Mathematical Reviews



EDITORIAL COMMITTEE

P. T. Bateman
M. Lowengrub
C. M. Pearcy
J. L. Selfridge, Executive Editor

Annual Index – 1982

Author Index M — Z Key Index

TABLE OF CONTENTS

Author Index M-Z	495–928
Key Index	929–979
Abbreviations of Names of Serials	
Journals in Translation	
Transliteration of Cyrillic	
Author Institution Codes and Addresses	AA1-AA37

Index of Mathematical Papers Volume 14
Published by the American Mathematical Society
Providence, Rhode Island USA
ISSN 0025-5629

MATHEMATICAL REVIEWS

Published by

AMERICAN MATHEMATICAL SOCIETY

Committee P. T. Betsman, M. Lowengrab,

A. A. Armendiriz, W. Boewene, E. Gerlach

S. Hall, P. D. F. Ion, S. Ivanov, J. S. Joel,

E. Kister, M. Rabindranathan, P. B. Smith,

D. J. Deckard, A. Greenspoon, F. Harary, A. E. Heins, D. J. Lewis, R. D. Low, R. J. Muirhead, M. S. Ramano

J. F. Riordan, R. A. Scott, C.-T. Shih, N. Sterr

entive Editor: J. L. Selfridge Editor: W. B. Woolf Frances E. Bryant

nger, Editorial Assistants: D. J. Kimball Librarian: Janice Seidler

riel Associate: Bogdan D. Dudzik m Analyst: Rilla J. Thedford

lanegers: Sandra K. Barth, Wendi L. Pohs

Records: Peggy A. Gerber

General Information

Journal references in Mathematical Reviews are given in the following form: Rickscheltre der Math. (6) 5(56) (1960/61), no. 2, 18-53 (1962), where, after the abbreviated title, one has: (series number) volume number (volume number in first series, if given) (nominal date), issue number if necessary, first page—last page (imprint date). If only one date is given, this will usually be interpreted as the nominal date and will follow the volume number. If no volume number is given, the year will be used in its place. The symbol * precedes the title of a book or other non-periodical that is being reviewed as a whole. If an issue of a journal needs to be reviewed as a whole (e.g., when it is a collection of articles dedicated to an individual) and an ad hoc title is devised for this purpose then the latter will appear in braces {}. References to reviews in Mathematical Reviews before Volume 20 (1959) are by volume and page number, e.g., MR 15, 122;

from Volume 20 to Volume 58 (1979), by volume and review number, e.g., MR 20 #4185 or MR 23 #A513; from 1980 on, by issue and review number, e.g., MR 80a: 46017. References to reviews in Jahrbuch über die Fortschritte der Mathematik and Zentralblatt für Mathematik are by volume and page number for the period before 1972 (e.g., Jbuch 50, 173; Zbl 29, 323) and by volume and review number since 1972 (e.g., Zbl 218:46017). Reviews reprinted from Applied Mechanics Reviews, Computing Reviews, Electrical & Electronics Abstracts, Mathematics of Computation, Operations Research, Physics Abstracts, Referativnyi Žurnal Matematika (Mehanika, etc.), Statistical Theory and Method Abstracts, or Zentralblatt für Mathematik are identified in parentheses following the reviewer's name by AMR, CR, EEA, MC, OR, PA, RŽMat (RŽMeh, etc.), STMA, Zbl, respectively.

Sponsored by

AMERICAN MATHEMATICAL SOCIETY AMERICAN STATISTICAL ASSOCIATION ARNALS OF MATHEMATICS AUSTRALIAN MATHEMATICAL SOCIETY BIOMETRIC SOCIETY CALCUTTA MATHEMATICAL SOCIETY
CANADIAN MATHEMATICAL CONGRESS
DANSK MATEMATISK FORENING
EDINBURGH MATHEMATICAL SOCIETY
INDIAN MATHEMATICAL SOCIETY INDUSTRIAL MATHEMATICAL SOCIETY INSTITUTE OF MATHEMATICAL STATISTICS ISLENŻKA STAERDFRAEDAFELAGID ISRAEL MATHEMATICAL UNION LONDON MATHEMATICAL SOCIETY MATHEMATICAL ASSOCIATION OF AMERICA MATHEMATICAL SOCIETY OF JAPAN MATHEMATICAL SOCIETY

OF THE REPUBLIC OF CHINA NORSK MATEMATISK FORENING

PACIFIC JOURNAL OF MATHEMATICS Polskie Towarzystwo Matematyczne REAL SOCIEDAD MATEMÁTICA ESPAÑOLA SOCIEDADE BRASILEIRA DE MATEMATICA SOCIÉTÉ MATHÉMATIQUE DE FRANCE SVENSKA MATEMATIKERSAMFUNDET Unión Matemática Argentina UNIONE MATEMATICA ITALIANA Wiskundig Genootschap te Amsterdam



Incomplete the second of the s

PACIFIC IQUENAL OF MATHEMATICS
POLSKIE TOWAREVETWO MATEMATYCZNE
REAL FOCKIDAD MATEMÁTICA ESPAÑOLA
SOCIEDADE BRABILLIRA DE MATEMATICA
SOCIEDADE BRABILLIRA DE MATEMATICA
SOCIEDADE BRABILLIRA DE FRANCE
SVERIKA MATEMATICA ARGENTINA
UNIONE MATEMATICA ITALIANA
WIRKINDIG GENOOTSCHAP TE AMSTERDAM

- M -

z M., A. See Gomez M., A.

Ma, Chun Ming On square-summability and uniqueness questions concerning nonstationary Stokes flow in an exterior domain. Arch. Rational Mech. Anal. 71 (1979), no. 2, 99-112. (Michael Wiegner) 824:35081 35Q10

Ma, Chung Fan See Ma, Zhong Fan Ma, Dian Rong (with Deng, Nai Yang) On the existence intervals of the solutions of certain nonlinear differential equations. (Chinese) Acta Math. Sinica 23 (1980), no. 6, 930–941. (Winston T. Lin) 82g:34011 34A34

Ma, Fai (with Caughey, T. K.) On the stability of linear and nonlinear stochastic

transformations. Internat. J. Control 34 (1981), no. 3, 501-511. (Authors' summary) 93E15 (70Q05)

(with Caughey, T. K.) On the stability of stochastic difference systems. (German nary) Internat. J. Non-Linear Mech. 16 (1981), no. 2, 139-153. (Ludwig Arnold) 93E15 (39A10, 60H25)

(with Caughey, T. K.) Stability of stochastic difference systems. Mech. Res. Com (1981), no. 2, 105–113. (From the introduction)
 (2003) 70LD5 (39A10, 60H99)
 (with Caughey, T. K.) Moment stability of linear stochastic difference systems.
 Mech. Res. Comm. 8 (1981), no. 3, 143–151. (Authors' introduction) 70L05 (39A10, 60H99) 60H25 (70L05)

Ma, Feng Shi (with Liu, De Fu) The theory of compound distribution of extreme values and its applications. (Chinese) Acta Math. Appl. Sinica 2 (1979), no. 4, 366-375. (Smiley

62E99 (62G99, 86A99) W. Cheng) 82a:62037

Ma, Ji Pu A spectral theory and analytic calculus for a linear operator. (Chinese. English nmary) Nanjing Daxue Xuebao 1980, Special Issue on Mathematics, 7-16. (Ming Zhu Yang) 82i:47021a 47A60 (47A10, 47A25) A polar spectral mapping theorem. (Chinese. English summary) Nanjing Daxue

Xuebao 1980, Special Issue on Mathematics, 17-21. (Ming Zhu Yang) 82i:47021b 47A60 (47A10, 47A25)

Ma, Shang Keng (with Amit, Daniel J.; Zia, R. K. P.) The O(n)-symmetric model between two and four dimensions. Nuclear Phys. B 180 (1981), no. 1, FS 2, 157-169. (Authors' summary) 82a:81029 81E99 (81G20)

hwang Ma, Shu Yin See Hwang Ma, Shu Yin Ma, Y. C. (with McLean, J. W.; Martin, David U.; Saffman, Philip G.; Yuen, Henry C.) Three-dimensional instability of finite-amplitude water waves. Phys. R (1981), no. 13, 817–820. (Authors' summary) 82c:76017 76B15 (35Q20)

Ma, Zhong Fan (with Liu, Zhen Hong; Zhu, Yong Jin; Cai, Mao Cheng) Minimum spanning trees with degree constraints. (Chinese) Acta Math. Appl. Sinica 3 (1980), no. 1, 1-12. (Fan R. K. Chung) 82a:05045 05C05 (68E10, 90B10)

(with Liu, Zhen Hong; Cai, Mao Cheng) Optimum restricted base of a matroid. Combinatorics 79 (Proc. Colloq., Univ. Montréal, Montreal, Que., 1979), Part II. Ann. Discrete Math. 9 (1980), 253-257. (R. A. Brualdi) 82g:05039 05B35 (68C05)

(with Tian, Feng) A polynomial algorithm for the linear programming problem.
(Chinese) Knowledge Practice Math. No. 2 (1980), 36-44. (Editors) 82c:90054
90C05

Ma, Zhong Qi (with Du, Dong Sheng; Xue, Pi You) A new criterion for constructing SU(N) grand unified models and residual discrete symmetry. Phys. Lett. B 99 (1981), no. 2, 107-109. (Authors' summary) 82b:81132 81G20

(with Dongfang, Xiao; Huang, Tao; Xue, Pi You; Zhou, Xian Jian; Huang, Nian Ning) Classical static and static spherically symmetric solutions of SU(N) gauge theory with external extended source. Sci. Sinica 24 (1981), no. 4, 466–475. (Authors' summary)

82m:81050 81E10 (53C05)

Maamoun, Malaz Parité des cycles contenant des sommets specifiés d'un graphe. (English summary) Discrete Math. 34 (1981), no. 2, 145–152. (E. Olaru) 82j:05078 05C38

van Maanen, J. A. Chronology. Studies on Christiaan Huygens (Sympos., Amsterdam, 1979), pp. 19-26, Swets & Zeitlinger, Lisse, 1980. (See 82m:01036) el Mabrouk, Mongi See El Mabrouk, Mongi

Mabuchi, M. (with Hasegawa, Hiroshi; Nakagomi, Teruaki; Kondo, Kazuo)

equilibrium thermodynamics of lasing and bistable optical systems. J. Statist. Phys. 23 (1980), no. 3, 281-313. (I. O. Bohachevsky) 82a:82022 82A35 (60K35, 62E15,

Macaev, V. I. (with Markus, A. S.) Asymptotic behavior of the spectrum of close-to-normal operators. (Russian) Funkcional. Anal. i Priložen. 13 (1979), no. 3, 93-94. (P. A. Mišnaevskii) 82f:47034 47B25 (35P20, 47A70)

(with Markus, A. S.) Operators generated by sesquilinear forms and their spectral optotics. (Russian) Linear operators and integral equations. Mat. Issled. No. 61 (1981), 86-103, 157, (E. Baumgärtel) 82i:47018 47A55 (35165, 47R25)

(with Markus, A. S.) Convergence of expansions in eigenvectors of an operator that is nearly selfadjoint. (Russian) Linear operators and integral equations. Mat. Issled. No. 61 (1981), 104-129, 157, (Richard E. Frankfurt) 82f:47027 47A70 (47A55.

Macagno, E. (with Stavitsky, D.; Christensen, J.) On the eighteen degrees of freedom triangular element. Comput. Methods Appl. Mech. Engrg. 26 (1981), no. 3, 265-283. (Authors' summary) 82f:65119 65N30

Macak, I. K. (with Pličko, A. M.) Sums of independent random variables in Banach spaces. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 23 (1980), 101-109, 149. (V. J. Paulauskas) 82h:60015 60B12 (60G50)

Asymptotic properties of Gaussian processes. (Russian) Ukrain. Mat. Z. 32 (1980),

no. 3, 332-339. (Z. G. Gorgadze) 82e:60064 60G15 (60G17)

Continuity of a random process on a compactum and the central limit theorem in C(S). (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 24 (1981), 102-107, 154. (Rastislav Potocký) 82j:60014 60B12 (60G20)

Asymptotic behavior of nonrecurrent random walks. (Russian) Ukrain. Mat. Z. 33 (1981), no. 3, 341-347. (P. Gerl) 82j:60124 60J15

Mačarašvili, N. D. Linear methods of summability of Fourier series by generalized spherical functions. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 98 (1980), no. 3, 549-552. (Naza Tanović-Miller) 82m:42018 42C10

Mačavariani, I. D. Lower and upper nontangential limits of the logarithmic potential of a

dual distribution. (Russian) Trudy Vyčisl. Centra Akad. Nauk Gruzin. SSR 20 (1980),

no. I Vyčisl. Mat. Programmirocomie, 71–86. (J. Vesely) 82d:31001 31A20

MacCallum, M. (with Kramer, Dietrich; Stephani, H.; Herlt, E.) ★Exact solutions of Einstein's field equations. Edited by Ernst Schmutzer. Cambridge Monographs on Mathematical Physics. Cambridge University Press, Cambridge-New York, 1980. 425 pp. ISBN 0-521-23041-1 (Colin B. G. McIntosh) 82h:83002 83-02 (53C80, 83C15, 83C20)

MacCamy, R. C. A population model with nonlinear diffusion. J. Differential Equations 39 (1981), no. 1, 52-72. (F. Rothe) 82g-92035 92A15 (34KO5, 35K55) (with Gurtin, Morton E.) Diffusion models for age-structured populations. Math. Biosci. 54 (1981), no. 1-2, 49-59. (Andris Abakuks) 82j-92053 92A15 (60J70)

Maccario, J. (with Didry, J. R.; Auget, J. L.) Une méthode de comparaison des courbes doses/réponses dans le cas où les paramètres ne sont pas estimables. Rev. Statist. Appl. 28 (1980), no. 4, 51-61. (Authors' summary) 82a:62111 62K05

(with Eweda, Eweda) Convergence du filtrage adaptatif à pas constant en présence d'observations corrélées. (English summary) C. R. vad. Sci. Paris Sér. I Math. 292 (1981), no. 8, 445-448. (Authors' summary) 82c:93022 93E11 (60G35, 94A11)

(with Eweda, Eweda) Convergence du filtrage adaptatif à pas décroissant en présence d'observations corrélées. (English summary) [Convergence of adaptive filtering with decreasing step-size in the presence of correlated observations] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 3, 223-226. (Authors' summary) 82k:94001

Maccone, C. Eigenfunction expansion for fractional Brownian motions. (Italian and Russian summaries) Nuovo Cimento B (11) 61 (1981), no. 2, 229–248. (Author's

summary) 82:60179 60365 (82A70, 93E03)

MacCormack, Robert William See Conference: Numerical Methods in Fluid Dynamics, 82h:76002

ld, I. G. Numbers of conjugacy classes in some finite classical groups. Bull. Austral. Math. Soc. 23 (1981), no. 1, 23-48. (Naohisa Shimomura) 82j:20092 MacDonald, John L. Cohomology operations in a category. J. Pure Appl. Algebra 19 (1980), 275–297. (Timothy Porter) 82c:18009 18C10 (55S99)

Macedońska-Nosalska, Olga (with Borevič, Z. I.) On the lattice of subgroups. (Russian) Modules and linear groups. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 103 (1980), 13-19, 155. (Charles S. Holmes) 82j:20061 20E15

On convergent sequences in Aut(F). (Polish and Russian summaries) Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 34 (1979), 37-42. (F. Levin) 20E36 (20F28)

An infinite Nielsen transformation as a limit of a sequence of finite ones. (Polish and Russian summaries) Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 34 (1979), 43–46. (F. Levin) 82f:20057 20E36 (20F28) Levin) 82f:20057

Macek, Joseph (with Maleki, Nasser) Erratum: "Schwinger's variational principle for electron-ion scattering" [Phys. Rev. A (3) 21 (1980), no. 5, 1403-1411; MR 81a:81075]. Phys. Rev. A (3) 23 (1981), no. 3, 1561. (Editors) 82c:81125

Macenis, Ionas See Macionis, Jonas

82e:93064

Macenko, V. G. A class of equations of mathematical physics arising in the dynamics of biological macrosystems. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 1, 69-79, 92A15 (35K99) 253 (L. I Rubinstein) 82k:92051

Macfarlane, A. J. Parametrizations of unitary matrices and related coset spaces. J. Math. Phys. 21 (1980), no. 10, 2579-2582. (J.-P. Antoine) 82c:22022 22E70 (15A57, 81C40)

MacFarlane, Alistair G. J. (with Bell, D. J.; Bryant, G. F.; Cook, P. A.; Crossley, T. R.; Denham, M. J.; Fallside, F.; Luntz, R.; Mayne, D. Q.; Munro, N.; Owens, D. H.; Rosenbrock, H. H.; Storey, Colin) *Modern approaches to control system design. IEE Control Engineering Series, 9. Peter Peregrinus, Ltd., Stevenage; on behalf of the Institution of Electrical Engineers (IEE), London, 1979. xviii +413 pp.

ISBN 0-906048-06-0 (Publishers' description) 821:93060 93D15 (15A99, 34H05) (with Postlethwaite, Ian; Edmunds, John M.) Principal gains and principal phases in the analysis of linear multivariable feedback systems. IEEE Trans. Automat. Control 26 (1981), no. 1, 32-46. (Authors' summary) 82c:93013 93B55 (93C35, 93D15, 94C05)

(with Hung, Y. S.) On the relationships between the unbounded asymptote behaviour of multivariable root loci, impulse response and infinite zeros. Internat. J. Control 34 (1981), no. 1, 31-69. (Authors' summary) 82h:93034 93B55 See also Complex variable methods for linear multivariable feedback system

MacGibbon, Brenda %-Borelian embeddings and images of Hausdorff spaces. Pacific J. Math. 94 (1981), no. 2, 369–378. (Y. Kodama) 82;54019 54C25 (54H05)
MacGillavry, Caroline H. The polyhedron in A. Dürer's "Melencolia I". An over 450 years

old puzzle solved? Nederl. Akad. Wetensch. Proc. Ser. B 84 (1981), no. 3, 287-294. (H. S. M. Coxeter) 82m:01029 01A40 (52-03, 82A60)

MacGillivray, A. D. On the switchback term in the asymptotic expansion of a model singular perturbation problem. J. Math. Anal. Appl. 77 (1980), no. 2, 612-625. (J. J.

Mahony) 82d:34080 34E99
MacGillivray, H. L. The mean, median, mode inequality and skewness for a class of densities. Austral. J. Statist. 23 (1981), no. 2, 247-250. (Author's summary) 82k:62036

A note on the normalized moments of distributions with nonmonotonic hazard rate. J. Appl. Probab. 18 (1981), no. 2, 530-535. (B. Raja Rao) 82m:62227 62N05 (62E10)

MacGregor, Thomas H. (with Abu-Muhanna, Yusuf) Extreme points of families of analytic functions subordinate to convex mappings. Math. Z. 176 (1981), no. 4, 511-519. (John G. Milcetich) 82d:30021 30C80 (with Abu-Muhanna, Yusuf) Families of real and symmetric analytic functions.

Trans. Amer. Math. Soc. 263 (1981), no. 1, 59-74. (M. S. Robertson) 82a:30011 30C45 (30C50)

Mach, Ernst See v. Seeliger, Hugo. 82g:01069

Macha, E. (with Balaziński, W.) A real-time method of determination of probable direction of fatigue crack propagation in materials. Parallel computers—parallel mathematics (Munich, 1977), pp. 319-324, North-Holland, Amsterdam, 1977. (See 82k:68003) 68J10 (73M10)

chado, R. (with Letelier, P. S.) Self-graviting [-gravitating] anisotropic fluids with plane symmetry. J. Math. Phys. 22 (1981), no. 4, 827–829. (Brian O. J. Tupper) 82h:R3045

summary) Rozpravy Československé Akad. Věd Řada Mat. Přirod. Věd 90 (1980), no. 5, 81 pp. (W. Benz) 82k:51005 51C05

MacHale, Desmond Minimum counterexamples in group theory. Math. Mag. 54 (1981), no. 1, 23–28. (Editors) #2az2003 20A05
Machek, Josef See Prague studies in mathematical linguistics, #2ax03005
Machek, Antonio (with Bohm, Corrado; Sontacchi, Giovanna) Complexity bounds for

equivalence and isomorphism of Latin squares. Inform. Process. Lett. 10 (1980), no. 4-5, 231-233. (Authors' summary) 82x:68066 68C25 (05B15)

Machover, Maurice The alternative theorem and the nonselfadjo on. J. Differential Equations 35 (1980), no. 2, 266-274. (Richard Brown) 82b:34019 34B05 (34A30)

Machtey, Michael See Special issue: Machtey, Michael, 82i:68005 and Meyer, Albert R.,

ciariello, Joseph (with Legasto, Augusto A., Jr.) System dynamics: a critical review.

System dynamics, pp. 23-43, Stud. Management Sci., 14, North-Holland, Amsterdam,
1980. (See 82j:90021) 93A10

tyre, Angus (with Boffa, M.; Point, Françoise) The quantifier elimination problem for rings without nilpotent elements and for semisimple rings. Model theory of algebra and arithmetic (Proc. Conf., Karpacz, 1979), pp. 20-30, Lecture Notes in Math., 834, Springer, Berlin, 1980. (Carol Wood) 82d:03054 03C60 (03C10, 16A99)

Nonstandard number theory. Proceedings of the International Congress of Mathematicians (Helsinki, 1978), pp. 253–262, Acad. Sci. Fennica, Helsinki, 1980. (Ş. A. Basarab) 82h:63971 03H15 (12L15, 14G25)

(with Hickin, Kenneth Keller) Algebraically closed groups: embeddings and centralizers. Word problems, II (Conf. on Decision Problems in Algebra, Oxford, 1976), pp. 141–155, Stud. Logic Foundations Math., 95, North-Holland, Amsterdam, 1980. (U. Felgner) 82c:20065 20F10 (03C60, 03D40, 20E06) Model theory. Modern logic—a survey, pp. 45–65, Synthese Library, 149, Reidel, Dordrecht, 1981. (See 82i:03002) 03Cxx (01A60, 03–02)

(with Cherlin, Gregory; van den Dries, Lou) Decidability and undecidability ems for PAC-fields. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 1, 101-104. (Carol 03C60 (03B25, 03D35, 12L05) Wood) 82g:03057

A theorem of Rabin in a general setting. Proceedings of the Model Theory Meeting (Univ. Brussels, Brussels/Univ. Mons, Mons, 1980). Bull. Soc. Math. Belg. Ser. B 33 (1981), no. 1, 53–63. (A. M. Dawes) 82k:03106 03H15 (03C60, 03C62, 10N15)

is, Jonas Comment on: "The regularity of boundary conditions" [Differencial'nye Uravnenija i Primenen.-Trudy Sem. Processy Optimal. Upravlenija I Sekcija No. 20 (1978), 17-23; MR 81a:34052]. (Russian. Lithuanian and English summaries)

Differencial npe Uraonenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija No. 27 (1980), 51–55, 143. (M. Švec) 82j:34064 34G10

Mack, Ju. Ju. See Macys, Juozas
Mack, Gerhard Quark confinement in lattice gauge theories. Field theory and strong interactions (Proc. Nineteenth Internat. Universitätwochen Kernphysik,

Karl-Franzens-Unio. Graz, Schladming, 1980), pp. 509–529, Acta Phys. Austriaca Suppl., XXII, Springer, Vienna, 1980. (See 82c:81001)

(with Göpfert, Markus) Iterated Mayer expansion for classical gases at low eratures. Comm. Math. Phys. 81 (1981), no. 1, 97-126. (Chung Y. Shen) 82k:82007 82A05

Physical principles, geometrical aspects, and locality properties of gauge field Fortschr. Phys. 29 (1981), no. 4, 135-185. (Andrzej Trautman) 82i:81089 81E10 (53C05)

Mack, Gregory A. (with Skillings, John H.) A Friedman-type rank test for main effects in a ctor ANOVA. J. Amer. Statist. Assoc. 75 (1980), no. 372, 947-951. (Joachim Krauth) 824-62083 62G10

A quick and easy distribution-free test for main effects in a two-factor ANOVA. ulation Comput. 10 (1981), no. 6, 571-591. (Author's sun n. Statist. B-Simi 82k-62141 62J10

(with Wolfe, Douglas A.) k-sample rank tests for umbrella alternatives. J. Amer. ntist. Assoc. 76 (1981), no. 373, 175-181. (Authors' summary) 82d:62084 62G10

Mack, Y. P. Local properties of k-NN regression estimates. SIAM J. Algebraic Discrete Methods 2 (1981), no. 3, 311-323. (Author's summary) 82h:62069 62G05 (62J05) Mackay, D. C. (with Connor, J. N. L.; Farrelly, D.) Complex angular momentum analysis of diffraction scattering in atomic collisions. J. Chem. Phys. 74 (1981), no. 6, 3278–3286.

(Authors' summary) 82d:81137 81F20 (81G45)
MacKay, R. S. (with Greene, John M.; Vivaldi, Franco; Feigenbaum, Mitchell J.) Universal behaviour in families of area-preserving maps. Phys. D 3 (1981), no. 3, 468-486. (Frederick R. Marotto) 82m:58041 58F14 (76F99)

Mackenroth, Uwe Some general considerations on optimality conditions for state constrained parabolic control problems. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 402-411, Lecture Notes in Control and Information Sci., 22, Springer, Berlin, 1980. (L. Longdon) 82e:49031 49B22

Optimalitätsbedingungen und Dualität bei zustandsrestringierten parabolischen Kontrollproblemen. (English and Russian summaries) Math. Operationsforsch. Statist.

Ser. Optim. 12 (1981), no. 1, 65-89. (L. Mikołajczyk) 82e:49030 49B22 ekenthun, Kenneth M., Jr. Noiseless coding of error detection information. IEEE Trans. Inform. Theory 27 (1981), no. 2, 227-230. (Author's summary) 82i:94014 94A29

Mackevičius, V. (with Kudžma, R.) Theory of stochastic processes. (Russian. Lithuanian and English summaries). Litovsk. Mat. Sb. 20 (1980), no. 3, 107-115, 218. (A. Prékopa) 60Gxx (01A73, 60H25)

Mackey, Michael C. Periodic auto-immune hemolytic anemia: an induced dynamical disease. Bull. Math. Biol. 41 (1979), no. 6, 829-834. (Author's summary) 82k:92011 92A07 (58F22, 92A15)

(with Lasota, Andrzej) The extinction of slowly evolving dynamical system Math. Biol. 10 (1980), no. 4, 333-345. (Nils Andreas Baas) 82s:58029 58F11 (3)

(with Glass, Leon; Graves, Carl; Petrillo, Gino A.) Unstable dyna

dically driven oscillator in the presence of noise. J. Theoret. Biol. 86 (1980), no. 3, 92A09 (58F14) 455-475. (Andris Abakuks) 82i:92021

(with an der Heiden, U.; Walther, Hans-Otto) Complex oscillations in a simple deterministic neuronal network. Mathematical aspects of physiology (Proc. Summer Sem., Unio. Utah, Salt Lake City, Utah, 1980), pp. 355-360, Lectures in Appl. Math., 19, Amer. Math. Soc., Providence, R.I., 1981. (Authors' summary) 82j:92023 92A09 (34K15) Philos. Sci. 46 (1979), no. 4,

n, Edward Scientific realism: the new debates

501-532. (Salvatore Guccione) 82m:03010 03A05 (03B30, 81B05)
MacKinnon, James G. Solving urban general equilibrium models by fixed point methods. Mahyais and computation of fixed points (Proc. Sympos., Math. Res. Center, Unio. Wisconsin, Madison, Wis., 1979), pp. 197–212, Publ. Math. Res. Center Unio. Wisconsin, 43, Academic Press, New York, 1980. (See 81;65003) 90A14 (55M20)

(with Davidson, Russell) Several tests for model specification in the presence of ative hypotheses. Eco netrica 49 (1981), no. 3, 781-793. (Authors' summary) 826-62189 62P20

Mackiv, R. S. (with Gončar, M. S.) Uniform random non-Gaussian fields and their application to the quantum field theory. (Russian) Ukrain. Mat. Ž. 31 (1979), no. 4, 357–364, 476. (W. Słowikowski) 82b:81059 81E10 (60G60, 60K35)

Mackjavičjus, V. See Mackevičius, V.

K Knight, Christopher J. Proof and relativity—a reply to W. H. Dudman: "Proof and truth" [Internat. Logic Rev. No. 19-20 (1979), 129-135; MR 82a:03005]. Internat. Logic Rev. No. 21 (1980), 77-80. (Editors) 82i:03010 03A05 (00A25)

Macko, Tibor (with Fabrici, Imrich) On bases and maximal ideals in ser

20M12 mary) Math. Slovaca 31 (1981), no. 2, 115-120. (T. S. Blyth) 82d:20060 Mackowiak, J. Best multiconfigurational approximations in the problem of N spinless particles. I. Theory. Rep. Math. Phys. 11 (1977), no. 3, 311-329. (K. V. Bhagwat)

Mackowiak, Tadeusz Indecomposable continua and the fixed point property. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 11-12, 903-912 (1981). (L. E. Ward, Jr.) 82f:54055 54F20 (54H25)

An embedding theorem for tree-like continua. Topology, Vol. 11 (Proc. Fourth Colloq., Budapest, 1978), pp. 805–813, Colloq. Math. Soc. János Bolyai, 23,

North-Holland, Amsterdam, 1980. (G. R. Gordh, Jr.) 82b:54050 Retracts of hereditarily unicoherent continua. (Russian summary) Bull. Acad. Polon Sci. Sér. Sci. Math. 28 (1980), no. 3-4, 177-183 (1981). (R. F. Dickman, Jr.) 82g:54063

54F55 (54F20) MacLean, H. Alan Transforms of measures on quotients and spline functions. Trans. Amer. Math. Soc. 261 (1980), no. 1, 287–296. (L. Thomas Ramsey) 82c:43004 43A25

(41A05)

MacLeod, R. A. (with Leeming, David J.) Some properties of generalized Euler numbers. Canad. J. Math. 33 (1981), no. 3, 606-617. (F. T. Howard) 82;10025 10A40 (05A15) MacMahon, James A. (with Schmipf, David J.; Andersen, Douglas C.; Smith, Kimberly G.; Bayn, Robert L., Jr.) An organism-centered approach to some community and ecosystem concepts. J. Theoret. Biol. 88 (1981), no. 2, 287-307. (Authors' sum 821-92045 92A17

Macnab, D. S. Modal operators on Heyting algebras. Algebra Universalis 12 (1981), no. 1, 5-29. (L. L. Maksimova) 82j:03082 03G25 (03B45, 06D20)

Cyclic polygons and related questions. *Math. Gaz.* **65** (1981), *no.* 431, 22–28. (P. J. Lorimer) **82**;51029 51M05

Macney, L. B. Generating functions of integral operators. (Russian) Functional an No. 14 (Russian), pp. 105-108, Ul' janovsk. Gos. Ped. Inst., Ul' yanovsk, 1980. (R. V. Duduchava) 82e:47041 47B38 (45D05)

Macokin, A. M. (with Kuznecov, Ju. A.) Partial solution of systems of linear algebraic equations. (Russian) Numerical methods in linear algebra (Proc. Third Sem. Methods of Numer. Appl. Math., Novosibirsk, 1978) (Russian), pp. 62-89, Akad. Nauk SSSR Sibirsk. Otdel., Vyčisl. Centr., Novosibirsk., 1978. (N. S. Fal'ko) 82g:65025 65F30 (65N20)

Macovei, Doina (with Pascali, Dan) Variational inequality techniques in free boundary problems. Proceedings of the International Symposium on Applications of Mathematics in System Theory (Univ. Brazov, Brazov, 1978), II, pp. 357–363, Univ. Brazov, Brazov, 1979. (Mario Primicerio) 82e:76066 76S05 (35R35, 49A29)

(Malio Filinicalio) and Association of the Malio Filippe in Malio Filippe

introduction) 82i:73051 73U05

Macphail, M. S. A summability problem. Canad. Math. Bull. 23 (1980), no. 4, 421-424. (John A. Fridy) 82d:40006 40C05

MacPherson, Robert (with Baum, Paul; Fulton, William) Riemann-Roch and topological K

theory for singular varieties. Acta Math. 143 (1979), no. 3-4, 155-192. (Allen B. Altman) 14F12 (14C40) 82c:14021

(with Goresky, R. Mark) Intersection homology theory. Topology 19 (1980), no. 2, 135-162. (Laurence R. Taylor) 82b:57010 57N65 (55N45)

(with Borho, Walter) Représentations des groupes de Weyl et homologie d'intersection pour les variétés nilpotentes. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 15, 707-710. (Authors' summary) 82f:14002 (17B05, 17B35, 20G05)

MacPhie, Robert H. (with Safavi-Naini, Reza) On solving waveguide junction scattering problems by the conservation of complex power technique. IEEE Trans. Microwave Theory Tech. 29 (1981), no. 4, 337–343. (Authors' summary) 824:78026 78A50

J. Circuit processes. Ann. Probab. 9 (1981), no. 4, 604-610. (B. R. Handa) 82j:60121 60J10 (05B35, 05C38, 60K99)

MacRae, E. C. See Kelton, Christina M. L., 82f:62155

Macrae, Kenneth I. (with Riegert, Ronald J.) Effect of curvature-squared terms on cosmology. Phys. Rev. D (3) 24 (1981), no. 10, 2555-2560. (Authors' summary) 83F05

Macri, Patrizia (with Guaraldo, Francesco) Immersion theorems for analytic stratifications (Italian. English summary) Rend. Mat. (6) 13 (1980), no. 1, 69-83. (Felice Ronga) 821:32026 32C42 (58A35)

Mačys, Juozas Bernoulli trials with variable probabilities. (Russian. Lithu summaries) Litovsk. Mat. Sb. 19 (1979), no. 4, 145-151, 211. (Sándor Csörgő) 82a:60031

- m, V. D. (with Nath, Prem) On some extension theorems concerning generalized Cauchy functional equations. (Turkish summary) Istanbul Üniv. Fen Fak. Mecm. Ser. A 41 (1976), 39-52 (1981). (K. Lajkó) 82h:39006

 39B50

 dan, D. B. (with Babich, G.) The relevance of a probabilistic form of invertibility.
- Biometrika 67 (1980), no. 3, 704-705. (Hideaki Sakai) 82a:62138 62M10 (93E15)
- Madan, Manohar L. (with Madden, Daniel J.) On the theory of congruence function fields. Comm. Algebra 8 (1980), no. 17, 1687-1697. (Sudesh Khanduja) 82b:12011 12A90 (14K10)
 - (with Valentini, Robert C.) A hauptsatz of L. E. Dickson and Artin-Schreier extensions. J. Reine Angew. Math. 318 (1980), 156-177. (Sudesh Khanduja) 82e:12030
- dan, V. P. (with Rogers, Colin) Correspondence principle for plane strain problems in magnetothermoviscoelasticity. Riv. Mat. Univ. Parma (4) 6 (1980), 7-13 (1981). (Authors' summary) 82h:73074 73R05 (73U05) ek-Madani, Reza See Malek-Madani, Reza
- Madatov, G. L. (with Sicanin, V. N.; Gorbuncov, V. V.; Mažara, G. N.; Komarov, V. G.; Alpatov, A. Р.; Horošilov, V. S.; Jaščenko, V. F.) ★Приклашные методы исследования управляемых механических систем. (Russian) [Applied methods of
 - investigation of mechanical control systems] "Naukova Dumka (Jerzy Jaroń) 82k:93028 93B35 (70K99, 70Q05, 93A15) ", Kiev, 1980. 192 pp.
- e-Tort. Monique Sur un problème de perturbations singulières pour des inéquations variationnelles de type parabolique dégénéré. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 2, 143-146. (Author's summary) 82b:35016 (35K65, 49A29, 49D50)
- da, G. S. See Model selection, 82f:62195
- Maddalena, Lucia Harnack's inequality for weakly coupled quasilinear parabolic systems. (Italian. English summary) Rend. Accad. Sci. Fis. Mat. Napoli (4) 47 (1980), 5–18 (1981). (Mario Primicerio) 82i:35097 35K55 (35B50)
- en, Daniel J. (with Vélez, William Yslas) A note on the normality of unramified, abelian extensions of quadratic extensions. Manuscripta Math. 30 (1979/80), no. 4, 343-349. (Toru Nakahara) 82e:12013 12A65
- (with Madan, Manohar L.) On the theory of congruence function fields. Comm.
- Algebra 8 (1980), no. 17, 1687–1697. (Sudesh Khanduja) 82h:12011 12A90 (14K10)
 Maddox, Ivor J. (with Willey, M. A. L.) Multiplication on the generalized entire sequences.
 Indian J. Math. 16 (1974), no. 1, 23–31. (Editors) 82i:40005 40A99 (46A45)
 - and convergent series. Indian J. Math. 20 (1978), no. 1, 25-27. (S. K. Baipai) 82e:30028 30C80 (30H05)
 - ★Infinite matrices of operators. Lecture Notes in Mathematics, 786.
 - Springer-Verlag, Berlin-New York, 1980. v + 122 pp. ISBN 3-540-09764-3 (Amnon
 - Jakimovski) 82c:40012 40H05 (40D20, 46A45, 47B37)
 Generalized Köthe-Toeplitz duals. Internat. J. Math. Math. Sci. 3 (1980), no. 3, 423-432. (Amnon Jakimovski) 82a:46009 46A45 (40C05, 40J05)
- (with Kuttner, B.) Matrices which sum all bounded Cesàro sur London Math. Soc. (2) 23 (1981), no. 3, 503-508. (Enno Kolk) 82f:40008 40005 (40G05)
- ddux, Roger Embedding modular lattices into relation algebras. Algebra Universalis 12 (1981), no. 2, 242-246. (George Hutchinson) 82d:06007 06C05 (04A05, 08A02)
- Madelbrot, B. B. (with Gefen, Y.; Aharony, A.) Critical phenomena and fractals with dimensionality near 1. Physics in one dimension (Proc. Internat. Conf., Fribourg, 1980), pp. 363-365, Springer Ser. Solid-State Sci., 23, Springer, Berlin, 1981. (See 82g:82003) 82A25
- Mader, A. (with Boyer, D.) Functorial topologies on abelian groups. Rocky Mountain J. Math. 10 (1980), no. 4, 695-708. (Donald Cook) 82f:20082 20K45 (20K40)
- Mader, W. Über ein graphentheoretisches Ergebnis von T. Gallai. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 1-2, 205–215. (Rudolf Halin) 82e:05075 05C70
- ella mattia Maderna, Carla See Della Mattia Maderna, Carla
- Madgerova, A. S. Isomorphisms of certain algebras of functions on an n-dimensional torus. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 6, 747-750. (C. C. White) 82i:46082
- Madhavan, S. On bisimple weakly inverse semigroups. Pacific J. Math. 90 (1980), no. 2, 397–409. (John W. Hogan) 82d:20057 20M10
- Madhave Rao, K. S. (with Gore, A. P.) Distribution-free tests for parallelism and concurrence in two-sample regression problem. J. Statist. Plann. Inference 5 (1981), no. 3, 281–286. (Authors' summary) 82k:62134 62J05 (62G10)
- Madhekar, H. C. (with Thakare, N. K.) A characterization for modified polynomial sets. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1659-1664. (Harold Exton) 82e:33017
- Madhusudana Rao, J. On some theorems of Iseki. Indian J. Pure Appl. Math. 12 (1981),
- no. 5, 580-584. (Haimabati Chatterjee) 82k:54073 al-Madi, Azmi K. See Al-Madi, Azmi K.
- Madison, Bernard L. (with Mukherjee, T. K.; Sen, M. K.) Periodic properties of groupbound semigroups. Semigroup Forum 22 (1981), no. 3, 225-234. (M. Friedberg) 20M10
 - Quotients of locally compact semigroups. Semigroup Forum 22 (1981), no. 3, 277-281. (J. M. Day) 82i:22005 22A15
- Madorskii, V. M. (with Anisovič, V. V.; Krjukov, B. I.) An approach to solving optimal control problems. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 2, 265-268. (Szymon Dolecki) 82j-49016 49B10
- Isen, Ib (with Taylor, Laurence R.; Williams, Bruce) Tangential homotopy equivalences. Comment. Math. Helv. 55 (1980), no. 3, 445-484. (Edgar H. Brown, Jr.) equivalences. Comment. Mat. 82f:57015 57N65 (55P10)
- Spherical space forms: a survey. 18th Scandinavian Congress of Mathematicians (Aarhus, 1980), pp. 82-103, Progress in Math., 11, Birkhäuser, Boston, Mass., 1981. (Editors) 82m:57025 57S17 (20105, 57S25)
- Madsen, Kaj (with Hald, Jørgen) Minimax optimization using quasi-Newton methods.

 Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 2, pp. 69-77, Lecture Notes in Control and Information Sci., 23, Springer, Berlin, 1980. (E. Spedicato) 65K05
 - (with Hald, Jørgen) Combined LP and quasi-Newton methods for minimal optimization. Math. Programming 20 (1981), no. 1, 49-62. (Klaus Tammer) 82x:90138 90C30 (65K05)

- (with Caprani, Ole; Rall, Louis B.) Integration of interval functions. SIAM J. Math. Anal. 12 (1981), no. 3, 321-341. (M. I. Levin) 82e:65050 65G10 (65R20)
- Madsen, Niel K. (with Rodrigue, Garry H.) Odd-even reduction for pentadiagonal matrices.
 Parallel computers—parallel mathematics (Munich, 1977), pp. 103–106, North-Holland, Amsterdam, 1977. (See 82k:68003) 68C05 (65F05)
- Madsen, Ole Lehrmann (with Kristensen, Bent Bruun) Diagnostics on LALR(k) conflicts based on a method for LR(k) testing. BIT 21 (1981), no. 3, 270-293. (Authors' summary) 82m:68121 68F05 (68B10)
- Madsen Barbosa, Ruy (with Godinho, Pedro Henrique) A note on the generating function and distribution of permutations by the number of cycles. (Portuguese. English summary) Combinatoria No. 1 (1979), exp. no. 1, 15 pp. (Authors' summary) 82e:05017 05A15
 - Partitions of numbers with restricted parts 1-2-3, 1-2-4 and 1-2-5, by finite
- differences. (Portuguese. English summary) Combinatória No. 1 (1979), exp. no. 3, 11 pp. (P. Bundschuh) 82i:10001 10−01 (10A45)

 eda, Fumi-yaki ★ Dirichlet integrals on harmonic spaces. Lecture Notes in Mathematics, 803. Springer-Verlag, Berlin-New York, 1980. x + 180 pp ISBN 3-540-09995-6 (M. Brelot) 82a:31019 31D05 (31C25)
 - A convergence property for solutions of certain quasilinear elliptic equations. Measure theory, Oberwolfach 1979 (Proc. Conf., Oberwolfach, 1979), pp. 547-553, Lecture Notes in Math., 794, Springer, Berlin, 1980. (Miroslav Krbec) 82b:35088 35J60
- da, Hajime (with Kodama, Shinzo) On realizability of compartmental systems. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 326-329, IEEE, New York, 1979. (See **82e:94002**) 92A09 (93C35)
 - rk, 1979. (See 82e:94002) 92A09 (93C35)
 (with Kodama, Shinzo) Positive realization of difference equations. IEEE Trans. Circuits and Systems 28 (1981), no. 1, 39-47. (Authors' summary) 82d:65085 (39A10, 92A90, 93C30)
- Maeda, Hirokazu Recent trends in linear systems theory. (Japanese) Systems and Control 24 (1980), no. 4, 248–255. (Kunihiko Ichikawa) 82a-93008 93B05 (14D99)
- Maeda, Kei-ichi (with Sato, Katsuhiko; Sasaki, Misao; Kodama, Hideo) Creation of wormholes by first order phase transition of a vacuum in the early universe. Progr Theoret. Phys. 65 (1981), no. 4, 1443-1446. (Authors' summary) 82e:83044
- Maeda, Michie Rotation-invariant cylindrical measures. Natur. Sci. Rep. Ochan. 31 (1980), no. 2, 47-59. (Werner Linde) 82e:28017 28C20 (60B11)
- , Shigeru Extension of discrete Noether theorem. Math. Japon. 26 (1981), no. 1, 85-90. (Victor Aldaya) 82g:70041 70H30 (49C10, 58F05)
- Maeda, Shûichirô On finite-modular atomistic lattices. Algebra Universalis 12 (1981), no. 1,
- 76-80. (James W. Lea, Jr.) 82d:06008 06C10

 Maeda, Yoshiaki (with Ōmori, Hideki; Yoshioka, Akira) On regular Fréchet-Lie groups. I. Some differential geometrical expressions of Fourier integral operators on a Riemannian manifold. Tokyo J. Math. 3 (1980), no. 2, 353-390. (J. J. Duistermant) 82h:58089
- 58G15 (22E65) Machara, Hiroshi On time graphs. Discrete Math. 32 (1980), no. 3, 281-289. (C. St. J. A. 05C30 (05C99) Nash-Williams) 82e:05079
- Machara, Kazuhisa On elliptic surfaces whose first Betti numbers are odd. Proceedings of the International Symposium on Algebraic Geometry (Kyoto Univ., Kyoto, 1977), pp. 565-574, Kinokuniya Book Store, Tokyo, 1978. (H. Kerner) 82æ32036
 - Family of varieties dominated by a variety. Proc. Japan Acad. Ser. A Math. Sci. 55 (1979), no. 4, 146-151. (Daniel Comenetz) 82e:14018 14D20 (14D05)
- Maejima, Makoto The remainder term in the local limit theorem for independent variables. Tokyo J. Math. 3 (1980), no. 2, 311-329. (V. K. Rohatgi) 82b:60020 A note on the nonuniform rate of convergence to normality. Yokohama Math. J. 28 (1980), no. 1-2, 97-106. (Isaac Meilijson) 82i:60044 60F05
 - Some sojourn time problems for strongly dependent Gaussian processes. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 1, 1-14. (Simeon M. Berman) 82::60064 60G15 (60F05)
- Maekawa, Makoto (with Wada, Koh) On the relation of two approaches to Rubin's model of Brownian particles. Phys. Lett. A 80 (1980), no. 4, 293-295. (Authors' summary) 82b:82042 82A35 (82A40)

 Maergoiz, L. S. Regularized types of convex and entire functions of several variables.
- (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1977, no. 11(186), 58-65. (S. Favorov (RŽMat 1978:9 B155)) 821:32003 32A15 (26B25)
- Regularization of types of convex and entire functions with strictly convex order-hypersurface. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 11, 60-66. (W. K. Hayman) 82e:32005 32A15
- Maestrini, Piero (with Barsi, Ferruccio) Error codes constructed in residue number systems with non-pairwise-prime moduli. Inform. and Control 46 (1980), no. 1, 16-25. (Authors' summary) 82f:94015 94B40
- Maeyama, Y. On the Babylonian lunar theory. Arch. Internat. Hist. Sci. 28 (1978), no. 102, 21–35. (Kristian Peder Moesgaard) 82i:01006a 01A17
 - The length of the synodic months. The main historical problem of the lunar motion Arch. Internat. Hist. Sci. 29 (1979), no. 104, 68-94. (N. Swerdlow) 82h:85008 (01A99, 85-03)
 - ein, Bernard R., 82i:01006b
- Maertu, J. I. (with Gasca González, Mariano) Interpolation in R^a with mean values. (Spanish) Contributions in probability and mathematical statistics, teaching of mathematics and analysis (Spanish), pp. 274–278, Grindley, Granada, 1979. (J. Horváth) 82a:41003 41A05
- Maffei, C. (with Ianiro, N.) On the asymptotic behavior of the solutions of the nonlinear equation $\hat{x} + h(t, x) \hat{x} + p^2(t) f(x) = 0$. Nonlinear differential equations (Proc. Internat. Conf., Trento, 1980), pp. 175-182, Academic Press, New York, 1981. (J. O. C. Ezeilo) 82h:34074 34D99 (34C99)
- Maffi, G. (with Jayakar, S. D.) A two-locus model for polymorphism for sex-linked meiot drive modifiers with possible applications to Aedes aegypti. Theoret. Population Biol. 19 (1981), no. 1, 19-36. (Authors' summary) 82c:92014 92A10
- Maffioli, Francesco The complexity of combinatorial optimization algorithms and the challenge of heuristics. Combinatorial optimization (Lectures, Summer School, 1977), pp. 107-129, Wiley, Chichester, 1979. (See 82a:30099) 90C10 (68C25)

- Maftei, Gh. The Einstein-Maxwell equations for a magnetostatic field with axial symmetry.
 An. Ştiinţ. Univ. "Al. I. Cuza" Iaşi Secţ. I b Fiz. (N.S.) 25 (1979), 25-30. (Author's ry) 82b:83039 83C50
- gn-Mondésir, Émire Remarques sur divers problèmes de la mécanique statistique des systèmes classiques avec des interactions dépendent des vitesses. Cas des évolutions non Acad. Roy. Belg. Bull. Cl. Sci. (5) 66 (1980), no. 7-8, 622-631. (Author's nary) 824:82011 82A05
- Magari-lifjaev, G. G. (with Tihomirov, V. M.) On the Kolmogorov inequality for fractional derivatives on the half line. (Russian summary) Anal. Math. 7 (1981), no. 1, 37-47. (Jöran Bergh) 82g:26026 26D15 (26A33)
- gazine, Michael J. (with Oguz, Osman) A fully polynomial approximation algorithm for the 0-1 knapsack problem. European J. Oper. Res. 8 (1981), no. 3, 270-273. (Authors' ary) 82k:90084 90C10 (90C39)
 - The number of states in a class of serial queueing systems. Fibonacci Quart. 19 (1981), no. 1, 43-45. (Author's summary) 82b:90057 90B22
- (1901), no. 1, 3-2. (Auditol Saliminary) adaptators 20022 gda, Constantine Gregory Circular balanced repeated measurements designs. Comm. Statist. A—Theory Methods 9 (1980), no. 18, 1901–1918. (Ch'ing Shui Chèng) 82c:62101
- nes, Enrico (with Colli Franzone, P.) On the inverse potential problem of electrocardiology. Calcolo 16 (1979), no. 4, 459-538 (1980). (È. M. Saak) 82c:35079 35R30 (31A25, 49D29, 92A07)
 - Mauro Pagni (1922-1979). (Italian) Boll. Un. Mat. Ital. A (5) 17 (1980), no. 2, 357-363. (Editors) 82a:01039 01A70
- gerramov, A. M. Expansion in eigenfunctions of a differential operator with a multiple continuous spectrum (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 2, 24–28. (M. M. Skriganov) 921-35081 35P10
- aggiolo-Schettini, Andrea An algebraic theory of structures and their derivations. (Italian) Confer. Sem. Mat. Univ. Bari No. 174 (1980), 11 pp. (Author's summary) 82e:68010
 - (with Wedde, Horst; Winkowski, Józef) Modeling a solution for a control problem in distributed systems by restrictions. *Theoret. Comput. Sci.* 13 (1981), no. 1, 61–83. (N. N. Mirenkov) 82e:68028 68B20 (68A05, 93A10)
- Maggu, Parkash Lal (with Das, Ghanshiam; Kumar, Ravinder) On equivalent-job for Japan 24 (1981), no. 2, 136–146. (Authors' summary) 82h:90066 90B35
 - (with Das, Ghanshiam; Singh, Mahabir; Singhal, M. L.) On 3×n sequencing problem involving equivalent-job for a job-block with transportation-times of jobs. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 12 (1981), no. 2, 271–279. (Authors' summary) 82h:90065 90B35
- hous, Fouzi Sur l'existence d'intégrales premières faibles pour un système de Pfaff réduit". (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 8,
- A489 A491. (Robert Roussarie) 82g:58006 58A17 (32C40)
 Magid, Andy R. Dimension in rings with solvable algebraic group action. Math. Scand. 47 (1980), no. 1, 21-28. (Hamet Seydi) 82i:13015 13C15 (14L30)
- Magidson, Jay See Goodman, Leo A., 82a:62079 abuel-Magied, M. See Abdel-Magied, M.
- Magill, K. D., Jr. (with Misra, Prabduh Ram; Tewari, U. B.) Unifying congruences on S(I). Semigroup Forum 21 (1980), no. 4, 361-371. (Bridget B. Baird) 82e:20079 20M20 (54C35)
 - (with Subbiah, S.) Semigroups whose regular §-classes form well-ordered chains Semigroup Forum 22 (1981), no. 1, 89-91. (Bernard L. Madison) 82b:20100 20M2
- (with Subbiah, S.) Regular §-classes of semigroups of continua 22 (1981), no. 2, 159-179. (Bernard L. Madison) 82:54031 54C35 (20M20, 54H15)
 Magill, Michael J. P. An existence criterion for models of resource allocation over an
- infinite horizon. Econom. Lett. 5 (1980), no. 3, 209-213. (Rolf Klötzler) 82d:49002 49A05 (90A15)
 - On a class of variational problems arising in mathematical economics. J. Math. Anal. Appl. 82 (1981), no. 1, 66-74. (Mohamed El-Hodiri) 82;90025 90B05 (90A06)
- Magnano, Giorgio (with Cavinato, Antonio) The principle of equivalence between lattice segments with the metric-interference effects. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 5, 429-434. (Authors' summary) 82c:82086 82A60 (51M05)
- Magnanti, T. L. (with Bitran, Gabriel R.) Duality based characterizations of efficient facets. Multiple criteria decision making theory and application (Proc. Third Conf.,
- Hagen/Königswinter, 1979), pp. 12-25, Lecture Notes in Econom. and Math. Systems,
- 177, Springer, Berlin, 1980. (Authors' summary) 82i:90105 90C31 (90A05)
 Combinatorial optimization and vehicle fleet planning: perspectives and prospects.
 Networks 11 (1981), no. 2, 179–213. (Author's summary) 82i:90026 90B05 (90B10) 90B20, 90B35, 90C10)
- (with Wong, Richard T.) Accelerating Benders decomposition: algorithm enhancement and model selection criteria. Oper. Res. 29 (1981), no. 3, 464–484. (Authors' summary) 82j:90051 90C10 (90C30)
- (with Aashtiani, H. Z.) Equilibria on a congested transportation network. SIAM J. Algebraic Discrete Methods 2 (1981), no. 3, 213–226. (Authors' summary) 82i:90041
- Magnaradze, L. G. A new representation of a pair of analytic functions and its applications (Russian. Georgian and English summaries) Sem. Inst. Prikl. Mat. Dokl. No. 14 (1980), 25-36. (C. Tanaka) 82c:30064 30E25 (30E20, 45E05)
 - Construction of a general representation of the solutions of a class of plane elliptic systems of differential equations and of the matrices of their fundamental solutions (Russian. Georgian and English summaries) Sem. Inst. Prikl. Mat. Dokl. No. 14 (1980), 57-63. (G. Wildenhain) 82j:35053 35J45 (35C15)
- Magnen, J. (with Sénéor, R.) Expansion and summability methods in constructive field theory. Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 217-223, Lecture Notes in Phys., 116, Springer, Berlin, 1980. (Editors) 82b:81061 81E10
- at, P. (with Martinet, L.) Invariant surfaces and orbital behaviour in dynamical systems with 3 degrees of freedom. Astronom. and Astrophys. 96 (1981), no. 1-2, 68-77.

- (Authors' summary) 82g:85002 85A05 (58F05, 70F15)
- perron, Bernard Opérateurs d'entrelacement des représentations unitaires irréductibles des groupes de Lie nilpotents et indice de Maslov. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 20, A943–A946. (A. Verona) 82f:22008 22E27 (58G15) Magneron, Berna
- Magni, J. F. (with Fossard, A. J.) A frequential analysis of singularly perturbed systems with state or output control. Large Scale Systems 1 (1980), no. 4, 223-228. (Authors' summary) 82f:93065 93D25 (93C57)
- Magnien, Maurice See Pagès, Alain; et al., 82k:90062
- gnus, Arne Jensen's inequality revisited: "A proof of Jensen's theorem by forward induction" [Nordisk Mat. Tidskr. 25/26 (1978), no. 3-4, 173-174; MR 82a:26018a] by A. J. Zajta. (Norwegian. English summary) Normat 28 (1980), no. 4, 165, 180. (Editors)
- Magnus, Jan R. (with Neudecker, H.) The elimination matrix: some lemmas and applications. SIAM J. Algebraic Discrete Methods 1 (1980), no. 4, 422-449. (D. S. Tracy) 82d:15007
- Magnus, R. J. Stability of universal unfoldings: a correction: "Universal unfoldings in Banach spaces: reduction and stability" [Math. Proc. Cambridge Philos. Soc. 86 (1979), no. 1, 41-55; MR 80k:58023]. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 1, 195-196. (D. R. J. Chillingworth) 82k:58021 58C27
- Magnus, W. (with Stella, Attilio; Indekeu, J. O.) A renormalization group analysis of correlation function series expansions. Phys. Lett. A 81 (1981), no. 1, 47-50. (Authors'
 - summary) 82h:82089 82A67 (82A25) See also Temme, N. M., 82a:65011a; Pexton, Robert L., 82a:65011b; Fettis, Hen
- E., 82g:65007a and Stuart, S. N., 82g:65007b grussson, K. G. (with Pritchard, A. J.) Local controllability for nonlinear evolution equations. Abstract Cauchy problems and functional differential equations (Proc.
- Workshop, Leibnitz, 1979), pp. 71-89, Res. Notes in Math., 48, Pitman, Boston, Mass., 1981. (See 824:34001) 93B05
- nedov, A. R. Investigation of the solutions of linear differential equations with maxima. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 1, 11-14. (K. Smitalová) 82e:34073 34K05
- (with Rjabov, Ju. A.) Periodic solutions of linear systems of differential equations "maxima". (Russian. Azerbaijani and English summaries) Akad. Nauk
- Azerbaidžan. SSR Dokl. 36 (1980), no. 2, 3-8. (A. I. Perov) 82b:34098 On an investigation of linear differential equations with maxima. (Russian,
- Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), 34K15 no. 9, 12-14. (V. G. Zadorožnii) 82g:34101
- On the periodic solutions of a system of differential equations with maxima with a small parameter. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk
- ĭdžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 3, 22-26. (Vincent Šoltės) 82g:34102 34K15
- Magpantay, Jose A. On the nonexistence of extended physical states in the Schwinger model. Phys. Lett. B 104 (1981), no. 3, 212-216. (Author's summary) 82i:81090 81E10
- Magradze, B. A. (with Kvinihidze, A. N.; Matveev, V. A.; Mestvirišvili, M. A.; Tavhelidze, A. N.) An integral equation for causal distributions and their self-similar asymptotic behavior in the ladder Φ*-model. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 302–312. (Authors' summary) 82c:81086 81EI0 (81D15)
- Magsudov, F. G. See Dictionary: English-Russian-Azerbaijani, 82h:00007
- Magurn, Bruce A. Nonpositive elements in Whitehead groups. J. Pure Appl. Algebra 21 (1981), no. 1, 11-21. (Sushil Jajodia) 82h:57018 57Q10
- Magyari, Eugen Magnetic solitons as envelope solitons in a large class of the nonlinear Schrödinger equations. Phys. Lett. A 80 (1980), no. 2-3, 168-170. (Author's summary) 81C05 (35Q20, 82A05) 82b-81019
 - Exact quantum-mechanical solutions for anharmonic oscillators. Phys. Lett. A 81 (1981), no. 2-3, 116-118. (Author's summary) 82h:81020 81C05
- hajan, R. R. (with Saxena, Rajendra K.) Evaluation of finite integrals involving M-function of two variables by using E operator. (Spanish) With an English translation. Repúb. Venezuela Bol. Acad. Cienc. Fis. Mat. Natur. 39 (1979), no. 117, 25-44 (1980). (C. K. Sharma) 82g:33011 33A35
- Mahalanabis, A. K. (with Hanmandlu, M.; Biswas, K. K.) On modelling and forecasting of vector stochastic processes. Appl. Math. Modelling 5 (1981), no. 3, 199-204. (Authors' summary) 82h:62144 62M09
 - (with Prasad, Surendra; Mohandas, K. P.) A fast optimal deconvolution algorithm for real seismic data using Kalman predictor model. IEEE Trans. Geosci. Remote Sensing 19 (1981), no. 4, 216-221. (Authors' summary) 82j:86003 86A15 (94A05)
 - (with Ray, Goshaidas) On the state estimation of large-scale continuous-time linear systems. Proc. IEE-D 128 (1981), no. 4, 137-141. (Authors' summary) 82g:93042 93E10
- Mahaldiani, N. V. (with Grišin, V. E.; Katyšev, Ju. V.; Švačka, A. B.) Interaction dynamics and nontopological soliton stability in an essentially nonlinear model of a complex scalar field. Phys. Lett. A 78 (1980), no. 5-6, 423-428. (Authors' summary) 82a:81002
 - (with Mahan'kov, V. G.; Pašaev, O. K.) On the integrability and isotopic structure of the one-dimensional Hubbard model in the long wave approximation. *Phys. Lett. A* 81 (1981), no. 2-3, 161-164. (Authors' summary) 82a:82045 82A67 (58F07)
- ned, N. (with Piccinini, Renzo; Suter, U.) *Some applications of topological K-theory. North-Holland Mathematics Studies, 45. Notas de Matemática [Mathematical Notes], 74. North-Holland Publishing Co., Amsterdam-New York, 1980. ix + 317 pp. ISBN 0-444-86113-0 (J. M. Boardman) 82f:55009 55N15 (58Gxx)
- hamoodian, E. S. On edge-colorability of Cartesian products of graphs. Canad. Math. Bull. 24 (1981), no. 1, 107-108. (R. J. Wilson) 82e:05068 05C15 (05C70, 05C99)
- Mahaney, S. R. (with Hartmanis, Juris) An essay about research on sparse NP complete tical foundations of computer science, 1980 (Proc. Ninth Sympos., Rydzyna, Mathe 1980), pp. 40-57, Lecture Notes in Comput. Sci., 88, Springer, Berlin, 1980. (Authors' summary) 82a:68073 68C25
- Mahan'kov, V. G. Computer and solitons. Special issue on solitons in physics. Phys. Scripta 20 (1979), no. 3-4, 558-562. (Author's summary) 82f:81013 81C05 (35Q20, 65P05) (with Litvinenko, E. I.; Švačka, A. B.) Numerical investigation of the
 - Kadomtsev-Petviashvili soliton stability. Comput. Phys. Comm. 23 (1981), no. 3,

223-232. (Authors' summary) 82j:76020 76B25 (76X05)

(with Mahaldiani, N. V.; Pašaev, O. K.) On the integrability and isotopic structure of the one-dimensional Hubbard model in the long wave approximation. Phys. Lett. A 81 (1981), no. 2-3, 161–164. (Authors' summary) 82æ82045 82A67 (58F07)

nta, Lakshmi (with Krori, K. D.; Sheikh, A. R.) A singularity-free solution for a static charged fluid sphere in Einstein-Cartan theory. (French summary). Canad. J. Phys. 59 (1981), no. 3, 425–427. (Authors' summary). 82b:83068 83E10 (83C55).
hapatra, P. C. A note on Riesz mean. Indian J. Pure Appl. Math. 11 (1980), no. 11,

1434-1443. (Hiroshi Hirokawa) 82a:40006 40D25 (40G05)

Mahar, Thomas J. (with Fleishman, Bernard A.) A minimum principle for superharmonic functions subject to interface conditions. J. Math. Anal. Appl. 80 (1981), no. 1, 46-56. (A. Borzymowski) 82g:35016 35B50 (31A05, 35J05)

haram, Dorothy An example concerning automorphisms of generalized cubes. Fund.

Math. 110 (1980), no. 3, 209-211. (Pedro Jiménez Guerra) 82e:28019 28D05 (54C50) 28D05 (54C50) Mahavier, W. S. (with Hagan, M. R.) o-coherent continua are hereditarily locally

connected. Proc. Amer. Math. Soc. 81 (1981), no. 1, 129-132. (G. R. Gordh, Jr.) 82a:54061 54F20 (54F55)

Mahdavi-Hezavehi, M. Totally ordered rings and fields. Bull. Iranian Math. Soc. 7, no. 2, 41-54 (1980). (D. G. Johnson) 82e:06017 06F25 (10M15, 16A86)

Mahé, Louis Séparation des composantes réelles par les signatures d'espaces quadratiques.

(English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 17, 769-771. 10C05 (14G30) (Author's summary) 82e:10037

(Author's summary) 82e:19037 10C05 (14G30) theo, Maryvonne Strongly graceful graphs. Discrete Math. 29 (1980), no. 1, 39–46. (D. Sotteau) 82;65093 05C99 (05B99)

(with Delorme, Charles; Thuillier, H.; Koh, K. M.; Teo, H. K.) Cycles with a chord are graceful. J. Graph Theory 4 (1980), no. 4, 409-415. (S. F. Kapoor) 82g:05078 05C99 (05C38)

Maher, David P. Two-dimensional digital filtering using transforms over extensions of finite rings. Information linkage between applied mathematics and industry, II (Proc. Second Annual Workshop, Monterey, Calif., 1979), pp. 269-278, Academic Press, New York, 1980.
(Author's summary) 82a:94021 94A12

Maher, Laurence P., Jr. A function which transforms certain graphs into straight lines for

simultaneous solution. Canad. Math. Bull. 23 (1980), no. 3, 261-266. (W. J. Thron) 829-26014 26B35

Maheshwari, S. N. (with Tapi, U.) Sur les espaces bitopologiques s-connexes. An. Stiint. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.) 25 (1979), no. 1, 57-59. (Editors) 54E55 (54D05) 82i-54052

82i:34052 34E33 (34E03) (with Thakur, S. S.) Countably a-compact spaces. J. Sci. Res. 3 (1981), no. 2, 121–123. (Authors' summary) 82i:54036 54D30

(with Chae, Gyu Ihn; Thakur, S. S.) On α-convergent filters. (Korean sum Ulsan Inst. Tech. Rep. 12 (1981), no. 2, 297-300. (Olav Njastad) 82j:54003

Mahler, Kurt On two definitions of the integral of a p-adic function. Acta Arith. 37 (1980), 105-109. (Daniel Barsky) 82b:26024 26E30 (12J25)

On some irrational decimal fractions. J. Number Theory 13 (1981), no. 2, 268-269. (F. Schweiger) 82j:10061 10F35

On a special nonlinear functional equation. Proc. Roy. Soc. London Ser. A 378 (1981), no. 1773, 155-178. (A. Pethő) 82m:10042 10D05 (30D05, 39B20)

Mahmood, S. J. (with Meldrum, J. D. P.; O'Carroll, L.) Inverse semigroups and near-rings J. London Math. Soc. (2) 23 (1981), no. 1, 45-60. (Steve Ligh) 82e:16033

oud, Magdi S. Multilevel systems: information flow in large linear control problems Handbook of large scale systems engineering applications, pp. 96–109, North-Holland, Amsterdam, 1979. (O. I. Nwokah) 82a:93036 93C45 (49E99, 93A13)

(with Hassan, Mohammed F.; Singh, Madan G.) A new hierarchical approach to the joint problem of systems identification and optimization. Large Scale Systems 1 (1980), no. 3, 159-166. (Authors' summary) 82i:49023 49C20 (93B30)

Mahmudov, A. A. Design of regression experiments taking systematic errors into account. (Russian) Voprosy Vyčisl. i Prikl. Mat. (Tashkent) No. 51 (1978), 53-68, 227. (H. Bandemer) 82a:62112 62K05

(with Aristov, V. V.; Popov, S. P.) Solution of the nonstationary problem of discontinuity evolution in a viscous heat-conducting gas. (Russian) 2. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 4, 1066–1070, 1088. (Authors' summary) 82i:76062 76N15

udov, A. P. (with Abasov, R. G.) Almost periodic solutions of some differential and differential-difference equations in a Banach space. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan, SSR Ser. Fiz.-Tehn, Mat. Nauk 1979, no. 5. 34G20 87-93. (Bolis Basit) 82a:34076

Completeness of systems of eigenelements of some quasilinear operator equations (Russian) Differencial'nye Uravnenija 17 (1981), no. 8, 1456-1467, 1532. (Sergiu Aizicovici) 82m:47040 47H12

udov, E. N. Necessary conditions for an extremum for nonautonomous differential inclusions. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1979, no. 6, 3-8. (G. Zatiašvili) 82b:49037 49B99

hmudov, H. Some classes of subgroups of linear operators in locally convex spaces. (Russian) Dokl. Akad. Nauk UzSSR 1979, no. 5, 5-6. (G. M. Ustinov) 82c:47045 47D05

ev, A. A. Finite groups with a self-normalizing subgroup of order six. (Russian) Algebra i Logika 19 (1980), no. 1, 91-102, 133. (V. M. Busarkin) 82h:20029 Finite groups with a sixth-order centralizer. II. (Russian) Algebra i Logika 19 (1980), no. 2, 214-223, 251. (Sergei A. Syskin) 82k:20027 20D05

On centralizers of TI-subgroups in finite groups. Comm. Algebra 9 (1981), no. 12, 1307–1322. (M. E. Harris) 82i:20025 20D05

Finite groups with a noninvariant four-core. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 2, 212-214, 238. (V. M. Busarkin) 82k:20028 20D05

Mahno, S. Ja. Limit theorems for stochastic equations with partial derivatives. Stochastic differential systems (Proc. IFIP-WG 7/1 Working Conf., Vilnius, 1978), pp. 320–330, Lecture Notes in Control and Information Sci., 25, Springer, Berlin, 1980. (Robert Marcus)

An averaging principle for stochastic partial differential equations. (Russian) Theory frandom processes, No. 8 (Russian), pp. 113–117, 126, "Naukova Dumka", Kiev, 1980. M. Stojanov) 82b:60070 60H15 (I. M. Stojanov) 82b:60070

Mahomed, M. S. (with Filozof, L. I.) Domain of convergence of approximation polynomials. (Russian). Questions of the theory of the approximation of functions (Russian), pp. 113–120, 198, Akad. Nauk Ukrain. SSR, Inst. Mat., Kieo, 1980. (È. O.

Zeel') 82j:41009 41A10 (34A45)

Mahoney, J. F. (with Sivazlian, B. D.) Computation of stock-outs in a multi-installation inventory system. Comput. Math. Appl. 7 (1981), no. 5, 369-386. (Authors' summary) 82i:90032 90B05

Mahoney, Michael K. (with Newman, Morris) Determinants of abelian group matrices.

ear and Multilin near Algebra 9 (1980), no. 2, 121-132. (John D. Leadley) 82d:15013 15A36

Mahoney, Michael S. Christiaan Huvgens: the measurement of time and of longitude at sea. dies on Christiaan Huygens (Sympos., Amsterdam, 1979), pp. 234-270, Swets & Zeitlinger, Lisse, 1980. (See 82m:01036) 01A45

Mahowald, Mark (with Davis, Donald M.) v₁- and v₂-periodicity in stable homotopy theory. Amer. J. Math. 103 (1981), no. 4, 615-659. (J. F. Adams) 82;:55017 55Q45 (with Cohen, F. R.) A remark on the self-maps of Ω²S^{2π+1}. Indiana Univ. Math. J. 30 (1981), no. 4, 583-588. (J. F. Adams) 82;:55013 55P99

The primary v2-periodic family. Math. Z. 177 (1981), no. 3, 381-393. (J. F. Adams)

bo-resolutions. Pacific J. Math. 92 (1981), no. 2, 365-383. (R. J. Milgram)

82m:55017 55Q45 (55P42)

(with Ray, Nigel) A note on the Thom isomorphism. Proc. Amer. Math. Soc. 82 (1981), no. 2, 307–308. (R. M. Vogt) 82e:55006 55N20 (with Bahri, A. P.) Stiefel-Whitney classes in H*BO (φ(r)). Proc. Amer. Math. Soc.

83 (1981), no. 3, 653–655. (R. E. Stong) 82k:55017 55R40
Mahr, Bernd (with Förster, Klaus) Isomorphism of labelled graphs. Discrete structures and algorithms (Proc. Conf., Berlin, 1979), pp. 77-91, Hanser, Munich, 1980. (Authors' summary) 82g:68048 68C25 (05C99, 68E10)

A bird's-eye view to path problems. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 335-353, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Author's summary) 82h:68090 68E10 (05C38, 68C25, 90B10)

(with Ehrig, Hartmut) Complexity of algebraic implementations for abstract data types. J. Comput. System Sci. 23 (1981), no. 2, 223-253. (Authors' summary) 82m:68083 68C25 (03D15, 68C40)

Mahrenholtz, O. (with Bogacz, R.) Optimally stable structures subjected to follower forces. Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 139–157, North-Holland, Amsterdam, 1980. (See 82g:93003) 93C99

ze, G. M. (with Zel'dovič, Ja. B.; Barenblatt, G. I.; Librovič, V. B.) ★Математическая теория горения и взрыва. (Russian) [Mathematical theory of combustion and explosion] "Nauka", Moscow, 1980. 479 pp. (errata insert). (Frederick 80A25 (80-02) A. Howes) 82i:80008

(with Sterbak, S. B.) Numerical method of investigating nonstationary spatial motions of a compressible gas. Inž.-Fiz. Ž. 38 (1980), no. 3, 528-537 (Russian); translated as J. Engrg. Phys. 38 (1980), no. 3, 317-323. (H. K. Cheng) 82f:76022 76N10 (65P05)

Maia, M. D. Contacts of space-times. J. Math. Phys. 22 (1981), no. 3, 538-542. (G. R. Jensen) 82g:53027 53B25 (83C99)

m, T. S. E. Pumping lemmas for term languages. J. Comput. System Sci. 17 (1978), no. 3, 319-330. (From the introduction) 82e:68081 68F05 (03B25, 03D05) (with van Emden, M. H.) Equations compared with clauses for specification of abstract data types. Advances in data base theory, Vol. 1 (Proc. Workshop, Toulouse,

1979), pp. 159-193, Plenum, New York, 1981. (See 82a:68040) 68B15 Chiral rotations and the fermion-boson equivalence in the Schwinger model. Maiella, G. Lett. Nuovo Cimento (2) 28 (1980), no. 17, 561-565. (From the text) 82h:81092

(81C35) Maier, A. B. Method of coordinate descent for one class of nonlinear integer programming problems. Avtomat. i Vyčisl. Tehn. (Riga) 1980, no. 4, 65-67, 97 (Russian); translated as Automat. Control Comput. Sci. 14 (1980), no. 4, 61-63. (Author's summary) 82h:90079 90C10

Maier, David Minimum covers in the relational database model. J. Assoc. Comput. Mach. (with Gallant, John; Storer, James A.) On finding minimal length superstrings. J.

Comput. System Sci. 20 (1980), no. 1, 50-58. (Thomas G. Szymanski) 82h:68033

(with Mendelzon, Alberto O.; Sadri, Fereidoon; Ullman, Jeffrey D.) Adequacy of decompositions of relational databases. Advances in data base theory, Vol. 1 (Proc. Workshop, Toulouse, 1979), pp. 101-114, Plenum, New York, 1981. (See 82a:68040)

Maier, Helmut Chains of large gaps between consecutive primes. Adv. in Math. 39 (1981),

no. 3, 257-269. (Mohan Nair) 82g:10061 10H15

Maier, V. R. (with Busarkin, V. M.) Finite groups with nilpotent centralizers of elements of odd order. (Russian) Sixth All-Union Symposium on Group Theory (Čerkassy, 1978) (Russian), pp. 166–179, 223, "Naukova Dumka", Kiev, 1980. (V. V. Kabanov) 82e:20017

Finite groups with nilpotent centralizers of elements of order 3. (Russian) Mat. Sb. (N.S.) 114(156) (1981), no. 4, 643-651, 656. (V. D. Mazurov) 82g:20035

Маїgarin, В. Ž. ★Устойчивость и качество процессов нелинейных систем автоматического управления. (Russian) [Stability and quality of processes of nonlinear automatic control systems] "Nauka" Kazah. SSR, Alma-Ata, 1980. 316 pp. (Françoise Berquier) 82g:93033 93D05 (34H05, 93C10, 93D20)

Maillet, J. M. (with de Vega, H. J.) Renormalization character and quantum S-matrix for a classically integrable theory. *Phys. Lett. B* **101** (1981), *no.* 5, 302–306. (Authors' summary) **82±81093** 81E15 (58F07, 81F15)

Mailliat, Alain (with Duhamel, Pierre) Sur les propriétés des densités de probabilité lagrangiennes. (English summary) C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci. Univers Sci. Terre 292 (1981), no. 16, 1107-1110. (Authors' summary) 82h:76028 76F99 (60J60)

тээ (сооб) mas, E. Z. (with Vilkas, Éduardas) ★Решения: теория, информация, пелирование. (Russian) [Decisions: theory, information, modeling] "Radio i sojaz",

- Moscow, 1981. 328 pp. (M. Mañas) 82m:90188 90D35 (90A05) lne, Richard E. (with Iliff, Kenneth W.) Formulation and implementation of a practical ent noise. SIAM J. Appl. algorithm for parameter estimation with process and measurement Math. 41 (1981), no. 3, 558-579. (Authors' summary) 82m:93084
- I Maio, Gisseppe Ser Di Maio, Guseppe
 faioli, M. (with Caliceti, E.; Graffi, Sandro) Perturbation theory of odd anharmonic oscillators. Comm. Math. Phys. 75 (1980), no. 1, 51-66. (Authors' summary) 82d:81630
- 81C12 (47A55) eters of Sobolev classes and chains of extremal subsp (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 3(11), 437-463, 495. (D. N. Zarnadze) 82j:41022 41A46 (46E35)
 - On a modification of the Bernštein-Nikol'skii inequ uality for trigon
 - polynomials. (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 1, 23-26. (S. D. Riemenschneider) 82:41018 41A17 (42A05)
 iresse, Jacques (with Pescheux, Jean-Michel) Fonction de production et mesure du
- capital: la robustesse des estimations. (English and Spanish summaries) Production functions and factor demand functions. Ann. I. N.S. É. E. No. 38-39 (1980), 63-75. (See 62P20 (90A11)
- (with Bosshardt, Marc-Olivier) Le comportement de déclassement des entreprises: quelques estimations. (English and Spanish summaries) Production functions and factor demand functions. Ann. I.N.S.E.E. No. 38-39 (1980), 207-235. (See 82e:90019)
- hirlot, Fernand E. (with Godart, Odon; Le Guyader, H.; Vallet, Cl.; Ferré, M.; Moulin, Th.) Symposium: Notion de Temps et Cybernétique. Cybernetica 24 (1981), no. 2, 89-120. (Editors) 82h-93002 93A10
- m Critical remarks on chemical electrodynamics and the theory of solutions (Polish, English, French, German and Russian summaries) Rozprawy Elektrotech. 27 (1981), no. 1, 3-35. (Author's summary) 82m:78001 78-03 (01A55, 35Q20, 81-03)
- ison, H. Dieter Uniqueness of the Prasad-Sommerfield monopole solution. Nuclear Phys. B 182 (1981), no. 1-2, 144-150. (Author's summary) 82f:81082 81G10 (81E99)
- neuve, Bernard Martingales de valeur absolue donnée, d'après Protter et Sharpe. (English summary) Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 642-645, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Michael Sharpe) 82f:60105 60G44
 - (with Jacod, Jean) Remarques sur les fonctionnelles additives non adaptées des processus de Markov. Seminar on Probability, XIV (Paris, 1978/1979) (French) pp. 410-417, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Michael Sharpe)
 - On Levy's downcrossing theorem and various extensions. XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 191-205, Lecture Notes in Math., 850, Springer, Berlin, 1981. (A. Fuchs) 82m:60091 60J55 (60K05)
 - ur on Probability, XV (Univ. Strasbourg, Stras 1979/1980) (French), pp. 347–350, Lecture Notes in Math., 850, Springer, Berlin, 1981.
 (P. E. Kopp) 82h:60082
- ister, P. I. Branching diffusion processes in an unbounded domain. (Russian) Mat. Sb. (N.S.) 114(156) (1981), no. 3, 406-424, 479. (Harry I. Cohn) 82j:60146 60J60 (60J80) istrenko, Ju. L. (with Romanenko, O. Ju.; Šarkovs'kii, O. M.) The qualitative behavior
- of solutions of quasilinear differential-difference equations. (Russian) An investigation of differential and differential-difference equations (Russian), pp. 38–50, 187, Akad. N Ukrain. SSR, Inst. Mat., Kiev, 1980. (V. G. Angelov) 82g:34103 34K15 (34K20)
 - A theorem on the preservation of asymptotically periodic solutions of differential-difference equations that are close to completely integrable ones. (Russian) An investigation of differential and differential-difference equations (Russian), pp. 50-81, 188, Akad. Nauk Ukrain. SSR, Inst. Mat., Kieo, 1980. (A. Halanay) 82k:34081
 - C^k -solutions of linear functional-differential equations with linear-fractional transformation of the argument. (Russian) Qualitative investigations of functional-differential equations (Russian), pp. 90–100, 185, "Naukova Dumka", Kiev, 1980. (P. Talpalaru) 82f:34092 34K15
- Maistrenko, V. E. (with Avaliani, G. V.; Pataraja, K. T.) Density of probability distribution of values of the square of the distance between two points. (Russian) Theoretical cybernetics (Russian), pp. 155-158, "Mecniereba", Tbilisi, 1980. (From the 60D05
- Maistrov, L. E. (with Edlin, I. S.) C. Babbage's difference engine. (Russian. English Summary) History and methodology of the natural sciences, No. XX (Russian), pp. 99-105, Moskov. Gos. Univ., Moscow, 1978. (Siegfried Gottwald) 82g-01027 01A55 (68-03) (with Apokin, I. A.; Belyi, Ju. A.) J. V. Atanasoff's computing machine. (Russian) Istor.-Mat. Issled. No. 23 (1978), 168-180, 358. (L. Guggenbuhl) 82f-01058 01A60
- wskii, G. D. (with Ljubič, Ju. I.; Ol'hovskii, Ju. G.) Selection-induced convergence to equilibrium in a single-locus autosomal population. Problemy Peredači Informacii 16 (1980), no. 1, 93-104 (Russian); translated as Problems Inform. Transmission 16 (1980), no. 1, 66-75. (Charles J. Mode) 82g:92026 92A10
- suradze, A. I. Stability and stabilization of logical-dynamical systems with respect to part of the variables. (Russian) Theoretical cybernetics (Russian), pp. 159-164, "Mecniereba", Tbilisi, 1980. (See 821:90004) 93D99
- (with Fahirov, G. A.) Stabilization of systems with quickly changing parameters with incomplete information. (Russian) Theoretical cybernetics (Russian), pp. 165-169, "Mecniereba", Tbilisi, 1980. (See 821:90004) 93D99
- Maisuradze, V. G. (with Gabisonija, V. E.) A method of constructing optimal mixed strategies in a finite antagonistic two-person game with independent constraints.
- an. Georgian and English sum aries) Soobšč. Akad. Nauk Gruzin. SSR 98 (1980), no. 1, 129–132. (W. H. Ruckle) 82h:90128 90D05
- Maitani, Fumio The method of linear operators for square integrable differentials on open Riemann surfaces and its applications. J. Math. Kyoto Univ. 20 (1980), no. 4, 661-689.
 - (M. Nakai) 32h:30059 30F30

 Behavior spaces on finite bordered Riemann surfaces. Mem. Kyoto Tech. Univ. Sci. Tech. 29 (1980), 9-23 (1981). (M. Nakai) 82k:30046 30F30 (30F25)

 Remarks on the isomorphisms of certain spaces of harmonic differentials induced
 - from quasiconformal homeomorphisms. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980),

- no. 7, 311-314. (T. A. Metzger) 82c:30068 30F30 (30C60, 46E99)
- Maiti, M. (with Babu, A. C.) On subsequential limit points of a sequence of iterates.

 Amer. Math. Soc. 82 (1981), no. 3, 377-381. (V. V. Obuhovskii) 82j:54097 54F.

 See also Singh, K. L., 82i:54082

 Maiti, S. R. Cowling's theorem in nonflat space-time. Monthly Notices Roy. Astronom
- 194 (1981), no. 3, 827-828. (Author's summary) 82a:83029 83C50 (83C40)

 Maitra, Ashok (with Rao, B. V.) Generalizations of Castaing's theorem on selectors.

 Colloq. Math. 42 (1979), 295-300. (J. E. Jayne (Zbl 427:28010)) 82m:28024 28B20 Analytic sets with countable sections. Fund. Math. 110 (1980), no. 2, 101-106. (Ryszard Frankiewicz) 82d:54043 54H05
- Maitra, S. N. A simple application of the theorem of composition of accelerations. Amer. Math. Monthly 87 (1980), no. 6, 466-468. (Samuel Levy) 82b:70002 70B99
- Maizel, Jacob V., Jr. (with Lenk, Robert P.) Enhanced graphic matrix analysis of nucleic acid and protein sequences. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 12, part 2, 7665-7669. (Authors' summary) 82m:92049 92A10
- Maizenberg, T. L. (with Kolmanovskii, V. B.) On control of time for reaching a domain by random motion. Prikl. Mat. Meh. 44 (1981), no. 1, 13-21 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 1, 7-12 (1981). (Constantin Vårsan) 82m:49051
- Maj, Jarosław R. (with Kania, Aleksander A.; Kiszka, Jerzy B.; Gorzałczany, Marian B.; Stachowicz, Marian S.) On stability of formal fuzziness systems. Inform. Sci. 22 (1980), no. 1, 51-68. (Authors' summary) 82k:93055 93D99 (03E72)
- no. 1, 51-68. (Authors' summary) 82k:93055 Maj, Mercede (with Longobardi, Patrizia) A Chapman-Scorza theorem. (Italian) Ricerche Mat. 29 (1980), no. 2, 351–369. (G. Zappa) 82k:20067 20F99
 Majchrowski, Marian On construction of a solution of the parabolic system of partial
- differential equations. Demonstratio Math. 13 (1980), no. 1, 285-299. (Kenneth J. 35K40
- Brown) 82g:35049 Majchrzak, Janusz (with Kurcyusz, Stanisław) Morrison-type algorithms for constrained optimization. I. Control Cybernet. 8 (1979), no. 2, 131-140. (Authors' summary) 49D07 (49D30)
- (with Kurcyusz, Stanisław) Morrison-type algorithms for constrained optimization. II. (Polish and Russian summaries) Control Cybernet. 8 (1979), no. 3, 227-240. (Authors' nary) 82m:49040b 49D07 (49D30)
- Majda, Andrew (with Ralston, James V.) Geometry in the scattering phase. Geometry of the Laplace operator (Proc. Sympos. Pure Math., Unio. Hawaii, Honolulu, Hawaii, 1979), pp. 253–255, Proc. Sympos. Pure Math., XXXVI, Amer. Math. Soc., Providence, R.I., 1980. (A. A. Laptev) 82b:58100 58G25 (35P25, 47A40)
 - The existence and stability of multidimensional shock fronts. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 3, 342-344. (Giovanni P. Galdi) 82g:35074 35L67 (76L05)
 - (with Beale, J. Thomas) Rates of convergence for viscous splitting of the
 - Navier-Stokes equations. Math. Comp. 37 (1981), no. 156, 243-259. (Authors' summary) 65M15 (76D05)
 - A qualitative model for dynamic combustion. SIAM J. Appl. Math. 41 (1981), no. 1, 70-93. (H. M. Cekirge) 82j:35096 35L67 (35Q20, 80A25)
- Majewska-Tronowicz, Jadwiga (with Michalczyk, Barbara; Kinowska, Malgorzata) Current bibliography of the history of science and technology. No. 34 (April–July 1979). (Polish) Kwart. Hist. Nauk. Tech. 25 (1980), no. 1, suppl., 22 pp. (Editors) 82h:01004a (00A15)
 - (with Michalczyk, Barbara; Kinowska, Malgorzata) Current bibliography of the ory of science and technology. No. 35/36 (July-Dec. 1979). (Polish)
 - Nauk. Tech. 25 (1980), no. 2, suppl., 30 pp. (Editors) 82h-0100-b 01A05 (00A15)

 See also Polish bibliography on the philosophy of science and technology during the years 1974–1976, 82f:00009
- or, Peter An improvement of Strassen's invariance principle. Ann. Probab. 7 (1979), no. 1, 55-61. (Werner Fieger) 82f:60069 60F17 (60G50) Major, Péter An improve
 - (with Szász, Domokos) On the effect of collisions on the motion of an atom in R1. Ann. Probab. 8 (1980), no. 6, 1068-1078. (F. L. Spitzer) 82i:82012 82A05 (60K35)
 - ★Multiple Wiener-Itô integrals. With applications to limit theorems. Lecture Notes in Mathematics, 849. Springer-Verlag, Berlin-New York, 1981. vii+127 pp. ISBN 3-540-10575-1 (H. Salehi) 82i:60099 60G60 (60H05, 60K35, 82A05)
- Major, R. See Strejc, Vladimir, 82k:93001 Majster-Cederbaum, Mila E. (with Reiser, Angelika) An efficient on-line position tree construction algorithm. Theoretical computer science (Fourth GI Conf., Aachen, 1979), pp. 190-198, Lecture Notes in Comput. Sci., 67, Springer, Berlin, 1979. (Andrzej
 - Proskurowski) 82b:68027 68C05 (68C25) Semantics: algebras, fixed points, axioms. Automata, languages and programming (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 394-408, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (From the introduction) 82a:68162
 - A simple relation between relational and predicate transformer semantics for nondeterministic programs. Inform. Process. Lett. 11 (1980), no. 4-5, 190-192. (From the
 - introduction) 82m:68025 68B10
 (with Reiser, Angelika) Efficient on-line construction and correction of position trees. SIAM J. Comput. 9 (1980), no. 4, 785-807. (Authors' summary) 82a:68124
- umdar, Pradip Kumar Ganita kaumudi and the continued fraction. Indian J. Hist. Sci. 13 (1978), no. 1, 1-5. (A. I. Volodarskii) 82g:01014 01A32
 - The extant Siddh -an error in the sine of one-third part of an angle. Indian J. Hist. Sci. 13 (1978), no. 1, 6-10. (A. I. Volodarskii) 82g:01015
 - A rationale of Bhaskara I's method for solving $ax \pm c = by$. Indian J. Hist. Sci. 13 (1978), no. 1, 11-17. (E. M. Bruins) 82g:01016 01A32
- datta Majumdar, S. See Datta Majumdar, S.
- ur, S. R. (with Ramkissoon, H.) Potentials and Green's functions in micropolar fluid theory. (German and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 5, 249-255. (L. Debnath) 82a:76004 76A05 (35Q20, 76Z05)
- ler, D. Dutta (with Chaudhuri, B. B.) Fuzzy sets and possibility theory in reliability studies of man machine systems. Fuzzy sets (Proc. Sympos. Policy Anal. Inform. Systems, Duke Univ., Durham, N.C., 1980), pp. 267-273, Plenum, New York, 1980. (Jiří Šústal) 82a:90060 90B25 (03E72, 62N05)
 - (with Chaudhuri, B. B.) Recognition and fuzzy description of sides and symmetries

of figures by computer. Internat. J. Systems Sci. 11 (1980), no. 12, 1435–1445. (Authors' summary) 82a:68167 68G10

Mak, K. L. Dynamics and control of integrated production-inventory-shipping systems. Cybernet. Systems 12 (1981), no. 3, 205–224. (Author's summary) 82i:90031 90B05 (90B30)

 Mak, T. K. Large-sample results in the estimation of a linear transformation. Biometrika 68 (1981), no. 1, 323-325. (Author's summary) 821:62040 62E20 (62H10) (with Ng, K. W.) Analysis of familial data: linear-model approach. Biometrika 68 (1981), no. 2, 457-461. (Authors' summary) 82h:62180 62P10 (62H20)
 Makagon, Andrzej (with Schmidt, Franz) A decomposition theorem for densities of positive operator-valued measure. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 1-2, 41-43 (1981). (S. D. Chatterji) 82m:46047 46G10 (28B05) See Makai, Endre

Makai, E., Jr. Continuous fields of Banach spaces. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 815–825, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (I. R. Isbell) 82e:46091 46M20

Correction to my paper: "The space of bounded maps into a Banach space" [Publ. Math. Debrecen 19 (1972), 177-179 (1973); MR 48 #6911]. Publ. Math. Debrecen 28

(1981), no. 1-2, 189. (Editors) 82g:46060 46E15 (46B20, 47D15)

Makai, Endre On a transformation of Gronwall concerning the three-body problem of cs. Studia Sci. Math. Hungar. 13 (1978), no. 1-2, 187-192 (1981). (F. tum mechan

quantum mechanics. Studia Sci. Main. Trungar. 15 (1770), no. 1-2, 107-172 (1701). (F. R. Halpern) 82m81013 81C05 (81F05, 81H99)

Makanin, G. S. Equations on a free semigroup. (Russian) Proceedings of the International Congress of Mathematicians (Helsinki, 1978), pp. 263-268, Acad. Sci. Fennica, Helsinki, 1980. (R. S. Pierce) 82b:20081 20M05 (03D40)

Makanina, T. A. The occurrence problem for the braid group 8_{n+1} when n+1>5.

(Pussian) Mat. Zamethi 29 (1081), no. 1. 31-33, 154. (From the text and summary)

(Russian) Mat. Zametki 29 (1981), no. 1, 31-33, 154. (From the text and summary)

82e:20049 20F36 (20F10, 32C40)
Makarcuk, M. M. Identification of stochastic objects. (Russian) Kibernet. i Vyčisl. Tehn.
No. 49 (1980), 49–57, 99. (Author's summary) 82a:93068 93E12 (93E03)
Makarenko, A. S. (with Moskal'kov, M. N.) A means of counteracting oscillations.

(Russian. English summary) Vyčisl. Prikl. Mat. (Kiev) 1980, no. 41, 65-71, 158. (I. M. Sheffer) 82b:65086 65M10

Makarenko, A. V. (with Dabagjan, A. V.) Application of a sequential dichotomy in the construction of an optimal standard size series of complexes of industrial plants. (Russian) Methods for optimization, identification and allocation of resources in complex systems (Russian), pp. 15-23, 46-47, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiec, 1980. (See 82c:90002) 90A99

Makarenko, G. I. (with Krasnov, M. L.; Kiselev, A. I.) *A book of problems in ordinary differential equations. Translated from the third Russian edition by Vladimir Shokurov [Vladimir Šokurov]. "Mir", Moscow; distributed by Imported Publications, Chicago, Ill., 1981. 333 pp. (Editors) 82g:34001 34-01 (00A07)

Makarenko, N. I. Justification of a three-dimensional model of shallow water. (Russian) Dinamika Splošn. Sredy No. 44 Dinamika Neodnorodn. Židkosti (1980), 61-82, 175. (Author's summary) 82k:76012 76B15 (58D25)

On the theory of two-layered shallow water. (Russian) Dinamika Splošn. Sredy No. 50 Kraev. Zadači dlja Uravnenii Gidrodinamiki (1981), 121–134, 176. (Author's summary) 82m:76068 76V05 (76B15) summary) 82m:76068

Makarevič, B. O. Jordan algebras and orbits in symmetric R-spaces. (Russian) Trudy Moskov. Mat. Obšč. 39 (1979), 157-179, 236. (I. L. Kantor) 82e:53035 53C35 (17C99, 32M15)

Makarevič, O. B. On the organization of multichannel access in data-process with a high degree of parallelism. Automat. i Vyčisi. Tehn. (Riga) 1980, no. 5, 24–30, 95 (Russian); translated as Automat. Control Comput. Sci. 14 (1980), no. 5, 21–26. (Author's summary) 82e:68005 68A05 (68B20)

Makarjan, V. S. (with Papojan, S. O.) On a contact problem for an elastic half-space with a semi-infinite cylindrical cavity. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Meh. 33 (1980), no. 1, 3-11, 78. (L. Jentsch) 82c:73082

kar-Limanov, L. G. (with Kim, Ki Hang; Neggers, Joseph; Roush, Fred William) Graph algebras. J. Algebra 64 (1980), no. 1, 46-51. (Dominique Foata) 82e:05114a Makar-Lima 05C99 (18G50)

Makarov, A. A. Necessary and sufficient conditions for correct solvability of a boundary value problem in a layer for systems of partial differential equations. (Russian) Differencial nye Uravnenija 17 (1981), no. 2, 320–324, 390. (O. John) 82e:35021

Makarov, A. L. (with Gledzer, E. B.) On the construction of a cascade model of two-dimensional turbulence. Izv. Akad. Nauk SSSR Ser. Fiz. Atmosfer. i Okeana 15 (1979), no. 9, not available (Russian); translated as Izv. Acad. Sci. USSR Atmospher. Ocean. Phys. 15 (1980), no. 9, 623-627. (Authors' summary) 82x76044 (86A35)

Makarov, A. P. Stability of linear differential systems with the piecewise constant periodic frequency of a parametric perturbation. (Russian. English summary) Vestnik Leningrau Univ. Mat. Meh. Astronom. 1981, vyp. 2, 108-110, 127. (Wolfgang Hahn) 82g:34066 34D10

Realisierungen mit Hilfe von Basen finiter Elemente. Math. Nachr. 36 (1978), 7-14. (Editors) 82f:46007 46A40 (46E05)

Makarov, G. D. Large deviations for a critical Galton-Watson process. (Russian. English summary) Teor. Verojamost. i Primenen. 25 (1980), no. 3, 490-501. (G. I. Ivčenko) 60J80 (60F10)

Makarov, I. A. The Frankl' problem and formulas for inversion of certain integral equations ija 16 (1980), with special functions in the kernels. (Russian) Differencial'nye Uraone 35M05 (45H05) no. 11, 2103-2105, 2112. (Author's summary) 82i:35128

Makarov, I. I. A theorem on the unprovability of lower time estimates for a certain class of functions. (Russian) Probabilistic methods and cybernetics, No. XV (Russian), pp. 48-50,

Kazan. Unio., Kazan, 1979. (V. B. Alekseev) 82c-63062 03D13 (68C30) Maksrov, I. P. See Partial differential equations, 82:35004 Maksrov, O. M. (with Lenin, A. I.) Accelerated algorithms for multiplication of a transposed vector by matrices $\| \tilde{G}_0^{-1} \|$ and $\| \tilde{G}_0^{-1} \|$. (Russian) Izv. Vysš. Učebn. Zaved.

Matematika 1980, no. 1, 34-38. (Jozef Mikloliko) 82e:65045 65F30 (65F05)

Makarov, V. L (with Kaminskii, V. A.) On the best spline with free nodes for a convex function. (Russian) Application of functional analysis to approximation theor pp. 45-52, 158, Kalinin. Gos. Univ., Kalinin, 1980. (A. A. Ligun) 82h:41016

Makarov, V. L. (with Voicehovskii, S. A.) Estimation of the rate of convergence of mes in eigenvalue problems for convex domains. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1035-1038. (From the introduction) 82f:65107

(with Samarskii, A. A.) Application of exact difference schemes to estimation of the rate of convergence of the method of lines. (Russian. Georgian and English summaries Sem. Inst. Prikl. Mat. Dokl. No. 14 (1980), 18-23. (Authors' summary) 824:65045

(with Ljalko, Ī. Ī.; Šmanenko, T. L.) Algorithmic aspects of the method of summary representations. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 4, 515-522. (Jozef Miklolko) 82e:65031 65F05 (15A24, 65N20)

(with Klunnik, O. O.; Kopistira, M. P.) Some questions of interpolation of xⁿ-analytic functions (Russian) Vyčial. Prikl. Mat. (Kiev) No. 42 (1980), 132-137, 166. (P. Vertesi) 82d:30031 30E05 (41A10) (with Gavriljuk, I. P.; Elenin, G. G.; Zdorenko, Ju. N.; Šan'ko, T. M.; Zmitrenko,

N. V.) Two algorithms for numerical solution of problems of quasilinear heat conduction and their comparison. (Russian. English summary) Vyčist. Prikt. Mat. (Kiev) 1980, no. 41, 92–105, 159. (Murli M. Gupta) 82a:65095 65P05 (65M05)

(with Samarskii, A. A.) Application of exact difference schemes to the estimation of the rate of convergence for the method of lines. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 2, 371-387, 550. (S. A. Vološin) 821:65099 65M20 (65N40)

Makarov, V. S. A noncompact partition of ten-dimensional Lobačevskii space. (Russian) Geometry of positive quadratic forms. Trudy Mat. Inst. Steklov. 152 (1980), 162-164, 237. (Author's introduction) 82k:51008 51F15

Makarova, A. D. A generalized resolvent of a 3-symmetric operator. (Russian) Functional analysis, No. 14 (Russian), pp. 99-104, Ul' janovsk. Gos. Ped. Inst., Ul' yanovsk, 1980. (T. Ja. Azizov) 82f:47049 47B50

Makarova, K. P. Points of self-intersection of a geodesic on a smooth closed surface with locally Lobačevskii metric. (Russian) Geometry of positive quadratic forms. Trudy Mat. Inst. Steklov. 152 (1980), 170-174, 238. (P. E. Markov) 82e:53100 53C50 (53C22)

Makarova, L. Ja. Sufficient conditions for strong linear convexity for polyhedra. (Russian) Some problems of multidimensional complex analysis (Russian), pp. 89-94, 265-266, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Fiz., Krasnoyarsk, 1980. (I. P. Ramadanov) 82k:32045 32F15

Sufficient conditions for linear convexity and some properties of linearly convex domains with a smooth boundary. (Russian) Izv. Vysł. Učebn. Zaved. Matematika 1980, no. 9, 13-17. (Harold P. Boas) 82c:32021 32F99

Makarow, B. M. See Makarov, B. M.

ev, N. K. (with Nosik, V. I.) Steady-state Couette flow (with heat transfer) of a gas of Maxwell molecules. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 5, 1077-1081. (Nina B. Maslova) 82h-82046 82A40 (45K05, 76P05)

Makay, Arpad See Bibliography: Makay, Arpad, 82c:01058
Makeenko, Ju. M. (with Migdal, A. A.) Quantum chromodynamics as dynamics of loops. Nuclear Phys. B 188 (1981), no. 2, 269-316. (Authors' summary) 82i:81137

(with Hohlačev, S. B.) Phase transition over the gauge group center and quark confinement in QCD. Phys. Lett. B 101 (1981), no. 6, 403-406. (Authors' summary) 81G05

(with Hohlacev, S. B.) The symmetry of the center of the gauge group and the problem of quark confinement in quantum chromodynamics. Z. Eksper. Teoret. Fiz. 80 (1981), no. 2, 448-466 (Russian); translated as Soviet Phys. JETP 53 (1981), no. 2, 228-237. (Authors' summary) 82k:81694 81G20 (81E25, 81G05)

Makhaldiani, N. V. See Mahaldiani, N. V.

Makhankov, V. G. See Mahan'kov, V. G. Makhoul, John On the eigenvectors of symmetric Toeplitz matrices. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 4, 868-872. (Author's summary) 82m:94012 94A05 (15A18, 65F15)

Makhviladze, G. M. See Mahviladze, G. M.
Maki, Daniel P. On determining regular behavior from the recurrence formula for orthogonal polynomials. Pacific J. Math. 91 (1980), no. 1, 173-178. (T. S. Chihara) 82h:42028 42C05

Maki, Haruo (with Kamata, Masayoshi) Note on the relation of γ-classes to characteristic classes. Math. Rep. Kyushu Univ. 12 (1979/80), no. 2, 69-76. (R. E. Stong) 82c:57013

Maki, Kazumi (with Takayama, Haiime) Breathers in the sine-Gordon system at finite temperatures. Phys. Rev. B (3) 22 (1980), no. 11, 5302-5307. (V. Z. Enol'skii) 82h:82075 82A67 (35O20, 81E99)

(with Lin-Liu, Y. R.) Two-soliton interaction energy and the soliton lattice in polyacetylene. Phys. Rev. B (3) 22 (1980), no. 12, 5754-5758. (Authors' summary) 82d:82086 82A67 (82A42)

Quantum statistics of solitons. Physics in one dimension (Proc. Internat. Conf., Fribourg, 1980), pp. 63–74, Springer Ser. Solid-State Sci., 23, Springer, Berlin, 1981. (See 82g.82003) 82A15 (35Q20)

(with Kleinert, H.) Lattice textures in cholesteric liquid crystals. Fortschr. Phys. 29 (1981), no. 5, 219-259. (Elan Moritz) 82k:82042 82A57

Māki, Sirpa *The determination of units in real cyclic sextic fields. Lecture Notes in Mathematics, 797. Springer-Verlag, Berlin-New York, 1980. i + 198 pp.
ISBN 3-540-09984-0 (Charles J. Parry) 82æ12004 12A45 (12A35, 12A50)

Makino, M. (with Brunel, F.; Leboeuf, J. N.; Tajima, T.; Dawson, J. M.; Kamimura, T.) Magnetohydrodynamic particle code: Lax-Wendroff algorithm with finer grid interpolations. J. Comput. Phys. 43 (1981), no. 2, 268-288. (Authors' summary) 65M05 (76W05)

Makino, Ryobei A note on applications of the balanced conditions. Sci. Rep. Fac. Ed. Fukushima Univ. No. 28 (1978), 1-6. (J. Jirásko) 824:16018 16A46 (16A48) Makinson, David Qu'est-ce la complétude structurale? Publ. Dép. Math. (Lyon) 16 (1979), no. 3-4, 65-66. (Editors) 82:e33039 03B99

Nonequivalent formulae in one variable in a strong omnitemporal modal logic. Z. Math. Logik Grundlag. Math. 27 (1981), no. 2, 111-112. (Scott K. Lehmann) 82h:03014

03B45

kkai, Michael (with Barwise, K. Jon; Kaufmann, Matt) Stationary logic. Ann. Math.

Logic 13 (1978), no. 2, 171-224. (From the introduction) 82i:03031a 03C80

The topos of types. Logic Year 1979-80 (Proc. Seminars and Conf. Math. Logic,

Unio. Connecticut, Storrs, Conn., 1979/80), pp. 157-201, Lecture Notes in Math., 859,

Springer, Berlin, 1981. (Lawrence Neff Stout) 82k:03103 03G30 (18825)

(with Barwise, K. Jon; Kaufmann, Matt) A correction to: "Stationary logic". Ann.

Math. Logic 20 (1981), no. 2, 231-232. (From the introduction) 82f:03031b An example concerning Scott heights. J. Symbolic Logic 46 (1981), no. 2, 301–318. (Bienvenido F. Nebres) 82m:03049 03C70

Makkenon, K. See McKennon, Kelly Makky, S. M. (with Ghalib, M. A.) Minimum deflection under dynamic loading. (Arabic mary) Arab J. Math. 1 (1980), no. 1, 22-31. (Authors' summary) 82k:73060 73K40 (65K10)

Makeys, M. The "large sieve" in quadratic fields. (Russian. Lithuanian and English summaries) Litousk. Mat. Sb. 20 (1980), no. 2, 79-86, 208. (J. W. Porter) 82b:10063 10H30 (12A25)

ha, A. N. A linear complex of planes associated with the trivector type (886; 410). (Russian) Modern geometry (Russian), pp. 44-63, Leningrad. Univ., Leningrad, 1980. (Josef Vala) 82g:51002 51A05 (15A72)

Makov, Udi E. (with Smith, A. F. M.) Bayesian detection and estimation of jumps in linear systems. Analysis and optimisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 333–345, Academic Press, London, 1980. (R. Š. Lipcer) 93E10

(with Smith, A. F. M.) Unsupervised learning for signal versus noise. IEEE Trans.

Inform. Theory 27 (1981), no. 4, 498-500. (Authors' summary) 82k:62064 62F15

Makovenko, E. T. See Technical resources of mini- and micro-computers, 82f:68007

Makovoz, Ju. I. (with Averbuh, N. D.) On determining a mean error on compacta in problems of the theory of approximations. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 4, 38-44, 140. (G. Marinescu) 82d:41047

41A65 Makowski, Louis A characterization of perfectly competitive economies with production Noncooperative approaches to the theor (1980), no. 2, 208-221. (See 82e:90023) eory of perfect competition. J. Econom. Theory 22 90A14

Perfect competition, the profit criterion, and the organization of economic activity. approaches to the theory of perfect competition. J. Econom. Theory 22 (1980), no. 2, 222-242, (See 82e:90023) 90A14

Makowsky, J. A. Measuring the expressive power of dynamic logics: an application of abstract model theory. Automata, languages and programming (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 409–421, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (G. Mirkowska) 82c:03022 03B45 (03C75, 03C95, 68C99)

Errata: "Measuring the expressive power of dynamic logics: an application of abstract model theory" [Automata, languages and programming (Noordwijkerhout, 1980), pp. 409–421, Springer, Berlin, 1980; MR 82c:03022]. Automata, languages and programming (Akko, 1981), p. 551, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (Editors) 82j:03021 03B45

Maksa, Gy. Bounded symmetric information functions. C. R. Math. Rep. Acad. Sci. Canada 2 (1980), no. 5, 247-252. (Prem Nath) 82a:94032 94A15

A remark on symmetric biadditive functions having nonnegative diagonalization. (Serbo-Croatian summary) Glas. Mat. Ser. III 15(35) (1980), no. 2, 279-282. (Hiroshi 39B70 (39B40, 46C99)

On the bounded solutions of a functional equation. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 4, 445-450. (J. Aczėl) 82g:94008 94A17 (39B20)

The general solution of a functional equation related to the mixed theory of

information. Aequationes Math. 22 (1981), no. 1, 90-96. (Pl. Kannappan) 82i:39006 30R40

Maksakov, V. V. (with Spasskii, B. I.) Invariant-theoretic (Erlangen) approach to the interrelation of physical theories. (Russian. English summary) History and methodology of natural sciences, No. XXI (Russian), pp. 15-20, Moskov. Gos. Univ., Moscow, 1979. (Andrzej Trautman) 82b:00015 00A69 (01A99)

Maksay, Stefan A probabilistic distribution law with practical applications. Mathe (Chij) 22(45) (1980), no. 1, 75–76. (From the introduction) 82e:62025 62E15

ksimenkov, A. V. Job control in a shared-use computer. Aviomat. i Vyčisl. Tehn. (Riga) 1979, no. 6, 59-66, 93 (Russian); translated as Automat. Control Comput. Sci. 13 (1979), no. 6, 52-57. (Author's summary) 82h:68035 68B20 (68C15, 90B22)

(with Nikonov, V. V.) Processing control language in a computer network. Automat. i Vyčisl. Tehn. (Riga) 1980, no. 6, 14–20, 95 (Russian); translated as Automat. Control Comput. Sci. 14 (1980), no. 6, 9–14. (Authors' summary) 821c68036 68B20

Asynchronous parallel computations in a modular multiprocessor computer. I. Program models. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 2, 88-95, 220-221 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 2, 79-85 (1981). (Author's mmary) 824:68017 68B20

Maksimiv, E. M. (with Bodnarčuk, P. I.) Nonlinear multipoint methods of solution of differential equations. (Ukrainian. Russian summary) Studies in the qualitative theory of differential equations and its applications (Ukrainian), pp. 9–10, 70, Akad. Nauk Ukrain.

SSR, Inst. Mat., Kiev, 1978. (Authors' summary) 82e;65033 651.05

Maksimov, Ju. M. (with Mednis, P. M.; Rasulkulov, M. S.) Time and phase means of dynamical systems. (Russian) 1zv. Akad. Nauk UzSSR Ser. Fiz. Mat. Nauk 1980, no. 5, 73–77, 101. (Authors' summary) 82e:82015 82A05 (70G35)

Maksimov, K. N. Limit distributions of a random variable defined on a Markov chain. (Russian. English summary) Teor. Verojatnost. i Primenen. 24 (1979), no. 3, 628-632. (E. 60J10 Seneta) 82m:60080

Maksimov, V. A. (with Potanina, V. L.) A mathematical model of slide bearings for a turbine engine and its numerical realization. (Russian) Computational methods and outer software, No. 2 (Russian), pp. 107-117, Kazan. Gos. Univ., Kazan, 1980. (See 76D10

Maksimov, V. I. On the existence of a saddle point in a differential-difference encounter-evasion game. Prikl. Mat. Meh. 42 (1978), no. 1, 15-22 (Russian); translated (with Krjažimskii, A. V.) Approximation in linear differential-difference games. Prikl. Mat. Meh. 42 (1978), no. 2, 202-209 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 2, 212-219 (1979). (Authors' summary) 82m:90194 90D42 (90D26)

A differential game with a functional payment. (Russian) Trudy Inst. Mat. i Meh.

Ural. Naučn. Centr Akad. Nauk SSSR No. 26 Differencia: Sistemy Systems 34-44, 95. (Claudia Simionescu) 82c:90114 90D26 (90D25)
Approximation of nonlinear differential-difference games. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 30 Optimal. Uprav. v Dinamič.

Maksimov, V. M. Mathematical expectations for probability distributions on compact groups. Math. Z. 174 (1980), no. 1, 49-60. (H. Heyer) 82g:60020 60B15 (43A05)

v, V. P. (with Bulgakov, A. I.) Functional and functional-differential inclusions with Volterra operators. (Russian) Differencial'nye Uravnenija 17 (1981), no. 8, 1362-1374, 1530. (J. Jarnik) 82j:34073 34K05 (34A60)

On passage to the limit in boundary value problems for functional-differential equations. (Russian) Differencial nye Uravnenija 17 (1981), no. 11, 1984–1994, 2109–2110. (V. Šeda) 82m:34077 34K30 (47H15)

Maksimov, Valeri M. See Maksimov, V. M.
Maksimov, L. L. Interpolation theorems in modal logics. Sufficient conditions. (Russian)
Algebra i Logika 19 (1980), no. 2, 194–213, 250–251. (I. Ruzsa) 82i:03028 03B45

Maksimovič, N. G. (with Matviičuk, Ja. N.; Šemuratov, F. A.) Application of the theory of matrix graphs to the formation of a model of an electrical circuit with multipoles. (Russian. English summary) Elektronnoe Modelirovanie 1981, no. 1, 27-32, 109. (Authors' summary) 82f:94019 94C05

Maksudov, F. G. (with Guseinov, A. I.) ★Azarbajdžanda rijazijjat. (Azerbaijani) [Mathematics in Azerbaijan] "Èlm", Baku, 1978. 40 pp. (J. S. Joel) 82a:01051 (with Guseinov, M. M.) A quadratic pencil of operators in the presence of a continuous spectrum. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan, SSR Dokl. 35 (1979), no. 1, 9-13. (From the text) 82f:47026

(with Bagirova, S. Ju.; Šamilov, A. H.) Smoothness of certain functionals, given in implicit form by a functional equation. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 35 (1979), no. 11, 3-7. (Dorde Dukić) 82h:70035

(with Pašaeva, E. E.) Multiple expansion in eigenfunctions of a one-dimensional nonselfadjoint differential operator of even order on the half axis. (Russian) Spectral theory of operators, No. 3 (Russian), pp. 34-101, "Elm", Baku, 1980. (M. Otelbaev) 47E05 (34B25, 47A70)

(with Allahverdiev, B. P.) Multiple expansion in generalized eigen- and associated vectors of a class of operator-valued functions in the presence of a continuous spectrum (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 11, 12-16. (P. A. Mišnaevskii) 82g:47014 47A70
(with Allahverdiev, B. P.) An analytic continuation through the continuous spectrum

of the resolvent of perturbed operator functions. (Russian. Azerbaijani and English naries) Akad. Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 1, 19-22. (From the text) 47A10 (47A55)

(with Veliev, O. A.) Spectral analysis of the Dirac operator with periodic complex-valued coefficients. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 2, 3-7. (From the text) 821:47058 47E05

(with Veliev, S. G.) A nonlinear boundary value problem for the Dirac equation. I. (Russian, Azerbaijani and English summaries) Akad, Nauk Azerbaidžan, SSR Dokl. 37 (1981), no. 3, 6-9, (V. Šeda) 82i:34022 34B25 (34B15)

(with Baïramogly, M.) The Green function for the operator Schrödinger equation. (Russian, Azerbaijani and English summaries) Akad. Nauk Azerbaidžan, SSR Dokl. 37 (1981), no. 7, 3-7. (Authors' summary) 82m:35028 35J10 (47F05, 81C05)

(with Veliev, O. A.) Nonselfadjoint differential operators in the space of a vector function with periodic coefficients. (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 1, 30. (Boris Pavlov) 82h:34025 34B25 (47E05) (with Aliev, A. B.; Tahirov, D. M.) A one-sided problem for a quasilinear equation 26-30. (Boris Pavlov) 82h:34025

of hyperbolic type. (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 4, 789-791. (R. G. Airapetjan) 82i:35122 35L70 (with Éminov, M. S.) On a one-dimensional Schrödinger operator with a

nonstandard asymptotic solution at infinity. (Russian. Azerbaijani and English

maries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 2 (1981), no. 3, 3-9. (Vojislav Marić) 82m:34048 34C99 See also Spectral theory of operators, 82b:47002

Mal, Dingur (with Agarwal, S. K.) Space of a class of meromorphic functions. Ganita 29 (1978), 1-9. (J. Gopala Krishna) 82j:30075 30H05 (30B10, 30D30)
(with Bose, S. K.) Multipliers and homeomorphisms on spaces of meromorphic

functions. Demonstratio Math. 13 (1980), no. 1, 183-188. (S. M. Shah) 82a:30044 30D55

Mal, S. B. (with Bhatnagar, Hari L.) Scattering of electromagnetic waves by inhomogeneous spherical particles. Proc. Indian Nat. Sci. Acad. Part A 44 (1978), no. 2, 94-102. (I. Kay) 82h:78015 78A45 (35L50)

94-102. (I. Kay) 828:78915 // 78A45 (35L50)
Malabre, M. (with Descusse, J.) Model following using measured output feedback. IEEE Trans. Automat. Control 26 (1981), no. 3, 791-795. (Authors' summary) 82j:93017

Malafeev, O. A. The existence of equilibrium situations in two-person noncooperative differential games with independent moves. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 2, 12-16, 123. (id. I. Gusev) 82c:90104 90D25 (90D05)

Malahov, A. N. ★Кумулянтный анализ случайных негауссовых процессов и их преобразований. (Russian) [Cumulant analysis of non-Gaussian random processes and their transformations] "Sovet. Radio", Moscow, 1978. 376 pp. (P. S. Knopov) 82k:60084 60G15 (60-02, 93E10, 94A05)

(with Muzyčuk, O. V.) Probability characteristics of dynamic systems subjected to

- on-delta-correlated random forces. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 8, 968-981 (Russian); translated as Radiophys. and Quantum Electronics 23 (1980), no. 8, 651-661 (1981). (Authors' summary) 821:93067 93E03 (82A05)
- ovskaja, S. V. Congruences of ruled quadrics with a focal self-polar tetrahedron. (Russian) Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur No. 11
- (1980), 61-64, 126. (M. A. Akivis) 82k:53021 53A20 laičuk, V. P. Estimation from experimental data of the probability of a random variable exceeding a given level. (Russian) Adapt. Sistemy Automat. Upravlenija No. 7 (1979), 58-65, 128. (Author's summary) 82j:62010 62E15
 Malakhov, A. N. See Malahov, A. N.

- Malakian, K. (with Adomian, George) Self-correcting approximate solution by the iterative method for linear and nonlinear stochastic differential equations. J. Math. Anal. Appl. 76 (1980), no. 2, 309-327. (G. N. Mil'Stein) 82a:34068 34F05
 - (with Adomian, George) A comparison of the iterative method and Picard's successive approximations for deterministic and stochastic differential equatio Math. Comput. 8 (1981), no. 3, 187-204. (Authors' summary) 82f:60130 60H10 (34A45, 93E03)
- (with Zabell, Sandy L.) Why Gibbs phase averages work-the role of Malament, David B. ergodic theory. Philos. Sci. 47 (1980), no. 3, 339-349. (Lawrence Sklar) 82f:82008 82A05
- d, M. M. The spectrum of one-dimensional perturbations of Volterra operators. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 7, 26-29, 97. (Toader Jucan) 82b:47065 47G05 (45P05)
 - Spectral analysis of Volterra operators with a kernel depending on the difference between arguments. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 5, 601-609. (Ju. I. Ljubič) 45P05 (47R35)
- Malan, S. W. (with Heidema, J.) Congruences on relational structures. Algebra Sympo (Potchefstroom Univ., Potchefstroom, 1979), pp. 55-68, Potchefstroom Univ. for Christian Higher Ed., Potchefstroom, 1980. (See 82i:16002) 08A30 (03C05)
- Malanciou, Odetta On discrete Markov processes (Romanian, English summary) Bul. Inst. Politehn. Bucureşti Ser. Mec. 42 (1980), no. 4, 3–7. (Author's summary) 82h:60128
- Malandrakis, C. G. Optimal sensor and controller allocation for a class of distributed parameter systems. Internat. J. Systems Sci. 10 (1979), no. 11, 1283-1299. (Author's summary) 82k:93079 93E20 Mal'cev, A. I. See All-Union Confere
- ice: Mathematical Logic, 82a:03002 and Halezov, E. A., 82f:01109
- Mal'cev, An. A. The structure of an m-jump. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 4, 129-135, 230. (Max I. Kanovič) 82m:03056 03D30

 Mal'cev, Ju. N. Some examples of varieties of associative rings. (Russian) Algebra i Logika
- 19 (1980), no. 6, 669-675, 745-746. (Author's summary) 82; 16027 16A3 (08B9) Identities of matrix rings. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 3, 213-214, 239.
- (Author's summary) 82k:16026 16A42

 Mal'cev, N. E. (with Avilov, K. V.) Calculation of sound fields in the ocean by the parabolic equation method. Akust. Ž. 27 (1981), no. 3, 335-340 (Russian); translated as Soviet Phys. Acoust. 27 (1981), no. 3, 185-188. (Authors' summary) 82k:76056
- Mal'cev, V. V. Sufficient conditions for e-sensitivity in mathematical programming problems. Avtomatika 1979, no. 5, 47-52, 93 (Russian); translated as So Control 12 (1979), no. 5, 35-39. (H. Mukai) 82b:90111 90C31 (49B50)
- Mal'ceva, E. G. (with Eidus, D. M.) Expansion of solutions of the Schrödinger equation in solutions of the potential scattering problem. (Russian. English summary) Mathematical questions in the theory of wave propagation, 10. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 89 (1979), 204-209, 294. (Woodford W. Zachary) 82a:35032 35J10 (81F05)
- Mal'ceva, L. I. (with Leonjuk, N. I.) Use of the Wulff-Delaunay method to assess the habits of crystals. Kristallografija 25 (1980), no. 5, 916–920 (Russian); translated as Soviet Phys. Cryst. 25 (1980), no. 5, 524–527 (1981). (Authors' summary) 82d:82073 82A60
- Malcolm, D. J. (with Vinogradov, O. G.) A new algorithm for cable statics. Proceedings of the 16th Midwestern Mechanics Conference (Kansas State Univ., Manhattan, Kan., 1979), pp. 73-77, Develop. in Mech., 10, Kansas St. Univ., Manhattan, Kan., 1979. (Authors' nmary) 82m:73064 73K99
- Malcolm, Michael A. (with Forsythe, George E.; Moler, Cleve B.) ★Mannu математических вычислений. (Russian) [Computer methods for mathematical computations] Translated from the English by H. D. Ikramov. "Mir", Moscow, 1980. 280 pp. (Editors) 82a:65001 65-01 (65-04)
- Malczewska, N. See Grigor'jan, A. T., 82f:01106
- Maldybaeva, E. Ja. Conditions for the stability of the accretion disc around a black hole. (Russian. English summary) Bulletin of the Institute of Astrophysics, No. 69-70, pp. 16-18, "Donis", Dushanbe, 1980. (Author's summary) 82m:85001b 85A40 (58F13, 76F99)
- Malec, Marian Un analogue aux différences finies des inégalités différentielles faibles du type parabolique avec des conditions aux limites non linéaires. (English and Russian aries) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 9, 681-687. (André Hautot) 82b:39004 39A10 (39C05)
- Maleev, A. B. (with Serecenko, A. A.; Taraščanskii, M. T.) Families of probability measures that admit consistent estimates. (Russian). Probability distributions in infinite-dimensional spaces (Russian), pp. 125-134, 178, Akad. Nauk Ukrain. SSR, Inst.
- Mat., Kiev., 1978. (G. I. Ivčenko) 82a:62053 62F12
 Maleki, Nasser (with Macek, Joseph) Erratum: "Schwinger's variational principle for electron-ion scattering" [Phys. Rev. A (3) 21 (1980), no. 5, 1403-1411; MR 81a:81075]. Phys. Rev. A (3) 23 (1981), no. 3, 1561. (Editors) 82c:81125 81F05
- Malek-Madani, Reza (with Lin, Shao Shiung) Solution to the Riemann problem for the equations of gas dynamics in a tube with varying cross section. Transactions of the Twenty-Sixth Conference of Army Mathematicians (Hanover, N.H., 1980), pp. 341-354, ARO Rep. 81, 1, U. S. Army Res. Office, Research Triangle Park, N.C., 1981. (Authors'
- summary) 82a:35069 35L67 (76N99)
 Malek-Mansour, M. (with van den Broeck, C.; Nicolis, G.; Turner, J. W.) Asymptotic properties of Markovian master equations. Ann. Physics 131 (1981), no. 2, 283-313. (Koichiro Matsuno) 824:82042 82A35 (58E07, 80A30)

- Malenica, Mirjana On a solution of the functional equation $\varphi(x) + \varphi[f(x)] = F(x)$. (Serbo-Croatian. French summary) Akad. Nauka Umjet. Bane Hercegov. Rad. Odjelj. Prirod. Mat. Nauka No. 19 (1980), 103-109. (S. Kurepa) 82h:39006 39B10

 Malešević, Jovan V. Estimates of the modulus of a Fourier series of certain classes of
- functions from L. (Serbo-Croatian. Russian summary) Mat. Vesnik 4(17)(32) (1980), no. 1, 25-30. (Naza Tanović-Miller) 82j:42010 42A32
 - On a theorem of G. Darboux and a theorem of D. Trahan. (Serbo-Croatian. Russian mary) Mat. Vesnik 4(17)(32) (1980), no. 3, 303-312. (Author's summary) 82h:26011 26A24
- Malevič, T. L. Probability of finding a Gaussian stationary process above the zero level. (Russian) Random processes and mathema tical statistics (Russian), pp. 79-87, 187, "Fan", Tashkent, 1978. (D. A. Darling) 82d:60072 60G15 (60G10)
 - (with Tošov, N.) The maximum of a Gaussian nonstationary process. (Russian) adom processes and mathematical statistics (Russian), pp. 88-95, 187-188, "Fan", Tashkent, 1978. (D. A. Darling) 82d:60073 60G15
 - Refinement of the central limit theorem for sums of m-dependent variables with increasing m. (Russian) Limit theorems, random processes and their applica
 - (Russian), pp. 133-138, 233-234, "Fan", Tashkent, 1979. (Zdzisław Rychlik) 824:60040
 - (with Abdalimov, B.) The rate of convergence of the distribution of U-statistics to the normal law. (Russian) Limit theorems, random processes and their applications (Russian), pp. 139-143, 234, "Fan", Tashkent, 1979. (W. Hoeffding) 82c:60040 60E05
 - (with Tošov, N.) Bounds for the maximum of a homogeneous Gaussian field. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. No. 20 (1979), 76-90, 157.
 - (Authors' summary) 82:60065 60G15 (60G60) (with Volodina, L. N.) Upper and lower bounds for factorial moments of the number of zeros of a Gaussian process. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk
- 1980, no. 4, 26-33, 104. (Hiroshi Sato) 82a:60052 60G15
 Malfliet, W. Simple solution method for the Korteweg-de Vries equation. Amer. J. Phys.
- 49 (1981), no. 7, 666-668. (Francesco Calogero) 82f:35166 lgoire, J. (with Voisin, C.) Factorisation de Stein topologique; découpe. To (1981), no. 2, 191–207. (Roy Dyckhoff) 82h:57013 57N05 (18F20, 54C10)
- Malgouyres, Gérard (with Cottrell, Marie; Fort, Jean-Claude) Stability analysis for some algorithms. Second Interne ational Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. III, pp. 387-394, Reidel, Dordrecht, 1980. (Authors' summary)
- 82g:94013 94A40 Malgrange, Bernard Méthode de la phase stationnaire et sommation de Borel. Complex
- analysis, microlocal calculus and relativistic quantum theory (Proc. Internat. Colloq., Centre Phys., Les Houches, 1979), pp. 170–177, Lecture Notes in Phys., 126, Springer, Berlin, 1980. (J. S. Joel) 82a:41028 41A60 (14D15, 32C40, 58G15) See also Ramis, Jean-Pierre, 82b:58004
- Malgrange, Pierre Fonctions de production et de demande de facteurs: quelques contributions. (English and Spanish summaries) Production functions and factor demand functions. Ann. I.N.S. É. É. No. 38-39 (1980), 5-16. (See 82e:90019) Note sur le calcul des valeurs propres d'un modèle macroéconométrique. (English and Spanish summaries) Ann. I.N.S.É.É. No. 41 (1981), 67-77. (Author's summary) 62P20
- Malhardeen, M. Z. M. (with Carr, Jack) Stability of nonconservative linear systems. Functional differential equations and bifurcation (Proc. Conf., Inst. Cienc. Mat. São Carlos, Univ. São Paulo, São Carlos, 1979), pp. 45-68, Lecture Notes in Math., 799, Springer,
- Berlin, 1980. (Olusola Akinyele) 82b:34079 34G10 (35B35, 73M99) Malickii, A. A. A variational problem in a class of indicators and its connection with the theory of experiments. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 22
- (1980), 95-102, 164. (Valery Fedorov) 82a:49020 49A99 (62K05) Maligranda, Lech Generalized Hardy inequalities in rearrangement invariant spaces. J. Math. Pures Appl. (9) 59 (1980), no. 4, 405-415. (F. Feher and P. L. Butzer) 82j:47052 47B38 (26D10, 46E30)
- Malik, David J. (with Eccles, Joseph; Secrest, Don) On quantal bound state solutions and potential energy surface fitting. A comparison of the finite element, Numerov-Colley and finite difference methods. J. Comput. Phys. 38 (1980), no. 2, 157-184. (R. L. Ingraham) 81C05 (65N30)
- Malik, H. J. (with Mikhail, N. N.) Unbiased estimates of cumulants and products of cumulants. J. Natur. Sci. Math. 18 (1978), no. 2, 7-17. (D. S. Tracy) 82&62043 62E30 (62D05)
- Malik, H. N. (with Qadir, A.) Break-up of integers and bracket functions in terms of bracket functions. A collection of manuscripts related to the Fibonacci sequence, pp. 172-175, Fibonacci Assoc., Santa Clara, Calif., 1980. (C. Small) 82k:10007
- (with Qadir, A.) Pseudoperiodic difference equations. A collection of m related to the Fibonacci sequence, pp. 176-179, Fibonacci Assoc., Santa Clara, Calif., 1980. (André Hautot) 82h:39002a 39A10
- (with Qadir, A.) Solution of pseudoperiodic difference equations. A collection of manuscripts related to the Fibonacci sequence, pp. 179-186, Fibonacci Assoc., Santa Clara, Calif., 1980. (André Hautot) 82h:39002b 39A10
- Malik, M. A. Historical and pedagogical aspects of the definition of function. Internat. J. Math. Ed. Sci. Tech. 11 (1980), no. 4, 489-492. (Richard L. Francis) 82b:00010 00A25 (01A65)
- Malik, Mazhar Ali Khan See Al-Hakim, Latif A. R., 82j:90040
- Malik, S. K. (with Chhabra, R. K.) Nonlinear stability of a weakly ionised cylindrical plasma. Proc. Indian Nat. Sci. Acad. Part A 44 (1978), no. 1, 38–45. (Authors' summary) 76X05 (76E25)
 - (with Singh, Manohar) Nonlinear dispersive waves on the surface of a
 - self-gravitating fluid layer. Astrophys. and Space Sci. 76 (1981), no. 1, 3-12. (Authors' summary) 824:76013 76B15 (35Q20)
 - (with Singh, Manohar) Second harmonic resonance in a self-gravitating fluid J. Math. Anal. Appl. 83 (1981), no. 1, 1-10. (Authors' summary) 82i:76009 76B15 (85A30)
- Malikov, A. I. (with Kozlov, R. I.) Construction of a vector-valued Ljapunov function and comparison systems for nonlinear control systems. (Russian) Vector-valued Ljapunov functions and their construction (Russian), pp. 129–152, 287, "Nauka" Sibirsk. Otdel.,

birsk, 1980. (Authors' summary) 82h:93049 93D05

Construction of Ljapunov vector-valued functions for a class of control systems. (Russian) Vector-valued Ljapunov functions and their construction (Russian), pp. 198-237, 288, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Author's summary) 821:93053

miltow, Ju. K. (with Lisienko, V. G.) Numerical method for solving heat-conduction problems for two-dimensional bodies of complex shape. Int.-Fiz. Ž. 40 (1981), no. 3, 503-509 (Russian); translated as J. Engrg. Phys. 40 (1981), no. 3, 314-319. (Authors' summary) 82m-80002 80x20 (65705)

alineckii, G. G. (with Kurdjumov, S. P.; Kurkina, E. S.; Samarskii, A. A.) Dissipative structures in an inhomogeneous nonlinear burning medium. (Russian) Dokl. Akad. Nauk. SSSR 251 (1980), no. 3, 587-591. (From the text) 82c-80015 80A25

aliniak, Yoram (with Koren, Israel) On classes of positive, negative, and imaginary radix

per systems. *IEEE Trans. Comput.* **30** (1981), *no.* 5, 312–317. (Authors' sum **8006** 68A05 (10A30, 68C05)

ballow, V. A. (with Sil'man, S. V.) Adaptive estimation of the trend of parameters of complex systems. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1990, no. 1, 38-45, 219 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 1, 32-39 (1981). (Authors' summary) 823-93063 93E10 (62M20, 94A05)

summary вадежима Hinorakaja, V. L (with Mihailenko, V. E; Appilogova, V. A.; Kovalev, S. N.; Levina, Ž. G.; Oleščuk, T. Ju.; Panasjuk, L. S.; Puhov, I. K.; Sedleckaja, N. I.) ★Сборинк задач no navepтательной геометрия с елементами программирования. (Russian) [A collection of problems in descriptive geometry with elements of programming] Second edition, revised and augmented. "Višča Škola", Kiev, 1980. 208 pp. (E. Otto) 82e:51004 51-01 (00A07)

wskii, B. N. See Technical resources of mini- and micro-com uters. 82f:69007

owski, Grzegorz (with Michalczyk, Marek) Interpolation properties for a class of -valued propositional calculi. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 10 (1981), no. 1, 9-16. (Henry Africk) 82g:03037 03B50 (03C40)
A characterization of strengthenings of a two-valued nonuniform sentential calculations.

Rep. Math. Logic No. 12 (1981), 17-33. (Wojciech Dzik) 82g:03046 03B99 (inowski, K. (with Findeisen, Władysław; Bailey, F. N.; Brdyś, M.; Tatjewski, Piotr; Woźniak, A.) **Control and coordination in hierarchical systems. International Series on Applied Systems Analysis, 9. Wiley-Interscience [John Wiley & Sons], Chichester-New York, 1980. x+467 pp. ISBN 0-471-27742-8 (Tamer Başar) 82b:93001 (49D27, 90A16, 92A25, 93A13)

vaud, E. *Statistical methods of econometrics. Third edition. Translated from the French by Anne Silvey. Studies in Mathematical and Managerial Economics, 6.

North-Holland Publishing Co., Amsterdam-New York, 1980. xvi + 769 pp. ISBN 0-444-85473-8 (Peter Schmidt) 82m:62244 62P20

Bev, I. G. (with Smirnov, G. S.) Some properties of the best approximation in spaces maries) Visnik Kiio. with a mixed integral norm. (Ukrainian. English and Russian su Univ. Ser. Mat. Meh. No. 21 (1979), 79-84, 164. (Ivan Singer) 82k:41018

Mališev, P. V. (with Petrina, D. Ja.; Gerasimenko, V. I.; Piljavs'kii, A. I.) The reversed osmosis problem as a boundary value problem in a domain with a fine structure. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 75–78. (L. I. Rubinstein) 82e:92018 92A09 (35K99, 80A30)

Mathematical description of the evolution of the classical infinite system. (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 1, 63-74. (B. S. Nahapetjan) 82e-82003 82A05 (60K35)

Mališevskii, A. V. (with Aizerman, M. A.) General theory of best variants choice: some aspects. IEEE Trans. Automat. Control 26 (1981), no. 5, 1030-1040. (Authors' summary) 90A05 (90A08)

82:59002 90AUS (NAUS)

Malitz, J. (with Rubin, Matatyahu) Compact fragments of higher order logic.

Malitz, J. (with Rubin, Matatyahu) Compact fragments of higher order logic.

Math. Logic, Mathematical logic in Latin America (Proc. IV Latin America) Santiago, 1978), pp. 219–238, Stud. Logic Foundations Math., 99, North-Holland.

dam, 1980. (M. Makkai) 82k:03055 03C80 (03C55)

Amsterdam, 1980. (Nr. Markan) Barrayon Cocci (1985)
Malitza, M. (with Calude, C.) On the category of Čech topological spaces. Topology, Vol. I (Proc. Fourth Colloq., Budapest, 1978), pp. 225–232, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (Yuh-Ching Chen) 82e:54012 54B30 (18B30)

alivert, Christian Méthode de descente sur un fermé non convexe. Analyse non convexe (Proc. Colloq., Pau, 1977). Bull. Soc. Math. France Mém. No. 60 (1979), 113-124. (D. E. Catlin) 82ac49036 49D10 (65K05)

Maljarenko, A. A. Generalization of a theorem of Esseen. (Ukrainian. English and Russian summaries) Visnik Kiiv. Univ. Ser. Mat. Meh. No. 21 (1979), 84–88, 164. (M. Skalsky) 60E15

A class of multidimensional random fields of Markov type. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 9, 21-22, 95. (Author's mary) 82k:60117 60G60 (60J25)

djarenko, V. A. (with Geinc, A. G.; Maslova, N. B.) Free molecular flow inside a spherical cavity. (Russian) Aerodynamics of rarefied gases, No. 10 (Russian), pp. 203-209, 237, Leningrad. Univ., Leningrad, 1980. (Authors' summary) 82e:76051

Maljarov, V. V. (with Pivovarčik, V. N.) The inverse problem of quantum scattering theory for fixed energy under spin-orbital interaction. (Russian. English summary) Ukrain. Fiz. Ž. 25 (1980), no. 4, 635-640, 697. (H. Baumgärtel) 82f:81068 81F05 (34B25)

(with Provarcik, V. N.) An algebraic method for solving an inverse problem of the intum scattering theory for fixed energy under spin-orbit interaction. (Russian. English summary) Ukra in. Fiz. Ž. 26 (1981), no. 2, 233-239, 348. (Nicolae Angelescu) 82e:81094 81F05 (34B25, 35R30)

w, V. P. Conflict interaction of econom ic models. Kibernetika (Kiev) 1979, no. 6, 83-90 (Russian); translated as Cybernetics 15 (1979), no. 6, 867-875 (1980). (Y. I.

Kannai) 82h:90135 90D20 (90A99)

Maljuta, Ju. M. Instantons and moduli schemes. (Russian. English summary) Dok
Nauk Ukrain. SSR Ser. A 1980, no. 11, 17–18. (R. O. Wells, Jr.) 82c:81087 ary) Dokl. Akad. (14F05)

Malkin, M. I. Topo Ikin, M. I. Topological conjugacy of discontinuous mappings of an interval. (Russian) Ukrain. Mat. Z. 32 (1980), no. 5, 610-616. (Hans G. Bothe) 82f:58056 58F12 Mal'kov, A. N. (with Beljaev, Ju. K.) On sampling inspection by attributes with varying probabilities of classification errors. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 2, 265–269. (S. H. Siraždinov) 82n:62234 62N10

Malkov, E. A. (with Omarov, T. B.) On gravitating systems with a nonstationary distribution function. (Russian. English summary) Akad. Nauk Kazah. SSR Trudy Astrofiz. Inst. 35 (1981), 3-7, 97. (Authors' summary) 82g:85012 85A40 (83F05)

Malkov, V. M. Edge effect in a shell of zero Gaussian curvature with a large aperture (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 26-32, 306, Leningrad. Univ., Leningrad, 1980. (S. Drobot) 824:73067 73L99 (53C45)

Malkus, David S. (with Fuller, E. R., Jr.) An isoparametric finite element model for large-strain elastostatics. J. Res. Nat. Bur. Standards 86 (1981), no. 1, 79-109. (Authors' summary) 824:73052 73K25

med Lamei (with Micali, Artibano) Sur les dimensions des algèbres ment valuées. (English summary) J. Algebra 68 (1981), no. 2, 237-246. (Aleksei 17A20 (17A30, 46H99) Gainov) 82e:17001

Maller, R. A. Some properties of stochastic compactness. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 3, 264–277. (François Bronner) 82h:60043 60F05 (60E07)
On the law of large numbers for stationary sequences. Stochastic Process. Appl. 10 (1980), no. 1, 65–73. (H. Bergström) 82h:60021 60F05 (60G10)

A theorem on products of random variables, with application to regress J. Statist. 23 (1981), no. 2, 177-185. (Sándor Csörgő) 82m:60032 60F05 (62J05)

Malliaris, A. G. Martingale methods in financial decision-making. SIAM Rev. 23 (1981), no. 4, 434–443. (Author's summary) 82j:90009 90A09 Malliavin, Marie-Paule See Malliavin-Brameret, Marie-Paule

Malliavin, Paul C[∞] parametrix on Lie groups and two steps factorization on convolution algebras. Harmonic analysis, Iraklion 1978 (Proc. Conf., Univ. Crete, Iraklion, 1978), pp. 142-156, Lecture Notes in Math., 781, Springer, Berlin, 1980. (Hélène Airault) 22E30 (35H05, 43A80, 58G05)

(with Gaveau, Bernard) Courbure des surfaces de niveau des fonctions holomorphes ournées dans la boule. (English summary) [Curvature of level surfaces of bounded holomorphic functions in the ball] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 2, 135-138. (Authors' introduction) 82m:32005 32A35 (31C10, 73C99)

Malliavin-Brameret, Marie-Paule Caténarité et théorème d'intersection en algèbre non commutative. Séminaire d'Algèbre Paul Dubreil 31ème année (Paris, 1977-1978), pp. 408-431, Lecture Notes in Math., 740, Springer, Berlin, 1979. (From the text) 82f:17010 17B35 (16A08, 17B30)

(with Warusfel, A.) ★Algèbre linéaire et géométrie classique. (French) [Linear algebra and classical geometry] Exercices. [Exercises] Maîtrise de Mathématiques Pures. [Mastery of Pure Mathematics] Masson, Paris, 1981. 128 pp. ISBN 2-225-68640-8 (R. J. 15-01 (00A07)

See also Seminar: Dubreil Paul-Malliavin, Marie-Paule, Algebra, 82i:16001

Mallik, A. If $L(\frac{1}{2}, \chi) > 0$, then $L(\frac{1}{2}, \chi)$ cannot be a minimum. Studia Sci. Math. Hungar. 12 (1977), no. 3-4, 445–446 (1980). (From the text) 82i:10051 10H10 (1977), no. 3-4, 445-446 (1980). (From the text) 82i:10051 Mallol, Cristian Sur l'orientation des G-espaces. (English summary) Rend. Sem. Mat. Univ

Politec. Torino 38 (1980), no. 2, 35-45 (1981). (Author's summary) 82k:20009 Mallows, C. L. Resistant smoothing. Time series (Proc. Internat. Meeting, Univ.

m, 1979), pp. 147–155, North-Holland, Amsterdam, 1980. (A 2157 62M20 (60G35) Nottingham, Nottingham, 19 Morris Walker) 82e:62157

(with Chung, F. R. K.; Diaconis, Persi; Graham, Ronald L.) On the permanents of complements of the direct sum of identity matrices. Adv. in Appl. Math. 2 (1981), no. 2, 121-137. (R. A. Brualdi) 82j:15008 15A15 (05A15) See also Friedman, Jerome H.; et al., 82h:62092

Malm, Donald G. *A computer laboratory manual for number theory. Student manual. COMPress Inc., Wentworth, N. H., 1980. viii + 256 pp. ISBN 0-933694-13-X (H. London) 82i:10002

2j:10002 10-04 (00A05, 68C05)
med, B. A. (with Zel'dovič, Ja. B.) Topological invariants and strings in distributed active dynamical systems. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 1, 92-94. (O. K. Davtjan) 82d:80024 80A25 (70K99, 81E99)

Malonek, Helmuth Beweis von Eigenschaften der Lösungen reeller partieller Differentialgleichungen höherer Ordnung durch Faktorisierung des Hauptteiles. Math.

Nachr. 96 (1980), 17-26. (L. A. Ivanov) 82d:35036 35G20 (35B99)

Malovičko, V. O. (with Gončarenko, V. M.) The first boundary value problem for second-order equations with nonnegative characteristic form. (Ukrainian. English and Russian summaries) Visnik Kiiv. Univ. Ser. Mat. Meh. No. 21 (1979), 36-41, 162. (From the text) 82i:35071 35J70

Boundary value problems for second-order equations with nonnegative characteristic form. (Russian) Mat. Fiz. No. 27 (1980), 111-117, 122. (Rudolf Svarc) 82e:35030 35J70 (35D05)

Solvability of a boundary value problem for a differential equation with a nonnegative characteristic form with boundary conditions of the first and third kind. (Russian) *Ukrain. Mat. Ž.* 32 (1980), no. 5, 667–671. (A. Džuraev) 82;35073 35J70

Malozemov, V. N. (with Daugavet, V. A.) Nonlinear approximation problems. (Russian) Current state of the theory of operations research (Russian), pp. 336–363, "Nauka", Moscow, 1979. (See 82:90002) 90C30

Malozemova, L. K. A. O. Gel'fond's polynomials. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 2, 110-113, 127. (I. M. Sheffer) 82i:33023 33A70 (41A50)

Malta, I. P. On 2-stability of flows. Bol. Soc. Brasil. Mat. 11 (1980), no. 1, 19–24. (C. S. Hartzman) 82i:58039 58F10 (58F25)

Maltese, George Integral representation theorems via Banach algebras. Enseign. Math. (2) 25 (1979), no. 3-4, 273–284 (1980). (Author's introduction) 82j:46067 46125 (46A55, 46K10)

Mal'tsev, N. E. See Mal'cev, N. E.

Mal'tsev, V. V. See Mal'cev, V. V. Mal'tseva, L. I. See Mal'ceva, L. I.

(with Mola, E. E.) Pair site occupation probability for one-dimensional array of dumbbells. J. Math. Phys. 22 (1981), no. 8, 1746-1748. (Authors' summary) 82j:82066

Maltz, Frederick H. (with Hitzl, Donald L.) Adaptive estimation procedures for multiparameter Monte Carlo computations. J. Comput. Phys. 37 (1980), no. 2, 218-241.

(N. Harris McClamroch) 82f:65006 65C05 (68J05)

etta Characterization of normal type structure by means of sequences. (Italian summary) Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 436-441 (1981). (S. Simons) 82i:46027 46B20 (52A07)

Maly, Jan On increment of the tangent argument along a curve. (Czech summary) With a an summary. Časopis Pēst. Mat. 106 (1981), no. 2, 186–196, 210. (Ju. B. 12):55004

55M25 Zelins'kii) 82j:55004

Maly, W. (with Director, Stephen W.) Dimension reduction procedure for the simplicial approximation approach to design centering. Proc. IEE-G 127 (1980), no. 6, 255-259. (Authors' summary) 82d:94057 94C05 (90C15)

Malyhin, V. I. On the power of first countable T₁-bicompacta. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 827-828, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (S. A. Peregudov) 82g:54009 54A25 (04A10)

(with Holscevnikova, N. N.) Independence of two set-theoretic statements in numation theory. (Russian) Mat. Zametki 28 (1980), no. 6, 869-882, 961. (Authors' amary) 82c:40005 40D05 (03E35)

Tracing by homeomorphism. (Russian) Uspehi Mat. Nauk 35 (1980), no. 5(215), 229-230. (Roy Dyckhoff) 82m:54011 54C99 (90D05)

Malyi, V. I. Quasiconstant operators in the theory of viscoelasticity of aging materials. Izv. Akad. Nauk SSSR Meh. Toerd. Tela 15 (1980), no. 4, 120-127 (Russian); translated as Mech. Solids 15 (1980), no. 4, 93-99. (Author's summary) 82g:73025 73F20

Malyšev, A. V. On the application of the discrete ergodic method in analytic arithmetic of indefinite ternary quadratic forms. (Russian) Studies in number theory, 6. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 93 (1980), 5–24, 225. (R. A. Rankin) 82k-19024 10C15 (10C05. 10125) 10C15 (10C05, 10J25)

See also Studies in num ber theory, 82s:10005 and Linnik, Ju. V., 82i:01077b

Malyšev, P. V. See Mališev, P. V.

Malysev, V. A. Complete cluster expansions for weakly coupled Gibbs random fields. Multicomponent random systems, pp. 505-530, Advances in Probability and Related Topics, 6, Dekker, New York, 1980. (J. Fernando Perez) 824:82019 82A15 (60K35)

Estimates of coefficients of Mayer expansions on the boundary of an infrared region. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 2, 235-243. (Author's summary) 82b:82017 82A05 (82A67)

(with Petrova, E. N.) Duality transformations of Gibbs random fields. (Russian) Probability theory. Mathematical statistics. Theoretical cybernetics, Vol. 18 (Russian), pp. 3-51, 188, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. (J. Fritz) 82j:82012 82A05 (58A99, 60G60, 60K35)

Malyševa, I. A. (with Sestakov, A. A.) Convergence of solutions in nonautonomo differential systems. (Russian) Differencial nye Uravnenija 16 (1980), no. 3, 424–432, 572. (A. I. Perov) 82b:34060 34D05

Malyshev, V. A. See Malyšev, V. A. Malyukov, V. P. See Maljukov, V. P.

Mályusz, K. (with Juhász, F.) Problems of cluster analysis from the viewpoint of numerical Soc. János Bolyai, 22, North-Holland, Amsterdam, 1980. From the text) 82b:68077

Malzan, Jerry (with Doković, Dragomir Ž.) Perturbation of eigenvalues in U(n) by pseudoreflections. Linear and Multilinear Algebra 8 (1979/80), no. 1, 35-40. (William H. Klink) 82a:15007

nk) 82a:15007 15A18 (22C05) On symmetry classes of tensors. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 3, 165-169. (J. D. Zund) 82h:53022 53A45 (20C30)

nev, S. G. Quantum effects in cosmological models with singularities. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1981, no. 1, 67-70. (Author's summary) 82e:83043 83F05 Mamašev, S. H. (with Šaripov, Š. R.; Husanov, B.) On some questions of the trajectories of

an n-dimensional generally homogeneous differential system. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 3, 38-43, 91-92. (L. M. Kuks) 82k:34034 (34D40)

ov, O. (with Siraždinov, S. H.; Formanov, S. K.) Optimal statistical quality control plans based on a multivariate quantitative attribute. (Russian) Limit theorems, random processes and their applications (Russian), pp. 183-201, 235, "Fan", Tashkent, 1979. (K. Sarkadi) 82e:62165 62N10

19/9. (K. SHERMI) OLEGATO DESTRUCTION OF BAYESIAN estimates the defective-free statistical quality control plans. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 3, 35–40, 98. (J. Gladitz) 82hc62175

62N10 (62F12)

matov, M. M. (with Ibragimov, R.) Local limit theorem for supercritical branching processes with continuous time and two types of particles. (Russian) Limit theorems, random processes and their applications (Russian), pp. 143-150, 234, "Fan", Tashkent, 1979. (Arthur O. Pittenger) 82c:60148 60J80

anov, B. Unconditional convergence of orthogonal series with structural conditions on (-∞, -1]∪[1, ∞). (Russian) Research in mathematics and physics (Russian), pp. 128-130, 148, Taškent. Gos. Ped. Inst., Tashkent, 1979. (E. Stipanić) 82a:42010

medhanov, D2. L. (with Nersisjan, A. A.) Approximation in the metric of the space L_1 . (Russian) Azerbaïdžan. Gos. Univ. Učen. Zap. 1978, no. 2, 13–21. (B. Bojanov) 82a:41033 41A65 (41A20, 41A25)

(with Israfilov, D. M.) Some problems of rational and polynomial approximation on arcs in space C metrics. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidtan. SSR Dokl. 35 (1979), no. 4, 19-22. (F. I. Ibragimov) 82b:30045 30E10

Strengthening of the Plemelj-Privalov theorem and problems of best approximation. (Russian) Theory of cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 164–167, 254, "Nauka" Sibirsk. Otdel., Novo 1980. (Wiesław Pleśniak) 82f:30035 30E10 (30E20)

Problems of the theory of best polynomial approximation with fixed weight. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 6, 13-20. (S. D. Riemenschneider) 82i:41009 41A10 (30E10)

nedli, E. M. (with Ovčinnikov, V. V.) Cascade procedures of packet-block coding. (Russian) Control of technical and organizational systems by application of technology (Russian), pp. 69-74, 227, "Nauka", Moscow, 1979. (V. A. Zinov'ev) 82h:94023 94B10 (94A24)

edov, A. M. Approximation by entire functions with a weight on the domain $E=[|x_1|>1] ||x_2|>1]$. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1979, no. 6, 64-70. (Ju. A. Brudnyi) 82c41021 41A30 (41A65) medov, G. A. (with Džafarov, A. S.) Theorems for the representation of a class of

almost-periodic functions. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 2, 35-41. (M. F. Timan) 42A75

metov, G. K. On the approximate solution of nonlinear operator equations. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidian. SSR Ser. Fiz. Tehn. Mat. Nauk 1 (1980), no. 2, 17-23. (P. S. Milojević) 82k:47070 47H05 (65J15)

nedov, I. T. Behavior of the solutions of degenerate quasilinear second-order parabolic equations. (Russian. English summary) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 11, 3-6. (V. Ďurikovič) 82i:35023

. 11, 3-6. (V. Ďurikovič) 82i:35023 35B65 (35K55)
dov, Ja. D. (with Dosiev, A. A.) Application of the grid method to the solution of a mixed boundary value problem for elliptic equations in the presence of singularities. (Russian) Demonstratio Math. 12 (1979), no. 4, 875-888. (G. W. Hedstrom) 82k:35034

(with Aširov, S.; Atdaev, S.) ★Teopean o первиенствах. (Russian) [Theorems on qualities] "Ylym", Ashkhabad, 1980. 233 pp. (D. Baïnov) 82k:26011 26D10 (34A60, 39C05)

sedov, K. S. Two-sided estimation of the optimal value of the target function in Boolean ogramming problems. (Russian) Questions of mathematical cybernetics and applied athematics, No. 3 (Russian), pp. 17–22, "Élm", Baku, 1978. (N. I. Janev) 82a:90097 90010

medov, M. B. (with Kononenko, A. F.) Linearly quadratic differential games with nonconflicting interests. (Russian) With a loose English translation. *Problems Control* Inform. Theory/Problemy Upraulen. Teor. Inform. 9 (1980), no. 4, 297-312. (L. D. Berkovitz) 82b:90137 90D25

nedov, N. S. (with Sultanov, G. F.) On the triple resonance case of the perturbed motion of a satellite of a spheroidal planet. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 4, 50-54. (Authors' summary) 82e:70013 70F15

edov, O. M. (with Baĭramov, R. A.) Σ-subdirect representations in axiomatizable classes. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 4, 3-7. (W. Taylor) 82c:08011 08C10 (03C05)

medov, R. M. (with Sattarov, R. M.) The equation of motion of elastoplastic media in pipes of viscoelastic material. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1979, no. 6, 76-83. (Authors' summary) 82e:76006 76A05 (92A09)

medov, S. G. On the spectral function of a differential operator. (Russian, Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 2, 3-8. (A. Devinatz) 82j:34023 34B25

Mamedov, V. A. (with Lebedev, P. A.) Vector equations of a three-dimensional six-elementary mechanism with variable length of the drive element. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 10, 29-32. (Authors' 70B15

Questions of engineering cybernetics (Russian), pp. 40-51, "Elm", Baku, 1979. (Krzysztof Sapiecha) 82h:94039 94C10

w, U. E. Martingale analogue of the law of the iterated logarithm. (Russian) Dokl. Akad. Nauk UzSSR 1981, no. 5, 9-11. (From the text) 82k:60103 60G42 (60F15)

da, Masaichi An analogue of the theorem of Paley-Wiener type on the universal covering group of de Sitter group. Tokyo J. Math. 3 (1980), no. 1, 75-97. (Kenneth Johnson) 824:22011 22E30 (43A80)

Mammitzsch, Volker (with Binzer, Hans-Wiegand) Bemerkung zu einem Satz von W. Rupp. (English summary) Manuscripta Math. 30 (1979/80), no. 4, 383–386. (Authors summary) 82m:28023 28B20

Mamuzić, Zlatko P. On dual concepts and complementarity in mathematics. Eleutheria 1979, no. 2, 413-432. (N. C. A. da Costa) 82h:00015 00A25 (03A05) Some remarks on abstract distance in general topology. Eleutheria 1979, no. 2, 433-446. (Å. Császár) 82i:54003 54A05 (54E15)

de Man, Hugo J. See De Man, Hugo J.

Manacorda, Tristano Topics in elastodynamics. Nonlinear dynamics of elastic bodies, pp. 1-53, CISM Courses and Lectures, 227, Springer, Vienna, 1978. (See 82j:73002) 73C50

Managan, Robert A. (with Ipser, James R.) On the existence and structure of inhomogeneous analogs of the Dedekind and Jacobi ellipsoids. Astrophys. J. 250 (1981), no. 1, part 1, 362-372. (Authors' summary) 82k:76077 76U05 (58F05, 85A05) no. 1, part 1, 362-372. (Authors' summary) 82k:76077 76U05 (58F05, 85A05)
nakov, S. V. (with Santini, P. M.; Tahtadžjan, L. A.) Asymptotic behavior of the

solutions of the Kadomtsev-Pyatviashvili equation (two-dimensional Korteweg - de Vries equation). Phys. Lett. A 75 (1979/80), no. 6, 451-454. (Hans Kaper) 82c:35072

(with Bruschi, Massimo; Ragnisco, O.; Levi, D.) The nonabelian Toda lattice-discrete analogue of the matrix Schrödinger spectral problem. J. Math. Phys. 21 (1980), no. 12, 2749–2753. (Francesco Calogero) 82b:58041 58F07 (35Q20)

(with Zaharov, V. E.) Three-dimensional model of relativistic-invariant field theo integrable by the inverse scattering transform. Lett. Math. Phys. 5 (1981), no. 3, 247-253. (P. G. L. Leach) 82j:81054 81F15 (35Q20, 58F07, 58G35) See also Soliton theory, 82k:81002

Manakova, E. I. (with Byc', V. V.; Nikitčenko, N. S.) A means of specifying the semantics of programming languages. (Russian) Design of interpreters. Mat. Issled. No. 59 (1980), 13–22, 154. (Authors' summary) 82a:68015 68B10

nankova, A. V. (with Grinin, A. P.; Kuni, F. M.) Approximate solution of an equation of vertical transport of stratospheric aerosols. (Russian. English summary) Vestnik Leningrad. Univ. Fiz. Him. 1981, vpp.1, 17-21, 122. (Authors' summary) 826:36011

Poncelet. (Italian. English summary). Proceedings of the Brescia Mathematical Seminar, Vol. 3 (Italian), pp. 142-180, Univ. Cattolica Sacro Cuore, Milan, 1979. (Jean-Claude Pont) 82-01024 nara, Carlo Felice (with Spoglianti, Maria) R. G. Boscovich and the precursors of V. naresi, Mirella (with Desalvo, Fausto) On birational coverings. Geom. Dedicata 9 (1980), no. 3, 255-265. (Markus Brodmann) 824:14008 14E05 (13G05) (with Cumino, Caterina) On the singularities of weakly normal varieties. cripta Math. 33 (1980/81), no. 3-4, 283-313. (Jonathan M. Wahl) 82j:14002

(with Ida, Monica) On the branches of a complex space. J. Reine Angew. Math. 321 (1981), 173–178. (L. Andrew Campbell) 82h:32013 32C40 (32C20)

ass, M. Multiple payoff conflicts. Optimization techniques (Proc. Ninth 1FIP Conf.,

Warsaw, 1979), Part 1, pp. 482-488, Lecture Notes in Control and Information Sci., 22, Springer, Berlin, 1980. (J. W. Pratt) 821:90105 90D10 (90A07)

rà, V. (with Ptak, Pavel) On states on the product of logics. Intern

Phys. 20 (1981), no. 6, 451-456. (Henner Kröger) 82j:81008 81B10 (03G12)
master, Alfred B. (with Remmel, Jeffrey B.) Co-simple higher-order indecomposable
isols. Z. Math. Logik Grundlag. Math. 26 (1980), no. 3, 279-288. (Thomas McLaughlin) 823:03041 03D50

(with Remmel, Jeffrey B.) Some decision problems for subtheories of sional partial orderings. Logic Year 1979-80 (Proc. Seminars and Conf. Math. Logic, Unio. Connecticut, Storrs, Com., 1979/80, pp. 202-214, Lecture Notes in Math., 859, Springer, Berlin, 1981. (Detlef G. Seese) 82h:03011 03B25 (03C65, 06A10) See also Crossley, John N., 82m:03060

Manber, Udi System diagnosis with repair. IEEE Trans. Comput. 29 (1980), no. 10, 934–937. (Mark Karpovsky) 82h:94047 94C15 (68E10, 90B25)
Mancini, F. (with Fusco-Girard, M.; Marinaro, M.) Electrodynamics of superconductors as

a consequence of local gauge invariance. Fortschr. Phys. 28 (1980), no. 7, 355–426. (From the introduction) 82481179 81305

neini, Giovanni (with Ambrosetti, Antonio) Solutions of minimal period for a class of convex Hamiltonian systems. Math. Ann. 255 (1981), no. 3, 405-421. (Frans Cantrijn) 58F05 (34C25, 49A40, 58F22, 70H05)

ancini, Roberto Claudio (with Bañuclos, Alicia; Depine, Ricardo Angel) Analytical expansions for Fermi-Dirac functions. J. Math. Phys. 22 (1981), no. 3, 452–455. nary) 82e:41045 41A60 (65A05, 65D20, 81C05)

cino, Otello Giacomo Determination of the equilibrium configuration of an elastoplastic simply supported beam. (Italian) Matematiche (Catania) 31 (1976), no. 2, 390-403 (1977). (M. Mişicu) 82c:73028 73E99 (49A10) (with Caprili, M.) Approximate resolution of a problem of filtration through a

porous medium. (Italian. English summary) Matematiche (Catania) 32 (1977), no. 2, 369-405. (Michel Chipot) 82a:76081 76S05 (49A29)

mouso, Vincent J. Almost locally connected spaces. J. Austral. Math. Soc. Ser. A 31 (1981), no. 4, 421–428. (E. Halfar) 82k:54025 54D05 (54G10)

di, V. (with Huseyin, K.) On the instability of multiple-parameter systems. Theoretical and applied mechanics (Proc. 15th Internat. Congr., Univ. Toronto, Toronto pp. 281-294, North-Holland, Amsterdam, 1980. (See 82d:00008) (58C28, 58E07)

dal, Nripes Kumar On estimation of the maximal point of a single factor quadratic response function. Calcutta Statist. Assoc. Bull. 27 (1978), no. 105-108, 119-125 (1979). (Valery Fedorov) 82a:62113 62K05

del', A. S. See Saridis, George N., 82e:92002

Mandel, Jean Sur la définition de la vitesse de déformation élastique et sa relation avec la vitesse de contrainte. (English summary) Internat. J. Solids and Structures 17 (1981), no. 9, 873-878. (Author's summary) 821:73024 73G05

ndelbaum, A. (with Vanderbei, R. J.) Optimal stopping and supermartingales over partially ordered sets. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 2, 253–264. (Annic Millet) 82k:60098 60G40 (60J10)

01A75 (30-03)

Mandel'stam, L. I. See Collection: Mandel'stam, L. I., 82g:01085

fandelzweig, V. B. Matrix elements of two-body operators between three-body hyperspherical basis states. Phys. Lett. A 80 (1980), no. 5-6, 361-364. (Author's summary) 82c:81164 81G50

Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 397-410, IEEE, New York, 1979. (Robert M. Baer) 821:68045 68C: 03D30) ders, Kenneth L. (with Adleman, Leonard M.) Reductions that lie. 20th Annual 68C25 (03D15.

Computational complexity of decision problems. Model theory of algebra an arithmetic (Proc. Conf., Karpacz, 1979), pp. 211-227, Lecture Notes in Math., 834, Springer, Berlin, 1980. (John Cherniavsky) 82m:03053 03D15 (10N05, 68C25)

fik, V. P. (with Aleksandrov, I. A.) Extremal properties of simultaneously p-valent functions. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 4, 3-13, 229. (Z. Lewandowski) 82i:30028 30C55

dl, Christoph *Applied network optimization. Academic Press [Harcourt Brace Jovanovich, Publishers], London-New York-Toronto, Ont., 1979. x + 175 pp. ISBN 0-12-468350-9 (R. Bolstein) 82e:90042 90B10 (90-02)

adl, Petr On the sequential improvement of replacement policies. Proceedings of the Second Prague Symposium on Asymptotic Statistics (Hradec Králové, 1978), pp. 277-290, North-Holland, Amsterdam, 1979. (E. V. Bulinskaja) 82a:90064 90B25

A mathematical model of storage. Kybernetika (Prague) 17 (1981), no. 2, 175–182. (M. S. Ali-Khan) 82j-60182 60K30 (90B05)

ndojana, J. C. (with Meditch, James S.) A decentralized algorithm for optimal routing in data-communication networks. Large Scale Systems 1 (1980), no. 3, 149-157. (Authors' nary) 82f:68009 68A05 (94C15)

Mandras, Franco On a class of degenerate elliptic equations of nonvariational type in two variables. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 18 (1981), no. 2, 605-618. (Giovanni M. Troianiello) 82m:35057 35J70

ndrekar, V. (with Hamedani, G. G.) The spaces $L_{p,M}$ (0). Bull. Iranian Math. Soc. 7, no. 1, 3–8 (1979). (N. Dinculeanu) 82a:46037 46E40 (with Linde, Werner; Weron, Aleksander) p-stable measures and p-absolutely

ing operators. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Błażejewko, 1979), pp. 167-178, Lecture Notes in Math., 828, Springer, Berlin, 1980. (D. J. H. Garling) 82i:47029 47B10 (46G12, 60B11)

(with de Araujo, Aloisio; Giné, Evarist; Zinn, Joel) On the accompanying laws corem in Banach spaces. Ann. Probab. 9 (1981), no. 2, 202-210. (Peter Z. Daffer)

60B12 (46B20) Mandzavidze, G. F. Some families of boundary value problems of linear conjugation. (Russian. Georgian and English summaries) Sem. Inst. Prikl. Mat. Dokl. No. 14 (1980),

45-52. (Author's summary) 82m:30047 30E25 Manenkov, A. B. Irregular magneto-optical waveguides. IEEE Trans. Microwave Theory Tech. 29 (1981), no. 9, 906–910. (Author's summary) 821:78004 78A10
 Manes, Ernest G. (with Arbib, Michael A.) Partially additive monoids, graph-growing, and

the algebraic semantics of recursive calls. Graph-grammars and their application to computer science and biology (Internat. Workshop, Bad Honnef, 1978), pp. 127-138, Lecture Notes in Comput. Sci., 73, Springer, Berlin, 1979. (Gianni Aguzzi) 821:68014

Equational aspects of ultrafilter convergence. Algebra Universalis 11 (1980), no. 2, 163-172. (B. T. Sims) 82a:54005 54A20 (with Arbib, Michael A.) Machines in a category. J. Pure Appl. Algebra 19 (1980),

9-20. (Authors' summary) 82i:68037 68D30 (01A60, 18B20, 68D15, 93Bxx)

Manevič, L. I. (with Lesničaja, V. A.) An asymptotic study of the vibrations of a plate with stiffening ribs. Prikl. Meh. 16 (1980), no. 7, 67-72 (Russian); translated as Soviet Appl. Mech. 16 (1980), no. 7, 607-611 (1981). (From the text) 82a:73032 73K12

(with Pilipčuk, V. N.) Nonlinear vibrations of a three-element mechanical system with several equilibrium positions. Prikl. Meh. 17 (1981), no. 2, 97-103 (Russian); translated as Soviet Appl. Mech. 17 (1981), no. 2, 178-184. (From the text) 82k:70026 70K 99

Mangasarian, O. L. Locally unique solutions of quadratic programs, linear and nonlinear nentarity problems. Math. Programming 19 (1980), no. 2, 200-212. (N. I. Janev)

82a:90168 90C33 (90C20)

Mange, Daniel ★Analyse et synthèse des systèmes logiques. (French) [Analysis and synthèsis of logical systems] Second edition. Traité d'Électricité [Treatise on Electricity], V. Georgi Publishing Co., St.-Saphorin, 1979. viii+343 pp. ISBN 2-604-00007-5 (C. Moraga) 82f:94027 94C10

Mangel, Marc Simple theory of relaxation from instabilities. Phys. Rev. A (3) 24 (1981), no. 6, 3226-3238. (Author's summary) 82m:82022 82A35 (58E07, 78A60) Search for a randomly moving object. SIAM J. Appl. Math. 40 (1981), no. 2, 327-338. (Author's summary) 82m:90097 90B40

nann, Margret (with Kandzia, Peter) On covering Boyce-Codd normal forms. Inform. Process. Lett. 11 (1980), no. 4-5, 218-223. (Authors' introduction) 82e:68023

(with Kandzia, Peter) The use of transitively irreducible kernels of full families of functional dependencies in logical data base design. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 195-211, Lecture Notes

in Comput. Sci., 100, Springer, Berlin, 1981. (Authors' summary) 82j:68012 68 Mangeron, Dumitru Ion (with Krivošcin, L. E.; Niang, S.; Fernandez, Dicesar Lass) Théorèmes d'unicité, d'existence, de stabilité et d'évaluation des erreurs commises lors du choix des solutions approchées concernant certains systèmes integrodifférentiels non tinicaires aux opérateurs paraboliques et aux autoreglages dans les limites d'intégration et dans les conditions initiales. (English and Spanish summaries) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 3, 437-446. (Claudia Simionescu) 82m:45025 45M10 (93C22)

(with Krivošcin, L. E.; Kutanov, Alymbek; D'Ambrosio, Ubiratan) On a class of integro-differential equations having temporal and local autocontrols as limits of integration. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 4, 521–529. (Authors' summary) 82m:45018 45K05 (73K99)

(with Nielson, Gregory M.) Bilinear interpolation in triangles based upon Mangeron theorem. Acta Math. Sinica 23 (1980), no. 3, 471-475. (James D. Fabrey) 82h:65005 65D05

(with D'Ambrosio, Ubiratan; Irimiciuc, N.; Maravall Casesnoves, Darío) New trends in mechanics. I. Generalized differential variational principles in rational mechanics. (Chinese. English summary) Acta Mech. Sinica (Beijing) 1980, no. 2,

177-183. (From the summary) 82a:70016 70H30 (49H05)
(with Bondarenko, B. A.; Santos, J. P. de Oliveira; Shimemura, Etsujiro) Problèmes concernant certaines extensions des équations polyvibrantes, dites équations de Mangeron. (Romanian summary) Bul. Inst. Politehn. Iași Sect. I 26(30) (1980), no. 1-2, 9-12. (Authors' summary) 82b:35146 35Q99

(with D'Ambrosio, Ubiratan; Krivošein, L. E.; Shimbo, Masaru) Méthode unitaire d'étude des différentes classes de problèmes "bien posés" concernant certains systèmes intégro-différentiels non linéaires aux opérateurs polyvibrants et aux autocontrôles dans les limites d'intégration. (Spanish summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 2, 283-295, (Sergiu Aizicovici) 82a:45017 45K05

(with Nielson, Gregory M.) Bilinear interpolation in triangles based upon a Mangeron theorem. (Spanish summary) Rev. Real Acad. Cienc. Exact. Fis. Madrid 75 (1981), no. 1, 89-96. (Authors' summary) 82m:41002 41A05 (65D05)

Mangin, Jean-Paul (with Brun, Louis) Extension aux domaines bornés ou non d'une ile de Poincaré. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 14, 685-687. (Authors' summary) 82e:26010 26B12 (76B15)

Mangione, Corrado What is contemporary logic talking about? Italian studies in the philosophy of science, pp. 89-111, Boston Studies Philos. Sci., 47, Reidel, Dordrecht, 1981. (Paul Ernest) 82c:03006 03A05

ngione, Vittorio On the curvature of a Riemannian manifold equipped with a symmetric P-connection. (Italian. English summary) Riv. Mat. Univ. Parma (4) 6 (1980), 201–209 (1981). (Giuseppe Arca) 82j:53057 53C05

Manglik, R. C. Some finite summations involving H-function. I. Indian J. Pure Appl. Math. 7 (1976), no. 5, 516-521. (Editors) 82c:33011 33A35

vu'o'ng Manh So'n See Vu'o'ng Manh So'n

Mani, G. S. Conditions for balanced polymorphism in the presence of differential delay in developmental time. Theoret. Population Biol. 20 (1981), no. 3, 363-393. (From the introduction) 82m:92050 92A10 (34K05)

- Mani, Peter (with Walkup, David W.) A 3-sphere counterexample to the Wo-path conjecture. Math. Oper. Res. 5 (1980), no. 4, 595-598. (P. McMullen) 82a:52004
- nida, M. M. Die Entwicklung der angewandten Mechanik als Wissenschaft im zweiten Drittel des 19. Jahrhunderts in Rußland. NTM Schr. Geschichte Natur. Tech. Medizin 15 (1978), no. 1, 8–13. (Peeter Müürsepp) 82a:01020 01A55
- da, S. N. Static solutions of classical Yang-Mills equations with sources. (Russian. English summary) Vestnik Leningrad. Univ. Fiz. Him. 1980, vpp. 3, 108–110. (Author's
- Summary) 82:e81039 81E99 (58C05, 58E05)
 Manija, M. G. Absolute continuity and singularity of probability distributions of random fields. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 3, 530-533. (Ju. S. Mišura) 82f:60087 60G30 (60G48, 60G60)

 Manikyamba, P. (with Swamy, U. Maddana; Rao, G. C.) Prime ideal characterization of
- chain based lattices. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 1, 98-106. (Mary Katherine Bennett) 82h:06017 06D99

 Manin, Ju. I. (with Atiyah, Michael F.; Hitchin, N. J.; Drinfel'd, V. G.) Construction of
- instantons. Phys. Lett. A 65 (1978), no. 3, 185-187. (P. E. Newstead) 82g:81049 81E10 (14F05, 32L05, 53C05, 57R25)
 - (with Lebedev, D. R.) Conservation laws and Lax representation of Benney's long wave equations. *Phys. Lett. A* 74 (1979), no. 3-4, 154–156. (Authors' summary)
 - 69 35Q20 (12H05, 58F07, 76B15)
 - (with Kostrikin, A. I.) ★Линейная алгебра и геометрия. (Russian) [Linear algebra and geometry] Moskov. Gos. Univ., Moscow, 1980. 320 pp. (J. L. Brenner) 82i:00008 00A06 (15-01, 20-01, 51-01)
 - soe. (Russian) [Computable and noncomputable] ★Вычислимое и невычис Kn6epneruxa. [Cybernetics] "Sovet. Radio", Moscow, 1980. 128 pp. (V. K. Bulitko) 82:e3002 03-02 (03Dxx, 68C30)
 - (with Henkin, G. M.) Twistor description of classical Yang-Mills-Dirac fields. Phys. Lett. B 95 (1980), no. 3-4, 405-408. (R. O. Wells, Jr.) 82f:81045 81E10 (32L10, 58A10)
- Maniscalco, Ignazia (with Portolano, Aida) Three-parameter measurable families of manifolds of the affine plane. (Italian) Atti Accad. Sci. Lett. Arti Palermo Parte I (4) 37 (1977/78), 415-432 (1980). (L. A. Santaló) 82j:53118 53C65 (51N10, 60D05)
 Manitius, A. (with Delfour, M. C.; Lee, E. B.) F-reduction of the operator Riccati
- equations for hereditary differential systems. Control of distributed parameter systems (Proc. Second IFAC Sympos., Coventry, 1977), pp. 261-271, IFAC, Düsseldorf, 1978. (Editors) 82a:49030 49B36 (49E20, 93B99)
- Algebraic criteria of approximate controllability of retarded systems. Analysis and optimization of systems (Proc. Fourth Internat. Conf., Versailles, 1980), pp. 97-110, Lecture Notes in Control and Information Sci., 28, Springer, Berlin, 1980. (Author's 93B05 (93B07)
- Completeness and F-completeness of eigenfunctions associated with retarded functional differential equations. J. Differential Equations 35 (1980), no. 1, 1-29. (Erwin
- Kozakiewicz) 82d:34098 34K05 (47D05) Necessary and sufficient conditions of approximate controllability for general linear retarded systems. SIAM J. Control Optim. 19 (1981), no. 4, 516-532. (Author's 93B05 (34K35)
- summary) 82g:93008 saic-Maniu, Al. See Isaic-Maniu, Al.
- Mańk, Tadeusz (with Swiatkowski, Tadeusz) On some class of functions with Darboux's characteristic. (Polish and Russian summaries) Zeszyty Nauk. Politech. Łódz. Mat. No. 11 (1978), 5-10. (Richard J. O'Malley) 82k:26002 26A21 (26A30)
- The spontaneous coherent state transition in the ϕ^4 -field model with an image mass. Phys. Lett. A 78 (1980), no. 3, 221-222. (Author's summary) 82a:81023 (81D25, 81K05)
- Mankiewicz, P. (with Vilimovský, Jiří) A remark on uniform classification of boundedly compact linear topological spaces. Rocky Mountain J. Math. 10 (1980), no. 1, 59-64. (M. S. Ramanujan) 82g:46009 46A14 (57N17)
- Man'ko, V. I. (with Dodonov, V. V.; Skaržinskii, V. D.) Nonuniqueness of the Yang-Feldman quantization procedure for the classical equations of motion. Phys. Lett. 81D05 (70H99)
- A 82 (1981), no. 2, 61-63. (Authors' summary) 82c:81059 Manley, O. P. (with Treve, Y. M.) A possible strange attractor in MHD flow. Intrinsic stochasticity in plasmas (Internat. Workshop, Inst. Etudes Sci. Cargèse, Cargèse, 1979), pp. 393-402. École Polytech., Palaiseau, 1979. (J. S. Joel) 82e:76076 76W05 (58F13)
- pp. 393-402, École Polytech., Palaiseau, 1979. (J. S. Joel) 82e:76076 Manley, P. L. Direct limits of free abelian groups with finite rank. Indian J. Math. 19 (1977), no. 2, 99–101. (From the text) 82a:20059 20K25
- A note on linear forms. Ranchi Univ. Math. J. 9 (1978), 77-80. (J. B. Roberts) 824-10028 10B05
- Mann, Avinoam Regular p-groups. III. J. Algebra 70 (1981), no. 1, 89–101. (J. R. J. Groves) 82m:20024 20D15
- Mann, L. N. (with Cattani, Eduardo H.) Gaps in the dimensions of the automorphism groups of some geometric structures. Geom. Dedicata 9 (1980), no. 4, 385-394. (R. Schultz) 82c:57022 57S15 (53C10)
- Mann, R. B. (with Moffat, J. W.) Gravitational synchrotron radiation in the metric of a new theory of gravitation. (French summary) Canad. J. Phys. 58 (1980), no. 11,
 - 1595-1598. (Richard Pavelle) 82d:83057 83E10 (83C30) (with Moffat, J. W.) Linear approximation in a new theory of gravity. J. Phys. A 14 (1981), no. 9, 2367-2376. (Authors' summary) 82h:83058 83D05
- ma, Zohar (with Waldinger, Richard) A deductive approach to program synthesis. Proceedings from 5th Scandinavian Logic Symposium (Aalborg, 1979), pp. 97-141, Aalborg Univ. Press, Aalborg, 1979. (Authors' summary) 82;68094 68G15 (03B35, 68B10)
 (with Dershowitz, Nachum) Inference rules for program annotation. IEEE Trans.
- Software Engrg. 7 (1981), no. 2, 207-222. (Authors' summary) 82c:68010 68B10 Manne, Alan S. (with Chao, Hung Po; Wilson, Robert B.) Computation of competitive equilibria by a sequence of linear programs. Econometrica 48 (1980), no. 7, 1595–1615. (Authors' summary) 82m:90039 90A14
- newille, Paul (with Pomeau, Y.) Intermittency: a generic phenomenon at the onset of turbulence. Intrinsic stochasticity in plasmas (Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 329–340, École Polytech., Palaiseau, 1979. (C. Tresser) 58F13 (28D20, 76F99)

- (with Pomeau, Y.) Intermittency and the Lorenz model. Phys. Lett. A 75 (1979/80), no. 1-2, 1-2. (Authors' summary) 82c:58039 58F13 (76F99)
- Intermittency, self-similarity and 1/f spectrum in dissipative dynamical systems. (French summary) J. Physique 41 (1980), no. 11, 1235-1243. (Author's summary)
- Intermittency in dissipative dynamical systems. Phys. Lett. A 79 (1980), no. 1, 33-35. (Author's summary) 82d:58045 58F13 (76F99) (with Pomeau, Y.) Wavelength selection in axisymmetric cellular structures. (French ary) J. Physique 42 (1981), no. 8, 1067-1074. (K. K. Puri) 82k:76033
- Statistical properties of chaotic solutions of a one-dimensional model for phase turbulence. Phys. Lett. A 84 (1981), no. 3, 129-132. (Author's summary) 82h:76029 76F99 (35Q10, 58F13)
- nheim, Philip D. (with Deshpande, Nilendra G.; Hwa, Rudolph C.) SU(4) × U(1) gauge theory. I. Muon-number nonconservation. Phys. Rev. D (3) 19 (1979), no. 9,
- 2686-2702. (Authors' summary) 82f:81084 81G20 (22E70)
 nnion, C. L. T. (with Taylor, John G.) General relativity on a flat lattice. Phys. Lett. B 100 (1981), no. 3, 261-266. (Authors' summary) 82d:83062 83E99 (81G05)
- m-Nachbar, Pauline On a singular perturbation problem arising in chemical separation studies. Mechanics today, Vol. 5, pp. 271-280, Pergamon, Oxford, 1980. (F. Feuillebois) 76R05 (35B25, 76S05)
- Manocha, H. L. (with Agarwal, A. K.) On further extension of bilateral generating functions for certain special functions. Simon Stevin 54 (1980), no. 3-4, 179-191. (V. L. Deshpande) 82b:33014 33A65
- Manoilo, N. V. (with Curilov, A. I.) Investigation of the convergence of the modified chord method. (Russian) Actomat. Sistemy Upravlenija i Pribory Actomat. No. 54 (1980), 84-89, iii. (Hans-Jürgen Albrand) 82c:65031 65H10

 Manolache, N. (with Bărcănescu, Ş.) Betti numbers of Segre-Veronese singularities. Rev.
- Roumaine Math. Pures Appl. 26 (1981), no. 4, 549-565. (Jürgen Herzog) 82j:13029 13H15 (14M99)
- Manole, Constantin A generalization of the Favard-Szász operators. (Romanian. French summary) Stud. Cerc. Mat. 32 (1980), no. 6, 663-668. (A. Lupaș) 82h:41032
- Manolov, Spas Autonomous systems with nonglobal internal resonance and a first approximation of period. (Bulgarian. Russian and French summaries) Godišnik Visš. Učebn. Zaved. Priložna Mat. 14 (1978), no. 2, 7-24 (1979). (G. V
 - Hmelevskaja-Plotnikova) 82b:34054 34C25

 Realization of an algorithm for the construction of periodic trajectories of autonomous systems of a specific class. (Russian) PLISKA Stud. Math. Bulgar. 3 (1981), 75-87. (V. G. Zadorožnii) 82k:34048 34C25
- noukian, Edward B. On the decoupling theorem in field theory. J. Math. Phys. 22 (1981), no. 3, 572-573. (Author's summary) 82f:81056 81E15 (81C30)
- nsfield, Lois Interpolation to scattered data in the plane by locally defined C1 functions. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 623-628, Academic Press, New York, 1980. (Eli Passow) 82c:41007 41A05

 On the solution of nonlinear finite element systems. SIAM J. Numer. Anal. 17
 - (1980), no. 6, 752-765. (Garry J. Tee) 82a:65090 65N30
 - On mixed finite element methods for elliptic equations. Comput. Math. Appl. 7 (1981), no. 1, 59-66. (Stephen W. Brady) 82b:65133 65N30 (35J15, 49G10)
- Finite element methods for nonlinear shell analysis. Numer. Math. 37 (1981), no. 1, 121-131. (David F. Griffiths) 82f:65116 65N30 (73L99)
- On the multigrid solution of finite element equations with isoparametric elements. Numer. Math. 37 (1981), no. 3, 423-432. (Author's summary) 82h:65075 (65N30)
- Mansfield, P. (with Goddard, P.; Osborn, Hugh) The functional measure for the exact SU(2) two-instanton solution. Phys. Lett. B 98 (1981), no. 1-2, 59-62. (Authors' summary) 82b:81058 81E10 (53C05, 81C35)
- nsimov, K. B. Optimality of singular (in the classical sense) controls in systems with lag. (Russian, Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan, SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 1, 147-152. (Stanisław Walczak) 82b:49034 49B36 (34K35, 49B10)
 - On the relation between two necessary conditions for optimality. (Russian Azerbaijan and English summaries) Izv. Akad. Nauk Azerbaijan and English summaries) Izv. Akad. Nauk Azerbaijan SSR Ser. Fiz.-Tehn.
 Mat. Nauk 1 (1980), no. 3, 133–136. (L. Mikołajczyk) 82m:49025 49B10
 nsour, H. M. M. (with Müller-Kirsten, H. J. W.) Matching of WKB solutions to other
- solutions. Phys. Rev. D (3) 24 (1981), no. 4, 1033-1035. (Authors' summary) 82h:81037
- r, M. (with Jury, E. I.) Positivity and nonnegativity conditions of a quartic equation and related problems. Thirteenth Asilomar Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1979), pp. 469-472, IEEE, New York, 1980. (From the summary) 82a:26016 26C10
 - (with Jury, E. I.) Positivity and nonnegativity conditions of a quartic equation and related problems. IEEE Trans. Automat. Control 26 (1981), no. 2, 444-451. (Authors' summary) 82j:93029 93D10 (94C10)
- malek-Mansour, M. See Malek-Mansour, M.

 Mansouri, F. (with Schaer, C.) SU(N)-extended conformally invariant actions in superspace. Phys. Lett. B 101 (1981), no. 1-2, 51-54. (Authors' summary) 824:83063 83E99 (81G20)
- Mansouri, Reza Broken Lorentz invariance and conventionality of clock synchronization. Phys. Lett. A 71 (1979), no. 2-3, 177-178. (Author's summary) 82b:83006
- Mansurov, M. (with Gaziev, A.) Integral of Cauchy type in the theory of analytic functions according to Vekua. I. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1978, no. 1, 78–84. (Wolfgang Tutschke) 82k:30051 30G20 (30E20)
- neuffel, Thomas A. An incomplete factorization technique for positive definite linear systems. Math. Comp. 34 (1980), no. 150, 473–497. (R. E. Funderlic) 82c:68019 65F10 (15A06)
 - An interval analysis approach to rank determination in linear least squares problems SIAM J. Sci. Statist. Comput. 2 (1981), no. 3, 335-348. (Author's summary) 82m:65042 65G10
- Manton, N. S. (with Jackiw, R.) Symmetries and conservation laws in gauge theories. Physics 127 (1980), no. 2, 257-273. (Steven Shnider) 824:81103 81E99 (53C80, 58E30, 70H30)

(with Forgacs, Peter) Space-time symmetries in gauge theories. Comm. Math. Phys. 72 (1980), no. 1, 15-35. (Judith M. Arms) 82b:81088 81E99 (53C05)

An alternative action for lattice gauge theories. Phys. Lett. B 96 (1980), no. 3-4, 328–330. (Author's summary) 82h:81062 81E10 (58E99)

multovič, S. V. (with Terent'ev, E. D.) Asymptotic solution of the problem of supersonic flow of an ideal gas around a blunt wedge. (Russian) Učen. Zap. CAGI 11 (1980), no. 6, 46-57. (Authors' summary) 822:76019 76199 mikjan, E. N. Foundations of the maximal physical likelihood method. (Russian. Armenian summary) 120. Akad. Nauk Armjan. SSR Ser. Tehn. Nauk 33 (1980), no. 4, 51-57, 64. (Author's summary) 824:93067 93E12

ukjan, V. A. (with Kuznecov, V. I.) Some peculiarities in the development of science

depending on the systemic character of their objective. (Russian. English summary)
Voprosy Istor. Estestroznan. i Tehn. 1979, no. 61-63, 64-66, 113, 123. (Authors' summary) 00A69 (92-01)

makjan, V. M. The Carleman singularity for a class of functions. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 72 (1981), no. 5, 263-268. (N. B. Pogosjan)

Szimitaryi Arkasi. Auka Arrigan. SSR Dout. 12 (1901), no. 3, 203-206. (N. B. Pogosjan)

Red. B. (with Fiorini, S.) A theorem on planar graphs with an application to the reconstruction problem. II. J. Combin. Inform. System Sci. 3 (1978), no. 4, 200-216. (Pavol Hell) 824-05083b 05C60 (05C10)

mmell, A. R. *The Tricomi equation with applications to the theory of plane transonic flow. Research Notes in Mathematics, 35. Pilman (Advanced Publishing Program), San Francisco, Calif.-London, 1979. vi+185 pp. ISBN 0-273-08428-3 (H. K. Cheng) 76H05 (35M05, 35Q20)

Mao, Zu Fan (with Sun, Geng) Two classes of linearly implicit methods. (Chinese. English summary) Math. Numer. Sinica 3 (1981), no. 2, 169-174. (Authors' summary) 82k:65042

et, A. (with Gazeau, J.-P.) A new approach to the two-particle Schrödinger box state problem. J. Chem. Phys. 73 (1980), no. 10, 5147-5154. (C. J. Eliezer) 82d:81019 81C05 (47A55, 81G45)

rac, V. S. Groups with a dense system of finite invariant jumps. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1981, no. 34, 27 pp. (Publisher's description) 82k:20068

Maracchia, Silvio The "unmerited" fame of Enopos of Chio. (Italian) Archimede 30 (1978), no. 1-2, 76-86. (E. Neuenschwander) 82m:01008 01A20
On the "cosine theorem". (Italian) Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur. 112 (1978), no. 5-6, 325-332. (William C. Waterhouse) 82:01009 01A20
Aristotle and incommensurability. (Italian. English and French summaries) Arch.

Hist. Exact Sci. 21 (1979/80), no. 3, 201-228. (Giovanna Derenzini) 82f:01008 01A20 (51-03)

Marasini, Donata The two-dimensional Student distribution and a test that allows the control of the type I error. (Italian. English and French summaries) Statistica (Bologna) 40 (1980), no. 4, 439-446. (Author's summary) 82d:62046

gno Marauta, Eziamaria See Aragno Marauta, Eziamaria Maravall, Agustin *Identification in dynamic shock-error models. Lecture Notes in ics and Mathematical Systems, 165. Springer-Verlag, Berlin-New York, 1979. viii + 158 pp. ISBN 3-540-09112-2 (Yoshio Kimura) 82c:62148 62P20

Effects of alternative seasonal adjustment procedures on monetary policy. onometric modeling and policy design at the Federal Reserve, Part I. With a conby Houston H. Stokes. J. Econo metrics 14 (1980), no. 1, 115-140. (See 82c:90003a)

A note on identification of multivariate time-series models. J. Econ

(1981), no. 2, 237–247. (Author's summary) 82:62129 62M10 (60G35)

Maravall Casesnoves, Dario Finite difference equations and linear differential equations with random coefficients. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 72 (1978), no. 4, 529-540. (Denis de Brucq) 82g:60081 39A10, 60J80, 92A15)

A three-dimensional stochastic process of birth, death and immigration. (Spanish. ary) Bul. Inst. Politehn. Iaşi Sect. I 25(29) (1979), no. 3-4, 35-39. (M. Iosifescu) 82c:60149 60J80 (92A15)

Non-Riemannian spaces and the use of the methods of classical mechanics in the theory of relativity. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 3, 333-359. (A. Crumeyrolle) 82e:83006 70H30)

(with D'Ambrosio, Ubiratan; Mangeron, Dumitru Ion; Irimiciuc, N.) New trends in mechanics. I. Generalized differential variational principles in rational mechanics. (Chinese. English summary) Acta Mech. Sinica (Beijing) 1980, no. 2, 177-183. (From the summary) 82a:70016 70H30 (49H05)

Asymptotic behavior and invariant solutions of linear systems of differential equations and of finite differences with random initial values and stochastic theory of control. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 1, 15–40. (Author's summary) 82m:93081 93E03 (34F05, 39A10)

Maravić, Manojlo ★Summability of the expansion in eigenfunctions of the Laplace operator in n-dimensional space. (Serbo-Croatian) With an English summary. Djela [Monographs], 55. Odjeljenje Tehničkih Nauka [Technical Sciences Section], 8. Akademija e i Hercegovine, Sarajevo, 1979. 151 pp. (G. V. Rozenbljum) i Umjet 35P10 (42C10)

35136 35P10 (42C10)
Summability of derived multiple Fourier series related to slowly oscillating functions with remainder term. (Serbo-Croatian summary) Mat. Vesnik 3(16)(31) (1979), no. 4, 431-441. (R. N. Mohapatra) 82ic:42012 42B05 (40F05, 42A28)

Sur certaines applications des fonctions à croissance lente avec reste. (Serbo-Croatian summary) Akad. Nauka Umjet. Bosne Hercegov. Rad. Odjelj. Prirod. Mat. Nauka No. 19 (1980), 43–58. (Jozef L. Teugels) 82e:40007 40E05 (26A12)

rbuh, V. V. On a single line queueing system with allowance for the reswitching time. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 4, 97-101, 221 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 4, 68-72 (1981). (Author's summary) 82m:60119

Marcellan Español, Francisco (with Rubio de Francia, José L.) Functionals continuous with respect to convergence in measure. (Spanish) Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 140–162, Consejo Sup. Inv. Cient., Madrid, 1977. (From the text) 824:28008

Equivalence between the formulas fundamental to the theory of orthogonal polynomials in Cassinians. (Spanish. English summary) Rev. Acad. Cienc. Zarug 33 (1978), 43-52 (1981). (Author's summary) 82g:33028 33A65

757(76), 43-32 (1981). (Nuturo's summary) 262,533-25 (1981). (Nuturo's summary) 262,533-25 (1981). (Some classes of plurisubharmonic functions. (Russian. English summary) 262,484. (Nauk Ukrain. SSR Ser. A No. 4 (1979), 259-263, 321. (Wieslaw Plešniak) 82b:32026 32F05 (32A22) rčenko, L. V. (with Nazarenko, T. I.) Some experiments on the application of interval

analysis to the solution of systems of ordinary differential equations with linear boundary conditions. (Russian). Numerical methods of optimization (applied mathematics) (Russian), pp. 161–175, Akad. Nauk SSSR Sibirsk. Otdel., Energet. Inst., Irkutsk, 1978. (G. S. Tabidze). 82a:65034 65G10 (65L10). Telenko, V. A. See Marčenko, V. O.

Marčenko, V. M. On the controllability and observability of systems with aftereffect. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 3, 239-242, 286. (Erwin Kozakiewicz) 82i:34102 34K35 (93B05, 93B07)

enko, V. O. (with Aleksandrov, A. D.; Blank, Ja. P.; Efimov, N. V.) Alekseï Vasil'evič Pogorelov (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 34 (1979), no. 4(208), 221-226. (Editors) 82h:01041 01A70

rčenko, V. P. Approximate investigation of a problem of optimal stabilization of a dynamical system. (Russian) Approximate solution of some problems for differential and integral equations of applied character (Russian), pp. 37-42, 48, Preprint 80, 17, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (See 82g:65004) 93D05

rčenkov, S. S. (with Demetrovics, János; Hannák, L.) Closed classes of self-dual functions in P₃. (Russian) Metody Diskret. Analiz. No. 34 (1980), 38–73, 101. (V. V. Rybakov) 82j:03029 03B50 (03G25)

A method of analysis of superpositions of continuous functions. (Russian) Problems Kibernet. No. 37 (1980), 5-17, 239. (G. M. Henkin) 82e:26013 26B40

On homogeneous algebras. (Russian) Dold, Akad. Nauk SSSR 256 (1981), no. 4, 787–790. (V. A. Artamonov) 821:08003 08A35

rchal, B. (with Chaleyat-Maurel, M.; El Karoui, Nicole) Réflexion discontinue et systèmes stochastiques. (English summary) Ann. Probab. 8 (1980), no. 6, 1049-1067. (M. H. A. Davis) 82k:60135 60H20 (60G44, 60J50)

urchal, C. (with Losco, L.) Sur une nouvelle propriété des équations linéarisées de la collision triple du problème des 3 corps. (English summary) [A new property of variational equations of the triple collision in the 3-body problem] J. Mécan (1981), no. 3, 465-473. (George Bozis) 82m:70005 70F07 (58F05, 70F35, 70M10)

rchand, A. (with Pacault, A.) Evolution of systems. Time scaling and scaling factors. Pattern formation by dynamic systems and pattern recognition (Proc. Internat. Sympos. Synerget., Garmisch-Partenkirchen, 1979), pp. 289-303, Springer Ser. Synergetics, 5, Springer, Berlin, 1979. (See 82k:00028) 92A05 (00A69, 93A10)

rchand, Jean-Paul (with Gudder, Stanley P.) A coarse-grained measure theory. (Russian mary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 11-12, 557-564 (1981). (Pedro Jiménez Guerra) 82i:28004 28A12 (28A60)

chesin, Dan (with Glimm, James; Isaacson, Eli; McBryan, Oliver A.) A shock tracking method for hyperbolic systems. Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 1–17, ARO Rep. 80, 3, U. S. Army Res. Office, Research Triangle Park, N.C., 1980. (Authors' summary) 82a:65069 65M25 (35L67) nary) 82a:65069

(with Glimm, James; McBryan, Oliver A.) Statistical fluid dynamics: unstable fingers. Comm. Math. Phys. 74 (1980), no. 1, 1-13. (Authors' summary) 82g:76038 76S05 (65C20, 76A60)

(with Glimm, James; Isaacson, Eli; McBryan, Oliver A.) Front tracking for hyperbolic systems. Adv. in Appl. Math. 2 (1981), no. 1, 91-119. (H. R. Aggarwal) 76V05 (76A60, 76S05)

(with Glimm, James; McBryan, Oliver A.) Unstable fingers in two-phase flow.

Comm. Pure Appl. Math. 34 (1981), no. 1, 53-75. (H. R. Aggarwal) 82e:76069

76TO.

(with Glimm, James; McBryan, Oliver A.) A numerical method for two phase flow with an unstable interface. J. Comput. Phys. 39 (1981), no. 1, 179–200. (Authors' summary) 82c:76098 76S05 (65N10, 76T05)

(with Isaacson, David; Isaacson, Eli; Paes-Leme, P. J.) Numerical analysis of spectral properties of coupled oscillator Schrödinger operators. I. Single and double well anharmonic oscillators. Math. Comp. 37 (1981), no. 156, 273-292. (Authors' summary) 65N25 (81C05)

Marchesini, G. (with Fornasini, E.) 2-D systems theory—a progress report. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. II, pp. 218–226, Reidel, Dordrecht, 1980. (Authors' summary) 82e:93077

A comment on the stochastic quantization: the loop equation of gauge theory as the equilibrium condition. Nuclear Phys. B 191 (1981), no. 1, 214-216. (Author's summary) 82k:81020 81C20 (81E10)

Marchetti, Franco E. (with Barra, M.; Del Grosso, G.; Gerardi, A.; Koch, Giorgio) Some basic properties of stochastic population models. Systems theory in immunology (Proc. Working Conf., Rome, 1978), pp. 155-164. Lecture Notes in Biomath., 32, Springer, Berlin, 1979. (C. P. Tsokos) 82h:92030 92A15 (60170)

Marchetti, P. A. The U₁ problem in a two and in a four-dimensional model. (Italian and Busic Communication)

Russian summaries) Nuovo Cimento A (11) 60 (1980), no. 1, 13-26. (Author's summary)

Marchi, Ezio The von Neumann growth model for an arbitrary set of nations or economies. Rev. Un. Mat. Argentina 29 (1979/80), no. 1-2, 85-95. (From the introduction) 90A14 (90D10) 82g:90023

Marchi, Maria Vittoria (with Le Donne, Attilio) Representation of Lipschitzian compact-convex valued mappings. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 68 (1980), no. 4, 278-280. (J. Borwein) 82k:49033 49B27

rchi, Mario (with Korchmáros, Gábor-Gabriele) Loops with partitions and André (1979), 329–340 (1981). (Claudio Bartolone) 82i:51002 51A15 (20N05)

On a special case of immersion between Sperner spaces. (Italian. English sum

Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 373-385 (1981). (Giorgio Nicoletti) 82m:51005 51A15

(with Cippo, Claudio Perelli) On a particular class of S-spaces. (Italian. English summary) Proceedings of the Brescia Mathematical Seminar, Vol. 4 (Italian), pp. 3-42. Sci. Mat., 4, Vita e Pensiero, Milan, 1980. (Alessandro Bichara) 82j:51013 51D15

(chizo) (with Biroli, Marco; Norando, T.) Homogenization estimates for quasivariational inequalities. (Italian summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 2, 267–274. (Lucio Boccardo) 82i:49005 49A29 (35J85)

nna, Clelia The equation of the vibrating string with variable discontinuous density. lian. English summary) Boll. Un. Mat. Ital. C (5) 18 (1981), no. 1, 223-240. (Italian. English sum

(Italian: English summary) Bott. Un. Nat. 1 Id. C (3) 18 (1961), no. 1, 225–240. (Tommaso Ruggeri) 82k:73042 73K03 (35L05) rchionna, Ermanno Eugenio Giuseppe Togliatti. (Italian) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 4, 309–319 (1 plate). (Editors) 82f:01120

Marchionna Tibiletti, Cesarina Brief history of "Mathesis". (Italian) Quad. Mathesis Cosenza 7 (1979), no. 1, 21-27 (1980). (Editors) 82f:01178 01A74

Marchioro, C. (with Galves, A.; Kipnis, C.; Presutti, Errico) Nonequilibrium measures which exhibit a temperature gradient: study of a model. Comm. Math. Phys. 81 (1981), no. 1, 127-147. (T. M. Liggett) 82m:60127 60K35 (82A05)

(with Pellegrinotti, A.; Pulvirenti, M.) On the dynamics of infinite anharmo systems. J. Math. Phys. 22 (1981), no. 8, 1740-1745. (J. Fritz) 82k:82008 82A05

Marchisa, Giuseppe A sufficient condition for the continuity of the zeros of polynomials with coefficients in a topological field. (Italian. English summary) Mater (Catania) 32 (1977), no. 2, 316-322. (L. Carlitz) 82h:10070 10M10 (12J10, 30G15) Marchuk, G. I. See Marcuk, G. I.

Marcilhacy, G. (with Leaute, B.; Skinazi, J.) Sur une solution particulière transcendante de l'équation de "sinus-Gordon". [On a particular transcendent solution of the sine-Gordon" equation] Lett. Nuovo Cimento (2) 32 (1981), no. 1, 13-18. (Francesco Calogero) 82i:35156 35Q20 (53A05, 58F07)

Marciniak, Andrzej (with Albrycht, Jerzy) Orbit calculations nearby the equilibrium points by a discrete mechanics method. Celestial Mech. 24 (1981), no. 4, 391-405. (Authors' mary) 82h:70007

Marčoková, Mariana Application of the Erdős-Straus theorem to partial series of the series $\sum_{n=1}^{\infty} 1/q^n$, where $q \ge 2$ and q is an integer. (Slovak) Sixth Scientific Conference of the College of Transport Engineering (College Transport Engrg., Žilina, 1979) (Slovak), pp. 102-106, College of Transport Engrg., Žilina, 1979. (L. Beran) 82f:10045

Marconi, F. (with Rudman, S.; Calia, V.) Numerical study of one-dimensional unsteady particle-laden flows with shocks. AIAA J. 19 (1981), no. 10, 1294–1301. (Authors' mary) 82m:76065 76T05 (76A60, 76L05, 76N15)

Marcos, J. A. P. Pacca (with Chandrasekaran, R.) Weighted min-max location problems: polynomially bounded algorithms. Operarch 17 (1980), no. 4, 172–180. (Authors' summary) 82e:90034 90B05 (90C20)

rcotorchino, François (with Michaud, Pierre) Modèles d'optimisation en analyse des données relationnelles. (English summary) Métriques et relations. Math. Sci. Humaines No. 67 (1979), 7-38, 125. (See 82e:92060) 92A27

Marcu, Dănuț On the gradable digraphs. An. Științ. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.) 26 (1980), no. 1, 185-187. (Issam Abdul-Kader) 82k:05056 05C20 Some remarks concerning the kernels of a strong connected digraph. An. Stiint.

Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.) 26 (1980), no. 2, 417-418. (From the text) 82i:05040 05C20

Marcu, Eleonora (with Gheorghiu, Gh. Th.) Des propriétés des fonctions holomorphes nonholonomes. (Romanian summary) Bul. Inst. Politehn. Bucureşti Ser. Mec. 42 (1980), no. 1, 3-11. (Authors' summary) 82g:30078 30G30

Marcus, G. I., 3-11. (Authors summary) 622-200/8 500390

Marcus, G. I. (with Belyh, L. N.) Mathematical model of an infectious disease. Calcolo 16 (1979), no. 4, 399-414 (1980). (Robert J. Mulholland) 82k:92029 92A09 (92A15) (with Kočergin, V. P.; Sarkisjan, A. S.; Bubnov, M. A.; Zalesnyĭ, V. B.; Klimok, V. I.; Kordzadze, A. A.; Kuzin, V. I.; Protasov, A. V.; Suhorukov, V. A.; Cvetova, E. A.; Ščerbakov, A. V.) ★Математические модели циркуляции в океане. (Russian)
[Mathematical models of circulation in the ocean] "Nauka" Sibirsk. Otdel., Novosibirsk,

1980. 288 pp. (Jiří Nedoma) **82e:86002** 86A05 (76V05) (with Dymnikov, V. P.; Zalesnyĭ, V. B.; Lykosov, V. N.; Bobyleva, I. M.; Galin, V. Ja.; Perov, V. L.) A mathematical model of the general circulation of the atmosphere and ocean. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 3, 577-581. (From the text) 82i:86001 86A05 (86A35)

(with Bubnov, M. A.) On the asymptotic behavior of the solution of linear equations of the dynamics of a baroclinic ocean over long periods of time. Izv. Akad. Nauk SSSR Ser. Fiz. Atmosfer. i Okeana 16 (1980), no. 3, (Russian); translated as Izv. Acad. Sci. USSR Atmospher. Ocean. Phys. 16 (1980), no. 3, 137-141 (1981). (Authors' summary) 82f:86002 86A05 (35B40, 76V05)

On the occasion of the 80th birthday of Academician M. A. Lavrent'ev. (Russian) Ž. Prikl. Meh. i Tehn. Fiz. 1980, no. 5, 3-7 (1 plate). (Editors) 82a:01040 01A70

(with Agoškov, V. I.) Kinetic equations and variational principles. SIAM J. Numer. Anal. 18 (1981), no. 2, 242-261. (C. V. Pao) 82i:82077 82A70 (49H05)

(with Aleksandrov, P. S.; Bogoljubov, N. N.; Kolmogorov, A. N.; Ljusternik, L. A.; Sobolev, S. L.; Šabat, B. V.) In memory of Mihail Alekseevič Lavrent'ev. (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 3-10 (1 plate). (Editors) 82e:01081 See also Lavrent'ev, M. A., 82f:01182 and Methods for solving systems of

variational-difference equations, 82i:65001 Martuk, N. G. Existence of solutions to a mixed problem for the vector wave equation. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 3, 546-549. (Rémi Vaillancourt) 82h:35092 35L05 (35L55)

Marcus, Daniel A. An alternative to Euclid's algorithm. Amer. Math. Monthly 88 (1981), no. 4, 280–283. (Paul Hartung) 82e:16005 10A05

Spanning subgraphs of k-connected digraphs. J. Combin. Theory Ser. B 30 (1981), no. 1, 21–31. (Ioan Tomescu) 82i:05046 05C20 (05C35)

Minimal positive 2-spanning sets of vectors. Proc. Amer. Math. Soc. 82 (1981), no. 2,

165-172. (George P. Barker) 82h:15002 15A03 (52A25) Marcus, Froim On a metric of E. Kähler. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 3-4, 233-238 (1980). (J. Ferrand) 82i:53053 53C55 (01A60, 53-03)

Some remarks on nonruled surfaces whose asymptotes of both families belong to linear complexes. An. Stiint. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.) 27 (1981), no. 1, 153–156. (K. Strubecker) 821:53017 53A20

Some observations on surfaces with null-projective-curvature. Libertas Math. 1 (1981), 133-140, (C. Thas) 82i:53017 53A20

Marcus, Marvin Variations on the Cauchy-Schwarz inequality. Linear Algebra Appl. 27 (1979), 81-91. (R. C. Thompson) 82a:15026 15A72 (15A45, 46C10) (with Wang, Bo Ying) Some variations on the numerical range. Linear and

Multilinear Algebra 9 (1980), no. 2, 111-120. (L. Berg) 824:47007 47A12 (15A18) (with Moore, Kenneth) A determinant formulation of the Cauchy-Schwarz inequality. Linear Algebra Appl. 36 (1981), 111-127. (Chung Lie Wang) 82h:15012 15A45 (26D15)

reus, Michael B. Weak convergence of the empirical characteristic function. Ann. Probab. 9 (1981), no. 2, 194-201. (J. Kiefer) 82g:60048 60F17

(with Pisier, Gilles) Caractérisation des processus p-stables, fortement stationnaires, à trajectoires continues. (English summary) [Characterization of strongly stationary p-stable processes with continuous sample paths] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 8, 439–441. (Authors' summary) 82m:60045 60G17 (60G15)

she (with Mizel, Victor J.) Semilinear hereditary hyperbolic systems with nonlocal boundary conditions. I. J. Math. Anal. Appl. 76 (1980), no. 2, 440-475. (Sergiu Aizicovici) 82f:35120a 35L50

(with Mizel, Victor J.) Semilinear hereditary hyperbolic systems with nonlocal dary conditions. II. J. Math. Anal. Appl. 77 (1980), no. 1, 1-19. (Sergiu Aizicovici) 35L50 (35R10, 92A15)

(with Bandle, Catherine) Sur une classe de problèmes apparaissant en physique des plasmas. (English summary) [A class of problems appearing in plasma physics] Acad. Sci. Paris Sér. I Math. 293 (1981), no. 8, 409-411. (Authors' summary) 82m:35062 35J85 (82A45)

Marcus, R. A. (with Noid, D. W.; Koszykowski, M. L.; Tabor, M.) Properties of vibrational energy levels in the quasiperiodic and stochastic regimes. J. Chem. Phys. 72 (1980), no. 11, 6169-6175. (Authors' summary) 824:81174 81G55 (58F14)

(with Ramaswamy, Ramakrishna) Perturbative examination of avoided crossings. m. Phys. 74 (1981), no. 2, 1379-1384. (Joseph Ford) 82g:58055 58F13 (70K99, 81C99)

(with Ramaswamy, Ramakrishna) On the onset of chaotic motion in deterministic tems. J. Chem. Phys. 74 (1981), no. 2, 1385-1393. (Joseph Ford) 82g:58056 58F13 (70K50, 81C99)

(with Koszykowski, M. L.; Noid, D. W.; Tabor, M.) On correlation functions and the onset of chaotic motion. J. Chem. Phys. 74 (1981), no. 4, 2530-2535. (Authors' summary) 82g:82007 82A05 (58F13)

Marcus, Ruth On a relationship between powers and atomic powers of likelihood-ratio tests in the general linear model. Metron 34 (1976), no. 3-4, 361-365 (1979). (Author's 62F03 mary) 82d:62048

Two-stage procedures for testing homogeneity of means against ordered alternatives in one-way ANOVA with common unknown variance. Austral. J. Statist. 22 (1980), no. 3, 250–259. (Author's summary) 824:62120 62J10 no. 3, 250-259. (Author's summary) 82d:62120

A two-stage procedure for testing homogeneity of means against ordered alternatives in analysis of variance with unequal variances. Comm. Statist. A—Theory Methods 9 (1980), no. 9, 949-963. (B. K. Ghosh) 82b:62025 62F03 (62L10)

ultaneous confidence intervals for monotone contrasts of normal n

J. Statist. 23 (1981), no. 2, 214-223. (Author's summary) 82k:62142 62J10 (62F25)

Marcus, Solomon L'activité de Gr. C. Moisil dans le domaine de la linguistique mathématique. Rev. Roumaine Math. Pures Appl. 23 (1978), no. 5, 767-769. (Editors) 01A70

Academician Gheorghe Marinescu is 60 years old. (Romanian) Gaz. Mat. (Bucharest) 85 (1980), no. 2, 49-51. (Editors) 82f:01121 01A70

See also Nicolescu, Miron, 82f:01185 and Moisil, Grigore Costantin, 82g:01089

Marcus, Steven I. (with Hsu, Kai) A general martingale approach to discrete-time stochastic control and estimation. IEEE Trans. Automat. Control 24 (1979), no. 4, 580-583. (Ju. M. Kabanov) 82j:93044 93E10

(with Mitter, Sanjoy K.; Ocone, D.) Finite-dimensional nonlinear estimation for a class of systems in continuous and discrete time. Analysis and optimisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 387-406, Acade London, 1980. (Martin Morf) 82e:93101 93E10 Modeling and approximation of stochastic differential equations driven by

semimartingales. Stochastics 4 (1980/81), no. 3, 223-245. (Philip Protter) 82g:60082 60H10 (60G48)

Marczewski, Edward See Hartman, Stanisław; et al., 82b:01047

Mardanov, M. D. (with Melikov, T. K.) On necessary optimality conditions in systems with lag. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1979, no. 6, 47-51. (K. B. Mansimov) 82g:49015 Marden, A. (with Pommerenke, Ch.) Analytic self-mappings of infinite order of Riemann

surfaces. J. Analyse Math. 37 (1980), 186-207. (B. Maskit) 82e:30067 30F99 (with Jørgensen, Troels; Pommerenke, C.) Two examples of covering surfaces. Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference (State Univ. New York, Stony Brook, N.Y., 1978), pp. 305-317, Ann. of Math. Studies, 97, Princeton Univ. Press, Princeton, N.J., 1981. (Jane Gilman) 82k:30048

(57M10) dešić, Sibe (with Šostak, A. P.) On the homotopy type of ANRs for p-paracompacta. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 10, 803-808. (Ju. M. Smirnov) 82e:54018 54C56 (54F43)

Foundations of shape theory and shape invariants. Rend. Sem. Mat. Univ. Politec.

Torino 38 (1980), no. 2, 47-52 (1981). (Editors) 821:58020 55P55 (54C56)

(with Sostak, n. P.) Perfect prototypes of stratifiable spaces. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 84-93. (Y. Kodama) 82a:54024 54C55

Shape theory and general topology. Proceedings of the Meeting on General Topology (Univ. Trieste, Trieste, 1978), pp. 119–128, Univ. degli Studi Trieste, Trieste, 1981. (From the text) 82g:54055 54F43 (54C56)

See also Shape theory and etric topology, 82m:55003

- Mardeliė, Vera On the homogeneity of the Tychonoff cube. Mat. Vesnik 4(17)(32) (1980), no. 1, 31-32. (J. van der Slot) 82h:54008 54B10 (57N20)
 Mardia, K. V. (with Edwards, Robert; Puri, Madan L.) Analysis of central place theory.
 (French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 2. With discussion. Bull. Inst. Internat. Statist. 47 (1977), no. 2, 93-110, 138-147. (Authors' summary) 82i:52014 52A22 (62P99, 92A20)

Tests of univariate and multivariate normality. Analysis of variance, judbook of Statistics, 1, North-Holland, Amsterdam, 1980. (See 821:62102) (62G10)

(with Jupp, P. E.) A general correlation coefficient for directional data and related ems. Biometrika 67 (1980), no. 1, 163-173. (Paul Sampson) 82b:62068 62H20

(with Holmes, Dorothy) A statistical analysis of megalithic data under elliptic ern. J. Roy. Statist. Soc. Ser. A 143 (1980), no. 3, 293-302. (Edward M. Carter) 82a:62077 62H15 (01A10)

(with Jupp, P. E.) Amendments and corrections: "A general correlation coefficient directional data and related regression problems" [Biometrika 67 (1980), no. 1, -173; MR 82b:62068]. Biometrika 68 (1981), no. 3, 738. (Editors) 82m:62126 163-173; MR 82b:62068]. Biomet 62H20

Directional statistics in geosciences. Comm. Statist. A—Theory Methods 10 (1981), no. 15, 1523–1543. (From the summary) 82h:62195 62P99 (86A60)

Marechal, O. (with Fack, Thierry) Sur la classification des automorphismes périodiques des

C*-algèbres UHF. (English summary) J. Funct. Anal. 40 (1981), no. 3; 267-301. (Christopher Lance) 82h:46084 46L40

Marek, Ivo Homogenization in neutron diffusion. Numerische Behandlung von Eigenwertaufgaben, Band 2 (Tagung, Tech. Unio. Clausthal, Clausthal, 1978), pp. 113-126, Internat. Schriftenrei he Numer. Math., 43, Birkhäuser, Basel, 1979. (Author's nary) 82g:82061 82A75 (65P05)

Asymptotic behavior of solutions of a homogeneous transport equation. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 181-186, 254, Sibirsk. Otdel., Novosibirsk, 1980. (Author's sur ary) 82a:45022 (82A70)

Marek, J. (with Haggag, S.) A nearly-perfect-fluid source for the Kerr metric. (Italian and es) Nuovo Cimento B (11) 62 (1981), no. 2, 273-282. (Authors' summary) 82h:83016 83C15 (83C55)

Marek, Miloš (with Raschman, Pavel; Kubíček, Milan) Waves in distributed chemical systems: experiments and computations. New approaches to nonlinear problems in dynamics (Proc. Conf., Pacific Grove, Calif., 1979), pp. 271-288, SIAM, Philadelphia, Pa., 1980. (Authors' summary) 82h:80023 80A30 (35K55, 92A09)

Marek, W. (with Grzegorczyk, A.) A sketch of the scientific accomplishments of Andrzej Mostowski. (Polish) Wiadom. Mat. (2) 22, no. 1, 47-52 (1979). (Stanisław J. Surma) 01A70 (03-03) 82b:01054

(with Zbierski, P.) On the number of models of the Kelley-Morse theory of classes.

Fund. Math. 109 (1980), no. 3, 169–173. (A. Levy) 82k-03069 03C62 (03C85, 03E70) renic, V. B. Metric structure of four-dimensional open analytic manifolds of nonnegative curvature. (Russian) Sibirsk. Mat. Z. 21 (1980), no. 5, 161-165, 192. (S. S. Singh)

res, M. General coalition-games and markets. IX. Oberwolfach Conference on Operations Research (Oberwolfach, 1978), pp. 217–222, Operations Research Verfahren, 36, Athenaum/Hain/Scriptor/Hanstein, Königstein/Ts., 1980. (Author's introduction) 82m:90040 90A14 (90D12)

reschal, Michel (with Duerinckx, G.) Corrélations de non-équilibre dans un modèle soluble. Acad. Roy. Belg. Bull. Cl. Sci. (5) 66 (1980), no. 9, 715-730. (Authors' summary)

H-theorem for an infinite, one-dimensional, hard-point system. J. Statist. Phys. 24 (1981), no. 1, 139-157. (G. V. Ramanathan) 82f:82009 82A05

Mareveera, N. A. Flow past a slender profile in a channel with permeable walls. Izv. Akad.
Nauk SSSR Meh. Židk. Gaza 1980, no. 2, 265–270 (Russian); translated as Fluid Dynamics 15 (1980), no. 2, 111-117. (From the introduction) 82h:76015 (76505)

Margaglio, Claudio (with Giudici, Reinaldo E.) A geometric characterization of the generators in a quadratic extension of a finite field. Rend. Sem. Mat. Univ. Padova 62 (1980), 103-114. (S. D. Cohen) 82f:12026 12C30

Margalef, Ramón See Legendre, Louis; et al., 28292071a

Margalef Roig, J. (with Outerelo Dominguez, E.) A note on paracompact spaces. (Spanish) Rev. Mat. Hisp.-Amer. (4) 39 (1979), no. 2-3, 87-98. (Richard Wilson) 82j:54029

(with Outerelo Dominguez, E.) Sufficient conditions for c-paracompactness. Application to a metrization theorem. (Spanish) Rev. Mat. Hisp.-Amer. (4) 39 (1979), no. 4-5, 166-172. (Sergio Salbany) 82k:54030 54D18 (54E35)

Märgäritescu, Eugen On the Studentized maximum modulus-method of multiple

comparison. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 1, 89-94. (Yung L. Tong) 82g:62103 62J15 (62F25)

See also Bibby, John, 82i-62107

Margolies, David (with Dubins, Lester E.) Naturally integrable functions. Pacific J. Math. 87 (1980), no. 2, 299-312. (C. Chou) 82f:43003 43A07 urgolis, Stuart W. k-transformation semigroups and a conjecture of Tilson. J. Pure Appl.

20M20 Algebra 17 (1980), no. 3, 313-322. (Bridget B. Baird) 82a:20076 On M-varieties generated by power monoids. Semigroup Forum 22 (1981), no. 4, 339–353. (B. Ponděliček) 82j-20128 20M35

s, G. A. Some remarks on invariant means. Monatsh. Math. 90 (1980), no. 3, 233–235. (Andrés del Junco) 82b:28034 28D10 (28A75, 43A07)
See also Ihara, Shin-ichiro, 82a:01035 and Tits, Jacques, 82g:01075

w, L. M. Examples of approximate investigation of the neighborhood of stationary modes of oscillating mechanical systems with a small parameter. *Prikl. Mat. Meh.* 43 (1979), no. 2, 235–249 (*Russian*); *translated as J. Appl. Math. Mech.* 43 (1979), no. 2, 254–269 (1980). (Author's summary) 82g:70047 70K30 (34C15)

de Maria, G. See De Maria, G. Marias, Michel Transformations canoniques linéaires dans les espaces de Hilbert.

Séminaire Paul Krée, 4e année: 1977–1978. Équations aux dérivées partielles en infinie, Exp. No. 8, 13 pp., Secrétariat Math., Paris, 1979. (Author's review (Zbl

Marica, Carmen (with Rusu, I.; Vasilache, Mariana; Eftimescu, Cornelia) Representation of the shadows in the plane axial reference system. (Romanian. French summary) Bul.
 Inst. Politehn. Iaşi Sect. I 26(30) (1980), no. 1-2, 75-79. (O. Bottema) 82g:51030

Maričev, O. I. (with Kilbas, A. A.) Fedor Dmitrievič Gahov. (Russian. English summary) Vesci Akad, Navuk BSSR Ser, Fiz.-Mat, Navuk 1980, no. 4, 130-132. (Editors) 82b:01052 01A70

A method for calculating integrals of hypergeometric functions. (Russian. English marry) Dokl. Akad. Nauk BSSR 25 (1981), no. 7, 590-593, 667-668. (Walter 33A30 Gautschi) 82i:33005

Marie, Maximilien *Histoire des sciences mathén es et phys rie, Maximilien *Histoire des sciences mathématiques et physiques. (French) [History of mathematical and physical sciences] Tome I. De Thales à Diophante. Tome II. De Diophante à Viète. Tome III. De Viète à Descartes. Reprinting of the 1883–1884 edition. Kraus Reprint, Nendeln, 1977. 831 pp. (not consecutively paged). (Editors) 82e:01126a 01A75 (01A05)

★Histoire des sciences mathématiques et physiques. (French) [History of mathematical and physical sciences] Tome IV. De Descartes à Huyghens. Tome V. De Huyghens à Newton. Tome VI. De Newton à Euler. Reprinting of the 1884-1885 edition. s Reprint, Nendeln, 1977. 758 pp. (not consecutively paged). (Editors) 82e:01126b 01A75 (01A05)

★Histoire des sciences mathématiques et physiques. (French) [History of mathematics and physical sciences] Tome VII. De Newton à Euler. Tome VIII. D'Euler à Lagrange. Tome IX. De Lagrange à Laplace. Reprinting of the 1885-1886 edition.

Kraus Reprint, Nendeln, 1977. 852 pp. (not consecutively paged). (Editors) 82e:01126c 01A75 (01A05)

★Histoire des sciences mathématiques et physiques. (French) [History of mathematical and physical sciences] Tome X. De Laplace à Fourier. Tome XI. De Fourier à Arago. Tome XII. D'Arago à Abel. Reprinting of the 1887-1888 edition. Kraus Reprint, Nendeln, 1977. 744 pp. (not consecutively paged). (Editors) 82e:01126d 01A75 (01A05)

Marigliano Ramaglia, V. (with Zucchelli, G. P.) Application of a variational principle for calculating S-matrix poles. Phys. Lett. A 67 (1978), no. 1, 9-12. (Authors' summary) 81F05 (49H05) 82b:81103

Mařik, J. (with Agronsky, S. J.; Biskner, R.; Bruckner, A. M.) Representations of functions by derivatives. Trans. Amer. Math. Soc. 263 (1981), no. 2, 493-500. (Richard J. O'Malley) 82e:26006 26A24 (26A21, 26A27)

Marin, Francisco (with Ch'en, Julie C. T.) Characterization of a topological space X by the lattice C(X, D). Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 4, 383-385. (Thomas E. Gantner) 82g:54028 54C40

rodriguez Marin, L. See Rodriguez Marin, L.

Marin, Toma Sur l'algèbre tangente d'un espace à connexion conforme. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 4, 387-391. (J. Ferrand) 82e:53024 53A30 (53B15)

Marinari, E. (with Fucito, F.; Parisi, Giorgio; Rebbi, C.) A proposal for Monte Carlo simulations of fermionic systems. Nuclear Phys. B 180 (1981), no. 3, FS 2, 369-377. (Authors' summary) 82h:81045 81C35 (65C20, 81-04, 81C99)

(with Falcioni, M.; Paciello, M. L.; Parisi, Giorgio; Taglienti, B.) Phase transition analysis in Z₂ and U(1) lattice gauge theories. Phys. Lett. B 105 (1981), no. 1, 51-54. (Authors' summary) 82j:82027 82A25 (81E25)

Marinaro, M. (with Fusco-Girard, M.; Mancini, F.) Electrodynamics of superconductors as a consequence of local gauge invariance. Fortschr. Phys. 28 (1980), no. 7, 355–426. (From the introduction) 826:81179 81J05

Marinec', T. I Approximate integration of nonlinear systems with retarded argument containing a polyharmonic operator. (Russian) Analytic methods for investigating nonlinear oscillations (Russian), pp. 88-95, 181, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (Author's summary) 82g:35115 35R10

Acceleration of the convergence of iteration processes for the approximate integration of partial differential equations given in an implicit form. (Russian. English mary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 22-25, 104. (Jarosław Jelen) 82b:65092 65M99

Integration of the Goursat problem for a nonlinear differential equation with deviating argument. (Ukrainian. English and Russian summaries) Visnik Kiiv. Univ. Ser. Mat. Meh. No. 22 (1980), 54-60, 149. (Author's summary) 82k:35097

Marinescu, Elvira Determination of a function on a two-dimensional interval from boundary conditions. (Romanian. French summary) Bul. Univ. Braşov Ser. C 21 (1979), 89-96. (A. Lupaş) 82j:65003 65D05

Marinescu, Gheorghe Se Gheorghe, 82f:01164 See Marcus, Solo mon 82f:01121 and Biography: Marine

Marinho, J. L. (with Stott, B.; Alsac, O.) The optimal power flow problem. Electric po problems: the mathematical challenge (Proc. Conf., Seattle, Wash., 1980), pp. 327–351, SIAM, Philadelphia, Pa., 1980. (Authors' summary) 824:90132 90C50

Marini, M. (with Cecchi, M.; Zezza, P. L.) A compactness theorem for integral operators and applications. Functional differential equations and bifurcation (Proc. Conf., Inst. Ciènc. Mat. São Carlos, Univ. São Paulo, São Carlos, 1979), pp. 119-125, Lecture Notes in Math., 799, Springer, Berlin, 1980. (Norman Dancer) 82b:47084 47H99 (34B15)

(with Cecchi, M.; Zezza, P. L.) Boundary value problems for nonlinear differential equations on noncompact intervals. Nonlinear differential equations (Proc. Internat. Conf., Trento, 1980), pp. 85-96, Academic Press, New York, 1981. (A. S. Vatsala)

Marinič, A. P. (with Korobov, V. I.; Podol'skii, E. N.) Controllability of nonlinear systems in the presence of constraints on the control. (Russian) Vestnik Har'kov. Gos. Univ. No. 174 vyp. 43 (1978), 34-37, 104. (N. N. Petrov) 824:49034

Marino, Mario Comment on: "Further contributions to the study of weak solutions of contour problems by parabolic operators" [Matematiche (Catania) 26 (1971), 381-396 (1972); MR 52 #1015] (Italian) Matematiche (Catania) 32 (1977), no. 1, 148–152 (1979). (V.-V. Olariu) 82m:35071 35K20

New contributions to the regularization of the solution of the Cauchy problem for

certain second-order differential equations in Hilbert spaces. (Italian. English summary) tiche (Catania) 32 (1977), no. 2, 299-306. (Sadakazu Aizawa) 82c:34070 34G10

On the regularization of solutions of the Cauchy problem for abstract differential equations of evolution of Schrödinger type. (Italian. English summary) Matematiche (Catania) 33 (1978), no. 1, 44-66 (1980). (Rémi Vaillancourt) 82e:47068 (45J05)

On the Hölderianity of the solution of the Cauchy problem by means of a

On the Fromerianity of the Solution of the Cauchy problem by means of a second-order abstract differential equation. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 16 (1979), no. 3, 949–961. (Jaures P. Ceccon) 82a:34671 34G10 (46E35) Mariño-Acebal, José B. (with Lagunas-Hernández, Miguel A.; Figueiras-Vidal, Anlbal R.; Carol Vilanova, Antonio) A linear transform for spectral estimation. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 5, 989–994. (Authors' summary) 82i:94005 94A12

(with Figueiras-Vidal, Aníbal R.; García-Gómez, Ramón) On generalized sampling nsions for deterministic signals. IEEE Trans. Circuits and Systems 28 (1981), no. 2, 153-154. (Authors' summary) 82d:94015 94A12

Marinosci, Rosa Anna Lie pseudoconnections. (Italian. English summary) Rend. Accad. Sci. Fis. Mat. Napoli (4) 47 (1980), 149-158 (1981). (C. Di Comite) 82j:53058

Marion, Jacques Sur la mesure de Hausdorff des ensembles parfaits de translation et de certains ensembles analogues. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 4, 263–266. (Author's summary) 82b.28014 28A75
Dimension de Hausdorff et fractions continues. (English summary) C. R. Acad. Sci.

Paris Sér. I Math. 292 (1981), no. 5, 311-313. (Author's summary) 82b:10073 10K10 (10K50, 12A15, 28A75, 54F45)

Maritz, A. A simple test for the independence of sets of variables. Austral. J. Statist. 23 62H15 (1981), no. 1, 52-57. (Author's summary) 82h:62086

Mariwalla, K. H. A complete set of integrals in nonrelativistic mechanics. J. Phys. A 13 (1980), no. 9, L289-L293. (F. A. E. Pirani) 82d:70037 70H99 (58F05)

Marjanović, M. M. Inverse limit sequences of graphs in representation of compact metric spaces. Bull. Acad. Serbe Sci. Arts Cl. Sci. Math. Natur. (N.S.) No. 10 (1979), 67-74. (J. Micolaszewski 82i:54024 54B25 (54E45)

Mar'janovič, T. P. See Questions of modeling complex systems, 82i:93088a

Mark, Otilia (with Alicu, Mira-Cristiana) Some properties of the fixed points set for multifunctions. (Romanian summary) Studia Univ. Babeş-Bolyai Math. 25 (1980), no. 4, 77-79. (R. E. Smithson) 82k:54066 54H25 (26A99, 54C60)

Markarjan, V. N. Addition of lower terms preserving hypoellipticity of an operator. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 15 (1980), no. 6, 443-460, 507. (David S. Tartakoff) 82g:35029 35H05

Markeev, A. P. (with Sokol'skii, A. G.) Method of constructing and investigating stability of periodic motions of autonomous Hamiltonian systems. Prikl. Mat. Meh. 42 (1978), no. 1, 52-65 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 1, 51-64 (1979). (J. S. Joel) 82i:70031 70M10 (34C25, 58F05, 70F15, 70K20)

(with Kunicyn, A. L.) Stability in resonance cases. (Russian) General mechanics, Vol. 4 (Russian), pp. 58–139, 143, Akad. Nauk SSSR, Vsexojuz. Inst. Naučn. i Tehn.

Informacii, Moscow, 1979. (E. Leimanis) 82b:70008 70Kxx (34D20, 58F05)
On steady rotations of a rigid body in a periodic orbit near the collinear libration point. Prikl. Mat. Meh. 43 (1979), no. 3, 411–418 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 3, 444-451 (1980). (Author's summary) 82g:70021

Markellos, V. V. (with Roy, Archie E.) Hill stability of satellite orbits. Celestial Mech. 23 (1981), no. 3, 269–275. (Authors' summary) 824:70043 70M10

(with Szebehely, Victor) Approximations of satellite stability. Celestial Mech. 24

(1981), no. 2, 183-184. (Authors' summary) 82h:70014 70F15

Markenscoff, Xanthippi (with Callias, Constantine) The nonuniform motion of a supersonic dislocation. Quart. Appl. Math. 38 (1980/81), no. 3, 323-330. (J. Miklowitz) 82k:73071 73505

Markham, R. Small sample efficiencies of tests based on the method of n rankings. J. Statist. Comput. Simulation 12 (1980/81), no. 3-4, 193-207. (Author's summary) 82m:62103 62G10

Asymptotic relative efficiencies of tests based on the method of n rankings when the underlying distributions are discrete. South African Statist. J. 15 (1981), no. 1, 31-41. (Author's summary) 82h:62077 62G20

Markham, Thomas L. Class G, and a unification problem. Linear Algebra Appl. 39 (1981), 197-204. (Emilie V. Haynsworth) 82j:15021 15A57

Markhashov, L. M. See Marhašov, L. M.

Marki, L. (with Mlitz, Rainer) Free monoids and strict radicals. Studia Sci. Math. Hungar. 13 (1978), no. 1-2, 225-228 (1981). (J. K. Luedeman) 82j:20121 20M11 (20M05) (with Wiegandt, R.) On semisimple classes of semigroups with zero. Semigroups (Proc. Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 55-72, Lecture Notes in Math.,

855, Springer, Berlin, 1981. (P. G. Trotter) 82g:20095 20M11 (16A21)

Markl, J. Accelerated convergence of the Kaczmarz algorithm when the input process has time correlation. Automat. i Telemeh. 1980, no. 8, 70-73 (Russian. English sum translated as Automat. Remote Control 41 (1980), no. 8, part 1, 1098-1100 (1981).

transtated as Automat. Remote Control 41 (1980), no. 8, part 1, 1099-1100 (
(Author's summary) 82hc62156 62M10

Markley, Nelson G. (with Paul, Michael E.) Matrix subshifts for Z' symbolic dyna oc. London Math. Soc. (3) 43 (1981), no. 2, 251-272. (Pierre Michel) 82i:54073 54H20 (28D05)

Markos, Lisana Pen'ja (with Gromova, P. S.) The method of vector-valued Ljapunov functions for systems with lag. (Russian) Differential equations with deviating argu-(Russian), pp. 14-22, Univ. Družby Narodov im. Patrisa Lumunby, Moscow, 1979. (A. I. Kir'janen) 82f:34097 34K20

Markov, G. G. (with Dželepov, G. D.) Holomorphically projective transformations of Kähler spaces into symmetric Kähler spaces. (Bulgarian. Russian and English summaries) Ploediv. Univ. Naučn. Trud. 16 (1978), no. 1, 443-453 (1980). (V. Mihova-Nehmer) 53B35

Markov, Ju. B. (with Coban, M. M.; Kirillov, P. V.) On the theory of random functions. (Russian) Contemporary questions of applied mathematics and programming (Russian), pp. 77-92, 168, "Stiinca", Kishinev, 1979. (A. Nowak) 82h:60126a 60H25 (with Coban, M. M.; Kirillov, P. V.) Principles of solution of stochastic problems

(Russian) Contemporary questions of applied mathematics and program pp. 135-155, 172, "Štiinca", Kishinev, 1979. (A. Nowak) 82h:60126b 60H25 (with Coban, M. M.) On the theory of random functions and stochastic problems.

(Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 12, 1611-1614. (From the text) 82g:60070 60G99 (60H25) 60G99 (60H25)

Markov, S. M. Some applications of extended interval arithmetic to interval iterations. Fundamentals of numerical computation (computer-oriented numerical analysis) (Proc. Conf., Tech. Unio. Berlin, Berlin, 1979), pp. 69-84, Comput. Suppl., 2, Springer, Vienna, 1980. (J. A. Grant) 82a:65033 65G10

Markov, S. N. Singularities of solutions of second-order equations in a real doma (Russian) Differencial'nye Uraonenija 17 (1981), no. 4, 741-743, 767. (K. R. Schneider)

34C11

Markov, V. G. See Hydrodynamic interaction of particles in suspension, 82e:76070
Markova, L. A. See North, John D., 82j:01005
Markova, L. N. Investigation of the distribution of a special Markov chain. (Russian. English summary) Issled. Operacii i ASU No. 12 (1978), 105-108, 133. (Author's summary) 82a:60101 60J10

Markova, V. P. Spectral method for recognition of symmetry and monotonicity of Boolean functions. Automat. i Vyčisl. Tehn. (Riga) 1979, no. 6, 15-19, 91 (Russian); translated as Automat. Control Comput. Sci. 13 (1979), no. 6, 13-17. (Author's summary) 82h:94028

Marković, Zoran An intuitionistic omitting types theorem. Publ. Inst. Math. (Beograd) (N.S.) 26(40) (1979), 167–169. (Dirk van Dalen) 82g:03103 03F55 (03C99)

Markovski, B. L. (with Rizov, V. A.) On classical systems with infinite set of conservation laws. (Russian summary) Bulgar. J. Phys. 7 (1980), no. 2, 134-140. (Authors' summary) 81C05 (58A15, 58F07)

Markovskii, A. I. The effect of a pseudodifferential operator on a rapidly oscillating exponent. (Russian) Mat. Fiz. No. 28 (1980), 75-83, 123. (From the introduction) 35S05 (47G05)

Markowitz, Michael J. An intrinsic conformal Lorentz pseudodistance. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 2, 359-371. (J. K. Beem) 826:83047 (53C50)

Markowsky, George (with Chandra, Ashok K.) On the number of prime implicants 94C10 (03B05, Discrete Math. 24 (1978), no. 1, 7-11. (Authors' summary) 82m:94055 03G05)

(with Wesley, Michael A.) Fleshing out wire frames. IBM J. Res. Develop. 24 (1980), no. 5, 582-597. (L. Gyarmathi) 821:68035 68C05 (51-04, 51M05, 53A17) (with Wohlgemuth, Andrew) Uncovering antibody incidence structure. Math.

Biosci. 52 (1980), no. 1-2, 141-156. (P. Ecsedi-Toth) 82e:92007 92A07 (with Moss, Franklin H.) An evaluation of local path ID swapping in computer

networks. IEEE Trans. Comm. 29 (1981), no. 3, 329-336. (Authors' sum 68A05 (90B10, 94C99)

Markšaitis, H. Solvability of the word problem for certain groups. (Russian. Lithuanian and English summaries) Litowsk. Mat. Sb. 20 (1980), no. 2, 87–90, 208–209. (O. V. Belegradek) 82c:20067 20F10 (03B25, 03D40)

Markus, A. G. (with Cekanov'skii, E. R.; Jancevič, A. A.) Application of the spectral theory of linear operators to the study of linear systems. (Russian) Mathematical methods of cybernetics (Russian), pp. 28-38, 90, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (Authors' summary) 82f:93032 93C05 (47D99)

Markus, A. S. (with Macaev, V. I.) Asymptotic behavior of the spectrum of close-to-normal

operators. (Russian) Funkcional. Anal. i Priložen. 13 (1979), no. 3, 93-94. (P. A. Mišnaevskii) 821:47034 47B25 (35P20, 47A70)

(with Macaev, V. I.) Operators generated by sesquilinear forms and their spectral ptotics. (Russian) Linear operators and integral equations. Mat. Issled. No. 61

(1981), 86-103, 157. (H. Baumgartel) 82i:47018 47A55 (35J65, 47B25) (with Macaev, V. I.) Convergence of expansions in eigenvectors of an operator that is nearly selfadjoint. (Russian) Linear operators and integral equations. Mat. Issled. No. 61 (1981), 104-129, 157. (Richard E. Frankfurt) 82f:47027 47A70 (47A55, 47B25)

Markus, B. (with Sarközy, F.) Optimization of horizontal control points. Optimization of design and computation of control networks (Proc. Internat. Sympos., Sopron, 1977), pp. 163-173, Akad. Kiadó, Budapest, 1979. (Authors' summary) 82f:86003 (90B05)

Markuš, I. I. See Steklov, V. A.; et al., 82j:01073

Markuševič, A. I. Remarks on the paper: "Cantor's theory of real numbers" [Istor.-Mat. Issled. No. 23 (1978), 56-70; MR 82h:01035a] by F. A. Medvedev. (Russian) Istor.-Mat. Issled. No. 23 (1978), 71-76, 357. (I. Grattan-Guinness) 82h:01035b

Marleau, R. S. (with Eslami, Mansour) On trajectory sensitivity minimization with an adaptive controller. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. II, pp. 342-350, Reidel, Dordrecht, 1980. (Authors' immary) 82e:93051 93C10 (65K10)

Marlewski, Adam Sur les puissances de l'opérateur généralisé de Bernštein des variables plusieurs. Fasc. Math. No. 12 (1980), 93-96. (P. C. Sikkema) 82m:41023 41A36

On the coefficients of some binomial expression. Fasc. Math. No. 12 (1980), 97-98. (Author's summary) 82e:05011 05A10

Asymptotic form of Bernštein-Kantorovič approximation. Fasc. Math. No. 12 (1980), 99-102. (P. C. Sikkema) 82h:41007 41A10 (41A25)

Marley, A. A. J. Joint independent random utility models where one of the choice structures satisfies the strict utility model. J. Math. Psych. 23 (1981), no. 3, 257-272. (Author's

summary) 82j-90011 90A10

Marmarells, V. Z. Practicable identification of nonstationary nonlinear systems. Proc. IEE-D 128 (1981), no. 5 Nonlinear Systems, 211-214. (Author's summary) 82k:93071

Marmaridis, Nikolaos Reflection functors. Representation theory, II (Proc. Second Inter-Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 382-395, Lecture Notes in Math., 832,

Springer, Berlin, 1980. (From the text) 82b:16042 16A89 (16A45)

Marmazeev, V. I. Semisimple spaces with regular multiplication and their centers. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 5, 47-52, 140. (O. Kowalski) 82h:53069 53C35

- riki 29 (1981), no. 5, 785-791, 799. (D. I. Papuc) 82m:53049
- mo, G. (with Saletan, E. J.; Simoni, A.; Zaccaria, F.) Liouville dynar ckets. J. Math. Phys. 22 (1981), no. 4, 835-842. (E. C. G. Sudarshan) 82g:58031 58F05 (70G99)
- melius, Robert A simple relation between covariant and noncovariant quantization of gauge theories. Phys. Lett. B 99 (1981), no. 6, 467-470. (Author's summary) 82e:81040 81E99 (58G25)
- merskaja, L. A. Scattering of a plane sound wave by two ideal spheres. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 4, 5-10, 139. (Author's summary) 82m:76055 76Q05
- m. A. I. Optimization of fault locating in technical diagnostic objects.

 Programmirovanie 1980, no. 4, 64–71, 96 (Russian); translated as Program
- Comput. Software 6 (1980), no. 4, 211-217 (1981). (From the introduction) 82h:68042
- oni, Pascal Une généralisation du théorème de Favard-Shohat sur les polynômes orthogonaux. (English summary) [A generalisation of the Favard-Shohat theorem on orthogonal polynomials] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 1, 19-22. nary) 82i:33017 33A65 (42C05)
- roscia, Paolo A note on locally factorial Noetherian domains. Comm. Algebra 9 (1981), no. 5, 491-497. (Stephen McAdam) 82g:13015 13F15
- rot, Jena Conservation des propriétés des fibres formelles d'un anneau semi-local noethérien par complétion adique. [Preservation of the properties of the formal fibers of a Noetherian semilocal ring under adic completion] Algebra Colloquium
- pp. 119-122, Univ. Rennes, Rennes, 1980. (See 82m:13001) 13B30 (14B25) roulas, John (with Barnett, Stephen) Polynomials with respect to a general basis. I. cory. J. Math. Anal. Appl. 72 (1979), no. 1, 177-194. (B. Levinger) 82h:15014a 15A21 (93B05, 93B07, 93B10)
- (with Barnett, Stephen) Polynomials with respect to a general basis. II. Applications. J. Math. Anal. Appl. 72 (1979), no. 2, 599-614. (Authors' summary) 82h:15014b 15A21 (93B05, 93B07, 93B10)
- (with Dascalopoulos, D.) Applications of the generalized Sylvester matrix.

 Math. Comput. 8 (1981), no. 2, 121-135. (Donald W. Robinson) 82;:15011 15

 requarelt, Charles L. (with Rosenstock, Herbert B.) Cluster formation in two-dime
- Manquardt, Charles L. (with Rosenstock, Herbert B.) Cluster formation in two-dimensional random walks: application to photolysis of silver halides. Phys. Rev. B (3) 22 (1980), no. 12, 5797-5809, (M. Dutta) 82-82088 82.60 (60115)
- is, F. (with Llosa, Josep; Molina, A.) Predictive extension of a singular Lagrangian system. Ann. Inst. H. Poincaré Sect. A (N.S.) 32 (1980), no. 4, 303-318. (Authors' 70D10 (49C10) summary) 82e:70004
 - (with Iranzo, V.; Llosa, Josep; Molina, A.) An exactly solvable model in predictive
- relativistic mechanics. I. Ann. Inst. H. Poincaré Sect. A (N.S.) 35 (1981), no. 1, 1-15. (Hans P. Künzle) 82m:83003 83A05 (58F07, 58F35, 70G99, 81G99)

 **ques, Maria Higina Rendeiro Vector distributions on manifolds as indicatrices of continuous linear mappings. (Portuguese) Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 182-188, Consejo Sup. Inc. Cient., Madrid, 1977. (J. Horváth) 82a:46042 46F99 (58A10, 58C99)
- Marques de Sá, E. Note on graphs and weakly cyclic matrices. Discrete Math. 34 (1981), o. 3, 275-281. (J. L. Brenner) 82e:05042 05B20 (05C50, 15A15)
- no. 3, 273–281. (J. L. Brenner) 528-05042 USB20 (05C30, 15A15)

 Multiple roots of diagonal multiples of a square matrix. Discrete Math. 36 (1981), no. 1, 57–67. (Marvin Marcus) 82h:15027 15A48 (15A15)
- no, O. A note on P-spaces. Rev. Mat. Hisp.-Amer. (4) 39 (1979), no. 6, 276. (Editors) 82i:16025 16A30 (54C40)
- Marriott, F. H. C. Diffusion and spatial pattern: a model for competition. Statistical ns in the spatial sciences, pp. 257-267, Pion, London, 1979. (See 82f:90003) 92A15 (86A05)
- Marris, A. W. Remarks on plane universal Navier-Stokes motions. Arch. Rational Mech. al. 77 (1981), no. 1, 95-102. (From the introduction) 82m:76020 76D05 (35Q10)
- Marschak, Jacob ★Economic information, decision, and prediction. Selected essays. Vol. I. Part I. Economics of decision. Theory and Decision Library, 7. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xviii + 389 pp. ISBN 90-277-1195-X (Editors) 82k:90003a 90Axx (01A75, 62C05, 92A25)
 - ★Economic information, decision, and prediction. Selected essays. Vol. II. Part II. Economics of information and organization. Theory and Decision Library, 7. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xii + 362 pp. ISBN 90-277-1196-8 (Editors)
- 82k:90003b 90Axx (01A75, 62C05, 92A25)

 ★Economic information, decision, and prediction. Selected essays. Vol. III. Part III. Money and other assets. Part IV. Economic measurements. Part V. Contributions to the
- logic of economics. Theory and Decision Library, 7. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. x+399 pp. ISBN 90-277-1197-6 (Editors) 82k:90003c 90Axx (01A75, 62C05, 92A25)
- Marschall, Erich (with Farwig, Reinhard) On the type of spectral operators and the nonspectrality of several differential operators on L*. Integral Equations Operator Theory 4 (1981), no. 2, 206-214. (Hari Bercovici) 82h:47037 4780 (47D10, 47E05)
 Marsden, Jerrold E. (with Fischer, Arthur E; Moncrief, Vincent) The structure of the
- space of solutions of Einstein's equations. I. One Killing field. Ann. Inst. H. Poincaré Sec. A (N.S.) 33 (1980), no. 2, 147–194. (Murray Cantor) **82d:83007** 83C05 (with Arms, Judith M.; Moncrief, Vincent) Symmetry and bifurcations of momentum mappings. Comm. Math. Phys. **78** (1980/81), no. 4, 455–478. (J. H. Rawnsley) **82m:59028** 58F05 (70H99, 81E10, 83C40) 83C05 (58D25)
- (with Tipler, Frank J.) Maximal hypersurfaces and foliations of constant mean ature in general relativity. *Phys. Rep.* **66** (1980), *no.* 3, 109–139. (F. J. Flaherty) **83048** 83C99 (57R30, 58D25, 58D30)
- *Lectures on geometric methods in mathematical physics. CBMS-NSF Regional Conference Series in Applied Mathematics, 37. Society for Industrial and Applied
- Conference series in Applied Mathematics, 37. Society for Industrial our applied Mathematics (\$IAM), Philadelphia, Pa., 1981. V.+97 pp. ISBN 0-89871-170-3 (B. V. Loginov) 82j:58046 58F05 (00A69, 58E07, 58F40, 73–02, 83–02)
- (with Holmes, Philip J.) A partial differential equation with infinitely r orbits: chaotic oscillations of a forced beam. Arch. Rational Mech. Anal. 76 (1981), no. 2, 135–165. (J. K. Hale) 82m:58039 58F13 (73K12)
- den, M. J. Spline interpolation at knot averages on a two-sided geometric mesh.

Math. Comp. 38 (1982), no. 157, 113-126. (Gheorghe Micula) 82m:41011 (65D07)

- with only one bonding map. Colloq. Math. 43 (1980), no. 1, 75-80 (1981). (James T. with only one bonding map. Colloq. Ma. Rogers, Jr.) 82e:54039 54F20 (54F50) Rogers, Jr.) 82e:54039
- Marsh, Terry Equilibrium term structure models: test methodology. With discussion by T. Breeden. J. Finance 35 (1980), no. 2, 421-438. (Giovanni M. Zambrur 82b-90013 90A09 (90A19)
- rshall, Albert W. (with Shaked, Moshe) Multivariate shock models for distributions with ng hazard rate average. Ann. Probab. 7 (1979), no. 2, 343-358. (Henry W. Block) 82d:62153 62N05 (60K10)
- Marshall, Bernard (with Strauss, Walter A.; Wainger, Stephen) L^p L^q estimates for the Klein-Gordon equation. J. Math. Pures Appl. (9) 59 (1980), no. 4, 417–440. (M. H. Protter) 82j:35133 35Q20 (35L15, 81C05)
 - Differentiability of distributions at a single point. Studia Math. 67 (1980), no. 2, 173-213. (Ioana Ciorănescu) 82;46054 46F10 (32A45)
- Tempered nontangential boundedness. Studia Math. 67 (1980), no. 3, 241-277. (Richard Bagby) 82c:42018 42B25 (46F10)
- Marshall, Charles D. Lie derivatives in differentiable spaces. Rocky Mountain J. Math. 10
- (1980), no. 1, 65-79, (P. G. Walczak) 82d:58005 58A40 (53A55)
 rshall, Donald E. (with O'Farrell, Anthony G.) Uniform approximation by real functions. Fund. Math. 104 (1979), no. 3, 203-211. (Authors' summary) 82j:41035
- no (with Méndez, Raúl) Computational aspects of the random choice method for shallow water equations. J. Comput. Phys. 39 (1981), no. 1, 1-21. (Darrell L. Hicks) 82&76014 76B15 (35L67, 65M05)
- shall, Murray (with Yucas, Joseph) Linked quaternionic mappings and their associated Witt rings. Pacific J. Math. 95 (1981), no. 2, 411-425. (Ron Brown) 82m:10037 Witt rines. 10C05 (10C01)
 - (with Brown, Ron) The reduced theory of quadratic forms. Rocky Mountain J.
- Math. 11 (1981), no. 2, 161-175. (Craig Cordes) 82;10037 10C04 (12D15)
 Marshall, T. G., Jr. Digital filter design by UL matrix decomposition. (Russian) IEEE Trans. Circuits and Systems 28 (1981), no. 1, 19-27. (Author's summary) 82a:94098 94C05 (65O05)
- Marshall, T. W. Brownian motion and quasi-Markov processes. Phys. A 103 (1980), no. 1-2, 172–182. (Author's summary) 82g:82009 82A05 (60J65, 82A70)
- rsicano, F. R. Qualitative aspects of the three-body problem. (Spanish) Riv. Mat. Univ. Parma (4) 6 (1980), 25-32 (1981). (Author's summary) 82h:70008 70F07 (58F05)
- Marsili-Libelli, S. A procedure for optimal multivariable PID design. Ricerche Automat. 11 (1980), no. 1, 18-31 (1981). (Author's summary) 82m:93044 93B55
- rston, Philip L. (with Kingsbury, Dwight L.) Acoustic scattering from fluid spheres: diffraction and interference near the critical scattering angle. J. Acoust. Soc. Amer. 70 (1981), no. 5, 1488-1495. (Authors' summary) 82k:76061 76Q05
- Martakova, A. S. (with Atanasjan, S. L.; Gur'eva, V. P.) Congruences of polarized parabolic lines of three-dimensional spaces with projective metrics. (Russian) Geometry of imbedded manifolds (Russian), pp. 70-79, Moskov. Gos. Ped. Inst., Moscow, 1978. (Josef Vala) 82e:53022 53A25
- Martel, Charles U. Multiprocessor scheduling with release times and deadlines. Proceedings of the West Coast Conference on Combinatorics, Graph Theory and Computing (Humboldt State Univ., Arcata, Calif., 1979), pp. 213-228, Congress. Numer., XXVI, Utilitas Math.,
- Winnipeg, Man., 1980. (Jacek Błażewicz) 82d:68030 68C15 (90B35) (with Lawler, Eugene L.) Scheduling periodically occurring tasks on multiple processors. Inform. Process. Lett. 12 (1981), no. 1, 9-12. (From the introduction)
- 90B35 (68B20, 68C15) Martelli, Mario (with Bebernes, Jerry) On the structure of the solution set for periodic boundary value problems. Nonlinear Anal. 4 (1980), no. 4, 821-830. (Jean Mawhin)
- 47H15 (34B15) Martellini, M. Observable effects of foam-like structure of space-time. III. Hadronic J. 3 (1979/80), no. 3, 1018-1038. (Author's summary) 82æ83025 83C45 (81G05)
- On the 1/N expansion for a model of quantum gravity: toward a finite theory (Italian summary) Nuovo Cimento B (11) 64 (1981), no. 1, 20-32. (Author's summary) 83C45 (81E15)
- Pais-Uhlenbeck regularization of free quantum gravity: toward a unitary theory. (Italian summary) Nuovo Cimento B (11) 64 (1981), no. 1, 33-40. (Author's summary) 82k:83026 83C45 (81E15)
- Martello, Silvano An algorithm for finding a minimal equivalent graph of a strongly connected digraph. (German summary) Computing 21 (1978/79), no. 3, 183-194. nary) 82f:68069 68E10 (05C20, 05C35, 05C38, 05C40)
 - (with Toth, Paolo) The 0-1 knapsack problem. Combinatorial optimization (Lectures, mer School, Urbino, 1977), pp. 237-279, Wiley, Chichester, 1979. (See 82a:90099)
- (with Toth, Paolo) Heuristic algorithms for the multiple knapsack problem. (German summary) Computing 27 (1981), no. 2, 93-112. (Authors' summary) 82j:90052 90C10 riens, G. Funktionen von vorgegebener Ordnung auf komplexen Kurven. J. Reine
- Angew. Math. 320 (1980), 68-85. (R. F. Lax) 82e:14034 14H05 (14C20) Martens, Henrik H. Problems in the theory of closed Riemann surfaces. Complex analysis Joensuu 1978 (Proc. Colloq., Univ. Joensuu, Joensuu, 1978), pp. 268-277, Lecture Notes in Math., 747, Springer, Berlin, 1979. (R. F. Lax) 82a:14011 14H99 (30F99)
- Marti, J. T. On the convergence of the discrete ART algorithm for the reconstruction of digital pictures from their projections. (German summary) Computing 21 (1978/79), no. 2, 105-111. (Author's summary) 821:68093 68G10 (92A07)

 Marti, Jean-André Théorèmes d'unicité sur les hyperfonctions analytiques par rapport à une
- des variables. (English summary). C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 19, 897–900. (Author's summary). 82g-32012 32A45 (46F15).

 Marti, Kurt. Solving stochastic linear programs by semistochastic approximation algorithms. Recent results in stochastic programming (Proc. Meeting, Oberwolfach, 1979), pp. 191–213, 1909. Lecture Notes in Econom. and Math. Systems, 179, Springer, Berlin, 1980. (G. S. Tarasenko) 82f:90073 90C15
 - Approximations to stochastic optimization problems. Stochastic programming (Proc. tt. Conf., Univ. Oxford, Oxford, 1974), pp. 159-166, Academic Press, London, 1980. eanu) 82d:90089 90C15 (90C48) (B. Bereanu) 82d:90089

Martié, Branislav (with Janić, Radovan R.) Sur quelques généralisations des équations fonctionnelles. Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 602-633 (1978), 223-228 (1979). (From the text) 82k:39004 39B05

Group manifolds. II. (Serbo-Croatian. English summary) Mat. Vesnik 3(16)(31) (1979), no. 2, 165-168. (Author's summary) 821:20069a 20F99

Sur certaines équations fonctionnelles. (Serbo-Croatian summary) Akad. Nauka

Umjet. Bosne Hercegov. Rad. Odjelj. Prirod. Mat. Nauka No. 19 (1980), 19-23. (Karol

39B30 Group manifolds. III, IV, V, VI. (Serbo-Croatian. English summary) Akad. Nauka Umjet. Bosne Hercegoo. Rad. Odjelj. Prirod. Mat. Nauka No. 19 (1980), 133–138, 139–142, 143–145, 147–149. (Author's summary) 82f:20069b 20F99
rtignon, Laura (with Lesche, B. J.) Über die Extremalpunkte der Menge der

bistochastischen Masse über dem Messraum [0,1]×[0,1]. An. Acad. Brasil. Ciènc. 52 (1980), no. 2, 203–206. (M. P. Eriov) 821:28004 28A35 (28A99)

Banach f-algebras and Banach lattice algebras with unit. Bol. Soc. Brasil. Mat. 11 (1980), no. 1, 11-17. (S. J. Bernau) 82c:46027 46B30 (46J10)

Martikainen, A. I. A criterion for the strong relative stability of a random walk on the line. (Russian) Mat. Zametki 28 (1980), no. 4, 619-622, 637. (Dominik Szynal) 82c:66055

(with Petrov, V. V.) On a theorem of Feller. (Russian. English sum Verojatnost. i Primenen. 25 (1980), no. 1, 194-197. (G. I. Ivčenko) 82h:60030 60F15

A converse to the law of the iterated logarithm for a random walk. (Russian. English mmary) Teor. Verojatnost. i Primenen. 25 (1980), no. 2, 364-366. (From the text) 824:60054 60F15

raum Martin, Alfonso See Guiraum Martin, Alfonso

Martin, André (with Bertlmann, R. A.) Bounds on radii and kinetic energies of N-particle systems. Nuclear Phys. B 182 (1981), no. 1-2, 35-44. (Authors' summary) 82d:81122

ravelo Martin, Armando See Ravelo Martin, Armando Martin, Clyde F. (with Khadr, Amr S.) On the Gl(n) action on linear systems: the orbit

(AMS-NASA-NATO Summer Sem., Harvard Univ., Cambridge, Mass., 1979),

pp. 239-251, Lectures in Appl. Math., 18, Amer. Math. Soc., Providence, R.I., 1980. (Allen Tannenbaum) 82e:93025 93B25 (14D20, 93B05)

See also Algebraic and geometric methods in linear systems theory, 82a:93004 and Geometrical methods for the theory of linear systems, 82h:93003

Martin, D. H. (with Getz, Wayne M.) Optimal control systems with state variable jump

discontinuities. J. Optim. Theory Appl. 31 (1980), no. 2, 195-205. (A. Blaquière) 82j:49020 49B10

Conditional positivity of quadratic forms in Hilbert space. SIAM J. Math. Anal. 11 (1980), no. 6, 1047-1057. (J. E. Rubio) 82b:49070 49G20 (15A63, 46C10)

(with Jacobson, D. H.) Copositive matrices and definiteness of quadratic forms subject to homogeneous linear inequality constraints. Linear Algebra Appl. 35 (1981), 227-258. (Philippe Revoy) 82c:15024 15A48 (15A63)

Finite criteria for conditional definiteness of quadratic forms. Linear Algebra Appl.

39 (1981), 9-21. (S. R. Mohan) 82m:15028 15A63 (15A57, 90C20)

The spectra of bounded linear selfadjoint operators relative to a cone in Hilbert space. Nonlinear Anal. 5 (1981), no. 3, 293-301. (Roger T. Lewis) 82i:49008 49A29

Martin, Daniel Jean (with Lenoir, Marc) An application of the principle of limiting absorption to the motions of floating bodies. J. Math. Anal. Appl. 79 (1981), no. 2, 370-383. (Authors' summary) 824:76019 76B20 (35J99, 35P99)

Martin, David U. (with Yuen, Henry C.; Saffman, Philip G.) Stability of plane wave solutions of the two-space-dimensional nonlinear Schrödinger equation. Wave Motion 2 (1980), no. 3, 215-229. (Authors' summary) 82d:76020 76B25 (35Q20)

(with McLean, J. W.; Ma, Y. C.; Saffman, Philip G.; Yuen, Henry C.)

Three-dimensional instability of finite-amplitude water waves. Phys. Rev. Lett. 46 (1981), no. 13, 817–820. (Authors' summary) 82c:76017 76B15 (35Q20)

Martin, Donald A. (with Kechris, Alexander S.) Infinite games and effective descriptive set theory. Analytic sets (Conf., University Coll., Univ. London, London, 1978), pp. 403-470, Academic Press, London, 1980. (See 82m:03063) See also Seminar: Cabal, 82c:03002 03E15 (04A15, 03D55, 90D13)

Martin, H. O. (with Tsallis, C.) Renormalization group specific heat and magnetization of the Ising ferromagnet in cubic and hypercubic lattices. Z. Phys. B 44 (1981), no. 4, 325-331. (Authors' summary) 82m82017 82A25 (82A68)

Martin, Harold W. (with Bennett, Harold R.) A metrization theorem for countably com ices. Portugal. Math. 36 (1977), no. 3-4, 247-250 (1980). (Ying Ming Liu) 82m:54025 54F35

Evolutionary metric spaces. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979). Topology Proc. 4 (1979), no. 2, 479–495 (1980). (Anne

K. Steiner) 82i:54055 54E35 (92A10) Derived subspaces of metric spaces. Canad. Math. Bull. 23 (1980), no. 4, 465-467. (Joe A. Guthrie) 82a:54057

Weakly induced fuzzy topological spaces. J. Math. Anal. Appl. 78 (1980), no. 2, 634-639. (Ying Ming Liu) 82h:54003 54A40 (03E72)

Linearly ordered covers, normality and paracompactness. Topology Appl. 12 (1981), no. 3, 305-313. (Gary Gruenhage) 82h:54027

aguilar-Martin, J. See Aguilar-Martin, J.

moreau de saint-Martin, J. See Moreau de Saint-Martin, J.

Martin, Jean-François Formalisation et étude de codages flous. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 4, 299-301. (Author's summary) 82d:62011 62A99

Martin, Jésus (with Bel, Luis) Predictive relativistic mechanics of systems of N particles with spin. Ann. Inst. H. Poincaré Sect. A (N.S.) 33 (1980), no. 4, 409-442. (Authors'

mary) 82k:70012a 70F99 (70H99, 83A05)
(with Bel, Luis) Predictive relativistic mechanics of systems of N particles with spin. II. The electromagnetic interaction. Ann. Inst. H. Poincaré Sect. A (N.S.) 34 (1981),

no. 2, 231-252. (Authors' summary) **82k-70012b** 70F99 (70H99, 78A35, 83A05) (with Bel, Luis; Damour, Thibaut; Deruelle, Nathalie; Ibanez, Jesus)
Poincaré-invariant gravitational field and equations of motion of two pointlike objects:

the postlinear approximation of general relativity. Gen. Relativity Gravitation 13 (1981), no. 10, 963–1004. (Authors' summary) 82m:83015 83C25 (83C10) artin, John R. On a class of regular immersions of S^1 into \mathbb{R}^2 . (Russian summary) Bull.

Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 10, 757-761. (Riccardo Benedetti) 82e:05063 05C10 (57R42)

(with Nadler, Sam B., Jr.) A note on fixed point sets and wedges. Canad. Math.
 Bull. 23 (1980), no. 4, 453–455. (L. E. Ward, Jr.) 82a:54088 54H25 (54F20)
 Absolute fixed point sets and AR-spaces. Fund. Math. 112 (1981), no. 2, 159–164.
 (L. E. Ward, Jr.) 82:54098 54H25 (54C5)
 Martin, Louise (with Guiaşu, Silviu; Reischer, Corina) Réseaux modulaires aléatoires avec

retard. Ann. Sci. Math. Québec 3 (1979), no. 1, 81-94. (From the introduction) 82k:94023 94C05

(with Reischer, Corina) Sur une application du principe pour minimiser l'interdépendance dans les automates probabilistes. Combinatorics 79 (Proc. Colloq., Univ. Montréal, Montreal, Que., 1979), Part I. Ann. Discrete Math. 8 (1980), 189-193.

(Authors' summary) 82a:68101 68D25

Martin, Mircea Almost product structures and special algebras. An. Stiint. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.) 25 (1979), no. 1, 61-64. (J. Vanžura) 82b:53034 53C05 (53C15)

Almost contact structures and derivations. Rev. Roumaine Math. Pures Appl. 26 81), no. 2, 267-273. (Luis A. Cordero) 82h:53050 53C15 (1981), no. 2, 267-273. (Luis A. Cordero) 82h:53050

Martin, P. P. (with Mecklenburg, W.) Constant Yang-Mills fields. Phys. Rev. D (3) 22 (1980), no. 12, 3088-3089. (Authors' summary) 82c.81088 81E10 (53C05)

Martin, Paul Andrew On the mull-field equations for the exterior problems of acoustics.

Quart. J. Mech. Appl. Math. 33 (1980), no. 4, 385-396. (Author's summary) 82e:76056 76005

Diffraction of elastic waves by a penny-shaped crack. Proc. Roy. Soc. London Ser. A 378 (1981), no. 1773, 263-285. (Author's summary) 82k:73023

rtin, Paul C. (with Shraiman, Boris; Wayne, C. Eugene) Scaling theory for noisy period-doubling transitions to chaos. Phys. Rev. Lett. 46 (1981), no. 14, 935–939. (Authors' summary) 82g:70051 70L05 (58F13, 70K05, 82A05)

Martin, Philippe A. Thermodynamic limit of quantum dynamical semigroups and macroscopic irreversibility. Mathematical problems in the quantum theory of irreversible processes (Naples, 1978), pp. 60-84, Lab. Cibernet. CNR, Naples, 1978. (See 82):82003)

(with Aizenman, Michael) Structure of Gibbs states of one-dimensional Coulomb systems. Comm. Math. Phys. 78 (1980/81), no. 1, 99-116. (Authors' summary) 82g:82005 82A05

(with Choquard, Ph.; Kunz, Hervé; Navet, M.) One-dimensional Coulomb systems. Physics in one dimension (Proc. Internat. Conf., Fribourg, 1980), pp. 335–350, Springer Ser. Solid-State Sci., 23, Springer, Berlin, 1981. (See 82g.82003) 82A05

(with Gruber, Ch.) Translation invariance in statistical mechanics of classical continuous systems. Ann. Physics 131 (1981), no. 1, 56-72. (J. R. Fontaine) 82d:82010 82A05

(with Davies, Edward Brian) An approach to metastability in some ferromagnetic systems. Helv. Phys. Acta 54 (1981/82), no. 1, 106-130. (C. A. Hurst) 82m:82021

Martin, R. Douglas Robust estimation of autoregressive models. With comments by Robert B. Miller. Directions in time series (Proc. Meeting, Iowa State Unito., Ames, Iowa, 1978). pp. 228-262, Inst. Math. Statist., Hayward, Calif., 1980. (Author's summary) 82h:62157

Time series: model estimation, data analysis and robust procedures. Modern statistics: methods and applications (Amer. Math. Soc. Short Course, San Antonio, Tex., 1980), pp. 73-110, Proc. Sympos. Appl. Math., XXIII, Amer. Math. Soc., Providence, R.I., 1980. (See 82c:62003) 62M10 (62F35)

K.I., 1980. (See Saceagous) 52M10 (62F:55)
Martin, R. J. A note on the adequacy of fit of a spatial model to some agricultural uniformity data. Biometrika 68 (1981), no. 1, 336–338. (Author's summary) 82k:62214 62P99

Martin, R. L. Subregional Phillips curves, inflationary expectations, and the intermarket relative wage structure: substance and methodology. Statistical applications in the spatial sciences, pp. 64-110, Pion, London, 1979. (See 82f:90003) 90A12

Martin, Robert H., Jr. Mathematical models in gas-liquid reaction (1980), no. 3, 509-527. (David Hoff) 82c:80024 80A30 (35K55)

Asymptotic behavior of solutions to a class of quasimonotone functional-differential equations. Abstract Cauchy problems and functional-differential equations (Proc. Workshop, Leibnitz, 1979), pp. 91-111, Res. Notes in Math., 48, Pitman, Boston, Mass.,

1981. (George Seifert) 82t:34104 34K25 (34K35)
Asymptotic behaviour of solutions to a class of nonlinear parabolic systems. Nonlinear partial differential equations and their applications. Collège de France Se

Noninear parisa in spycermia myser. No. 100 (1979), pp. 320–326, Res. Notes in Math., 53, Pitman, Boston, Mass., 1981. (See 82i:35002) 35B40 (35K10) Martin, Wolfgang Line tracking in nonstationary processes. (German and French

aries) Signal Process. 3 (1981), no. 2, 147-155. (Author's summary) 821:92006 92A05 (94A14)

Martindale, Wallace S., III (with Desmarais, Paul C.) Generalized rational identities and rings with involution. Israel J. Math. 36 (1980), no. 2, 187-192. (Susan Montgomery) 82i:16029 16A39 (16A38)

Martin-Deschamps, Mirelle Courbes de genre géométrique borné sur une surface de type général [d'après F. A. Bogomolov]. Séminaire Bourbaki, 30e année (1977/78), Exp. 233-247, Lecture Notes in Math., 710, Springer, Berlin, 1979. (P. E. 14J25 (14F05) Newstead) 82e:14045

(with Lewin-Menégaux, Renée) Surfaces de type général dominées par une variété fixe. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 10, A587-A590.

(M. Miyanishi) \$2\text{el4017}\$ | 4\text{E05}\$ ([4]10] | New approach to the semiclassical limit of quantum mechanics. I. Multiple tunnelings in one dimension. Comm. Math. Phys. **30** (1981), no. 2, 223–254. (C. Bardos) \$2\text{ks1013}\$ | 81C10 (34B25, 58G15, 60J35, 81C20)

Martinelli, G. (with Parisi, Giorgio) A systematical improvement of the Migdal recursion formula. Nuclear Phys. B 180 (1981), no. 2, FS 2, 201-220. (Nicolae Angelescu) 82k-82017 82A25 (82A57, 82A77)

- rtinenko, Marija Fundamental solutions of elliptic systems in Riemannian space.
 (Ukrainian. Russian summary) Visnik L'viv. Derž. Univ. Ser. Meh.-Mat. No. 13 (1978),
 30-34, 123. (Ja. A. Roltberg) 82a:35039 35J45 (53B20)
- ith Magnenat, P.) Invariant surfaces and orbital behaviour in dynamical systems with 3 degrees of freedom. Astronom. and Astrophys. 96 (1981), no. 1-2, 68-77. (Authors' summary) 22,28502 85A05 (58F05, 70F15) rtinez, David R. (with Oppenheim, Alan V.; Frisk, George V.) Computation of the
- Hankel transform using projections. J. Acoust. S Sasakawa) 82hc42018 42B99 (45F05, 65F05) ections. J. Acoust. Soc. Amer. 68 (1980), no. 2, 523-529. (T.
- ntes Martinez, G. J. See Fuentes Martinez, G. J.
 rtinez, Jorge (with Iglewicz, Boris) A test for departure from normality based on a biweight estimator of scale. Biometrika 68 (1981), no. 1, 331–333. (Authors' summary) 821:62044 62F03
- 82f:62044 62F03 urtinez, Jorge Lexicographic centers of a lattice-ordered group. Ordered groups (Proc. Conf., Bosse State Univ., Bosse, Idaho, 1978), pp. 29-42, Lecture Notes in Pure and Appl. Math., 62, Dekker, New York, 1980. (Keith R. Pierce) 82b:06017 06F15
 Prime selectors in lattice-ordered groups. Czechosłowak Math. J. 31(106) (1981), no. 2, 206-217. (Stephen H. McCleary) 82b:06025 06F15
 urtinez, José Mario Solving nonlinear simultaneous equations with a generalization of Brent's method. BIT 20 (1980), no. 4, 501-510. (Author's summary) 82b:65048
- (with Lopes, T. L.) Combination of the sequential secant method and Broyden's method with projected updates. (German summary) Computing 25 (1980), no. 4, 379–386. (Authors' summary) 82:65033 65H10 (58C15)
- salanova Martinez, M. Amparo See Salanova Martinez, M. Am jara Martinez, P. See Jara Martinez, P.
- rinez Alonso, L. Schrödinger spectral problems with energy-dependent potentials as sources of nonlinear Hamiltonian evolution equations. J. Math. Phys. 21 (1980), no. 9, 2342–2349. (J. E. Marsden) 82e:58048 58F07 (35Q20, 81C05, 82A45) Martinez Ak
- Gel'fand-Dikii method and nonlinear equations associated to Schrödinger operators with energy-dependent potentials. *Lett. Math. Phys.* 4 (1980), no. 3, 215-222. (A. Degasperis) 82i:-58046 58F07 (35Q20)
- nonlinear evolution equations. Lett. Nuovo Cimento (2) 27 (1980), no. 1, 28-31. (Victor Aldaya) 826:35138 35Q20 (58F07) (with Guil Guerrero, F.) Hamiltonian formulation for the Jaulent-Miodek family of
- (with Olmedilla, E.; Guil Guerrero, F.) Infinite-dimensional Hamiltonian systems sociated with matrix Schrödinger operators. (Italian and Russian summaries) Nuovo mento B(11) 61 (1981), no. 1, 49-61. (Carmen Chicone) 82j:58065 58F07 (35J10, 47F05, 49C10, 81C99)
- urtinez-Calvo, Maria Cristina Exponentially well-behaved categories: a theorem on adjoint functors. (Spanish. English summary) Rev. Mat. Hisp.-Amer. (4) 39 (1979), no. 6, 267-275. (G. M. Kelly) 82j:18005 18A40
- rinez Carracedo, Celso (with Sanz Alix, Miguel A.) Relations between certain uniformities and the algebraic structure of a ring. (Spanish) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 2, 185-189. (Melvin Henriksen) 82h:46069 46J10 (54E15)
- On certain compactifications of Frink. (Spanish) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 4, 545-563. (Anthony D'Aristotile) 82j:54038 (46E25, 54D60)
- (with Sanz Alix, Miguel A.) Multiplicative linear forms on certain subrings of $\mathcal{C}(X)$. ish) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 4, 565-575.
- (Melvin Henriksen) 82h-46046 46E25 (54C40)

 Martinez del Rio, Carlos (with Soberon, Jorge M.) The dynamics of a plant-pollinator interaction. J. Theoret. Biol. 91 (1981), no. 2, 363-378. (Authors' summary) 82k:92067
- Martinez Gadea, Pedro (with Oubiña, J. A) On the cohomology of some Riemannian manifolds with a parallel φ(4, 2)-structure. Tensor (N.S.) 34 (1980), no. 3, 286-294. (C. S. Houh) 82e:53059 53C15
 - (with Oubiña, J. A) On differentiable manifolds with φ(4, 2)-structure. Geom Dedicata 10 (1981), no. 1-4, 393-402. (Kouei Sekigawa) 82h:53052 53C15
- Martinez-Herrero, R. Object reconstruction for partially polarized quasimonochromat illumination. Optica Acta 28 (1981), no. 8, 1151-1162. (Author's summary) 82i:78005
- rtinez Maurica, Javier Compactness in V-spaces. (Spanish) Rev. Mat. Hisp.-Amer. (4) 39 (1979), no. 1, 12-20. (L. Narici) 82m:46079 46P05 (46B99)
- Martinez-Villa, Roberto (with Bautista Ramos, Raymundo) Representations of partially ordered sets and 1-Gorenstein Artin algebras. Ring theory (Proc. Antwerp Conf. (NATO) Adv. Study Inst.), Univ. Antwerp, Antwerp, 1978), pp. 385-433, Lecture Notes in Pure and Appl. Math., 51, Dekker, New York, 1979. (Sheila Brenner) 82i:16028 16A64

 Left serial Artin rings whose factors have finite global dimension. An. Inst. Mat.
 - noma México 19 (1979), no. 2, 149-175 (1980). (From the text) 82e:16009 16A35
 - Algebras stably equivalent to I-hereditary. Representation theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 396-431, Lecture Notes in Math., 832, Springer, Berlin, 1980. (From the text) 82b:16017 16A45
- 832, Springer, Berlin, 1980. (From the text) 820:16011 10.742.
 Martinjuk, A. A. Stability of motion in the neutral case with increasing perturbations. (Russian) Asymptotic methods in the theory of nonlinear oscillations (Proc. All-Union Conf. Asymptotic Methods in Nonlinear Mech., Katsiveli, 1977) (Russian), pp. 86–92, 274, "Naukova Dumka", Kiev, 1979. (Snežana Hristova) 82b:34062 34D15
 - nous Ważewski systems (with Obolenskii, A. Ju.) Stability of the solutions of autonom (Russian) Differencial'nye Uravnenija 16 (1980), no. 8, 1392-1407, 1532. (R. F. Datko) 82f:34056 34D05
 - The principle of comparison and averaging in systems with fast and slow motions. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 6, 1307-1310. (V. G. Zadorožnii) 82a:34059 34C29
 - (with Mitropol'skii, Ju. A.) Development of the Lyapunov functions method in nonlinear mechanics. (French and German summaries) Internat J. Non-Linear Mech. 15 (1980), no. 4-5, 377–386. (C. Corduneanu) 82&34055 34C29 (70K15) Method of integral inequalities in the theory of stability of motion. Prikl. Meh. 16 (1980), no. 4, 3–19, 140 (Russian); translated as Soviet Appl. Mech. 16 (1980), no. 4,

- 267–281. (P. Hagedorn) 824:34064 34D20 (70K20, 93D05) (with Kožuhovskii, N. N.) Stability of the equilibrium position of Hamiltonian systems. Prikl. Meh. 16 (1980), no. 12, 83–89 (Russian); translated as Soviet Appl. Mech. systems. Prikl. Meh. 16 (1980), no. 12, 83-89 (Russian); translated as Soviet Appl. Mech. 16 (1980), no. 12, 1079-1083 (1981). (Donald G. Saari) 82j:34051 34D20 (58F05, 70H99, 70K20)
- 70H99, 70K20)

 Martinjuk, A. Ē. Application of methods of Galerkin type and combinatorial type to a nonlinear equation with a principal linear operator. (Russian) Mat. Fiz. No. 27 (1980), 32–38, 120. (B. Jankó) 82j:65037 65J15 (47H17)

 Martin-Lél, Anders ★ Statistical mechanics and the foundations of thermodynamics.

 Lecture Notes in Physics, 101. Springer-Verlag, Berlin-New York, 1979. ii + 120 pp. 15BN 3-540-09255-2 (P. D. F. Ion) 82i:82001 82-01 (60K35, 80A10, 82A05)

 Martino, R. Analytical considerations on a new class of functions for the mathematical description of the human crythrocyte's profile during the osmotic, "disk-sphere"

 Transition. Bull Math. Biol. 41 (1979), pp. 6, 809, 904 (Author's suppress) 82th/92012
- tion. Bull. Math. Biol. 41 (1979), no. 6, 899-904. (Author's summary) 82k:92012
- furioli Martinolli, Antonella See Furioli Martinolli, Antonella
- Martinova, M. K. (with Alekseev, V. B.) Decomposition of a complete graph into subgraphs imbeddable in a plane integer lattice. (Russian) Diskret. Analiz No. 32 Metody Diskret. Analiza v Sinteze Upravl. Sistem (1978), 3-20, 95. (H. Fleischner) 82e:05060 (05C70)
- or, E. On the set of bounded linear operators transforming a certain sequence of a Hilbert space into an absolutely summable one. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 829–837, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (From the text) 82e:47059 47D25 (47B05)
- Martin Quetglas, G. On the local geometry of differentiable manifolds with degenerate metric. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 1, 53-64. (M. Barros) 82h:53044 53B99 (53B05)
- rtins, Fátima Graça *Sobre a aproximação por splines polinomiais. (Portuguese) [On approximation by polynomial splines] With an English summary. Trabalhos de Investigação 79 [Research Monographs 79], 2. Universidade Nova de Lisboa, nento de Matemática, Lisbon, 1979. pp. 11-30. (Author's summary) 82k:41007 41A15
- Martins, Luiz Carlos (with Podio-Guidugli, Paolo) A variational approach to the polar decomposition theorem. (Italian summary) Atti Accad. Nat. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 6, 487–493. (C.-C. Wang) 82i:15013 15A23
- Martins, Pedro de A. P. Spherical Coulomb functions: recurrence relations and continued fractions. J. Comput. Phys. 41 (1981), no. 1, 223-230. (Author's summary) 82g:65014 65D20 (33A45)
- Martins, R. A. F. (with Owen, D. R. J.) Elastoplastic and geometrically nonlinear thin shell analysis by the semiloof element. Comput. & Structures 13 (1981), no. 4, 505-513. (Authors' summary) 82e:73065 73K25
- Martins, Roberto de A. The origin of dimensional analysis. J. Franklin Inst. 311 (1981), no. 5, 331-337. (Ll. G. Chambers) 82h:01034 01A55 (00A69, 01A50)
- Martio, Olli Definitions for uniform domains. Ann. Acad. Sci. Fenn. Ser. A I Math. 5 (1980), no. 1, 197-205. (Kari Hag) 82c:30028 30C60
 - New methods in injectivity theorems connected with Schwarzian derivative. 18th Scandinavian Congress of Mathematicians (Aarhus, 1980), pp. 411–415, Progress in Math., 11, Birkhäuser, Boston, Mass., 1981. (Brad G. Osgood) 82k:30025 30C60
 - Reflection principle for solutions of elliptic partial differential equations and quasiregular mappings. Ann. Acad. Sci. Fenn. Ser. A I Math. 6 (1981), no. 1, 179–187. (M. Ju. Vasil'čik) 82m:35048 35J60 (30C60)
 - On mathematical research. (Finnish) Arkhimedes 33 (1981), no. 2, 114-116. (T. Metsänkylä) 82h:00021 00A99 (01A73)
- Martirosjan, V. A. Growth of coefficients of polynomials that realize uniform approximation on the complex plane. (Russian. Armenian and English summaries) Izv.
 - Akad. Nauk Armjan. SSR Ser. Mat. 15 (1980), no. 6, 419-432, 507. (Wiesław Pleśniak) 30E10 (41A10, 41A29)
- Martirosjan, V. M. On the closure, minimality and property of being a basis of the simplest rational fractions on a system of rays. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 15 (1980), no. 4, 276-291, 333. (R. P. Boas, Jr.) 30B60 (30E10)
 - On the closure, minimality and basis property of systems of functions of Mittag-Leffler type in angular domains. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 16 (1981), no. 2, 85–102, 168. (M. I. Nagnibida)
- 30B60 Martorell, J. (with Lane, A. M.) The random phase approximation: its role in restoring symmetries lacking in the Hartree-Fock approximation. Ann. Physics 129 (1980), no. 2,
- 273-302. (Authors' summary) 82b:81136 81G30 Martynenko, M. D. (with Boiko, L. F.) 2b-parabolic boundary value problems. (Russian) Differencial'nye Uravnenija 14 (1978), no. 12, 2212-2222, 2301. (Authors' summary)
- 35K35 (with Sīpka, Ĭ. G.) Analytic extension of metaharmonic potentials. (Russian. English
- summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1979, no. 4, 132–134, 144. (I. Netuka) 826:31010 31B30 (31B35) (with Šīpka, I. G.; Svirskii, E. A.) General representation of the solutions of static
- equations of the moment theory of elasticity. (Russian. English summary) Dokl. Akad. Nauk BSSR 24 (1980), no. 10, 880-883, 956. (M. O. Bašeleišvili) 82e:73008 73B99 (35J99)
- Motion of a wing of finite span, similar in design to a circular one. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 6, 14-18, 140. (Author's summary) 82e:76010 76805 (76639)

 Martynenko, O. G. (with Kolesnikov, P. M.; Rudenok, I. P.) Contribution to the theory of
- waves in open gradient fiber lightguides. Radiotehn. i Elektron. 24 (1979), no. 11, 2173-2178 (Russian); translated as Radio Engrg. Electron. Phys. 24 (1979), no. 11, 1-5 (1980). (G. P. Bava) 82b:78025 78A50
- Martynjuk, A. A. See Martinjuk, A. A. Martynjuk, A. E. See Martinjuk, A. E.
- Martynjuk, P. A. (with Barabaševa, O. A.) Limit equilibrium of a disk crack in an elastic layer (Russian) Dinamika Splošn. Sredy No. 43 Mat. Problemy Meh. (1979), 3-19, 184. (Authors' summary) 82e:73073 73M05

ov, G. A. Exact equations and the theory of liquids. I. Analysis, transformation and Martyr method of solving exact equations. Molecular Phys. 42 (1981), no. 2, 329-345. (Author's summary) 82i:82052 82A50

Martynov, G. V. Fredholm determinants for kernels connected with the omega-squared test. (Russian) Adoptive systems and their applications (Russian), pp. 92-97, 187, "Nauka" Sibirsk. Otdel., Novosibirsk, 1978. (Jana Jurečkovů) 82e:62068 62G10

Calculation of the function of normal distribution. (Russian) Probability theory. Mathematical statistics. Theoretical cybernetics, Vol. 17 (Russian), pp. 57-84, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (Z. Šidák) 82b:62003

Martynov, I. I. Necessary and sufficient conditions for the stability of the exponents of a linear system. (Russian. English summary) Dokl. Akad. Nauk BSSR 24 (1980), no. 5, 393-396, 475. (R. F. Datko) 82a:34063 34D05

Martynov, I. P. Third-order systems with a moving singular curve. (Russian) rencial'nye Uravnenija 17 (1981), no. 2, 227-232, 387. (Juri Bogdanov) 82g:34029 34C05

A property of simplified nth-order differential equations. (Russian. English ad. Nauk BSSR 25 (1981), no. 5, 392-395, 475. (A. Cordu

82f:34009 34A34 (34A05)

Martynov, L. M. (with Martynova, T. A.) Ideally attainable varieties of inverse semigroups.

(Russian) Izv. Vysš. Učebn. Zaved. Matematika 1978 pp. 8-67, 32 (4 prese semigroups.) 20M07 82j:20106a

The groupoid of prevarieties of semigroups with a zero. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 3, 80-82. (B. M. Schein) 821:20069 20M07 (08C15)

Martynov, S. I. (with Taktarov, N. G.) Parametric instability and stabilization of a jet of a magnetizable liquid. Magnit. Gidrodinamika No. 2 (1980), 27-30 (Russian); translated as Magnetohydrodynamics 16 (1980), no. 2, 131-133. (Magdi M. Shoucri) 82e:76111

Martynova, T. A. (with Martynov, L. M.) Ideally attainable varieties of inverse semigroups. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1978, no. 8, 67-73. (Anna Ja. Aizenštat) 20M07

Martynyuk, A. A. See Martinjuk, A. A.

Marubayashi, Hidetoshi Linearly compact modules over HNP rings. Proceedings of the 4th Symposium on Semigroups (Yamaguchi Univ., Yamaguchi, 1980), pp. 36–39, Yamaguchi Univ., Yamaguchi, 1980. (See 821:2008) 16A80

Modules over Dedekind prime rings. V. Osaka J. Math. 17 (1980), no. 2, 377-390. (Robert Gordon) 82b:16006 16A14 (16A64)

Completions of hereditary Noetherian prime rings. Osaka J. Math. 17 (1980), no. 2,

391–406. (B. Stenström) 82h:16003 16A12
Pure injective modules over hereditary Noetherian prime rings with enough invertible ideals. Osaka J. Math. 18 (1981), no. 1, 95–107. (B. Stenström) 82g:16005 16A14

rumoto, Yoshihiko (with Asano, Kouhei; Yanagawa, Takaaki) Ribbon knots and ribbon disks. Osaka J. Math. 18 (1981), no. 1, 161-174. (Bradd Evans Clark) 82d:57010

Maruoka, Akira (with Hirata, Tomio; Kimura, Masayuki) Efficient algorithm to solve the path cover problem for reducible flow graphs. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 637-640, IEEE, New York, 1979. (See 82e:94002) 68G10 (90B10)

(with Hirata, Tomio; Kimura, Masayuki) A polynomial time algorithm to find a path cover of a reducible flow graph. Systems-Comput.-Controls 10 (1979), no. 3, 71–78 (1981). (M. C. Golumbic) 82h:05039 05C70 (05C20, 05C38)

(with Nisijo, Keizi; Kimura, Masayuki) An optimum decomposition of files

Systems-Comput.-Controls 10 (1979), no. 4, 76-83 (1981). (Authors' summary) 82m:68137

(with Kimura, Masayuki; Shoji, Nobuyoshi) Pattern decomposition for tessellation automata. Theoret. Comput. Sci. 14 (1981), no. 3, 211-226. (Authors' summary) 68D20

rupov, N. N. (with Rozenfel'd, B. A.) On the work in physics of the Iranian scholars of the IX-X centuries al-Īrānshahrī and al-Rāzī. (Russian) Voprosy Istor. Estestvoznan. i Tehn. 1980, no. 2, 106-111. (E. S. Kennedy) 82b:01008 01A30

Marusciac, Ioan On am-convex functions and some of their applications to nonlinear programming. Proceedings of the Third Colloquium on Operations Research (Chij-Napoca, 1978), pp. 169–178, Univ. "Babes-Bolyai", Chij-Napoca, 1979. (Author's introduction) 90C30 (90C31)

On am-linear functions. Mathematica (Chij) 21(44) (1979), no. 2, 149-153. (J. V. Ryff) 82a:26012 26B25 (90C25)

See also Proceedings: Colloquium on Operations Research, 82e:90005 Marushko, I. A. See Maruško, I. A

Marušiak, Pavol Oscillation criteria for the solutions of nth-order differential equations with lag. (Russian) Sixth Scientific Conference of the College of Transport Engineering (College Transport Engrg., Žilina, 1979) (Slovak), pp. 59-65, College of Transport Engrg., Žilina, 1979. (Erwin Kozakiewicz) 82d:34102 34K15

1979. (Erwin Kozakiewicz) **82d:34102** 34K15

Marukin, M. M. Conditions for the applicability of the normal limit law to the sum of a random number of independent variables. (Russian) Theory of random processes, No. 7 (Russian), pp. 81-85, 131, "Naukova Dumka", Kiev, 1979. (Werner Wolf) 82d:60041

An example of the moment problem for positive integral random variables.

(Ukrainian. English and Russian summaries) Visnik Kiio. Univ. Ser. Mat. Meh. No. 22 (1980), 60-66, 149. (M. Skalsky) 82k:60029 60E05 (60F99)

Marusiak, A. G. A two-sided method for solving a two-point boundary value problem with a parameter. (Russian) An investigation of differential and differential-difference equa (Russian), pp. 81-88, 188, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (From the text) 82m:34018 34B15 (34A45)

Maruško, I. A On quantum theory of the force constant matrix of polyatomic systems. (Russian summary) Phys. Status Solidi (B) 106 (1981), no. 2, 707-714. (Author's summary) 82j:81071 81H20

Maruyama, Ken-ichi Note on the group of H-equivalences of principal S^3 -bundles over S^7 . Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 1, 123-127. (J. W. Rutter) 82i:55005

na, Masaki Moduli of stable sheaves. II. J. Math. Kyoto Univ. 18 (1978), no. 3, 557-614. (M. Schneider) 82h:14011 14D20 (14F05)

The theorem of Grauert-Mülich-Spindler. Math. Ann. 255 (1981), no. 3, 317-333. (S. Ramanan) 82k:14012 14D20 (14F05)

Maruyama, Noriko Rational homology 3-spheres which bound rationally acyclic 4-manifolds. J. Tsuda College No. 12 (1980), 11–30. (R. C. Kirby) 82k:57005 Marnyama, Takeo (with Nagasawa, Masao) An application of time reversal of Markov ses to a problem of population genetics. Adv. in Appl. Probab. 11 (1979), no. 3, 457-478. (Authors' summary) 82g:92027 92A10 (60J70)

Marx, B. (with Vogel, J.) Analytizitätseigenschaften der Lösungen nichtlinearer Operatorgleichungen vom Hammerstein-Typ und rekursive Bestimmung ihrer Löss (English and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 9, 371-382. (Jürgen Scheurle) 82f:58033 58E07 (45N05, 47H15, 65J15)

ries H. Structure et fonction vues par un physiologiste. (English summary) ure and function as viewed by a physiologist] Fund. Sci. 1 (1980), no. 1, 59-77. [Structure and function as viewed by a physi

(Author's summary) 82k:92004 92A05 (93A10)

Marx, Karl See Abraham-Frois, Gilbert; et al., 82g:90018

Maryland, Wallace, Jr. Results on finite connected partially ordered sets. J. Combin. Inform. System Sci. 6 (1981), no. 2, 129–136. (Derek C. J. Burgess) 82m:06003 06A10

März, Roswitha Untersuchung eines parametrischen impliziten Einschrittverfahrens.

Beiträge Numer. Math. 8 (1980), 85-97. (H. Brunner) 82j:65050 anoni Marzegalli, Stefania See Paganoni Marzegalli, Stefania

Marzetta, Thomas L. Two-dimensional linear prediction: autocorrelation arrays, minimum-phase prediction error filters, and reflection coefficient arrays. IEEE Trans. Acoust. Speech Signal Process. 28 (1980), no. 6, 725-733. (Author's summary) 82a:94022

Marzulli, P. On a common feature of some Runge-Kutta and predictor-corrector methods. Calcolo 16 (1979), no. 2, 181-188. (René Alt) 82b:65060 65L05

Marzuoli, Annalisa (with Salmistraro, Franco; Catenacci, Roberto) Generalized Killing-Yano tensors. Gen. Relativity Gravitation 13 (1981), no. 5, 425-432. (J. D. Zund) 82i:83032 83C40 (53B30, 83C20)

Masaike, Kanzo (with Horigome, Takanori) Direct sum of r-injective modules. Tsukuba J. Math. 4 (1980), no. 1, 77-81. (M. Teply) 82b:16028 16A63 (16A53)

saitis, Česlovas (with Francis, George C.) Differentiation of tabular data. Transactions of the Twenty-Sixth Conference of Army Mathematicians (Hanover, N. H., 1980), pp. 75-87, ARO Rep. 81, 1, U. S. Army Res. Office, Research Triangle Park, N.C., 1981. (Authors' summary) 82a:65017 65D25

Masalov, S. O. The semi-inversion method in the problem of wave scattering echelette grating with finite conductivity. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 5, 1091-1094. (A. S. Silbergleit) 82c:78018 78A45

amba, Sala Voka (with Mboma, Bukele) Sur les bares et les semi-bares points. Fac. Sci. Univ. Nat. Zaire (Kinshasa) Sect. Math.-Phys. 4 (1978), no. 2, 225-234 (1979). (V. Istrățescu) 82d:47008 47A12 (46L05, 47B20)

An outline of the theory of stationary measures over Re. Measure theory, Oberwolfach 1979 (Proc. Conf., Oberwolfach, 1979), pp. 295-309, Lecture Notes in Math., 794, Springer, Berlin, 1980. (W. A. Woyczyński) 82c:28024 28C10 (60G10)

(with Burbea, Jacob) Hilbert spaces of Hilbert space valued functions. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Błażejewko, 1979), pp. 1-20, Lecture Notes in Math., 828, Springer, Berlin, 1980. (Manfred Stoll) 82j:46048 46E40

Multiplicative partial integration and the Trotter product formula. Adv. in Math. 40 (1981), no. 1, 1-9. (Robert L. Moore) 82m:47030a 47D05 (17B65, 46G99)

Erratum: "Multiplicative partial integration and the Trotter product formula". Adv. in Math. 40 (1981), no. 3, 308. (Robert L. Moore) 82m:47030b 47D05 (17B65, 46G99)

Mašanov, V. I. A pair of ruled surfaces in P₃. (Russian) Differential geometry of homogeneous spaces (Russian), pp. 62-66, Irkutsk. Gos. Univ., Irkutsk., 1979. (K. Radziszewski) 82b:53020 53A20

On the class and order of focalness of a family of planes. (Russian) Differential geometry of homogeneous spaces (Russian), pp. 70-75, Irkutsk. Gos. Univ., Irkutsk, 1979. (M. A. Akivis) 82b:53021 53A20

(with Civinskaja, T. M.) Metric properties of a mapping of a pair of ruled surfaces into the space 3S5. (Russian) Differential geometry of homogeneous spaces (Russian), pp. 76-86, Irkutsk. Gos. Univ., Irkutsk, 1979. (M. Decuyper) 82g:53014

(with Cebyševa, B. P.) The group of motions of a space with a degenerate metric. (Russian) Differential geometry of homogeneous spaces (Russian), pp. 87–89, Irkutsk. Gas. Univ., Irkutsk, 1979. (I. P. Egorov) 82c:15029 15A63 (53B05)

Masat, Francis E. A note on normal subgroups and reflexive subsemigroups. Indian J. Math. 18 (1976), no. 2, 71-74. (Editors) 82a:20004 20A05

Congruences on conventional semigroups. Czechoslovak Math. J. 31(106) (1981), no. 2, 199-205. (Howard B. Hamilton) 82j:20115 20M10 Mascarenhas, Maria Luisa Fonctionnelles faiblement continues et semi-continues

inférieurement issues de lois de comportement non linéaires pour des fluides incompressibles. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A79-A81. (Author's summary) 82k:76009 76A99 (76D99)

★Géométrie du compas. (French) [Geometry with the compass] Corrected edition of the 1798 French translation. With corrections by C. Pierru and J. Pierru. Monom, Coubron, 1980. xvi+198 pp. (J. Dieudonnė) 82m:01081 01A75 (12-03,

schierti, Antonio (with Lorenzani, Massimo) Algebraic and analytic local cohomology for affine schemes. (Italian summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 3, 395–402. (Gerd Faltings) 82k:14006 14B15 (13D03, 14F99) 395-402. (Gerd Faltings) 82k:14006

chio, G. On a system of functional equations from information theory. (Italian) Pubbl. Istit. Mat. Appl. Fac. Ingr. Unic. Stud. Roma Quaderno No. 17 (1981), 15-22. (I. Fenyő) 39B40 (94A15)

Maschke, E. K. (with Saramito, B.) On the possible importance of generalized Lorenz equations in the theory of magneto-hydrodynamic stability. Intrinsic stochasticity in plasmas (Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 383-392,

- École Polytech., Palaiseau, 1979. (Authors' summary) 82k:76642 76W05 (58F13)
 (with Gomberoff, L.) Nonideal effects on the stability of a cylindrical
 current-carrying plasma. Field theory, quantization and statistical physics, pp. 123-145,
 Math. Phys. Appl. Math., 6, Reidel, Dordrecht, 1981. (Authors' summary) 82k:76098
- chike, Hans-Ginter (with Loges, Frido) Ein ebenes Modell der elastisch-plastischen Verformung bei Eindruckversuchen. Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe 28 (1979), no. 3, 107-111. (J. L. Nowinski) 82e:73039 73E99 scioli, Flavia A Bayesian method for the estimation of probability in a multinomial
- model. Metron 34 (1976), no. 3-4, 303-322 (1979). (Author's summary) 82d:62062 62F15
- -Colell, Andreu Two propositions on the global univalence of systems of cost function General equilibrium, growth, and trade, pp. 323-331, Academic Press, New York, 1979. (G. Chichilnisky) 82g:90019 90A12
- temarks on the game-theoretic analysis of a simple distribution of surplus problemat. J. Game Theory 9 (1980), no. 3, 125-140. (Roy Gardner) 82a:90185 90I Remarks on the gam 90D12 (90A10, 90D13)
- Noncooperative approaches to the theory of perfect competition: presentation. Noncooperative approaches to the theory of perfect competition. J. Econom. Theory 22 (1980), no. 2, 121–135. (See 82e:99023) 90A14 (90D10) (with Dubey, Pradeep; Shubik, Martin) Efficiency properties of strategic market games: an axiomatic approach. Noncooperative approaches to the theory of perfect
- etition. J. Econom. Theory 22 (1980), no. 2, 339-362. (See 82e:90023) (90D10)
- o, Elvira (with De Dominicis, Rodolfo) Convergence of sums of random variable nary) Boll. Un. Mat. Ital. B (5) 18 that are dependent in blocks. (Italian. English summary) Boll. Un. Mat. Ital. B (1981), no. 1, 305-314. (Authors' summary) 82j:60034 60F05 (60G60, 60K35)
- shburn, J. D. Three counterexamples concerning e-chain completeness and fixed point properties. Proc. Edinburgh Math. Soc. (2) 24 (1981), no. 2, 141-146. (D. Simovici) 06A10 (06A12)
- hhood, Asif On groups of neat and pure-high extensions. Tumkang J. Math. 11 (1980), no. 1, 83-90. (Donald Cook) 82j:20102a 20K40
 - On groups of neat and pure-high extensions. Kyungpook Math. J. 21 (1981), no. 1, 31-37. (Donald Cook) 82;20102b 20K40
- on, Bahram (with Partovi, M. Hossein) On the gravitational motion of a fluid obeying an equation of state. Ann. Physics 130 (1980), no. 1, 99-138. (P. C. Vaidya) 83C50 (83C55)
- hour, A. F. (with Abouammoh, A. M.) A note on the unimodality of discrete m. Statist. A-Theory Methods 10 (1981), no. 13, 1345-1354. (S. Kotz)
- distributions. Commission of Selection (Commission of Selection of Sel 82h:62023
- Gruenhage) 82k-54031 54D18 (54D30)
 (with Hasanein, I. A.; Abd El-Monsef, M. E.) Remarks on nearly compact spaces. n J. Pure Appl. Math. 12 (1981), no. 6, 685-690. (Ilija Kovačević) 82g:54034
- shimo, Katsuya Degree of the standard isometric minimal immersions of complex projective spaces into spheres. Tsukuba J. Math. 4 (1980), no. 1, 133-145. (Carlos E. Harle) 82j:53100 53C42
- ashiyama, Kazuko T. (with Mori, Hazime; Morita, Terumitsu) Contraction of state variables in nonequilibrium open systems. I. *Progr. Theoret. Phys.* **63** (1980), *no.* 6, 1865–1884. (From the summary) **82b:82043a** 82A35 1865-1884. (From the summary) 82b:82043a
 - (with Morita, Terumitsu; Mori, Hazime) Contraction of state variables in nonequilibrium open systems. II. *Progr. Theoret. Phys.* **64** (1980), *no.* 2, 500–521. (Authors' summary) **82b:82043b** 82A35
- shkour, Munaim A. Quantization of angular momentum in curved space-time. I. Tensor fields. Bull. College Sci. (Baghdad) 18 (1977), no. 1, 281–298. (W. M. Baker) 82g:83011 83C40 (53C80)
- skin, Eric (with Dasgupta, Partha; Hammond, Peter J.) The implementation of social choice rules: some general results on incentive compatibility. Rev. Econom. Stud. 46 (1979), no. 2, 185-216. (Andrew Postlewaite) 82g:90011 90A08 (90D45)
 - (with Laffont, Jean-Jacques) A differential approach to dominant strategy echanisms. Econometrica 48 (1980), no. 6, 1507–1520. (Mohamed El-Hodiri) 82h:90003 90A06 (90A08)
- Maskit, Bernard See Ries on surfaces and related topics: Proceedings of the 1978 Stony Brook Conference, 82f:32002
- slennikova, V. N. (with Dezin, A. A.; Zelenjak, T. I.) Some mathematical problems in hydrodynamics. (Russian). Partial differential equations (Proc. Conf., Novosibirsk, 1978). (Russian), pp. 21–31, 247, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Stefan Balint) 35Q20 (76D99, 76E99)
 - (with Gapeeva, N. V.) A problem with a directional derivative for multicomponent diffusion and chemical kinetics systems. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 6, 61–70, 220. (I. Lojczyk-Królikiewicz) 82m:35076 35K55 (80A30, 80A32, 92A40)
 - (with Bogovskii, M. E.) Sobolev spaces of solenoidal vector fields. (Russian) Sibirsk. Mat. Ž. 22 (1981), no. 3, 91-118, 237. (Georgi E. Karadžov) 82i:46052
- Masliyah, Jacob H. (with Kumar, Dileep) Application of orthogonal collocation on finite elements to a miscible displacement problem. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 191-195, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82c:76100 76S05
- summary) высления потоках.

 явич, А. А. (with Gaponov, S. A.) ★Развитие возмущений в сжимаемых потоках.

 (Russian) [Development of perturbations in compressible flows] "Nauka" Sibirsk.

 Otdel., Novosibirsk, 1980. 145 pp. (Publisher's description) 82g:76021 76Fxx (76J99,
- Maslov, E. P. (with Abramjanc, T. G.; Rubinovič, E. Ja.) Elementary differential game of alternate pursuit. Avtomat. i Telemeh. 1980, no. 8, 5-15 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 8, part 1, 1043-1052 (1981). (È. G. Al'breht) 82m:90177 90D26
- Maslov, S. Ju. Theory of inference search and questions of the psychology of creation.

- (Russian) Semiotics and information science, No. 13 (Russian), pp. 17-46, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (P. Ecsedi-Toth) (Russian) Semiotics and inform 03B99 (00A25, 68G20) 82æ03025
- (with Matisaevič, Iu. V.; Minc, G. E.; Orevkov, V. P.; Slisenko, A. O.) Nikolaí ksandrovič Šanin (on the occasion of his 60th birthday). (Russian) Uspehi Mat. Nauk
- 35 (1980), no. 2(212), 241-245. (Editors) 82g:01063 01A70 slov, V. P. (with Danilov, V. G.) Bicharacteristics of difference schemes. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. computer memors for partial superential equations, it (roc. second reads internal. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 345-348, IMACS, New Brunswick, N.J., 1977. (Remi Vaillancourt) 82g:65048 65M10 (58G15) (with Čebotarev, A. M.) On Monte Carlo calculation of the Feynman path integral.
 - Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 349-353, IMACS, New Briuswick, N.J., 1977. (Authors' summary) 82c:81044 81C35 (65C05, 65M99)
 - (with Nazaikinskii, V. E.) Algebras with general commutation relations and their pplications. I. Pseudodifferential equations with increasing coefficients. (Russian)
 - appurations. I. recutoutinterium equations with interesting ocerniterium, (Russian), app. 5–144, 270, Akad. Nauk. SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (See 824:47025) 47G05
 - (with Karasev, M. V.) Algebras with general commutation relations and their applications. II. Operator unitary-nonlinear equations. (Russian) Current problems in mathematics, Vol. 13 (Russian), pp. 145–267, 270, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (See 82&47025) 47G05 (47H15)
 - (with Dobrohotov, S. Ju.) The problem of reflection off the boundary for the equation and finite-zone conditionally periodic solutions. (Russian) Funkcional. Anal. i
 Priložen. 13 (1979), no. 3, 79-80. (L. A. Takhtajan (Tahtadžjan)) 82a:35014

 35840 (35Q20, 58F30, 58G15)
 - (with Karasev, M. V.) Quasiclassical soliton-type solutions of Hartree equations. (Russian. English summary) Boundary value problems of mathematical physics and related questions in the theory of functions, 11. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 84 (1979), 108-113, 311, 318. (L. A. Takhtajan (Tahtadžjan)) 35O20 (81C05)
 - (with Dobrohotov, S. Ju.) Finite-zone almost periodic solutions in WKB-approximations. (Russian) Current problems in mathematics, Vol. 15 (Russian), pp. 3-94, 228 (loose errata), Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn.
 - Informacii, Moscow, 1980. (Alan Weinstein) 82i:58035
 - (with Dobrohotov, S. Ju.) Multidimensional nonlinear spectral boundary value problems and superposition of their asymptotic solutions according to the law of Novosibirsk, 1978) (Russian), pp. 166–175, 253, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Erich Miersemann) 82b:35124 35P30 (81G05)
 - (with Dobrohotov, S. Ju.) Finite gap almost periodic solutions in asymptotical expansions. Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ. Nijmegen, Nijmegen, 1980), pp. 1-25, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (Alan Weinstein) 82k:58043 58F07 (35C20, 35Q20,
 - (with Karasev, M. V.) Global asymptotic operators of a regular representation. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 1, 33-37. (Virgil Obădeanu) 82e:81020 81C40 (22E60, 58F06)
 - (with Omel'janov, G. A.) Asymptotic soliton-like solutions of equations with small dispersion. (Russian) Uspehi Mat. Nauk 36 (1981), no. 3(219), 63-126, 255. (P. Szeptycki) 82i:35021 35B40 (35Q20, 58F05, 58G15, 76B25, 82A45)
- Maslova, N. B. Stationary solutions of the Boltzmann equation and the Knudsen boundary layer. (Russian) Aerodynamics of rarefied gases, No. 10 (Russian), pp. 5-15, 229, Leningrad. Univ., Leningrad, 1980. (Author's summary) 82d:76073 76P05
- (with Geinc, A. G.; Maljarenko, V. A.) Free molecular flow inside a spherical cavity. (Russian) Aerodynamics of rarefied gases, No. 10 (Russian), pp. 203-209, 237, Leningrad. Univ., Leningrad, 1980. (Authors' summary) 82e:76051 76P05
- Maslowe, S. A. (with Redekopp, L. G.) Long nonlinear waves in stratified shear flows. J. Fluid Mech. 101 (1980), no. 2, 321-348. (Authors' summary) 82h:76062
- (with Brown, S. N.; Rosen, A. S.) The evolution of a quasisteady critical layer in a stratified viscous shear layer. Proc. Roy. Soc. London Ser. A 375 (1981), no. 1761, 271–293. (Authors' summary) 821:76014 76E15 (86A05, 86A35)
- Mašnikov, S. A. (with Rožkov, V. I.) Asymptotic behavior of solutions of systems of difference and differential-difference equations with small lag. (Russian) Differential equations with deciating argument (Russian), pp. 65–79, Unic. Družby Narodov im. Patrisa Lumumby, Moscow, 1979. (G. S. Ladde) 82e:34088 34K25
- dal Maso, Gianni See Dal Maso, Gian
- son, A. W. On subgroups of GL(n, A) which are generated by comm Angew. Math. 322 (1981), 118-135. (K. Wohlfahrt) 82i:20056
- Mason, Alice (with Walsh, John J.; Wilson, David C.) Inverse limits which are not hereditarily indecomposable. Proc. Amer. Math. Soc. 83 (1981), no. 2, 403-407. (Józef Krasinkiewicz) 82k:54054 54F15 (57Q99)
- Mason, D. P. (with Tsamparlis, Michael) Magnetohydrodynamics in a Riemann-Cartan space-time. Gen. Relativity Gravitation 13 (1981), no. 2, 123-134. (P. C. Vaidya) 83C55 (76W05, 83E10)
- (with McIlroy, D. K.) Electric field dissociation of charged macromolecular sites in polarized biomembranes. I. The mathematical model. SIAM J. Appl. Math. 40 (1981), no. 2, 283-297. (Authors' summary) 82g:92020a 92A09
- (with McIlroy, D. K.) Electric field dissociation of charged macromolecular sites in polarized biomembranes. II. A dual perturbation solution. SIAM J. Appl. Math. 40 (1981), no. 2, 298-314. (Authors' summary) 82g:92020b 92A09
- on, David M. On the use of a statistic based on sequential ranks to prove limit theorems for simple linear rank statistics. Ann. Statist. 9 (1981), no. 2, 424-436. (Lionel Weiss) 82h:62033 62E20 (60F05)
- son, Geoffrey Quasithin groups. Finite simple groups, II (Proc. Sympos., Unio. Du Durham, 1978), pp. 181–197, Academic Press, London, 1980. (See 82h:20021) Quasithin groups. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 155–157, Proc. Sympos. Pure Math., 37, Amer. Math. Soc.,

Providence, R.I., 1980. (From the text) 82i:20026 20D05

n Prime z-ideals of C(X) and related rings. Canad. Math. Bull. 23 (1980), no. 4, 437-443. (Sergio Salbany) 82c:54013 54C40 (13A15, 46E25)

son, J. C. Recent advances in near-best approximation. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 629-636, Academic Press. New York, 1980. (Joseph M. Lambert) 82b:41025 41A50

Near-best multivariate approximation by Fourier series, Chebyshev series and Chebyshev interpolation. J. Approx. Theory 28 (1980), no. 4, 349-358. (Allan Pinkus) 82a:41031 41A63 (41A10, 42B05, 65D15)

Mason, J. R. M. (with Hill, Raymond) On (k,n)-arcs and the falsity of the Lunelli-Sce conjecture. Finite geometries and designs (Proc. Conf., Chelwood Gate, 1980), pp. 153-168, London Math. Soc. Lecture Note Ser., 49, Cambridge Univ. Press, mbridge, 1981. (A. Barlotti) 82m:51013 51E20 (05B25)

Cambridge, 1981. (A. Bariotti) & Am.51013 51E.20 (05825)
son, Robert Lee (with Gunst, Richard F.) ★Regression analysis and its application. A
data-oriented approach. Statistics: Textbooks and Monographs, 34. Marcel Dekker, Inc.,
New York, 1980. xiv+402 pp. ISBN 0-8247-6993-7 (A. N. Philippou) 82a:62091 62J05 (62-07)

son, Rodney J. Implicit moment particle simulation of plasmas. J. Comput. Phys. 41 (1981), no. 2, 233-244. (Author's summary) 82k:82031

m, S. G. (with Zuzovsky, M.; Priel, Z.) Effects of rotary Brow rheological transients of suspensions of spheroids. J. Rheol. 24 (1980), no. 6, 705-717. (G. Paria) 82f:76004 76A10 (76F99, 76T05) (G. Paria) 82f:76004

Masry, Elias (with Cambanis, Stamatis) Consistent estimation of continuous-time signals from quantized noisy samples. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. II, pp. 443-446, Reidel, Dordrecht, 1980. (Authors' summary) 82e:94028 94A12

Discrete-time spectral estimation of continuous-time processes—the orthogonal series method. Ann. Statist. 8 (1980), no. 5, 1100-1109. (Paul Deheuvels) 82g:62128 62M15 (62G05)

(with Cambanis, Stamatis) Consistent estimation of continuous-time signals from nonlinear transformations of noisy samples. IEEE Trans. Inform. Theory 27 (1981), no. 1, 84-96. (K. S. Fu) 82c:94007 94A12

Mass, Nathaniel J. Destabilizing impacts of price and quantity adjustments to relative supply and demand. J. Econom. Behavior Organization 1 (1980), no. 4, 361-384. (Author's summary) 82b:90034 90A16 (90A11)

Massa, Enrico Variational techniques in general relativity: generalisations of a classical result of A. Palatini. (Italian. English summary) Riv. Mat. Univ. Parma (4) 5 (1979), part 2, 511-522 (1980). (Mauro Francaviglia) 82k:83003 83C05 (49F99)

Massa, Silvio (with Roux, Delfina) On the minimal displacement under generalized nonexpansive multivalued mappings. (Italian summary). Rend. Mat. (6) 12 (1979), no. 3-4, 577-585 (1980). (Bhamidi V. Rao) 82a:54025 54C60 (54H25) 3-4, 577-585 (1980). (Bhamidi V. Rao) 82a:\$4025 54C60 (54Fl25) (with Roux, Delfina) On the lower type of entire functions. (Italian summary) Boll.

Un. Mat. Ital. A (5) 18 (1981), no. 1, 76-83. (R. S. L. Srivastava) 82e:30005

Massabo, I. (with Nistri, P.; Pera, Maria Patrizia) A result on the existence of infinitely many solutions of a nonlinear elliptic boundary value problem at resonance. (Italian summary) Boll. Un. Mat. Ital. A (5) 17 (1980), no. 3, 523-530. (Michele Mininni) 35J65 (47H15)

esteva Massaguer, Francisco See Esteva Massaguer, Francisco
Massarotti, A. (with Burattini, E.; Santaniello, A.) A graph colouration technique. Second Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. III, pp. 326-333, Reidel, Dordrecht, 1980. (O. V. Borodin) 82g:05045 05C15 (68E10)

(with Aiello, A.; Burattini, E.; Ventriglia, F.) "A posteriori" evaluation of bin packing approximation algorithms. Discrete Appl. Math. 2 (1980), no. 2, 159–161. (Barry E. Jacobs) 82h:68061 68C25 (52-04, 90B05)

Massatt, Paul Some properties of condensing maps. Ann. Mat. Pura Appl. (4) 125 (1980), 101-115. (Simeon Reich) 82j:54099 54H25 (47H09, 47H10)

Stability and fixed points of point-dissipative systems. J. Differential Equations 40 (1981), no. 2, 217-231. (Jean Mawhin) 82j:47078 47H10 (34K15, 58E07)

saza, Carla (with Ragusa, Alfio) On some conditions of regularity, in terms of existence of a good basis of syzygies. J. Algebra 70 (1981), no. 2, 493-516. (Mico Nishi) 82k:13023 13H99 (13D25)

er, David W. (with Anderson, M.) Lower bounds for heights on elliptic curves. Math. Z. 174 (1980), no. 1, 23-34. (Daniel Bertrand) 82g:10049 10F35 (14G25)

Small values of the quadratic part of the Néron-Tate height. Seminar on Number Theory, Paris 1979–80, pp. 213–222, Progress in Math., 12, Birkhäuser, Boston, Mass., 10F35 (14K15) 1981. (See 82j:10004)

On polynomials and exponential polynomials in several complex variables. *Invent. Math.* 63 (1981), no. 1, 81–95. (Michel Waldschmidt) 82j:10062 10F35 (13A17) sey, Gerald J. Logic and linguistics. Modern logic-a survey, pp. 311-329, Synthese

(with Traldi, Lorenzo) Links with free groups are trivial. Proc. Amer. Math. Soc. 82 (1981), no. 1, 155-156. (W. D. Neumann) 82i:57005 57M25

Massidda, V. (with Hernando, J. A.) The planewise summation method for triclinic lattices. Phys. B+C 101 (1980), no. 2, 159-176. (I. John Zucker) 82a:82046 82A67 (10G99)

buiculescu-Massier, Doina See Buiculescu-Massier, Doina Massimo, F. M. (with Kwatny, Harry G.; Bahar, Leon Y.) Derivation of the

82A70)

Brayton-Moser equations from a topological mixed potential function. J. Franklin Inst. 310 (1980), no. 4-5, 259–269. (François Aribaud) 82194020 94C05 (58F40, 94C15) Masson, D. Moment problem approximants to the Chandrasekhar H-equation. J. Math. Phys. 22 (1981), no. 3, 462–464. (Author's summary) 82e-45014 45L05 (44A60).

Maštalir, V. P. A method of representing information in normalization systems. (Russian) Questions of the application of computers in the development and investigation of technical systems (Russian), pp. 9-15, 54, Preprint 80, 42, Akad. Nauk Ukrain. SSR, Inst.

Kibernet., Kiev, 1980. (See 82g:68007) 68G10

Mastin, C. W. (with Ghosh, A.; Thompson, J. F.) A fractional step method for the solution of the Navier-Stokes equations in arbitrary three-dimensional regions. Advances in

computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Unio., Bethlehem, Pa., 1979), pp. 114–117, IMACS, New Brumswick,

N.J., 1979. (Authors' summary) 82c:76032 76D05 (65N05)

Mastjanica, V. S. (with Selko, M. A.) Approximate solution of singular integral equations by the degenerate kernel method. (Russian) Differencial nye Uraonenija 16 (1980), no. 12, 2255-2267, 2303. (V. V. Ivanov) 82d:45018 45L10 (45E05)

2255-2267, 2303. (V. V. Ivanov) 824:45018 45L10 (45E05) (with Šeiko, M. A.) A solution of a two-dimensional singular integral equation of the first kind. (Russian. English summary) Dokl. Akad. Nauk BSSR 24 (1980), no. 9,

T73-776, 859. (V. B. Dybin) 82c:45009 45E05 (45L05, 65R20) strangelo-Dehen, Michèle (with Dehen, Danièle) Les p-topologies en théorie du potentiel. (English summary) Ann. Inst. Fourier (Grenoble) 31 (1981), no. 2, viii, 153-173. (L. Stoica) 82g:31006 31B15 (60J45)

Différentiabilité fine et différentiabilité sur des compacts. Bull. Soc. Math. France 108 (1980), no. 1, 3-15. (Author's summary) 82k:31008 31B15 (60J45) (with Dehen, Danièle) Les p-topologiques et les équations différentielles

stochastiques. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A99-A102. (Authors' summary) 82b:60063 60H10 (60J45)

gonzález Mastrapa, H. See González Mastrapa, H. Mastro, R. A. (with Voss, David A.) A quintic spline collocation procedure for solving the Falkner-Skan boundary-layer equation. Comput. Methods Appl. Mech. Engrg. 25 (1981), no. 2, 129–148. (Authors' summary) 82e:76039 76D10 (65D07)

Mastrogiacomo, Pasquale The cohomology of jet fields and the cohomology of covariant tensor fields on a manifold with a linear connection. (Italian. English summary) ntiche (Catania) 31 (1976), no. 2, 349-370 (1977). (Author's sum 58A12 (53C05, 57N65, 57R99)

Mastroianni, Gluseppe (with Occorsio, Mario Rosario) On the derivatives of Stancu polynomials. (Italian. English summary) Rend. Accad. Sci. Fis. Mat. Napoli (4) 45 (1978), 273-281 (1979). (D. D. Stancu) 82a:41019 41A36 (41A10, 41A25)

Mastroserio, C. Inequalities concerning polynomial approximation in the uniform norm. (Italian. English summary) Calcolo 17 (1980), no. 2, 133-142 (1981). (Wilhelm Sippel) 41A10 (41A17)

(with Montrone, M.) A quadratic-convergence method for linear matrix equations. (Italian. English summary) Calcolo 18 (1981), no. 1, 87-96. (Authors' summary) 65F10 82m:65030

Masud, Abu S. (with Hwang, Ching Lai) Interactive sequential goal programming, J. Oper. Res. Soc. 32 (1981), no. 5, 391–400. (Authors' summary) 824:90119 90C31

Masuda, Mikiya On smooth S1-actions on cohomology complex projective spaces. The case where the fixed point set consists of four connected components. J. Fac. Sci. Univ. Tokyo Sect. IA Math. 28 (1981), no. 1, 127-167. (Italo José Dejter) 82i:57031

Cohomology of S¹-orbit spaces of cohomology spheres and cohomology complex projective spaces. Math. Z. 176 (1981), no. 3, 405-427. (Allan Edmonds) 82j:57035

noto, Naoya (with Sabata, Hideki) Sur le crochet neuf dans mécanique nonlinéaire. (Japanese summary) Mem. Osaka Kyoiku Univ. III Natur. Sci. Appl. Sci. 29 (1980), no. 1, 13-17. (J. S. Joel) 82k:70018 70H99 (58F05, 70G25)

ssur, Howard Uniquely ergodic quadratic differentials. Com no. 2, 255-266. (K. Strebel) 82a:32031 32G15 (30F35)

Transitivity properties of the horocyclic and geodesic flows on moduli space. J. Analyze Math. 39 (1981), 1-10. (Jane Gilman) 82k:30047 30F30 (32G15, 58F17)

Masurjan, A. S. On the class of primitive recursive functions definable on finite models. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 71 (1980), no. 4, 209-211. (V. K. Bulitko) 82i:03052 03D20 (03C57)

(with Zaprjanov, Zaprjan Dimitrov) An exact solution of the problem of unsteady fully-developed viscous flow in slightly curved porous tube. (Polish and Russian summaries) Arch. Mech. (Arch. Mech. Stos.) 32 (1980), no. 4, 461-474. (From the 76S05 (35C05, 76D99) introduction) 82g:76041

Matasov, A. I. Phase curves of the equation of motion of a point mass. Izv. Akad. Nauk SSSR Meh. Tverd. Tela 15 (1980), no. 3, 13-19 (Russian); translated as Mech. Solids 15 (1980), no. 3, 11-18. (C. Marchal) 82d:58031 58F07 (70D99)

Matcha, Robert L. (with Gadre, Shridhar R.) Inequalities among atomic expectation values J. Chem. Phys. 74 (1981), no. 1, 589-591. (Authors' summary) 82c:81157

Matchett, Andrew Class groups of cyclic groups of square-free order. Trans. Amer. Math. Soc. 264 (1981), no. 1, 251–254. (I. Reiner) \$2c:13019 13D15 (16A26, 20C10) Matczyński, M. Stress concentrations in a nonhomogeneous elastic layer weakened by

cracks. (Polish and Russian summaries) Rozprawy Int. 27 (1979), no. 4, 559-574 (1980). (From the summary) 82e:73074 73M05 (73C45)

Máté, Attila A lower estimate for the achromatic number of irreducible graphs. Discrete Math. 33 (1981), no. 2, 171-183. (P. Erdős) 82c:05060 A partition relation for Souslin trees. Trans. Amer. Math. Soc. 268 (1981), no. 1,

143-149. (J. M. Henle) 82k:03078 03E05 (04A20) Mateev, M. D. (with Kadyševskii, V. G.; Čižov, M. V.) On the problem of the muon-electron mass difference. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980),

no. 3, 358-364. (Authors' summary) 82c81182 81L05 (81G15)

Matei, Pavel Evolution equations with time-dependent domains. Variational inequalities

optimization problems (Proc. Summer School, Constanța, 1979), pp. 155-163, Minist. Ed. Încățămiîntului, Constanța, 1979. (A. Pazy) 82c:34074 34G20 (34A60, 49A50)
Mateljević, M. The isoperimetric inequality in the Hardy class H¹. Mat. Vesnik 3(16)(31)

(1979), no. 2, 169-178. (Kenneth Stephenson) 82i:30052 30D55

Matekski, J. Peter (with Brooks, Robert) The dynamics of 2-generator subgroups of PSL(2, C). Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference (State Univ. New York, Stony Brook, N.Y., 1978), pp. 65-71, Ann. of Math. Studies, 97, Princeton Univ. Press, Princeton, N.J., 1981. (Avner Ash) 82j:10045 10D07 (20H10, 22E40, 30F99)

Mateos, Juan (with Boya, Luis J.; Cariñena, José F.) Homotopy and solitons. Fortschr Phys. 26 (1978), no. 3, 175-214. (From the text) 82h:81054 81E10 (53C05, 55R25,

(with Boya, Luis J.) The kink: real Hoof bundle and Morse theory. J. Phys. A 13

terms, Pavel The set of empirical questions that can be answered by an empirical theory.

Synthese 47 (1981), no. 1, 57-68. (Editors) 82m:03040 03B65 (03B30)

essi, C. (with Jayakar, S. D.) Coevols tion of species in competition: a th Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 2, part 2, 1081-1084. (A. C. Trajstman) 92A15 221-92034

tett, Prabhaker A decision procedure for the correctness of a class of programs. J. Assoc.

Comput. Mach. 28 (1981), no. 2, 215-232. (V. Ju. Meitus) 82gc8017 68B10 (68C05)

devosjan, G. U. The factorization of meromorphic functions with separation of their

singularity set. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan.

SSR Ser. Mat. 14 (1979), no. 6, 416-423, 501. (A. N. Kanatnikov) 82b:30028

thai, A. M. (with Rathie, Pushpa N.) Recent contributions to axiomatic definitions of information and statistical measures through functional equations. Essays in probability and statistics, pp. 607-633, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 824:94022

(with Katiyar, R. S.) Exact percentage points for three tests associated with exponential populations. Sankhyā Ser. B 42 (1980), no. 1-2, 33-41. (Authors' summary) 822:62056 62F04

On a conjecture in g etric probability regarding asymptotic normality of a random simplex. Ann. Probab. 10 (1982), no. 1, 247-251. (Gedalia Ailam) 82m:60019 an, Bernard Un ensemble exceptionn el pour un problème de répartition modulo 1. re de Théorie des Nombres 1977-1978, Exp. No. 25, 9 pp., CNRS, Talence, 1978.

(Harald Niederreiter) 82e:10059 10K05 Numbers contravening a condition in density modulo 1. Acta Math. Acad. Sci. ar. 36 (1980), no. 3-4, 237-241 (1981). (Henri Faure) 82e:10088

ather, Michael (with Walker, Marshall) Commuting homotopy limits and colimits.

Math. Z. 175 (1980), no. 1, 77-80. (R. M. Vogt) 82a:55008 55P10

hews, N. A. (with Aghvami, A. H.) Binary and quaternary CPSK transm nonlinear channels in additive Gaussian noise and cochannel interference. *Proc. IEE-F*128 (1981), no. 2, 96–103. (Authors' summary) 824:94038 94A40

thews, P. M. (with Seetharaman, M.; Takahashi, Yasushi) On the degree of the minimal

equation of the matrices in first-order relativistic wave equations. J. Phys. A 13 (1980), no. 9, 2863-2872. (Authors' summary) 82g:81037 81D25 (22E43, 58D25) (with Vijayalakshmi, B.; Seetharaman, M.; Takahashi, Yasushi) On the

sibility of repeated irreducible representations in barnacle-free un unique-mass relativistic wave equation ns. J. Phys. A 14 (1981), no. 5, 1193-1204. (N. D. Sengupta) 82g:81038 81D25 (22E70)

(with Seetharaman, M.; Raghavan, Sekhar; Bhargava, V. T. A.) A simple accurate formula for the energy levels of oscillators with a quartic potential. Phys. Lett. A 83 (1981), no. 3, 118–120. (Authors' summary) 82h-81632 81C12

this, F. H. An L_{∞} error estimate for the Ritz-Trefftz approximation in optimal control. Math. Comput. Simulation 23 (1981), no. 2, 188-190. (Author's summary) 82i:49028 49D15

m, Rudolf A. (with Vanstone, S. A.) Doubly resolvable Kirkman systems. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 611–625. (W. H. Mills) 82e:05030 05B05 (05B25)

Sample graphs for isomorphism testing. Proceedings of the Ninth tern Conference on Combinatorics, Graph Theory, and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1978), pp. 499-517, Congress. Numer., XXI, Uti Winnipeg, Man., 1978. (Kabekode V. S. Bhat) 82a:68125 68E10 (68C05) , XXI, Utilitas Math.,

The systems of linked 2-(16, 6, 2) designs. Ars Combin. 11 (1981), 131-148. (Jennifer Seberry) 82k:05035 05B30

(with Phelps, Kevin T.; Rosa, Alexander) A class of Steiner triple systems of order 21 and associated Kirkman systems. *Math. Comp.* **37** (1981), *no.* 155, 209–222. (Charles J. Colbourn) **82k:05022** 05B07 (51E10)

(with Sermer, Pavol) Least-squares methods for mixed-type equations. SIAM J. Numer. Anal. 18 (1981), no. 4, 705-723. (lan Gladwell) 82k:65070 65N30 (65M60)

hon, William (with Flaherty, Joseph E.) Collocation with polynomial and tension splines for singularly-perturbed boundary value problems. SIAM J. Sci. Statist. Comput. 1 (1980), no. 2, 260–289. (T. Stýs) 82x65055 65L10

debacker-Mathot, F. See Debacker-Mathot, F.

Mathot, Françoise On the decomposition of states of some *-algebras. Pacific J. Math. 90
(1980), no. 2, 411–424. (G. Lassner) 82c:46072 46K10 (46L30, 47D40)

thur, B. L. An integral involving generalized Rice polynomials and a generalized function of N variables. (Spanish) With an English translation. Repúb. Venezuela Bol. Acad. Cienc. Fis. Mat. Natur. 39 (1979), no. 118, 27-37 (1980). (Rekha Srivastava) 82k:33010 33A35 (44A20)

An expa sion formula for a generalized function of n variables. (Hindi. English nary) Vijnana Parishad Anusandhan Patrika 23 (1980), no. 2, 111-115. (C. L. Koul) 82i:33006 33A35 (33A65)

me results concerning a special function of several complex variables. Indian J.

Pure Appl. Math. 12 (1981), no. 8, 1001-1006. (L. J. Slater) 82h:33004. 33A30

Mathur, K. C. (with Kashyap, B. R. K.) On a class of probability distributions and its use in information theory. J. Math. Sci. 9 (1974), 13-22 (1976). (Authors' summary) 82f:62015 62B10

Mathur, K. K. Certain interpolation processes. Math. Student 45 (1977), no. 4, 21-32 (1979). (P. Vértesi) 82i:41002 41A05 (41A10)

(with Mishra, R. S.) Lacunary interpolation by splines: (0; 0, 2, 3) and (0; 0, 2, 4) Acta Math. Acad. Sci. Hungar. 36 (1980), no. 3-4, 251-260 (1981). (A. Meir) 82e:41012 41A15

r, Remu (with Munot, P. C.) On nonlinear oscillation problem. J. Indian Inst. Sci. 62 (1980), no. 10, 167-171. (H. E. Fettis) 82c:34042 34C15 (33A30, 70B05) tignon, Michel Sous-corps fermés du complété de la clôture algébrique d'un corps local.

aire de Théorie des Nombres, 1978-1979, Exp. No. 12, 9 pp., CNRS, Talence, 1979. (Sudesh Khanduja) 82c:12011 12B20 (12J10)

(with Reversat, Marc) Sur les automorphismes d'extensions transcendantes de corps des. [On the automorphisms of transcendental extensions of valued fields] Seminar on er Theory, 1980-1981 (Talence, 1980-1981), Exp. No. 6, 16 pp., Univ. Bordeaux I, Talence, 1981. (See 82m:10006) 12B15

Matikuk, M. I. (with Pukal'skii, I. D.) An oblique derivative problem for a degenerate parabolic equation. (Russian) Mat. Zametki 28 (1980), no. 4, 533-544, 635. (J. Kačur) 35K70

tijasevič, Ju. V. (with Maslov, S. Ju.; Minc, G. E.; Orevkov, V. P.; Slisenko, A. O.) Nikolai Aleksandrovič Šanin (on the occasion of his 60th birthday). (Russian) Uspehi Mat. Nauk 35 (1980), no. 2(212), 241-245. (Editors) 82g.01063 01A70

tijevic, Jacob R. (with Estes, Dennis R.) Local-global criteria for outer product rings Canad. J. Math. 32 (1980), no. 6, 1353-1360. (C. P. L. Rhodes) 82c:13024 13F9

(Authors' summary) 82j:92017 92A07 (92A09)

wski, J. (with Benedykt, Z.) Remarks on some fixed point theorem. Demonstratio ath. 14 (1981), no. 1, 227-232. (Silvio Massa) 821:54071 54H25 Math. 14 (1981), no. 1, 227-232. (Silvio Massa) 82f:54071

Matkowsky, Bernard J. (with Olagunju, David O.) Propagation of a pulsating flame front in a gaseous combustible mixture. SIAM J. Appl. Math. 39 (1980), no. 2, 290–300. (Richard J. Field) 82480023 80A25 (35K99)

(with Putnick, Leonard J.; Reiss, Edward L.) Secondary states of vibrating plates. J. Acoust. Soc. Amer. 69 (1981), no. 6, 1682-1687. (Authors' introduction) 82k:73048 73K12 (58E07, 73D99, 73H10)

(with Sivashinsky, G. I.) On the stability of nonadiabatic flames. SIAM J. Appl. Math. 40 (1981), no. 2, 255–260. (Richard J. Field) 82h:80005 80A25

Matlis, Eben The ring as a torsion-free cover. Israel J. Math. 37 (1980), no. 3, 211-230. (T. 13C12 (13C05) Cheatham) 82e:13011

Matloff, Norman S. Use of regression functions for improved estimation of means

Biometrika 68 (1981), no. 3, 685–689. (Author's summary) 82k:62119 62JG

Matolesy, Kálmán (with Császár, Ákos) Syntopogenous extensions for prescribed

topologies. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 1-3, 59-75. (W. Kulpa) 82i-54006 54A15 (54E15)

On extensions of syntopogenous spaces. Publ. Math. Debrecen 28 (1981), no. 1-2, 103-119. (Ivan L. Reilly) 82::54007 54A15 (54C20)

Matos, Mário C. (with Colombeau, Jean-François) Convolution equations in spaces of infinite-dimensional entire functions. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 4, 375-389. (Richard M. Aron) 82h:46058 46G20 (32A15, 46F25)
(with Colombeau, Jean-François) On some spaces of entire functions defined on

infinite-dimensional spaces. Pacific J. Math. 96 (1981), no. 1, 63-75. (J. M. Isidro) 82k-46068 46G20 (32A15)

Matos Beia, A. (with Alte da Veiga, L. M.; Costa, M. M. R. R.; de Almeida, M. J. M.; de Andrade, L. R.) On the prediction of order in the o phases on the basis of a nere-packing model. Acta Cryst. Sect. A 37 (1981), no. 2, 197-200. (Authors' summary) 824:82071 82A60 (52A45)

Matousek, I. (with Valenta, Ja.; Plundrová, I.; Šatra, M.) Identification of the elastic-plastic response of solid bodies using the finite-element method. (Russian. English ry) Adv. in Mech. 2 (1979), no. 2, 101-144. (Authors' summary) 82e:73029 73E99 (65N30)

Matov, A. Ja. (with Tiščenko, N. F.) Mathematical models of computational systems with riority failure in the servicing. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 3, 190-194, 223 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 3, 130 (1981). 60K25 (Authors' summary) 82k:60193

Matov, V. I. Singularities of the maximum function on a manifold with boundary. (Russian. nglish summary) Trudy Sem. Petrocsk. No. 6 (1981), 195-222. (G. N. Himšiašvili) 82i-58022 58C27 (57R45)

Matrosov, V. M. (with Kozlov, R. I.) Comparison principle in the theory of differential equations with perturbations. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 4, 807-811. (C. Corduneanu) 82a:34075 34G20 (34D20)

(with Kozlov, R. I.) Derivation of theorems of dynamic properties with Ljapunov vector functions for differential equations with perturbations. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 3, 521-525. (A. Halanay) 82c:34061 34D20 (93D05)

See also Vector-valued Ljapunov functions and their construction, 82d:65004 tova, G. A. (with Petrenko, A. I.) Forming mathematical models of electrical circuits by applying analytic transformations. Kibernetika (Kiev) 1981, no. 2, ii, 60-64, 150 (Russian. English summary); translated as Cybernetics 17 (1981), no. 2, 223-229. (From the text) 82k:94026 94C05 (68J10)

m Group structure of Bayes theorem. Essays in probability and sta pp. 709-716, Shinko Tsusho, Tokyo, 1976. (Author's summary) 82ts62016 62C10 tsuda, Hiro-o Notes on pseudoconformal manifolds. Yokohama Math. J. 28 (1980), no. 1-2, 87-95. (Kunio Sakamoto) 82ts53045 53C05 (32F25)

Matsuda, Hirotsugu The Ising model for population biology. Progr. Theoret. Phys. 66 (1981), no. 3, 1078–1080. (Ronald F. Fox) 82m:92063 92A15 (82A68)

Matsuda, Michihiko ★First-order algebraic differential equations. A differential algebraic approach. Lecture Notes in Mathematics, 804. Springer-Verlag, Berlin-New York, 1980. vi+111 pp. ISBN 3-540-09997-2 (R. Cohn) 82d:12015 12H05 (34A99)

Matsuda, Minoru Note on nondentable subsets in Banach spaces. Rep. Fac. Sci. Shizuoka Univ. 15 (1980), 1-5 (1981). (Robert E. Huff) 82j:46019 46B20

Matsuda, Ryūki Kronecker function rings. Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 13 (1981), 13–24. (J. W. Brewer) 82i:13008 13B25 (13F05) Matsui, Kineo (with Pradhan, D. K.) A fault-diagnosis technique for closed flow networks.

FTCS-10 (Tenth Internat. Sympos. Fault-Tolerant Comput., Kyoto, 1980), pp. 302-304, IEEE, New York, 1980. (Authors' summary) 82a:68044 68B20 (94C15) tsumoto, E. Behaviour of the stationary singular points in one-dimensional materials

with internal state variables. (German summary) Acta Mech. 39 (1981), no. 3-4, 241-249. (Author's summary) 82h:73033 73D99 (35B99)

umoto, Hideki (with Semenoff, G.; Umezawa, Hiroomi) A perturbative look at the dynamics of extended systems in quantum field theory. J. Math. Phys. 22 (1981), no. 10,

2208-2222. (Authors' summary) 82m:81066 81E99 (81D05)
(with Yamanaka, H.; Umezawa, Hiroomi) Role of the Wigner rotation in quantum field theory with extended objects. Phys. Rev. D (3) 24 (1981), no. 10, 2607-2614.

(Author's summary) 82k-81046 81EO5 (with Hongoh, M.; Umezawa, Hiroomi) The dynamical rearrangement of symmetry and the group contraction. Progr. Theoret. Phys. 65 (1981), no. 1, 315-337. (Authors' summary) 82e:81024 81D20 (22E70)

o, Keiji Some remarks on the mean concentration functions. Keio Math. Sem. Rep. No. 6 (1981), 41-45. (G. C. Jain) 82j:60028 60E15

pp. No. 6 (1981), 41-43. (C. C. Jam) accounts over 1997. The moto, Koji Infinitesimal variations of invariant hypersurfaces of a P-Sasakian anifold. J. Korean Math. Soc. 16 (1979/80), no. 2, 177-187. (V. Mihova-Nehmer) 82f-53058a 53C25 (58E10)

Some transformations on almost paracontact Riemannian manifolds. Bull. Yamagata Univ. Natur. Sci. 10 (1980), no. 1, 25-34. (V. Mihova-Nehmer) 82a:53050 53C25

Infinitesimal variations of invariant hypersurfaces of a P-Sasakian manifold. II. Tensor (N.S.) 34 (1980), no. 3, 297-302. (V. Mihova-Nehmer) 821:53058b 53C2:

On conformal P-Killing vector fields in almost paracontact Riemannian manifolds. 53C25

J. Korean Math. Soc. 18 (1981), no. 1, 73-80. (Giuseppe Arca) 82m:53048 oto, Makoto (with Tamássy, Lajos) Scalar and gradient vector fields of Finsler spaces and holonomy groups of nonlinear connections. Demonstratio Math. 13 (1980), no. 2, 551–564. (A. Kawaguchi) 82c:53046 53C60

Fundamental functions of S3-like Finsler spaces. Tensor (N.S.) 34 (1980), no. 2, 141-146. (R. Miron) 82a:53030 53B40

(with Numata, Shigeru) On semi-C-reducible Finsler spaces with constant coefficients and C2-like Finsler spaces. Tensor (N.S.) 34 (1980), no. 2, 218-222. (R.

Projective changes of Finsler metrics and projectively flat Finsler spaces. Tensor (N.S.) 34 (1980), no. 3, 303-315. (R. Miron) 82e:53046

S.) 34 (1980), no. 3, 303-315. (R. Miron) 82e:53046 53B40
Berwald connections with (h)h-torsion and generalized Berwald spaces. Tensor (N.S.) 35 (1981), no. 2, 223-229. (H. Rund) 82j:53043 53B40

tsumoto, Takashi (with Chua, Leon O.; Ichiraku, Shigeo) Correction to: "Geometric properties of resistive nonlinear n-ports: transversality, structural stability, reciprocity, ad antireciprocity" [IEEE Trans. Circuits and Systems 27 (1980), no. 7, 577-603; MR 81i:58034]. IEEE Trans. Circuits and Systems 28 (1981), no. 2, 168. (Editors) 82a:58044 58F40 (94C05)

(with Chua, Leon O.; Kawakami, Hiroshi; Ichiraku, Shigeo) Geometric properties of dynamic nonlinear networks: transversality, local-solvability and eventual passivity. IEEE Trans. Circuits and Systems 28 (1981), no. 5, 406-428. (Authors' summary) 94C15 (58C27, 58F10)

to, Tetsuaki A gauge theory of the integral form: lattice-like gauge theory invariant under translation and rotation. Nuclear Phys. B 176 (1980), no. 2, 523-544. (Author's summary) 82b:81098 81E99 (81G05)

oto, Waichirò Sur la condition de Levi: problème de Cauchy pour les systèmes à caractéristiques doubles. Seminar on Hyperbolic and Holomorphic Partial Differential Equations, 1979-1980 (French), Exp. No. 7, 23 pp., Univ. Paris VI, Paris, 1980. (Editors) 82b:35102 35L55 (35A07)

Sur l'espace de données admissibles dans le problème de Cauchy. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 13, 621-623. (Author's summary) 82f:35118 35L45

Une remarque sur l'unicité du prolongement des solutions pour les systèmes mixtes de type parabolique et de type elliptique dégénéré. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 14, 665-668. (Author's summary) 82e:35044 35K10 (35J70, 35O10)

On the conditions for the hyperbolicity of systems with double characteristic roots. I. J. Math. Kyoto Univ. 21 (1981), no. 1, 47-84. (J. Vaillant) 82m:35096a 35L45 On the condition for the hyperbolicity of systems with double characteristic roots. II.

J. Math. Kyoto Univ. 21 (1981), no. 2, 251-271. (J. Vaillant) 82m:35096b nura, Hideyuki *Commutative algebra. Second edition. Mathematics Lecture Note Series, 56. Benjamin/Cummings Publishing Co., Inc., Reading, Mass., 1980. xv+313 pp. ISBN 0-8053-7026-9 (R. M. Fossum) 82i:13003 13-02

(with Ogoma, Tetsushi) Remarks on associated prime ideals. Rend. Sem. Mat. Univ.

Politec. Torino 38 (1980), no. 2, 53-61 (1981). (Gerhard Pfister) 82k:13004 13A17 tsumura, Toshio (with Sakawa, Yoshiyuki) Nonlinear analysis of nitrogen cycle in aquatic ecosystems. Internat. J. Systems Sci. 11 (1980), no. 7, 803-816. (T. G. Hallam) 82g:92052 92A17 (34C05)

(with Sakawa, Yoshiyuki) An optimization problem related to the regulation of influent nutrients in aquatic ecosystems. Internat. J. Systems Sci. 12 (1981), no. 5, 565-585. (Authors' summary) 82k:92065 92A17

tsunaga, Hiromichi Smooth circle group actions on complex surfaces. Mem. Fac. Sci. ane Univ. 14 (1980), 47-54. (Riccardo Benedetti) 82h:14023

Isunawa, Tadashi (with Ikeda, Sadao) Uniform asymptotic distribution of extremes. Essays in probability and statistics, pp. 419–432, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 82c:60041 60F05 (62E20, 62G30)

Approximate behavior of quasi-extreme order statistics. Recent developments in statistical inference and data analysis (Proc. Internat. Conf., Inst. Statist. Math., Tokyo, 1979), pp. 197–201, North-Holland, Amsterdam, 1980. (Mir Maswood Ali) 82ac62034

Matsuno, Koichiro Dynamics of relations, sequential connectedness, and feedback loops in open systems. IEEE Trans. Systems Man Cybernet. 11 (1981), no. 4, 310-312. (Author's 92A05 (93A10)

Matsuno, Yoshimasa Exact multisoliton solution for nonlinear waves in a stratified fluid of finite depth. Phys. Lett. A 74 (1979), no. 3-4, 233-235. (Author's summary) 826:35096 35O20 (58F07, 76B25)

Bilinearization of nonlinear evolution equations. J. Phys. Soc. Japan 48 (1980), no. 6, 2138-2143. (Yvette Kosmann-Schwarzbach) 82m:35132a 35Q20

Bilinearization of nonlinear evolution equations. II. Higher-order modified

Korteweg-de Vries equations. J. Phys. Soc. Japan 49 (1980), no. 2, 787-794. (Yvette Kosmann-Schwarzbach) 82m:35132b 35O20

Bilinearization of nonlinear evolution equations. III. Bäcklund transformations of higher-order Korteweg-de Vries equations. J. Phys. Soc. Japan 49 (1980), no. 2, 795-801.

(Yvette Kosmann-Schwarzbach) 82m:35132c 35Q20
Bilinearization of nonlinear evolution equations. IV. Higher-order Benjamin-Ono equations. J. Phys. Soc. Japan 49 (1980), no. 4, 1584–1592. (Yvette Kosmann-Schwarzbach) 82m:35132d 35Q20

Statistics of nonlinear dispersive waves. II. Multipoint velocity correlation-functions. Phys. A 104 (1980), no. 1-2, 71-94. (Author's summary) 82a:82006

The Backlund transformations of the higher-order Korteweg-de Vries equation Phys. Lett. A 77 (1980), no. 2-3, 100-102. (Woodford W. Zachary) 82c:35073

Number density function of Benjamin-Ono solitons. Phys. Lett. A 87 (1981/82), no. 1-2, 15-17. (Author's summary) 82m:76012 76B25 (58F07, 76V05)

Matsuoka, Katsuo (with Anzai, Kazuo; Koizumi, Sumiyuki) On the Wiener formula of functions of two variables. Tokyo J. Math. 3 (1980), no. 2, 249-270. (Thu Pham-Gia)

82d:40007 40D25 (40E05) suoka, Motohisa Noribumi Okamoto. (Japanese) Sügakushi Kenkyü No. 86 (1980), 22-30. (K. Masuda) 82j:01067 01A70 (01A27)

Matsusaka, Teruhisa On some cohomology groups of invertible sheaves. Proceedings of th International Symposium on Algebraic Geometry (Kyoto Univ., Kyoto, 1977), pp. 1-14, Kinokuniya Book Store, Tokyo, 1978. (Takao Fujita) 82a:14013 14310 (14F12)

★On polarized varieties. Monografías del Instituto de Matemáticas [Monographs of the Institute of Mathematicsl. 10. Universidad Nacional Autónoma de México, Mexico City, 1981. 39 pp. (Norman Goldstein) 82h:14012 14D20

On polarized varieties of dimension 3. II. Amer. J. Math. 103 (1981), no. 2, 357-376. (Daniel Comenetz) 82i:14008 14D20 (14F12, 14J30)

Errata to: "On polarized varieties of dimension 3. I" [Amer. J. Math. 101 (1979), no. 1, 212-232; MR 81d:14010]. Amer. J. Math. 103 (1981), no. 2, 376. (Editors) 82f:14011

Matsushima, Yozò See Manifolds and Lie groups, 82m:53001
Matsushita, Yasuo On Euler characteristics of compact Einstein 4-manifolds of metric signature (++--). J. Math. Phys. 22 (1981), no. 5, 979-982. (Ion Doru Albu) 53C50 (57R20)

Inequality for the Euler characteristic of compact Einstein 4-manifolds. Math. Japon. 26 (1981), no. 1, 77-79. (N. J. Hitchin) 82h:53065 53C25 (57R20)

Matsuyama, Tomoko (with Komatsu, Hiroaki) A characterization of Boolean rings. Math. Japon. 25 (1980), no. 5, 591-592. (Authors' summary) 82a:06025 06E20

ma, Yasuo Mismatch robustness of linear prediction and its relationship to coding. Inform. and Control 47 (1980), no. 3, 237-262. (Author's summary) 82k:93064 (94A17)

Matsuyama, Yoshio On certain hypersurfaces of R^{2m+1}. Kodai Math. J. 2 (1979), no. 2, 272–274. (Bang-yen Chen) 82g:53061 53C40 (57R70)

Maisuzaki, Toshio A remark on problems of cyclotomy in the Kakuchi Senshō. (Japanese) Sûgakushi Kenkyû No. 85 (1980), 1-5. (K. Masuda) 82f:01012 01A27

Mattei, Giulio On rigid rotations in plasma mechanics. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 6, 404-407 (1980). (Author's summary) 82i:76095 76W05

Wave propagation in a gas in the presence of thermal radiation. (Italian. English summary) Atti Sem. Mat. Fis. Univ. Modena 29 (1980), no. 1, 88-94. (Author's summary) 82k:76052 76N15

Mattei, J.-F. See Ramis, Jean-Pierre, 82b:58004

Matteo, Alba (with Demichele, Cataldo) On the removable singularities of the weak solutions of strongly quasielliptic equations. (Italian. English summary) Rend. Accad. Sci. Fis. Mat. Napoli (4) 47 (1980), 177–197 (1981). (Rudolf Švarc) 82g:35025 35D10

Mattheij, R. M. M. Estimating the discretization error in three-point difference schemes for second order linear singularly perturbed BVP. Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ. Nijmegen, Nijmegen, 1980), 327-337, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (R. E. O'Malley, Jr.) 82b:34023 34B10 (34E20, 65L10)

Matthews, D. (with Jürgensen, H.; Wood, Derick) Life and death in Markov deterministic tabled OL systems. Inform. and Control 48 (1981), no. 1, 80-93. (Authors' summary) 68F15 (68D22) 82h:68111

Matthews, Geoffrey Time's arrow and the structure of spacetime. Philos. Sci. 46 (1979), no. 1, 82–97. (Lawrence Sklar) 82;83043 83C99

Matthews, Steven (with Cohen, Linda) Constrained Plott equilibria, directional equilibria and global cycling sets. Rev. Econom. Stud. 47 (1980), no. 5, 975-986. (From the introduction) 82b:90004 90A08

Matthias, Hans-Heinrich ★Zwei Verallgemeinerungen eines Satzes von Gromoll und Meyer. (German) [Two generalizations of a theorem of Gromoll and Meyer] Dissertation, Rheinische Friedrich-Wilhelms-Universität, Bonn, 1980. Bonner Mathematische Schriften [Bonn Mathematical Publications], 126. Rheinisch Friedrich-Wilhelms-Universität, Bonn, 1980. 90 pp. (Wolfgang Ziller) \$2a:58022 58E10 (53C60)

della Mattia Maderna, Carla See Della Mattia Maderna, Carla

Mattila, Kirsti On normal and compact operators on Banach spaces. Israel J. Math. 37 (1980), no. 1-2, 164-170. (Klaus Kalb) 82i:47050 47B40 (47B05, 47B15)

Mattila, Pertti Absolute continuity and uniqueness of measures on metric spaces. Trans. Amer. Math. Soc. 266 (1981), no. 1, 233-242. (G. Mägerl) 82k:28003 28A12 (28A15) Integral geometric properties of capacities. Trans. Amer. Math. Soc. 266 (1981), no. 2, 539-554. (J. Král) 82h:31008 31B15 (28A75, 31C15)

Mattioli, Nuvoletta (with Salvatori, M. Cesarina) A theorem of existence and uniqueness in nonlinear dispersive optics. (Italian. English summary) Atti Sem. Mat. Fis. Univ. Modena 28 (1979), no. 2, 405-424 (1980). (L. Cesari) 82k:78001 78A10 (47H15)

(with Bassanini, Piero) Uniqueness of periodic solutions of the linearized quasihydrodynamic plasma equations with impedance boundary conditions. (Italian mmary) Z. Angew. Math. Phys. 31 (1980), no. 5, 581-591. (Authors' summary) 76X05 (35Q20, 82A45)

Mattis, Daniel C. How to reduce practically any problem to one dimension. Physics in or ension (Proc. Internat. Conf., Fribourg, 1980), pp. 3-10, Springer Ser. Solid-State Sci., 23, Springer, Berlin, 1981. (See 82g:82003) 00A69

(with Sutherland, Bill) Strange solutions to field theories in one spatial dimension.

J. Math. Phys. 22 (1981), no. 8, 1692-1695. (P. Mitra) 82k:81073 81E99

Mattson, Don A. (with Hatzenbuhler, James) A note on countable compactifications. Riv. Mat. Univ. Parma (4) 6 (1980), 33-35 (1981). (J. van der Slot) 82h:54038

- thler, James) Spaces for which all compact metric spaces are Amer. Math. Soc. 82 (1981), no. 3, 478-480. (Anne K. Steiner) (with Hatzen rs. Proc. Amer. Mo 54D35 (54D40)
- 445-449. (D. Bainov) 82c34010 34742 (32razo, 3-rato), solida, D. W. (with Kornerup, P.) Foundations of finite precision rational arithmetic.
 Fundamentals of numerical computation (computer-oriented numerical analysis) (Proc. Fundamentals of numerical computation (computer-oriented numerical analysis) (Proc. Conf., Tech. Univ. Berlin, Berlin, 1979), pp. 85–111, Comput. Suppl., 2, Springer, Vienna, 1980. (G. Blanch) 82b:65836 65G10
- hidea, Iordan C. (with Balan, George C.; Şorea, N. I.) Un modèle mathématique de la mécanique des fils immergès. (Romanian and English summaries) Bul. Univ. Galați Fasc. 11 Mat. Fiz. Mec. Teoret. 1 (1978), 75–82. (From the summary) 82a:73027a 73199
 - Une mèthode d'élèment fini dans le modelage de la dynamique des fils immergès. (Romanian and English summaries) Bul. Univ. Galați Fasc. II Mat. Fiz. Mec. Teoret. 2 (1979), 89–95. (From the summary) 82a:73027b 73J99 (70H99)
- icz, Andrzej See Kafarov, V. V., 82j:80006 Matulis, V. (with Pliuškevičius, R. A.; Tumasonis, V.) Some works of Lithuanian mathematicians on mathematical logic and programming. (Russian. Lithuanian and English summaries) Litovsk. Mat. Sb. 20 (1980), no. 3, 19-27, 216. (Authors' summary) :01042 01A65 (01A73, 90-03, 90Cxx)
- tumoto, Takao (with Kawauchi, Akio) An estimate of infinite cyclic coverings and knot theory. Pacific J. Math. 90 (1980), no. 1, 99-103. (J. P. Levine) 82j:57017 57Q45
- o Multivariate linear regression analysis. Essays in probability and sta museta, namee Muttivariate intear regression analysis. Essays in production and 3 pp. 321–338, Shinko Tsusho, Tokyo, 1976. (From the introduction) 82j:62054 tubish, Josef (with Novák, Josef) Über eine elementare Fläche. (English, Russ Czech summaries). Anl. Mat. 24 (1979). no. 2, 93–104. (M. St. Botez) 82ee 62105
- saries) Apl. Mat. 24 (1979), no. 2, 93-104. (M. St. Botez) 82e:53007 53A05 (65S05)
 - Docent Jaroslav Chudý (on the occasion of his sixtieth birthday). (Czech) Časopis Pēst. Mat. 105 (1980), no. 4, 417-418. (Editors) 82a:01041 01A70 htszczykowa, Hanna (with Waliszewski, Włodzimierz) An immersion of a differential
- space in a Cartesian space. Ann. Polon. Math. 37 (1980), no. 2, 131-134. (Charles D. Marshall) 82b:58012 58A40
- uszewski, A. (with Kowalczyk, T.; Nalbach-Leniewska, A.; Pleszczyńska, E.) On concepts and measures of bivariate stochastic dependence. Mathematical statistics, pp. 189-195, Banach Center Publ., 6, PWN, Warsaw, 1980. (C. A. Robertson) 82c:62085
- eev, A. S. (with Jakubovič, V. A.) Application of the abstract theory of optimization to the solution of the optimal control problem of a system with distributed parameters. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 186-188, 254, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Editors) 82e:49013 49A27
- Matveev, E. M. Some Diophantine equations with a large number of variables. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. No. 2 (1979), 22–30, 101. (From the text) 82h:10026 10B16 (10F37, 10F45)
 - Some Diophantine equations with an effective boundary for the modulus of
 - solutions. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1980, no. 6, 23–27, 116. (A. Pethó) 82e:10033 10B16

 Effective estimate of some polynomials with several variables. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1981, no. 1, 29–33, 107. (S. V. Kotov) 10B16
- Matveev, M. I. (with Bazaržapov, A. D.; Mišin, V. M.) ★Геомагнитные в bypm. (Russian) [Geomagnetic variations and storms] "Nauka" Sibirsk. Otdel. birsk, 1979. 248 pp. (Publisher's description) 82h:86001 86-02 (86A25)
- Matveev, M. V. On everywhere dense zero-dimensional subspaces of topological sp (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1981, no. 4, 36-39, 85. (R. N. Ormocadze) 82m:54034 54F45
- Matveev, P. N. On the question of representing the solution of a mixed problem for a nonlinear equation of the theory of viscoelasticity. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 9, 78-81. (François Sidoroff) 82c:73032 73F99
- Matveev, S. V. (with Zilberg, A. L.) Relations in the homeotopy group of a handlebody and the ribbon braid group. (Russian) Mat. Zamerki 29 (1981), no. 4, 567-575, 634. (Jože Vrabec) 82k:57004 57N10 (20F36)
- Matveev, V. A. (with Kvinihidze, A. N.; Magradze, B. A.; Mestvirišvili, M. A.; Tavhelidze, A. N.) An integral equation for causal distributions and their self-similar asymptotic behavior in the ladder Φ^3 -model. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 302–312. (Authors' summary) 82c:81086 81EI0 (81D15)
- (with Krasnikov, N. V.; Rubakov, V. A.; Tavhelidze, A. N.; Tokarev, V. F.) The structure of the ground state in two-dimensional massless quantum electrodynamics. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 313-328. (Authors' summary) 82b:81060 81E10 (81L05)
- summary) 82b:81060 81E10 (81L05)

 (with Valakidze, Š. I.) Bogoljubov transformation in the problem of massive particle capture by the quantum field. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 346-357. (Authors' summary) 82b:81118 81F20

 (with Krasnikov, N. V.; Tavhelidze, A. N.) The problem of CP invariance in quantum chromodynamics. Fiz. Elementar. Častic i Atom. Jadra 12 (1981), no. 1, 100-124 (Russian. English summary); translated as Soviet J. Particles and Nuclei 12 (1981), no. 1, 120-124 (Russian. English summary); Sthesilong, 81636.
- (1981), no. 1, 38-47. (Authors' summary) 82:61089 81G05

 Matveev, V. F. See König, Dieter; et al., 82k:60192

 Matveev, V. N. Investigations of the vibrations of a cutting tool in the machining of metals
- within a framework of a mathematical model. (Russian) Studies in stability and the theory of oscillations (Russian), pp. 41-62, Jaroslav. Gos. Univ., Yaroslavl', 1979. (A. A. Martinjuk) 82f:34100 34K20 (70K40)
- Matreeva, L. V. Estimate of the rate of convergence of a sequence of Gronwall polynomials. II. (Russian) Ural. Gos. Univ. Mat. Zap. 11 (1978/79), no. 4, 30-37, 131. (Z. Rubinstein) 82k-30005 30C10
- Matveičuk, M. S. Weak compactness of a set of integrable bilinear forms. (Russian) Constructive theory of functions and functional analysis, No. 2 (Russian), pp. 52-60, Kazan. Gos. Univ., Kazan, 1979. (H. H. McFaden) 82f-46071 46L50

- The law of multiplication of random norms. (Russian) Issled. Prikl. Mat. No. 8 (1980), 78-84. (M. M. Day) 82g-46089 46H99 (08A02, 60B99)

 A theorem on the states of quantum logics. (Russian. English summary) Teoret. Mat.
- Fiz. 45 (1980), no. 2, 244-250. (Anatolij Dvurečenskij) 82d:81015 81B10 (46L30)
- Matvievskaja, G. P. Some Arabic commentaries on the tenth book of Euclid's Elem (Russian) Mathematics in the East in the Middle Ages (Russian), pp. 3-87, 194, "Fan", Tashkent, 1978. (E. S. Kennedy) 82i:01010 01A30
 - History of mathematics and astronomy of the East in the Middle Ages. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1981, no. 1, 23-26, 91. (E. S. Kennedy) 82i:01011 01A30
- Matvičuk, Ja. N. (with Maksimovič, N. G.; Šemuratov, F. A.) Application of the theory of matrix graphs to the formation of a model of an electrical circuit with multipoles. (Russian. English summary) Elektronnoe Modelirovanie 1981, no. 1, 27-32, 109. (Authors' summary) 82f:94019 94C05
- Matvilsin, Ja. O. Mechanics in Kazan (1825-1850). (Russian) Asymp nonlinear mechanics (Russian), pp. 79-85, 195, Akad. Nauk Ukrain. SSR, Inst. Mat., Kieo, 1979. (Peeter Müürsepp) 82e:01065 01A55 Mátyks, Ferenc On the quotients of the elements of linear recursive sequences of second
- rder. (Hungarian) Mat. Lapok 27 (1976/79), no. 3-4, 379-389. (P. Kiss (Zbl 418:10010)) 82m:10020 10A35
- Matysiak, Stanisław (with Bielski, Włodzimierz) Green functions for some problems of electroelasticity. (Russian summary) Bull. Acad. Polon. Sci. Sèr. Sci. Tech. 27 (1979), no. 8-9, 691-698 (1980). (E. Pinney) 822:73056 73R05 (78A99)

 A plane contact problem in the linear theory of piezoelectroelasticity. (Russian
 - mmary) Bull. Acad. Polon. Sci. Sér. Sci. Tech. 27 (1979), no. 8-9, 699-707 (1980). (C.
- Dierieck) 82e:73086 73T05 (73R05)

 Matyska, Jiří An example of removable singularities for bounded holomorphic functions. (Czech summary) Časopis Pěst. Mat. 105 (1980), no. 2, 133-146, 208. (N. I. Skiba) 82k:30035 30D50 (30C85)
- Matzeu, Michele (with Donati, Flavio) On the strong solutions of some nonlinear evolution problems in ordered Banach spaces. (Italian summary). Boll. Un. Mat. Ital. B (5) 16 (1979), no. 1, 54–73. (Jürgen Weyer) 82a:47057 47H15 (34G20, 47H20)
- Matzeu, P. (with Caddeo, Renzo) The prolongation to T₂M of the partial connections of Vrânceanu. (Italian. English summary) Rend. Sem. Fac. Sci. Univ. Cagliari 49 (1979), no. 3-4, 331-341. (J. J. Etayo) 82c:53026 53C05
- Izmer, Richard A. (with Handler, F. A.) Gravitational wave scattering. Phys. Rev. D (3)
 22 (1980), no. 10, 2331-2348. (Authors' summary)
 82a:83019
 83C35
 (with Zamorano, N. A.) Imaginary-frequency interior modes of black holes. Proc.
- Roy. Soc. London Ser. A 373 (1980), no. 1753, 223-233. (Andrew King) 82d:83021 83C20 (83C25)
- Mauceri, Giancario Weyl multipliers and bounded operators on L^p. (Italian summary Rend. Sem. Mat. Fis. Milano 49 (1979), 9-18 (1981). (Richard Bagby) 82g:43008 43A22 (42B15, 81D05)
- The Weyl transform and bounded operators on $L^p(\mathbb{R}^n)$. J. Funct. Anal. 39 (1980), no. 3, 408-429. (José L. Rubio de Francia) 82i:44002 44A15 (33A65, 42B15, 58G15) Zonal multipliers on the Heisenberg group. Pacific J. Math. 95 (1981), no. 1, 143-159. (Norman J. Weiss) 82k:43008 43A80 (22E30, 43A22, 58G05)

 Mauceri, S. (with Restivo, Antonio) A family of codes commutatively equivalent to prefix
- codes. Inform. Process. Lett. 12 (1981), no. 1, 1-4. (Aldo De Luca) 82j:94021
- Mauclaire, Jean-Loup Suites limite-périodiques et théorie des nombres. I. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 4, 180-182. (Author's introduction) 82d:10075a 10K20 (10L10)
 - Suites limite-périodiques et théorie des nombres. II. Proc. Japan Acad. Ser. A Math Sci. 56 (1980), no. 5, 223-224. (Editors) 82d:10075b 10K20 (10L10)
 - bres. III. Proc. Japan Acad. Ser. A Math. Suites limite-périodiques et théorie des non Sci. 56 (1980), no. 6, 294-295. (Editors) 82d:10075c 10K20 (10L10)
 - Fonctions arithmétiques et analyse harmonique. Analytic number theory (Proc. Sympos., Tokyo, 1980) (French), pp. 83–94, Monograph. Sci. Maison Franco-Japon., 3, Maison Franco-Japon., Tokyo, 1981. (See 82h:10004)

 See also Analytic number theory, 82h:10004
- nersberger, R. (with Schmidt, Wolfgang H.) Berry-Esseen type bounds for nonlinear models. Math. Operationsforsch. Statist. Ser. Statist. 11 (1980), no. 4, 465-473. (A. N. Philippou) 82k:62046 62E20 (62J02)
- ngeri, Antonino A maximum principle for the solutions of some variational inequalities of parabolic type. (Italian) Matematiche (Catania) 33 (1978), no. 1, 26-31 (1980). (M. 49A29 (35B50)
- Mauldin, R. Daniel (with Cenzer, Douglas) Inductive definability: measure and category. Adv. in Math. 38 (1980), no. 1, 55-90. (Andrzej Szymański) 82b:03086 03D70 (03E15, 28A05, 54H05)
 - (with Cenzer, Douglas) Faithful extensions of analytic sets to Borel sets. Houston J.
 - Math. 6 (1980), no. 1, 19-29 (D. W. Bressler) 82a:54071 54H05 (with Burgess, John P.) Conditional distributions and orthogonal measures. Ann. Probab. 9 (1981), no. 5, 902-906. (Robert F. Wheeler) 82j:28002 28A05
- (with Srivastava, Shashi Mohan) Paramétrisations des ensembles coanalytiques à coupes relativement non maigres. C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 16, 743-745. (Authors' summary) 82e:54044 54H05 (54C65)
- Mäulen, Jürgen Das Wachstumsverhalten ganzer Funktionen unter Voraussetzungen über ihre Laplace-Transformierte. Math. Z. 176 (1981), no. 4, 541–550. (B. Kuttner) 44A10 (30D15)
- nunder, C. R. F. A short proof of a theorem of Kan and Thurston. Bull. London Math. Soc. 13 (1981), no. 4, 325-327. (J. P. May) 82h:55009 55P20 lleyat-Maurel, M. See Chaleyat-Maurel, M.
- wer, Donald Arithmetic properties of the idèle discriminant. Pacific J. Math. 85 (1979),
- no. 2, 393-401. (Ezra Brown) 82e:12007 12A50 (12A55) Maurer, Helmut Differential stability in optimal control problems. Appl. Math. Optim. 5
- (1979), no. 4, 283–295. (Author's summary) 82k-49650 49E20 (93D99) (with Metz, Rudolf; Nolte, Wolfgang) Die Automorphismengruppe de Möbiusgeometrie einer Körpererweiterung. Aequationes Math. 21 (1980), no. 1, 110-112.
 - (Armin Herzer) 82c:51009 51B10 Symmetries of quadrics. Geometry-von Staudt's point of view (Proc. NATO Adv.

Study Inst., Bad Windsheim, 1980), pp. 197-229, NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci., 70, Reidel, Dordrecht, 1981. (Francis Buckenhout) 82i:51010 51A40

First and second order sufficient optimality conditions in mathematical programs and optimal control. Mathematical programming at Oberwolfach (Proc. Conf., Math. Forschungsinstitut, Oberwolfach, 1979). Math. Programming Stud. No. 14 (1981). 163-177. (Marco Gaviano) 82i:90096 90C30 (49A27)

urer, Hermann A. (with Ottmann, Thomas) Dynamic solution of decomposable pp. 17-24, Hanser, Munich, 1980. (Authors' summary) 82j-68049 68E05 (90B40) (with Albert, Jürgen; Rozenberg, Grzegorz) Simple EOL forms under uniform interpretation generating CF languages. Fund. Inform. (4) 3 (1980), no. 2, 141-156. (K.

68F05

P. Lee) 82e:68071 (with Ehrenfeucht, A.; Rozenberg, Grzegorz) Continuous grammars. Inform. and Control 46 (1980), no. 1, 71–91. (Jürgen Dassow) 824:68045 68F05 (03D05) (with Salomaa, Arto; Wood, Derick) Context-free grammar forms with strict interpretations. J. Comput. System Sci. 21 (1980), no. 1, 110-135. (S. Ginsburg)

The post-office problem and related questions. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 1-19, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Author's summary) 82h:68049 68C05 (68B15, 68C25, 90B05)

(with Salomaa, Arto; Wood, Derick) Colorings and interpretations: a connection between graphs and grammar forms. Discrete Appl. Math. 3 (1981), no. 2, 119-135. (B. 05C15 (68F05)

(with Salomaa, Arto; Wood, Derick) Derivation languages of grammar form Internat. J. Comput. Math. 9 (1981), no. 2, 117-130. (Authors' summary) 82a:68148

(with Bucher, W.; Culik, K., II; Wotschke, D.) Concise description of finite languages. Theoret. Comput. Sci. 14 (1981), no. 3, 227-246. (Authors' sum 821:68075 68F05 (03D05)

(with Edelsbrunner, H.) A space-optimal solution of general region location. ret. Comput. Sci. 16 (1981), no. 3, 329-336. (Authors' summary) 82m:68082 68C25 (51-04, 90B05)

Maurer, Stephen B. Vertex colorings without isolates. J. Combin. Theory Ser. B 27 (1979), no. 3, 294–319. (Narsingh Deo) 82c:05049 05C15 (68E10)

(with Rabinovitch, Issie; Trotter, William T., Jr.) Partially ordered sets with equal rank and dimension. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 627-637. (Authors' summary) 82b:06004 06A10

(with Rabinovitch, Issie; Trotter, William T., Jr.) Large minimal realizers of a partial order. II. Discrete Math. 31 (1980), no. 3, 297-313. (Author's review (W.T.T.)) 82a:06002 06A10 (05C35)

(with Rabinovitch, Issie; Trotter, William T., Jr.) A generalization of Turán's theorem to directed graphs. Discrete Math. 32 (1980), no. 2, 167–189. (Aldo G. S. Ventre) 82c:05061 05C35 (04A05, 05C20, 06A10)

Maurev, B. (with Beauzamy, Bernard) Iteration of spreading models. Ark. Mat. 17 (1979).

marey, b. (with Beautrainy, Bernard) Iteration of spreading models. Ark. Mat. 17 (1979), no. 2, 193–198. (R. W. Cross) 82;46018 46B20 (with Johnson, William B.; Schechtman, G.; Tzafriri, L.) Symmetric structures in Banach spaces. Mem. Amer. Math. Soc. 19 (1979), no. 217, v+298 pp. (Z. Chanturia (Zbl 421:46023)) 82;46025 46B25 (46E30, 47B38)

Tout sous-espace de L¹ contient un I_p [d¹après D. Aldous]. Seminar on Functional Analysis, 1979–1980 (French), Exp. No. 1-2, 13 pp., École Polytech., Palaiseau, 1980. (Author's introduction) 82b:46037 46E30 (46B25)

nuri, Giancarlo (with Bertoni, Alberto; Miglioli, P. A.) A characterization of abstract data as model-theoretic invariants. Automata, languages and programming (Sixth Colloq., Graz, 1979), pp. 26–37, Lecture Notes in Comput. Sci., 71, Springer, Berlin, 1979. (János Demetrovics) 82a:68027 68B15

(with Bertoni, Alberto; Miglioli, P. A.) Towards a theory of abstract data types: a discussion on problems and tools. International Symposium on Programming (Proc. Fourth Internat. Sympos., Paris, 1980), pp. 44-58, Lecture Notes in Comput. Sci., 83, Springer, Berlin, 1980. (Authors' summary) 82c:68013 68B15 (03C99, 03D99)

(with Sabadini, Nicoletta) A #P-complete problem over arithmetical trees. CAAP '81 (Proc. Sixth Colloq., Genoa, 1981), pp. 308-315, Lecture Notes in Comput. Sci., 112, Springer, Berlin, 1981. (From the introduction) 82;68022 68C25

(with Bertoni, Alberto) On efficient computation of the coefficients of some polynomials with applications to some enumeration problems. Inform. Process. Lett. 12 (1981), no. 3, 142-145. (Authors' summary) 82i:68026 68C25 (03D05, 05A15)

(1761), no. 3, 142-143. (Natural saturals) marrine. Maurica, Javier Maurica, Javier See Martinez Maurica, Javier Maurice, J. (with Baracs, Janos; Luong, T. T.; Léopold, B.) Habitat polyédrique. With an Maurice, J. (Natural Saturals) marrines (Natural Satural Saturals) marrines (Natural Saturals) marrines English translation. Structural Topology 1979, no. 2, 7-52. (Authors' summary) 82f:52008

Maurice, Joël (with Villa, Pierre) Fiscalité et choix de la technique de production vus à travers une réforme de l'assiette des charges sociales. (English and Spanish summaries) Production functions and factor demand functions. Ann. I.N.S. É. E. No. 38-39 (1980), 97-122. (See 82e:90019) 90A11

Maurin, Krzysztof ★Analysis. Part II. Integration, distribution, holomorphic functions tensor and harmonic analysis. Translated from the Polish by Eugene Lepa. D. Reidel Publishing Co., Dordrecht-Boston, Mass.-London; PWN-Polish Scientific Publishers, Warsaw, 1980. xvii + 829 pp. (loose errata). ISBN 90-277-0865-7 (R. G. Bartle) 82i:00003 00A05 (28-01, 28-02, 30-01, 31-01, 46-01, 53-01, 54-01, 58-01)

rry, G. (with Delifer, J. B.) Un exemple de domaine de Krull non commutatif au sens de Marubayashi borné qui n'est noéthérien, ni un R-ordre de Fossum. Publ. Dép. Math. (Lyon) 15 (1978), no. 4, 49-60. (Kenneth A. Brown) 82b:16007 16A18

Maurya, B. R. (with Lal, K. B.) On solutions of coupled electromagnetic an d zero-rest-m scalar fields. (Turkish summary) Istanbul Unio. Fen Fak. Meem. Ser. A 41 (1976), 21–27 (1981). (Authors' summary) 82-83040 83C50 (53B50) (with Lal, K. B.) On wave solutions of the field equations of Einstein's, Bonnor's and Schrödinger's nonsymmetric unified theories. (Turkish summary) Istanbul Unio. Fen

Fak. Mecm. Ser. A 41 (1976), 65-76 (1981). (Authors' summary) 82c:83066 83E10 (58D25)

rya, R. P. (with Prasad, Y. N.) Application of Jacobi polynomial and multivariable H-function in heat conduction in nonhomogeneous moving rectangular parallelepiped. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 4, 393-400. (C. L. Koul) 82e:80005 80A20 (33A35, 33A65)

Marraganis, A. G. The periodicity of a charged particle motion in a magnetic dipole field.

Astrophys. and Space Sci. 76 (1981), no. 1, 159–166. (Author's summary) 82e:78002

A reduction of the magnetic-binary problem by means of the energy integral. Astrophys. and Space Sci. 76 (1981), no. 1, 167-172. (Author's summary) 82f:78005

rron, V. C. (with Hine, T. C.) Embeddable transversal designs. Discrete Math. 29 (1980), no. 2, 191-200. (Kishore Sinha) 824:05026 05B05 (62K10)

di, Mustafa (with Kennedy, E. S.) Abū al-Wafā' and the Heron theorems. J. Hist.

Arabic Sci. 3 (1979), no. 1, 19-30. (J. L. Berggren) 82k-01015 01A30 el Mawaziny, Ahmed H. See El Mawaziny, Ahmed H. Mawhin, Jean (with Rouche, N.) **Ordinary differential equations. Stability and periodic itions. Translated from the French and with a preface by R. E. Gaines. Surveys and

Reference Works in Mathematics, 5. Pitman (Advanced Publishing Program), Bo Mass.-London, 1980. ix + 260 pp. ISBN 0-273-08419-4 (From the preface) 82k34001 34-01 (34Cxx, 34Dxx) (with Willem, Michel) Range of nonlinear perturbations of linear operators with an

infinite-dimensional kernel. Ordinary and partial differential equations (Proc. Fifth Conf., Univ. Dundee, Dundee, 1978), pp. 165–181, Lecture Notes in Math., 827, Springer, Berlin, 1980. (Donald Kershaw) 82e:47081 47H15 (45N05)

(with Nečas, Jindřich; Novák, Břetislav) Docent Svatopluk Fučík has died. (Czech) Časopis Pēst. Mat. 105 (1980), no. 1, 91-101. (Editors) 82f:01122 01A70

Monotonicity and two-point boundary value problems for nonlinear second order differential equations in Hilbert space. Abstract Cauchy problems and functional differential equations (Proc. Workshop, Leibnitz, 1979), pp. 113-132, Res. Notes in Math., 48, Pitman, Boston, Mass., 1981. (K. Schmitt) 82k:34069 34G20 (47H15)

Semilinear equations of gradient type in Hilbert spaces and applications to differential equations. Nonlinear differential equations (Proc. Internat. Conf., Trento. 1980), pp. 269-282, Academic Press, New York, 1981. (D. Pascali) 82i:47095 47H15

Generalized multiple Perron integrals and the Green-Goursat theorem for differentiable vector fields. Czechoslovak Math. J. 31(106) (1981), no. 4, 614-632. (Yôto Kubota) 82m:26010 26A42 (26A39, 58C99)

(with Ward, James R., Jr.) Nonresonance and existence for nonlinear ellipti boundary value problems. Nonlinear Anal. 5 (1981), no. 6, 677-684. (P. W. Bates) 822-35063 35165

Maximon, L. C. (with Lehman, D. R.; Parke, William C.) Numerical evalu integrals containing a spherical Bessel function by product integration. J. Math. Phys. 22 (1981), no. 7, 1399-1413. (C. W. Clenshaw) 82i:65014 65D30

xim-Răileanu, Liliana The Weil homomorphism for almost principal fibre bu Roumaine Math. Pures Appl. 26 (1981), no. 2, 317-325. (P. Ver Eecke) 82k:57013 57R20 (53C05)

Maxson, Carlton J. (with Smith, Kirby C.) Centralizer near-rings that are endomorphism rings. Proc. Amer. Math. Soc. 80 (1980), no. 2, 189-195. (G. Betsch) 824:16034 16A76 (16A44)

(with Hartfiel, D. J.) The construction and decomposition of patterns induced by a itive cone of functions. Discrete Math. 34 (1981), no. 3, 261-274. (Ivan Rival) 82g:05034 05B30 (06B99)

(with Smith, Kirby C.) Centralizer near-rings determined by completely regular inverse semigroups. Semigroup Forum 22 (1981), no. 1, 47-58. (Günter Pilz) 82c:16037 16A76 (20M20)

Maxwell, George Space groups of Coxeter type. Proceedings of the Conference on Kristallographische Gruppen (Univ. Bielefeld, Bielefeld, 1979), Part II. Match No. 10 (1981), 65-76. (Georg Günther) 82k:51009 51F15 (20H15)

Maxwell, J. A. (with Renninger, G. H.) On the theory of synchronization of lateral optio-nerve responses in *Limulus*. I. Uniform excitation of the homogeneous retina. Math. Biosci. 52 (1980), no. 1-2, 117-130. (Authors' summary) 82a:92044 (92A07)

(with Renninger, G. H.) On the theory of synchronization of lateral optic-nerve responses in Limulus. II. Nonuniform excitation and inhomogeneous inhibition. asci. 52 (1980), no. 1-2, 131-139. (Authors' summary) 82a:92045 92A27 (92A09)

Biosci. 52 (1980), no. 1-2, 131-139. (Authors' summary) 82a:92045 92A27 (92A09)
Maxwell, James Clerk. See Fuller, A. T., 82c:01048; Polisk, Josef, 82f:01129; Anniversary:
Death of Maxwell, James Clerk. 82f:01160; Domb, C., 82g:01024; Jones, R. V.,
82a:01058; Karcev, V. P., 82a:01054 and Cockbain, A. E., 82a:01070
Maxworthy, T. The fluid dynamics of insect flight. Annual review of fluid mechanics, Vol.

13, pp. 329-350, Annual Reviews, Palo Alto, Calif., 1981. (See 821:76001)

May, J. P. Infinite loop space theory revisited. Algebraic topology, Waterloo, 1978 (Pro Conf., Univ. Waterloo, Waterloo, Ont., 1978), pp. 625-642, Lecture Notes in Math., 741, Springer, Berlin, 1979. (V. P. Snaith) 82g:55008 55P47

Pairings of categories and spectra. J. Pure Appl. Algebra 19 (1980), 299-346. (J. M. ardman) 82c:55010 55P47 (18D10)
(with Lewis, L. Gaunce, Jr.; McClure, J.) Ordinary RO(G)-graded cohomology. Boardman) 82c:55010

Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 2, 208-212. (Stewart B. Priddy) 82e:55008 55N25 (55P42)

(with Cohen, F. R.; Taylor, Laurence R.) $K(\mathbb{Z},0)$ and $K(\mathbb{Z}_2,0)$ as Thom spectra. Illinois J. Math. 25 (1981), no. 1, 99-106. (V. P. Snaith) 82h:55008 (with Milgram, R. James) The Bockstein and the Adams spectral sequences. Proc.

Amer. Math. Soc. 83 (1981), no. 1, 128-130. (J. F. Adams) 82i:55019 May, Kenneth O. See World directory of historians of ma

ry S., 82e:01103

May, Robert M. (with Oster, George F.) Period doubling and the onset of turbulence: an analytic estimate of the Feigenbaum ratio. Phys. Lett. A 78 (1980), no. 1, 1-3. (K. E. Swick) 82g:92036 92A15 (58F13, 76F99) May, Warren Fields with free multiplicity groups modulo torsion. Rocky Mountain J.

Math. 10 (1980), no. 3, 599-604. (Jack Sonn) 82f:12028 12E99 (12F05)

May, William D. (with Chivukula, R. Rao) A go efer's order duality an J. Math. 18 (1976), no. 1, 41-47. (I. Namioka) 82e:46015

theorem. Indian J. Math. 18 (1976), no. 1, 41-47. (I. Namioka) 82c46015 46.A40 ybee, John S. Sign solvability. Computer-assisted analysis and model simplification (Proc. First Sympos., Univ. Colorado, Boulder, Colo., 1980), pp. 201-257, Academic Press, New York, 1981. (See 82g0016) 15A21 (05C99, 90A14, 92A17, 93C05) (with Greenberg, Harvey J.; Lundgren, J. Richard) Graph-theoretic foundations of computer-assisted analysis. Computer-assisted analysis and model simplification (Proc. First Sympos., Univ. Colorado, Boulder, Colo., 1980), pp. 481-495, Academic Press, New York, 1981. (See 82g00016) 68J10 (00A69)

See also Computer-assisted analysis and model simplification, 82g:00016
syberry, John Penn A new Begriffsschrift. I. British J. Philos. Sci. 31 (1980), no. 3,
213-254. (Ignacio Angelelli) 82c:03007a
A new Begriffsschrift. II. British J. Philos. Sci. 31 (1980), no. 4, 329-358. (Ignacio
Angelelli) 82c:03007b
03A05 (00A25)

Hirokam On structural controllability theorem. IEEE Trans. Automat. Control 26

(1981), no. 3, 795-798. (Author's summary) 22k:93016
 Mayer, Daniel Method of co-state variables: a new network description. Acta Tech. ČSAV 26 (1981), no. 1, 105-116. (Author's summary) 22k:94058
 94C05
 Mayer, J. E. Equilibrium density matrix for fluids. Perspectives in statistical physics, pp. 323-341, Stud. Statist. Meck., IX, North-Holland, Amsterdam, 1981. (A. K. Rajagopal) 82j:82043
 82A40 (82A50)

Rajagopal) 82j:82043 ayer, János (with Kas. os (with Kas, Péter) An algorithm for the solution of the nonlinear net problem. (Hungarian. English summary) Alkalmaz. Mat. Lapok 5 (1979), no. 1-2, 157-164. (László Lovász) 82e-90041 90B10 (90C25)

Mayer, Jean (with Appel, Kenneth; Haken, Wolfgang) Triangulation à v₃ séparés dans le problème des quatre couleurs. J. Combin. Theory Ser. B 27 (1979), no. 2, 130–150. (Authors' summary) 82h:05062

Un nouveau type de preuve mathématique. Le théorème des quatre couleurs. I. Publ. Dép. Math. (Lyon) 16 (1979), no. 3-4, 67-80. (R. C. Read) 321:05042a 05C15 (00A25, 03A05)

Mayer, John C. (with Brechner, Beverly) The prime end structure of indecomposable continua and the fixed point property. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 151–168, Academic Press, New York, 1981. (Harold Bell) 82g:54647 54F20 (54H25)

Mayer, Meinhard E. Geometric aspects of gauge theory. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 80-99, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81004) 81E10 (53C05)

Soc., 3, Hilger, Bristol, 1980. (See EdicB1004)

Geometric aspects of symmetry breaking in gauge theories (Higgs models without Higgs bosons). Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 291–295, Lecture Notes in Phys., 116, Springer, Berlin, 1980. (From the introduction) #28x81043 #1E10 (35C65, 81D20)

Symmetry breaking in gauge theories (geometric aspects). Proceedings of the

UNAM Workshop on Gauge Theories (Univ. Nac. Autónoma México, Mexico City, 1979). Hadronic J. 4 (1980/81), no. 1, 108-152. (Author's summary) 82h:81110 81E99 (53C05, 81D25)

ayer, Richard H. (with Kadane, Joseph B.; Larkin, Jill H.) A moving average model for sequenced reaction-time data. J. Math. Psych. 23 (1981), no. 2, 115-133. (Authors' summary) 82h:92060 92A25 (62M10, 68J10)

yer, Tobias See Forbes, Eric G., 82a:01032 and 82d:01012

Mayer-Kress, G. (with Haken, Hermann) Intermittent behavior of the logistic system. Phys. Lett. A 82 (1981), no. 4, 151-155. (K. E. Swick) 82g:58054 58F13 (76E20,

(with Haken, Hermann) Chapman-Kolmogorov equation for discrete chaos. Phys. Lett. A 84 (1981), no. 4, 159–160. (From the text) 82j:58080 58F13

Mayer-Wolf, E. Isometries between Banach spaces of Lipschitz functions. Israel J. Math. 38 (1981), no. 1-2, 58-74. (G. Marinescu) 82e-46036 46E10 (58D15)

Mayes, Vivienne (with Rhoades, B. E.) Some properties of the Leininger generalized Hausdorff matrix. Houston J. Math. 6 (1980), no. 2, 287-299. (J. Németh) 82e:40005 40C05

Maynard Smith, J. Models of evolution of altruism. Theoret. Population Biol. 18 (1980), no. 2, 151–159. (Author's summary) 82b:92027 92A10
Mayne, D. Q. (with Bell, D. J.; Bryant, G. F.; Cook, P. A.; Crossley, T. R.; Denham, M.

J.; Fallside, F.; Luntz, R.; MacFarlane, Alistair G. J.; Munro, N.; Owens, D. H.; Rosenbrock, H. H.; Storey, Colin) ★Modern approaches to control system design. IEE Control Engineering Series, 9. Peter Peregrinus, Ltd., Stevenage; on behalf of the Institution of Electrical Engineers (IEE), London, 1979. xviii + 413 pp. 1SBN 0-906048-06-0 (Publishers' description) 821:93060 93D15 (15A99, 34H05)

(with Polak, Elijah) An exact penalty function algorithm for optimal control

problems with control and terminal equality constraints. I. J. Optim. Theory Appl. 32 (1980), no. 2, 211-246. (V. F. Dem'janov) 82e:49050a 49D30 (with Polak, Elijah) An exact penalty function algorithm for optimal control

oblems with control and terminal equality constraints. II. J. Optim. Theory Appl. 32 (1980), no. 3, 345–364. (V. F. Dem'janov) 82e:49050b 49D30 (with Polak, Elijah) Design of nonlinear feedback controllers. IEEE Trans

mat. Control 26 (1981), no. 3, 730-733. (A. van Harten) 82k:93051 (49B99)

(with Polak, Elijah; Heunis, A. J.) Solving nonlinear inequalities in a finite number of iterations. J. Optim. Theory Appl. 33 (1981), no. 2, 207-221. (B. T. Poljak) 82:65040 65K05 (90C30)

(with Osorio Cordero, A.) Deterministic convergence of a self-tuning regulator with table forgetting factor. Proc. IEE-D 128 (1981), no. 1, 19-23. (Authors' summary) 93C40

Mayne, F. (with Henin, F.) Physical description of decay processes. Phys. A 108 (1981), no. 2-3, 281–304. (Authors' summary) 82je82034 82A35 (81F20)

Mayne, Georges Une théorie macroscopique non linéaire des diélectriques élastiques

dispersifs, non dissipatifs, anisotropes, comportant plusieurs espèces de charges. Bull. Soc. Math. Belg. Sér. A 31 (1979), no. 2, 137-150. (Gérard A. Maugin) 82h:73075

cia-Máynez, Adalberto See Garcia-Máynez, Adalt

Mayorga, R. V. (with Quintana, V. H.) A family of variable metric methods in function space, without exact line searches. J. Optim. Theory Appl. 31 (1980), no. 3, 303-329. (Ja. I. Al'ber) 32i:49029 49D15 (49D37, 65K10, 90C30)

Mayr, Ernst W. Persistence of vector replacement systems is decidable. Acta Inform. 15 (1981), no. 3, 309-318. (Author's summary) 82f:68060 68D90

(with Meyer, Albert R.) The complexity of the finite containment problem for Petri nets. J. Assoc. Comput. Mach. 28 (1981), no. 3, 561-576. (Authors' summary) 82f:68061 68D90 (03B25, 03D15, 68C25)

Mays, Michael E. Groups of square-free order are scarce. Pacific J. Math. 91 (1980), no. 2, 373-375. (Gary L. Walls) 82e:20033 20D60

Maystre, D. Integral methods. Electromagnetic theory of gratings, pp. 63–100, Topics Current Phys., 22, Springer, Berlin, 1980. (See 82a:78001) 78A45

(with Nevière, M.; Petit, Roger) Experimental verifications and applications of the theory. Electromagnetic theory of gratings, pp. 159–225, Topics Current Phys., 22, Springer, Berlin, 1980. (See 82a:78001) 78A45

nik, S. A. Asymptotically equivalent two-dimensional linear differential systems (Russian) Differencial nye Uravnenija 17 (1981), no. 2, 220-226, 387. (Pavel Knjazev)

Asymptotic behavior of equivalent linear differential systems. (Russian) Differencial'nye Uravnenija 17 (1981), no. 5, 923-926, 959. (I. Kiguradze) 82j:34035

Mažara, G. N. (with Madatov, G. L.; Šičanin, V. N.; Gorbuncov, V. V.; Komarov, V. G.; Alpatov, A. P.; Horošilov, V. S.; Jaščenko, V. F.) ★Прикладные методы исследования управляемых механических систем. (Russian) [Applied methods of investigation of mechanical control systems] "Naukova Dumka", Kiev, 1980. 192 pp. (Jerzy Jaroń) 82h:93028 93B35 (70K99, 70Q05, 93A15)

Mazat, J.-P. (with Bardsley, William G.; Woolfson, Richard) Relationships between the magnitude of Hill plot slopes, apparent binding constants and factorability of binding polynomials and their Hessians. J. Theoret. Biol. 85 (1980), no. 2, 247-284. (Y.

Cherruault) 82c:92007 92A09

Mazenko, Gene F. (with Nolan, Michael J.; Valls, Oriol T.) Real-space dynam renormalization group. I. General formalism. *Phys. Rev. B* (3) **22** (1980), *no.* 3, 1263–1274. (Richard S. Ellis) **82c:82031** 82A25 (82A67)

(with Nolan, Michael J.; Valls, Oriol T.) Real-space dynamic renormalization group. II. Simple examples. Phys. Rev. B (3) 22 (1980), no. 3, 1275-1285. (Richard S. Ellis) 82c:82032 82A25 (82A67)

Mažeru, V. V. (with Gordon, V. A.) Approximate method of solution of problems of the theory of elasticity of one-dimensionally inhomogeneous bodies. (Russian) Computational methods of mechanics. Mat. Issled. No. 64 (1981), 38-45, 190. (Authors' summary) 82k:73057 73K30 (65L99)

Mazet, Edmond (with Gayeau, Bernard) Divergence des fonctionnelles de Kac et diffusion antique. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 9,

A559-A562. (Mark Pinsky) 82:281036 81C20 (60157)
Mazet, Pierre Un théorème d'hypoellipticité pour l'opérateur ē sur les espaces de Banach. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 31-33. (Author's summary) 82h:32033 32F20 (35H05)

Mazhar, S. M. (with Bojanić, R.) An estimate of the rate of convergence of the Nörlund-Voronoi means of the Fourier series of functions of bounded variation. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 243-248, Academic Press, New York, 1980. (Tikam Singh) 82c:41016 41A25 (42A10)
Maz'ja, V. G. (with Morozov, N. F.; Plamenevskii, B. A.) Nonlinear bending of a plate

with a crack. (Russian) Differential and integral equa (Russian), pp. 145-163, Tbilis. Gos. Univ., Tbilisi, 1979. (R. Kodnár) 82b:35063 35J65 (73M05)

(with Plamenevskii, B. A.) Pseudoanalyticity of the solutions of a perturbed polyharmonic equation in Rn. (Russian) Scattering theory. Theory of oscillation (Russian), pp. 75-91, 185, Probl. Mat. Fiz., 9, Leningrad. Univ., Leningrad, 1979. (R. V. Duduchava) 824:35043 35J30 (31B30) Duduchava) 82d:35043

(with Sapošnikova, T. O.) Multipliers in spaces of differentiable functions. (Russian) Theory of cubature formulas and the application of functional analysis to problems of mathematical physics (Proc. Sem. S. L. Sobolev, No. 1, 1979) (Russian), pp. 37-90, 154, Trudy Sem. S. L. Soboleva, No. 1, 1979, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1979. (Angelo Favini) 82e:46048 46E35

The spectrum of V. A. Steklov's problem for a second-order equation with nonnegative characteristic form. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 95 (1979), no. 1, 41-44. (Author's summary) 82g:35086 35P05

(with Sapošnikova, T. O.) Theory of multipliers in spaces of differentiable functions and their applications. (Russian) Theory of cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 225–233, 255, "Nauka" Sibirsk. Otdel., (Proc. Conj., Nocosiorisk, 1916) (Russian), pp. 223-233, 233, Nauku Storisk Nocosibrisk, 1980. (P. Szeptycki) **221-46036** 46235 (with Gel'man, I. V.) The domination of differential operators with constant

coefficients in a half space. (Russian) Math. Nachr. 95 (1980), 47-78. (L. Cattabriga) 82c:35012 35E15

An imbedding theorem and multipliers in pairs of S. L. Sobolev spaces. (Russian) Theory of analytic functions and harmonic analysis. Trudy Thiliss. Mat. Inst. Razmadze Akad. Nauk Gruzin. SSR 66 (1980), 59-69. (S. G. Samko) 82j:46044 46E35 (31C15) (with Hyoles, A. A.) Imbedding of the space $\hat{L}_p^i(\Omega)$ into a space of generalized functions. (Russian) Theory of analytic functions and harmonic analysis. Trudy Tbiliss. Mat. Inst. Razmadze Akad. Nauk Gruzin. SSR 66 (1980), 70-83. (S. G. Samko) 82j:46045 46E35 (46F05)

(with Sapošnikova, T. O.) A coercive estimate for solutions of elliptic equations in spaces of multipliers. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vpp. 1, 41–47, 118–119. (C. V. Coffman) 82c:35025 35J40 (46E35)

(with Sapošnikova, T. O.) Multipliers on the spaces W_p^m , and their applications. assian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1961, vpp. 1, 42-47, 120. (H. Triebel) 82e:46049 46E35 (47G05)

On the extension of functions belonging to S. L. Sobolev spaces. (Russian. English ammary) Investigations on linear operators and the theory of functions, XI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 113 (1981), 231-236, 269. (Author's summary) 82k:46053 46E35

Mazko, A. G. (with Haritonov, B. L.) The matrix Routh-Hurwitz problem for a class of algebraic domains. (Russian) Dynamics and stability of mechanical systems (Russian), pp. 124-127, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (Authors' summary) 821:93054 93D05

Control of spectral and optimal properties of linear systems. (Russian) Dyna stability of mechanical systems (Russian), pp. 128-133, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (Author's summary) 821:93039 93C15

The Lyapunov matrix equation for a certain class of regions bounded by algebraic curves. Aviomatika 1980, no. 3, 45-50, 94 (Russian. English summary); translated a Soviet Automat. Control 13 (1980), no. 3, 37-42 (1981). (Author's summary) 821:93055

is-Mazlo n, Nadine See Bessis-Mazloum, Nadi

Mazón, M. L. (with Quirós, M.; de Urries, F. J.; Hoyos, J.; Rodriguez, E.) Geometrical structure of Faddeev-Popov fields and invariance properties of gauge theories. J. Math. Phys. 22 (1981), no. 8, 1767-1774. (Authors' summary) 82m:81057 81E10 (53C80)

Mažorova, O. S. (with Popov, Ju. P.) Methods for the numerical solution of Navier-Stokes equations. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 4, 1005–1020, 1086.

(Jaroslaw Jeleń) 824:76026 76D05 (65P05)

zumdar, Anita Some properties of sets with positive measures. (Serbo-Croatian summar

Glas. Mat. Ser. III 16(36) (1981), no. 1, 25–27. (Detlef Plachky) 82k:28001 28A05 dar, Sati (with Li, C. C.) A type of orthogonal contrasts for unbalanced data.

Biometrical J. 23 (1981), no. 7, 645-651. (Authors' summary) 82m:62151 62J05 Mazumdar, Tapas Existence of solutions for linear systems and hyperbolic problems with variable domains. Applicable Anal. 11 (1980/81), no. 4, 279-290. (V.-V. Olariu) 82k:35068 35L15

Mazur, Barry On the arithmetic of special values of L functions. Invent. Math. 55 (1979), no. 3, 207-240. (V. V. Šokurov) 82e:14033 14G10 (10D24, 12A70, 14G25, 14K07) See also Serre, Jean-Pierre, 82e:14049

Mazur, Brian A. (with Taylor, Desmond P.) Demodulation and carrier synchronization of multi-h phase codes. IEEE Trans. Comm. 29 (1981), no. 3, 257-266. (Authors' summary) 94A14

Mazur, P. (with van Saarloos, W.; Bedeaux, D.) Hydrodynamics for an ideal fluid: Hamiltonian formalism and Liouville equation. *Phys. A* **107** (1981), *no.* 1, 109–125. (Authors' summary) **82e:76005** 76A02 (49H05, 58F05)

Mazur, Ryszard On a subclass of convex functions. (Polish and Russian summaries) Zeszyty Nauk. Politech. Łódz. Mat. No. 13 (1981), 15-20. (Edward J. Moulis, Jr.)

82m:30017 30C45 (30C50)

Mazurenko, S. L. (with Kiselevskii, L. I.) A solution of Vlasov's equation that describes a neutral current layer in the electrical drift approximation. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980. no. 5, 53-57, 141. (Authors' 82A45 (45K05)

Mazurkov, M. I. (with Sverdlik, M. B.) Evaluation of the effectiveness of the fast method of directly calculating circular convolution and correlation. Radiotehn. i Elektron. 24 (1979), no. 11, 2212-2221 (Russian); translated as Radio Engrg. Electron. Phys. 24 (1979), no. 11, 34-42 (1980). (Kenneth N. Berk) 82e:62147 62M10 (65U05)

Mazurov, V. D. See Kourovka notebook, 82f:20005

Mazurov, VI. D. Some mathematical constructions for pattern recognition. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 27 Metody Mat. Programmir. i Priložen (1979), 33-39, 126. (Author's summary) 82e:68096 The theory and applications of committee constructions. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 29 Metody dlja Nestacionar. Zadač Mat. Programmir. (1979), 31-63, 141. (Author's summary) 82k:90111 90A05)

Mazzarella, C. (with Polizzotto, C.) Structural optimization based on the workhardening adaptation concept. Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 597-611, North-Holland, Amsterdam, 1980. (See 82g:93003) 93C10

(with Panzeca, T.) On work-hardening adaptation of discrete structures subjected to dynamic forces in the presence of second-order geometric effects. J. Structural Mech. 9 (1981), no. 1, 29-49. (Authors' summary) 82i:73042 73K99 (73E99)

Mazzarella, Francesco A characteristic property of harmonic functions. (Italian) Atti Accad. Sci. Lett. Arti Palermo Parte I (4) 37 (1977/78), 433–438 (1980). (Ü. Kuran) 31B05 82i:31005

Mazzarino, John (with Barnett, Arnold) On the sequential search for spatially-distributed events. SIAM J. Algebraic Discrete Methods 1 (1980), no. 1, 82-91. (Ulla Pursiheimo) 90B40

Mazziotto, Gérald (with Szpirglas, Jacques) Équations du filtrage pour un processus de Poisson mélangé à deux indices. (English summary) Stochastics 4 (1980/81), no. 2, 89–119. (A. N. Al-Hussaini) 82h:60073 60G35 (60G60, 93E11)

(with Spriglas, Jacques) Un exemple de processus à deux indices sans l'hypothèse F4. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 673-688, Lecture Notes in Math., 850, Springer, Berlin, 1981. (B. Marchal) 82i:60055 60G07 (60G48)

(with Merzbach, Elv: Szpirglas, Jacques) Discontinuités des processus croissants et martingales à variation intégrable. [Discontinuities of increasing processes and martingales with integrable variation] Two-index random processes (Paris, 1980), pp. 59-83, Lecture Notes in Math., 863, Springer, Berlin, 1981. (Xavier Guyon) 60G07 (60G44)

(with Szpirglas, Jacques) Sur les discontinuités d'un processus CAD-LAG à deux indices. [On the discontinuities of a two-index CAD-LAG process] Two-index random processes (Paris, 1980), pp. 84–90, Lecture Notes in Math., 863, Springer, Berlin, 1981. (Xavier Guyon) 82m:60039 60G07 (60G40)

(with Körezlioglu, Hayri; Lefort, P.) Une propriété markovienne et diffusions associées. [A Markov property and associated diffusions] Two-index random processes (Paris, 1980), pp. 245-274, Lecture Notes in Math., 863, Springer, Berlin, 1981. (Xavier Guyon) 82m:60085 60J25 (60G15, 60J60)

yon) 82m:00005 00123 (00015, 00100) (with Spiriglas, Jacques) Résolution du problème d'arrêt optimal sur N². (English mary) [Solution of the optimal stopping-time problem on N²] C. R. Acad. Sci. Paris . I Math. 293 (1981), no. 1, 87–90. (Authors' summary) 82i:60000 60G40 See also Two-index random processes, 82i:60004

Mazzocca, Francesco (with Lo Re, Pia Maria; Olanda, Domenico) Generalized hexagons and polar spaces. (Italian. English summary) Rend. Mat. (6) 13 (1980), no. 3, 401–408 (1981). (Stanley E. Payne) 82j:51022 51E20 (05B25)

(with Brylawski, Thomas H.; Lo Re, Pia Maria; Olanda, Domenico) Some applications of the intersection theory to Galois geometry. (Italian. English summary) Ricerche Mat. 29 (1980), no. 1, 65-84. (G. Tallini) 82i-05024 05B35

Mazzola, Guerino Generic finite schemes and Hochschild cocycles. Comment. Math. Helv. 55 (1980), no. 2, 267-293 (Jacous Employ). 55 (1980), no. 2, 267-293. (Jacques Emsalem) 82k:14010

Mbaeyi, Peter Nwoye O. Mathematical models of stably evolving complexities. IV. Mechanics of unbounded cell division (cancer). Proceedings of the Second International Conference on Mathematical Modelling (St. Louis, Mo., 1979), Vol. I, II, pp. 841–850, Univ. Missouri-Rolla, Rolla, Mo., 1980. (Author's summary) 82e:92015

Mboma, Bukele (with Masamba, Sala Voka) Sur les bares et les semi-bares points. Ann. Fac. Sci. Univ. Nat. Zaire (Kinshasa) Sect. Math.-Phys. 4 (1978), no. 2, 225-234 (1979). (V. Istrăjescu) 82d:47008 47A12 (46L05, 47B20) McAdam, Stephen (with Heitmann, Raymond C.) Good chains with bad contractions. Pacific J. Math. 86 (1980), no. 2, 477-489. (Markus Brodmann) 82d:13002 13A17

Asymptotic prime divisors and going down. Pacific J. Math. 91 (1980), no. 1, 179-186. (David E. Dobbs) 82k:13019 13E05 (13A17, 13B20)

McAleer, Michael The minimum error variance rule for nonlinear regression models. Econom. Lett. 6 (1980), no. 1, 17-21. (Author's summary) 82e:62092

A small sample test for nonnested regression models. Econom. Lett. 7 (1981), no. 4, 335-338. (Author's summary) 82m:62153 62J05

McAlister, D. B. Partially ordered inverse semigroups. Proceedings of the Conference on Semigroups in Honor of Alfred H. Clifford (Tulane Univ., New Orleans, La., 1978), pp. 18–34, Tulane Univ., New Orleans, La., 1979. (Bernard L. Madison) 82a:06027

Amenably ordered inverse semigroups. J. Algebra 65 (1980), no. 1, 118–146.

(Bernard L. Madison) 82ac66028 06F05 (20M10)

On a problem of M.-P. Schützenberger. Proc. Edinburgh Math. Soc. (2) 23 (1980), no. 3, 243–247. (P. G. Trotter) 82ac26075 20M10 (20M07)

McAllister, Byron L. A survey of cyclic element theory and recent developments. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980),

pp. 255-263, Academic Press, New York, 1981. (B. J. Pearson) 82g:54052 McAllister, David F. (with Roulier, John A.) Approximation by convex quadratic splines. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 757–761, Academic Press, New York, 1980. (David R. Hill) 82a:41013

(with Roulier, John A.) An algorithm for computing a shape-preserving osculatory quadratic spline. ACM Trans. Math. Software 7 (1981), no. 3, 331-347. (Authors' summary) 821:65009 65D07

McAloon, Kenneth Les rapports entre la méthode des indicatrices et la méthode de Gödel pour obtenir des résultats d'indépendance. Models of arithmetic (Sem., Univ. Paris VII, Paris, 1977) (French), pp. 31-39, Astérisque, 73, Soc. Math. France, Paris, 1980. (Franco Montagna) 82g:03098a 03F30 (03C62, 03E35)

Progressions transfinies de théories axiomatiques, formes combinatoires du théorème d'incomplétude et fonctions récursives à croissance rapide. Models of arithmetic (Sem., Univ. Paris VII, Paris, 1977) (French), pp. 41-58, Astérisque, 73, Soc. Math. France, Paris, 1980. (Franco Montagna) 82g:03098b 03F30 See also Model theory and arithmetic, 82m:03004 03F30 (03C62, 03D20)

McArthur, Robert P. Anderson's deontic logic and relevant implication. Notre Dame J. al Logic 22 (1981), no. 2, 145-154. (Stephen Read) 82g:03027 03B45

McAuley, Louis F. Shrinkable decompositions, criteria and generalizations. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979). Topology Proc. 4 (1979), no. 2, 497-506 (1980). (H. Rosłaniec) 82h:54009 Monotone mappings—some milestones. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 117-141, Academic Press, New York, 1981. (John J. Walsh) 82g:54022 54C10

(with Woodruff, Edythe P.) Certain point-like decompositions of E^3 with 1-dimensional images of nondegenerate elements. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 265-280, Academic Press, New York, 1981. (M.-E. Hamstrom) 82h:54013 54C10 (57N12)

See also General topology and modern analysis, 82e:54001 tulley McAuley, Patricia See Tulley McAuley, Patricia

McAvaney, Kevin L. A conjecture on two-point deleted subgraphs of Cartesian products. Combinatorial mathematics, VII (Proc. Seventh Australian Conf., Univ. Newcastle, Newcastle, 1979), pp. 172–185, Lecture Notes in Math., 829, Springer, Berlin, 1980. (J. Sheehan) 82i:05065 05C99 (05C60)

See also Combinatorial mathematics, 82k:05003 McBeth, Rod Exponential polynomials of linear height. Z. Math. Logik Grundlag. Math. 26 (1980), no. 5, 399-404. (John P. Helm) 82g:03074 03D20 (04A05)

A generalization of Ackermann's function. Z. Math. Logik Grundlag. Math. 26 (1980), no. 6, 509-516. (Cristian Calude) 82c:03063 03D20

A note on exponential polynomials and prime factors. Z. Math. Logik Grus Math. 27 (1981), no. 3, 213-214. (A. A. Mullin) 82i:03053 03D20 (10A05)

McBryan, Oliver A. Elliptic and hyperbolic interface refinement in two-phase flow. Boundary and interior layers—computational and asymptotic methods (Proc. Conf., Trinity College, Dublin, 1980), pp. 124-133, Boole, Dún Laoghaire, 1980. (F. Feuillebois) 76T05 (65N30, 76S05)

(with Glimm, James; Marchesin, Dan; Isaacson, Eli) A shock tracking method for hyperbolic systems. Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 1–17, ARO Rep. 80, 3, U. S. Army Res. Office, Research Triangle Park, N.C., 1980. (Authors' summary) 82a:65069 65M25 (35L67)

(with Glimm, James; Marchesin, Dan) Statistical fluid dynamics: unstable fingers. m. Math. Phys. 74 (1980), no. 1, 1-13. (Authors' summary) \$2g:76038 (65C20, 76A60)

(with Glimm, James; Isaacson, Eli; Marchesin, Dan) Front tracking for hyperbolic systems. Adv. in Appl. Math. 2 (1981), no. 1, 91-119. (H. R. Aggarwal) 82i:76097 76V05 (76A60, 76S05)

nn, James; Marchesin, Dan) Unstable fingers in two-phase flow. Comm. re Appl. Math. 34 (1981), no. 1, 53-75. (H. R. Aggarwal) 82e:76069 (65N30)

(with Glimm, James; Marchesin, Dan) A numerical method for two phase flow with nunstable interface. J. Comput. Phys. 39 (1981), no. 1, 179-200. (Authors' sun in: 7698 76S05 (65N10, 76T05)

McCabe, John H. Continued fractions associated with two-point Padé approximation Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 637-642, Academic Press, New York, 1980. (A. Magnus) 82e:41025 41A21

McCabe, Peter J. On two market equilibrium theorems. J. Math. Econom. 8 (1981), no. 2, 167-171. (From the introduction) 82k:90037 90A14

McCall, John J. (with Lippman, Steven A.) The economics of belated inform rnat. Econom. Rev. 22 (1981), no. 1, 135-146. (G. Tintner) 82g:92059 92A20

on of a system of coupled harn oscillators. J. Chem. Phys. 75 (1981), no. 2, 957-961. (Authors' summary) 82h:92011 92A09 (58F14, 70L05)

McCann, Roger C. On the oscillat n of solutions of forced even order nonli shima Math. J. 10 (1980), no. 2, 263-269. (From the text) 82j:34027

tically stable dynan ical systems into radial flows in l2. Pacific J. Math. 90 (1980), no. 2, 425-429. (A. Pelczar) 82e:54049 54H20

McCanney, J. M. Continuing galactic formation: a new concept of galactic evolution.

Astrophys. and Space Sci. 74 (1981), no. 1, 57-64. (B. K. Datta) 82h:85001 85A05

McCarl, Bruce (with Fortuny-Amat, José) A representa ation and economic interpretation of

a two-level programming problem. J. Oper. Res. Soc. 32 (1981), no. 9, 783–792.

(Siegfried Schaible) 82i:90093 90C30

McCartan, S. D. (with Johnston, B.) Minimal T_F-spaces and minimal T_{FF}-spaces. Proc. Roy. Irish Acad. Sect. A 80 (1980), no. 1, 93–96. (C. W. Patty) 82a:54036 54D25

McCarthy, John (with Cartwright, Robert) First order programming logic. Conference Record of the Sixth Annual ACM Symposium on Principles of Programming Languages nio, Tex., 1979), pp. 68-80, ACM, New York, 1979. (Luigia Aiello) 82e:68030 68C01 (03D80, 68B10)

McCarthy, P. J. The existence of Hamiltonian cycles in critical graphs. (Italian summary)

Boll. Un. Mat. Ital. A (5) 18 (1981), no. 2, 213-217. (J. Bosák) 82g:05054 05C35 (05C15, 05C45)

McCarthy, Patrick J. Ultrageneralised complex analysis. Lett. Math. Phys. 4 (1980), no. 6, 509-514. (Bernd Goldschmidt) 82e:30072 30G35 (35J45, 81C99) (with Crampin, Michael; Hodgkin, Luke; Robinson, David Clyde) 2-manifolds of

constant curvature, 3-parameter isometry groups and Bäcklund transformations. Rep Math. Phys. 17 (1980), no. 3, 373-383. (G. L. Lamb, Jr.) 82m:58001 58A15 (35Q20 58A15 (35O20.

Rational parametrisation of normalised Stiefel manifolds, and explicit non-'t Hooft solutions of the Atiyah-Drinfeld-Hitchin-Manin instanton matrix equations for Sp(n). Lett. Math. Phys. 5 (1981), no. 4, 255-261. (R. L. Ingraham) 82i:81091 81E10 Rational par (53C10, 81G20)

Explicit non-'t Hooft rational solutions of the Atiyah-Drinfel'd-Hitchin-Manin instanton matrix equations for SU(2r). Phys. Lett. A 84 (1981), no. 4, 155-158. (P. E. Newstead) 82k:81056 81E10 (14F05, 35C05, 53C05)

McCartney, L. N. Crack propagation in linear viscoelastic solids: some new results. (French summary) Internat. J. Fracture 14 (1978), no. 6, 547-554. (Author's summary) 82a:73053 73M05 (73F99)

McCartney, Philip W. Neighborly bushes and the Radon-Nikodým property for Banach spaces. Pacific J. Math. 87 (1980), no. 1, 157-168. (P. D. Morris) 82g:46045 46B22 McCay, B. M. (with Greenspan, H. P.) On the wetting of a surface by a very viscous fluid.

Stud. Appl. Math. 64 (1981), no. 2, 95-112. (Authors' summary) 824:76032 7
McClamroch, N. H. ★State models of dynamic systems. A case study approach.

Springer-Verlag, New York-Berlin, 1980. viii + 248 pp. ISBN 0-387-90490-5 (O. A. Sebakhy) 82i:93001 93A10

Sebakhy) 82i-93001 93A10
McClean, Sally I. A semi-Markov model for a multigrade population with Poisson recruitment. J. Appl. Probab. 17 (1980), no. 3, 846–852. (Alexander Mehlmann)

82e60144 60K15

McCleary, John Mod p decompositions of H-spaces; another approach. Pacific J. Math. 87

373–388 (Editors) 82j:55011 55P45

McCleary, Stephen H. A solution of the word problem in free normal-valued lattice-ordered groups. Ordered groups (Proc. Conf., Boise State Univ., Boise, Idaho, 1978), pp. 107–129, Lecture Notes in Pure and Appl. Math., 62, Dekker, New York, 1980. (A. M. W. Glass) 06F15 (03D40, 20F10)

The lateral completion of an arbitrary lattice-ordered group (Bernau's proof revisited). Algebra Universalis 13 (1981), no. 2, 251-263. (F. D. Pedersen) 82k:06022

(with Davis, Gary) The lateral completion of a completely distributive lattice-ordered group (revisited). J. Austral. Math. Soc. Ser. A 31 (1981), no. 1, 114-128. (Marlow Anderson) 82k:06021 06F15

McClellan, James H. (with Tom, Victor T.; Quatieri, Thomas F., Jr.; Hayes, Monson H.) Convergence of iterative nonexpansive signal reconstruction algorithms. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 5, 1052-1058. (Authors' summary) 94A12 (94A14)

McClendon, J. F. Note on a selection theorem of Mas-Colell. J. Math. Anal. Appl. 77 (1980), no. 1, 326–327. (Gencho Skordev) 82f:55003 55M20 (54C65, 90A14)

Classifying relative principal fibrations with loop space fibers. Ann. Scuola Norm.

Sup. Pisa Cl. Sci. (4) 8 (1981), no. 1, 103-118. (S. Y. Husseini) 82j:55020 McClendon, John H. The evolution of the chemical isotopes as an analog of biological

olution. J. Theoret. Biol. 87 (1980), no. 1, 113-128. (Author's summary) 82h:92003 92A05 (92A40)

McCure, J. (with Lewis, L. Gaunce, Jr.; May, J. P.) Ordinary RO(G)-graded cohomology. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 2, 208-212. (Stewart B. Priddy) 82e:55008 55N25 (55P42)

McClure, J. P. (with Dales, H. G.) Higher point derivations on commutative Banach algebras. III. Proc. Edinburgh Math. Soc. (2) 24 (1981), no. 1, 31-40. (R. J. Loy)

McCollum, Gin (with Finkelstein, David) Concept of particle in quantum mechanics Quantum theory and the structures of time and space, Vol. 2 (Second Conf., Tutting, 1976), pp. 46-85, Hanser, Munich, 1977. (Louis H. Kauffman) 82h:81009 81B05

Conalogue, Denis J. Numerical treatment of convolution integrals involving distributions with densities having singularities at the origin. Comm. Statist. B-Simulation Comput. 10 (1981), no. 3, 265-280. (Author's summary) 82f:65147

Connell, James Spectral densities of spherical harmonics for rotational Browniar motion. Phys. A 102 (1980), no. 3, 539-546. (Author's summary) 82e:81058 81G35 (34F05, 60J65)

McConway, K. J. Marginalization and linear opinion pools. J. Amer. Statist. Assoc. 76 (1981), no. 374, 410-414. (Lyle D. Broemeling) 82ic62011 62A99

McCool, James A characterization of periodic automorphisms of a free group. Trans. Amer. Math. Soc. 260 (1980), no. 1, 309-318. (Benjamin Fine) 82f:20049 20E05

McCormick, Garth P. Locating an isolated global minimizer of a constrained nonconvex program. Math. Oper. Res. 5 (1980), no. 3, 435-443. (Ferenc Forgó) 82c:90080 90C30 (65K05)

McCormick, N. J. (with Sanchez, R.) Inverse problem transport calculations for anisotropic scattering coefficients. J. Math. Phys. 22 (1981), no. 1, 199–208. (Authors' summary) 82A70 (85A25)

McCormick, Stephen F. (with Longsine, D. E.) Simultaneous Rayleigh-quotien inimization methods for $Ax = \lambda Bx$. Linear Algebra Appl. 34 (1980), 195-234. (L. Fox) 82b:65022 65F15 (15A18, 65N99)

A mesh refinement method for Ax = \(\lambda Bx. \) Math. Comp. 36 (1981), no. 154, 485-498. (Author's summary) 82d:65070 65N25 (65F15, 65L15, 65R99)

(Causin's Sammary) Garacter 503(2) (051-3, 051-3, 051-3) (051-3, 051-3) (051-3, 051-3) (051-3, 051-3) (051-3, 051-3) (051-3, 051-3) (051-3, 051-3) (051-3, 051-3) (051-3, 051-3) (051-3, 051-3) (051-3, 051-3) (051-3, 051-3, 051-3) (051-3, 051-3, 051-3) (051-3, 051-3, 051-3) (051-3, 051-3, 051-3) (051-3, 051-3, 051-3) (051-3, 051-3, 051-3) (051-3, 051-3, 051-3) (051-3, 051-3, 051-3) (051-3, 051-3, 051-3, 051-3) (051-3, 051-3, 051-3, 051-3) (051-3, 051-3, 051-3, 051-3) (051-3, 051-3, 051-3, 051-3) (051-3, 159-162. (Authors' summary) 82b:82076 82A67 (39A12)

(with Wu, Tai Tsun) Lattice gauge theory in four dimensions: decoupling points and a dual symmetric perturbation theory. Nuclear Phys. B 190 (1981), no. 3, FS 3, 519-541.

(with Gaudin, Michel; Wu, Tai Tsun) Normalization sum for the Bethe's hypothesis wave functions of the Heisenberg-Ising chain. Phys. Rev. D (3) 23 (1981), no. 2, 417-419. (Authors' summary) 82a:82044 82A67 (Authors' summary) 82a:82044

(Authors' summary) 82a:82044 82A67
(with Perk, Jacques H. H.; Wu, Tai Tsun) Ising field theory: quadratic difference equations for the n-point Green's functions on the lattice. Phys. Rev. Lett. 46 (1981), no. 12. 757-760. (Authors' summary) 82b:82077 82A67 (39A10)

McCoy, Earl D. (with Connor, Edward F.) The statistics and biology of the species-area relationship. Amer. Natur. 113 (1979), no. 6, 791-833. (R. M. Cormack) 82a:92035 92A17

McCoy, R. A. Necessary conditions for function spaces to be Lindelöf. (Serbo-Croatian ary) Glas. Mat. Ser. III 15(35) (1980), no. 1, 163-168. (E. Michael) 82a:54033 54D20 (54C35)

k-space function spaces. Internat. J. Math. Math. Sci. 3 (1980), no. 4, 701-711. (Richard Wilson) 82±54012 54C35 (54D50)

(Richard Wilson) 82e:54012 540.35 (540.50) (with Lutzer, David J.) Category in function spaces. I. Pacific J. Math. 90 (1980), no. 1, 145–168. (J. M. Aarts) 82e:54019 54C35 (46E10)

Function spaces which are k-spaces. The Proceedings of the 1980 Topology Conference (Univ. Alabama, Birmingham, Ala., 1980). Topology Proc. 5 (1980), 139-146 (1981). (Joe A. Guthrie) 82j:54021 54C35 (54D50)

McCracken, M. F. Applications of mathematics to problems concerning the performance of heart valves. Some mathematical questions in biology (Proc. 14th Sympos., San Francisco, Calif., 1980), pp. 91-130, Lectures Math. Life Sci., 13, Amer. Math. Soc., Providence,

R.I., 1980. (Author's summary) 82d:76105 76205 (92A09)
(with Peskin, C. S.) A vortex method for blood flow through heart valves. Comput. Phys. 35 (1980), no. 2, 183-205. (Nadav Liron) 82c:76117 76Z05 (65P05. 76D05, 92A09)

McCrea, J. D. The radiation damping terms in Synge's equations of motion. Gen. Relativity Gravitation 13 (1981), no. 4, 397–415. (Author's summary) 82i:83028 83C30 (83C25) The Petrov type of a static vacuum space-time near a normal-dominated singularity. J. Phys. A 14 (1981), no. 6, 1351-1356. (Author's summary) 82f:83026

McCrea, W. H. (with Davidson, W.) Atomic and gravitational metrics in cosmology. Proc. Roy. Soc. London Ser. A 374 (1981), no. 1759, 447-459. (Authors' summary) 82j:85009 85A40 (83F05)

McCreadie, G. (with Broomhead, D.; Rowlands, G.) On the analytic derivation of Poincaré maps—the forced Brusselator problem. *Phys. Lett. A* **84** (1981), *no.* 5, 229-231. (From the text) **82h:92012** 92A09 (58F10, 80A30)

McCreary, J. P. A linear stratified ocean model of the equatorial undercurrent. Philos. Roy. Soc. London Ser. A 298 (1980/81), no. 1444, 603-635. (Robert Pearson) 86A05 (35C99, 76C15, 76V05) 82h:86002

n, Kevin The Zel'manov annihilator and nilpotence of the nil radical in quadratic Jordan algebras with chain conditions. J. Algebra 67 (1980), no. 1, 230-253. (I. P. Šestakov) 82g:17016 17C10

(with Meyberg, Kurt) Coordinatization of Jordan triple systems. Comm. Algebra 9 (1981), no. 14, 1495-1542. (Joseph C. Ferrar) 82k:17012

(with Hogben, Leslie) Maximal modular inner ideals and the Jacobson radical of a Jordan algebra. J. Algebra 68 (1981), no. 1, 155-169. (I. P. Šestakov) 82g:17015

McCrory, Clint G. (with Hardt, Robert M.) Steenrod operations in subanalytic homology

Compositio Math. 39 (1979), no. 3, 333-371. (Felice Ronga) 82h:55019 55810 (32B20)
McCrudden, Michael On the nth root set of an element in a connected semisimple Lie group. Math. Proc. Cambridge Philos. Soc. 86 (1979), no. 2, 219-225. (R. O. Nazarjan) 82b:22014 22F20

On embedding infinitely divisible distributions on simply-connected solvable Lie J. London Math. Soc. (2) 24 (1981), no. 2, 365-372. (H. Heyer) 82m:60013 60B15 (43A05)

On nth roots and infinitely divisible elements in a connected Lie group. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 2, 293-299. (Dragomir Z. Doković) 82a:22008

Factors and roots of large measures on connected Lie groups. Math. Z. 177 (1981), no. 3, 315-322. (K. R. Parthasarathy) 82m:60014 60B15 (22E30, 43A05)

McCulloh, Leon R. A class number formula for elementary-abelian-group rings. J. Algebra 68 (1981), no. 2, 443-452. (Hans Opolka) 82e:12009 12A57 (20C10)

Cullough, Darryl Connected sums of aspherical manifolds. Indiana Univ. Math. J. 30 (1981), no. 1, 17-28. (W. D. Neumann) 82e:55013a 55P10 (57N37)

The group of homotopy equivalences for a connected sum of closed aspherical annifolds. *Indiana Univ. Math. J.* 30 (1981), no. 2, 249–260. (W. D. Neumann) 82e:55013b 55P10 (57N37)

McCusker, Karen (with Baecher, Gregory; Gros, Jacques) Methodologies for facility siting decisions. Formal methods in policy formulation, pp. 32-83, Interdisciplinary Systems Res., 49, Birkhäuser, Basel, 1978. (See 82k:90009) 90A05

McDermott, Drew V. (with Charniak, Eugene; Riesbeck, Christopher K.) ★Artificial nitelligence programming. Lawrence Erlbaum Associates, Inc., Hillsdale, N.J., 1980. xii +323 pp. ISBN 0-89859-004-3 (P. Štēpānek) 82k:68049 68G05 (68B20, 92A25)

McDiarmid, Colin Colouring random graphs badly. Graph theory and combinatorics (Proc. Conf., Open Univ., Milton Keynes, 1978), pp. 76–86, Res. Notes in Math., 34, Pitman, San Francisco, Calif., 1979. (O. V. Borodin) 82m:05045 05C15

McDonald, B. E. Explicit Chebychev-iterative solution of nonselfadjoint elliptic equations on a vector computer. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 181–188, IMACS, New Brunswick, N.J., 1977. (See 82a:65004) 65N25

McDonald, B. R. (with Kirkwood, B. H.) The Witt ring of a full ring. J. Algebra 64 (1980), no. 1, 148–166. (A. Rosenberg) 82a:10024 10C05

Projectivities over rings with many units. Comm. Algebra 9 (1981), no. 2, 195-204.

(A. Verschoren) 82a:16037 16A99 Aut(GL2(R)) for rings with many units. Comm. Algebra 9 (1981), no. 2, 205-220.

20H25 (20F28) (James F. Hurley) 82m:20051

(with Kirkwood, B. H.) The orthogonal and the special orthogonal groups over a full J. Algebra 68 (1981), no. 1, 121-143. (Joel Cunningham) 82h:10035 10C30

 (with Kirkwood, B. H.) The symplectic group over a ring with one in its stable range.
 Pacific J. Math. 92 (1981), no. 1, 111-125. (D. G. James) 82i:20062 20H25 (10C30)
 (with Waterhouse, William C.) Projective modules over rings with many units. Proc. Amer. Math. Soc. 83 (1981), no. 3, 455-458. (Daniel D. Anderson) 82j:13010 (13B25)

McDonald, Gary C. Subset selection rules based on quasiranges for uniform populations. Sankhyā Ser. B 40 (1978/79), no. 3-4, 163-191. (Author's summary) 82e:62038 62F07

(with Lorenzen, Thomas J.) Selecting logistic populations using the sample medians.

mm. Statist. A—Theory Methods 10 (1981), no. 2, 101-124. (Authors' summary) 82c:62038 62F07

McDonald, H. (with Briley, W. R.) On the structure and use of linearized block implicit schemes. J. Comput. Phys. 34 (1980), no. 1, 54-73. (C. Bardos) 82a:65066 65M10

McDonald, J. J. See Case studies in mathematical modelling, 82k:00026
McDonald, John Malcolm (with Darroch, John) Comment: "Large sample estimation and testing procedures for dynamic equation systems" [J. Econometrics 12 (1980), no. 3, 251-283; MR 81g:62156] by F. Palm and A. Zellner. J. Econometrics 17 (1981), no. 1,

127-130. (Authors' summary) 82m:62245a 62P20

McDonald, John N. On some zero configurations associated with the van der Waerden conjecture. Linear Algebra Appl. 32 (1980), 137-155. (Thomas L. Markham) 82c:15008 15A15 (15A51)

Closed orbits of convex sets of operators on the disk algebra. Pacific J. Math. 97 (1981), no. 1, 159-165. (Richard Rochberg) 82m:46057 46J15 (47B37, 47D20)

(with Weiss, N. A.) A system of Markov processes with random lifetimes. Wahrsch. Verw. Gebiete 56 (1981), no. 3, 287-315. (Hermann Rost) 82j:60131

McDonald, Roderick P. A simple comprehensive model for the analysis of covariance structures. British J. Math. Statist. Psych. 31 (1978), no. 1, 59-72. (Author's summary)

Erratum: "A simple comprehensive model for the analysis of covariance structures" British J. Math. Statist. Psych. 32 (1979), no. 2, 298. (Editors) 82j:62056b 62J10

A simple comprehensive model for the analysis of covariance structures: some remarks on applications. British J. Math. Statist. Psych. 33 (1980), no. 2, 161-183. (Friedrich Pukelsheim) 82d:62105 62H25

McDonough, Joseph M. Suppressing oscillations in nonlinear systems. J. Math. Anal. Appl. 84 (1981), no. 2, 338-355. (G. B. Ermentrout) 82k:34049 34C25 (34D20, 58F21, 34C25 (34D20, 58F21,

McDonough, R. N. Application of the maximum-likelihood method and the

num-entropy method to array processing. Nonlinear methods of spectral analysis, pp. 181-244, Topics Appl. Phys., 34, Springer, Berlin, 1979. (See 82j:62069)

Donough, T. P. Two group isomorphisms and a little projective geometry. *Math. Gaz.* **64** (1980), no. 430, 245-254. (P. B. Kirkpatrick) **82**]:**20001** 20-01 (51-01) An infinite version of Margaraff's theorem. Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 126, 173-179. (Cheryl E. Praeger) 82g:20005 20B07 (20B10)

McDuff, Dusa Foliations and monoids of embeddings. Geometric topology (Proc. Georgia Topology Conf., Athens, Ga., 1977), pp. 429-444, Academic Press, New York, 1979.

(Author's summary) 82m:57014 57R32 (58D10)

C¹-minimal subsets of the circle. (French summary) Ann. Inst. Fourier (Grenoble) 31 (1981), no. 1, vii, 177–193. (C. S. Hartzman) 82h:58044 58F99

illip (with Brenner, D.; Fraser, Donald Alexander Stuart)

Transformation-parameter/structural models: asymptotic conditional distributions. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 1, 49-53. (Authors' summary) 82i:62008 62A25 (62E20)

(with Feuerverger, Andrey) On the efficiency of empirical characteristic function procedures. J. Roy. Statist. Soc. Ser. B 43 (1981), no. 1, 20-27. (B. Jesiak) 82h:62053

Mčedlišvili, T. F. On the question of the synthesis of nonlinear dynamical control systems. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 99 (1980),

no. 3, 653-656. (Author's summary) 82e:93034 93B50

McEliece, Robert J. (with Sarwate, D. V.) On sharing secrets and Reed-Solomon codes. Elece, Robert J. (with Sarwate, D. V.) On sharing secrets and Reed-Solomon codes. Comm. ACM 24 (1981), no. 9, 583–584. (Authors' summary) 82h:94024 94B35 (with Davisson, Lee D.; Pursley, Michael B.; Wallace, Mark S.) Efficient universal

noiseless source codes. IEEE Trans. Inform. Theory 27 (1981), no. 3, 269-279. (Authors' summary) 82e:94038 94A24 (94A05)

Practical codes for photon communication. IEEE Trans. Inform. Theory 27 (1981), no. 4, 393-398. (Author's summary) 82m:94013 94A05

McEnnis, Brian W. The distortion coefficient of an operator with bounded characteristic function. Indiana Univ. Math. J. 30 (1981), no. 1, 65-71. (Chandler Davis) 82i:47012 47A45

McFall, John D. (with Nowakowski, Richard) Strong independence in graphs. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 639-656. (J. Sedláček) 82h:05030 05C35 (90B25)

On elementary divisors of the tensor product of two matrices. Linear Algebra Appl.

33 (1980), 67-86. (B. N. Moyls) 82c:15032 15A69 (15A18)
McFarlane, Keith (with McGill, N. C.; McKenna, I. H.) Space-time and spatial geodesics on a rotating sphere. Internat. J. Theoret. Phys. 19 (1980), no. 5, 347-368. (Authors' summary) 82f:83012 83C10 (53B50)

Appearance of a relativistically rotating disk. Internat. J. Theoret. Phys. 20 (1981),

no. 6, 397-409. (Author's summary) 82:e83008 83B05
(with Wan, Kay Kong) On certain local observables generated by the momenta. J. Phys. A 14 (1981), no. 1, L1-L3. (Authors' summary) 82a:81019 81D99 (58F06,

(with Wan, Kay Kong) On the quantization of multilinear momentum observables (Italian and Russian summaries) Nuovo Cimento B (11) 63 (1981), no. 2, 627-641. (Manfred Andriè) 82j:58057 58F06 (81D05)

McGavran, Dennis Adjacent connected sums and torus actions. Trans. Amer. Math. Soc. 251 (1979), 235-254. (Author's summary) 82c:57026 57825 (57N15, 57Q15, 57R05) ee, Richard (with Armstrong, Robert A.) Competitive exclusion. Amer. Natur. 115

(1980), no. 2, 151-170. (Andris Abakuks) 82d:92029 92A17 (58F14)

McGibbon, C. A. Multiplicative properties of power maps. I. Quart. J. Math. Oxford Ser. (2) 31 (1980), no. 123, 341-350. (M. Mimura) 82c:55009 55P45 Some properties of H-spaces of rank 2. Proc. Amer. Math. Soc. 81 (1981), no. 1, 121-124. (J. Stasheff) 821:55018 55P45 (55Q15)

Stable properties of rank 1 loop structures. Topology 20 (1981), no. 2, 109-118. (J. P. May) 82e:55018 55P45 (55R35)

McGiffin, P. B. (with Murthy, D. N. P.) Parameter estimation for autoregressive system with missing observations. II. Internat. J. Systems Sci. 12 (1981), no. 6, 657-663. (Authors' summary) 82i:93071 93E10

McGilchrist, Clyde A. (with Gleeson, A. C.) Bilateral processes on a rectangular lattice. Austral. J. Statist. 22 (1980), no. 2, 197-206. (David Pickard) 82c:60177 60K3. (62F12, 92A90)

(with Simpson, Judy M.) Growth-variable distribution and mortality. Math. Biosci.

50 (1980), no. 3-4, 159-162. (Authors' summary) 82m:92014 92A07 (62P10)
McGill, Kevin Charles (with Fogel, Eli) Spectral analysis of previewing controllers. IEEE Trans. Automat. Control 25 (1980), no. 5, 959-967. (A. A. Zlatkin) 82g:49029 (93C15)

McGill, N. C. (with McFarlane, Keith; McKenna, I. H.) Space-time and spatial geodesics on a rotating sphere. Internat. J. Theoret. Phys. 19 (1980), no. 5, 347-368. (Authors' mary) 82f:83012 83C10 (53B50)

McGill, Paul An elementary integral. Measure theory, Oberwolfach 1979 (Proc. Conf., Oberwolfach, 1979), pp. 310-316, Lecture Notes in Math., 794, Springer, Berlin, 1980. (O. 28B10 Lipovan) 82b:28017

A direct proof of the Ray-Knight theorem. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 206-209, Lecture Notes in Math., 850, Springer, Berlin, 1981. (From the text) 82j:60147 60J60 (60G40)

veran, David Fuzzy logic and nondistributive truth valuations. Fuzzy sets (Proc. Sympos. Policy Anal. Inform. Systems, Duke Univ., Durham, N.C., 1980), pp. 49-57, Plenum, New York, 1980. (See 81h:03105) 03B52

McGovern, Richard (with Paulsen, Vern I.; Salinas, Norberto) A classification theorem for essentially binormal operators. J. Funct. Anal. 41 (1981), no. 2, 213-235. (Claude Schochet) 82i:47037 47B20 (46M20)

McGrath, J. T. (with Cavin, R. K., III) On internal models for specified plant parameter variations. IEEE Trans. Automat. Control 26 (1981), no. 2, 521-523. (Authors' summary) 82e:93060 93C35

McGuinness, Brian See Hahn, Hans, 82b:01073

McGuinness, Mark J. Noether's theorem and infinities of polynomial conserved densities. Nonlinear evolution equations and dynamical systems (Proc. Meeting, Univ. Lecce, Lecce, 1979), pp. 363-368, Lecture Notes in Phys., 120, Springer, Berlin, 1980. (Victor Aldaya) 35167 35Q20 (12H05, 49C10, 58F07)
Infinities of polynomial conserved densities for nonlinear evolution equations. J.

Math. Phys. 21 (1980), no. 12, 2737-2742. (Francesco Calogero) 82h:35142a (58F07)

An infinity of polynomial conserved densities for a class of nonlinear evolution equations. J. Math. Phys. 21 (1980), no. 12, 2743-2748. (Francesco Calogero)

35Q20 (58F07)

(with Gibbon, John) Amplitude equations at the critical points of unstable dispersive physical systems. Proc. Roy. Soc. London Ser. A 377 (1981), no. 1769, 185-219. (G. A. 35Q20 (58C40, 76B15)

McGuire, James B. (with Thompson, Colin J.) On the universality and computation of Feigenbaum's 8. Phys. Lett. A 84 (1981), no. 9, 451-453. (Editors) 82j:58100 58F20 (82A05)

McHugh, Richard (with Ejigou, Ayenew) Relative risk estimation under multiple matching. Biometrika 68 (1981), no. 1, 85-91. (Dan Anbar) 82g:62134 62P10 (62F10)

Mcllroy, D. K. (with Mason, D. P.) Electric field dissociation of charged macron sites in polarized biomembranes. I. The mathematical model. SIAM J. Appl. Math. 40 (1981), no. 2, 283-297. (Authors' summary) 82g-92820a 92A09 (with Mason, D. P.) Electric field dissociation of charged macromolecular sites in

- polarized biomembranes. II. A dual perturbation solution. SIAM J. Appl. Math. 40 (1981), no. 2, 298-314. (Authors' summary) 82g-92020b 92A09 lunes, B. T. (with Klotz, A. H.) On the meaning of the metric hypothesis in the nonsymmetric unified field theory. Acta Phys. Polon. B 11 (1980), no. 5, 345-358. (H. A. Buchdah) 82c-83064 83E10 (53B50, 81L05)
- Brinkman's theorem in general relativity and non-Riemannian field theories. Gen. Relativity Gravitation 12 (1980), no. 9, 767-773. (Author's summary) 82b:83069
- An identification of the metric tensor of the nonsymmetric unified field theory. J.

 Phys. A 13 (1980), no. 12, 3657-3670. (J. R. Vanstone) 82g:83027 83E10 (53B50)

 A note on Browne's "source function" in five-dimensional relativity. Gen. Relativity
- tion 13 (1981), no. 5, 495-501. (Author's summary) 82i:83068 Melmis, B. C. (with El-Asfouri, S. A.; Kapadia, Asha Seth) Stochastic compartmental modeling and parameter estimation with application to cancer treatment follow-up studies. Bull. Math. Biol. 41 (1979), no. 2, 203-215. (Authors' summary) 82m:92022 92A09 (92A07, 93E03)
 - (with El-Asfouri, S. A.; Kapadia, Asha Seth) On stochastic compartmental eling. Bull. Math. Biol. 41 (1979), no. 4, 611-613. (Authors' summary) 82m:92031 92A09 (93E03)
- McIntosh, C. B. G. Self-similar cosmologies with equation of state p=µ. Phys. Lett. A 69 (1978/79), no. 1, 1-3. (Author's summary) 82a:83009 83C15 (83C40, 83F05)
 - (with Halford, W. D.; van Leeuwen, E. H.) Curvature collineations of nonexpansion and twist-free vacuum type-N metrics in general relativity. J. Phys. A 13 (1980), no. 9, 2995-3000. (Brian O. J. Tupper) 82f:83021 83C20 (53B50, 83C40)
 - (with Halford, W. D.) Determination of the metric tensor from compo tensor. J. Phys. A 14 (1981), no. 9, 2331-2338. (H. Rund) 82i:83053 83C99
 - Equations with soliton solutions and the pseudosphere. Lett. Math. Phys. 5 (1981),
- no. 2, 105-112. (W. F. Shadwick) 82:35168 35Q20 (58A15)

 McIntyre, M. E. On the "wave momentum" myth. 25th anniversary issue: editorial reflections on the development of fluid mechanics. J. Fluid Mech. 106 (1981), 331-347. 76Q05 (76B15)
- McKane, A. J. (with Stone, Michael) Localization as an alternative to Goldstone's theorem. Ann. Physics 131 (1981), no. 1, 36-55. (Authors' summary) 82c:82084 82A55 (82A42) (with Lubensky, T. C.) Cluster size distribution above the percolation threshold. J.
- Phys. A 14 (1981), no. 5, L157-L161. (Authors' summary) 82d:82057 82A42 (82A67) McKay, Brendan D. (with Colbourn, Charles J.) A correction to Colbourn's paper on the complexity of matrix symmetrizability: "The complexity of symmetrizing matrices" [Inform. Process. Lett. 9 (1979), no. 3, 108-109; MR 81a:68045]. Inform. Process. Lett.
 - 11 (1980), no. 2, 96-97. (Authors' introduction) 82a:68069 68C25 (65F30) (with Godsil, C. D.) Spectral conditions for the reconstructibility of a graph. Combin. Theory Ser. B 30 (1981), no. 3, 285-289. (B. Manvel) 82k:05082 050 05C60 (05C38)
- McKay, John Graphs, singularities, and finite groups. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 183–186, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (Editors) 82e:20014 20C99 (05C25, 14B05, 17B10)
- McKay, W. G. (with Patera, J.) *Tables of dimensions, indices, and branching rules for ns of simple Lie algebras. Lecture Notes in Pure and Applied Mathematics 69. Marcel Dekker, Inc., New York, 1981. v+317 pp. ISBN 0-8247-1227-7 (Bernard 17B10 (22E70, 81C40)
- Kolman) 82i:17008 McKean, H. P. Theta functions, solitons, and singular curves. Partial differential equations and geometry (Proc. Conf., Park City, Utah, 1977), pp. 237–254, Lecture Notes in Pure and Appl. Math., 48, Dekker, New York, 1979. (M. F. Atiyah) 82f:14028 14H45 (14K25, 34B27, 35Q20, 58F07, 70H99)
 - Units of Hill curves. Geometry and analysis, pp. 81-94, Indian Acad. Sci., Bangalore, 1980. (M. F. Atiyah) 821:58046 58F07 (14H45, 34B25, 35Q20)
- esq's equation on the circle. Comm. Pure Appl. Math. 34 (1981), no. 5, 599-691. (George Wilson) 82j:58063 58F07 (14H40, 14K25, 35Q20, 47F05, 76B25)
- McKee, Sean (with Brunner, H.) The repetition factor and numerical stability of Volterra integral equations. Comput. Math. Appl. 6 (1980), no. 3, 339-347. (R. C. MacCamy) 65R20 (45L10)
 - (with Elliott, Charles M.) On the numerical solution of an integro-differential equation arising from wave-power hydraulies. BIT 21 (1981), no. 3, 318-325. (Authors' summary) 82m.65120 65R20 (76B99)
 - (with Ailen, Keith) Fixed step discretisation methods for delay differential equations. Comput. Math. Appl. 7 (1981), no. 5, 413-423. (Authors' summary) 82f:65095
 - (with Cameron, R. F.) The direct numerical solution of a Volterra integral equation arising out of viscoelastic stress in materials. Comput. Methods Appl. Mech. Engrg. 29 (1981), no. 2, 219-232. (Authors' summary) 82k:65080 65R20 (73F99)
- (with Andrade, Célia; Bertoldi Franco, Neide) Convergence of linear multistep methods for Volterra first kind equations with $k(t,t)\equiv 0$. (German summary) Computing 27 (1981), no. 3, 189-204. (Authors' summary) 82k:65079 65R20
- McKellar, Bruce H. J. (with Box, Michael A.) The scaling group of the radiative transfer
- cquation. J. Atmospheric Sci. 38 (1981), no. 5, 1063–1068. (Authors' summary)

 82:86005 86A10 (82A25, 82A70, 85A25)

 McKellar, R. J. The uniqueness of gravity as a Poincaré or Lorentz gauge theory. J. Math.

 Phys. 22 (1981), no. 12, 2934–2942. (H. Rund) 82i:83046 83E99 (83C05)
- McKelvey, R. W. (with Herod, J. V.) A Hille-Yosida theory for evolutions. Israel J. Math. 36 (1980), no. 1, 13-40. (T. Kato) 82c:47053 47D99 (34G10, 47D05)
- McKetvey, Richard D. (with Ordeshook, Peter C.; Ungar, Peter) Conditions for voting equilibria in continuous voter distributions. SIAM J. Appl. Math. 39 (1980), no. 1, 161-168. (J. H. Blau) 824:90014 90A08
 - (with Wendell, R. E.) New perspectives in competitive location theory. European J.
- Oper. Res. 6 (1981), no. 2, 174–182. (Authors' summary) 82g:90042 90B05

 McKenna, I. H. (with McFarlane, Keith; McGill, N. C.) Space-time and spatial geodesics on a rotating sphere. Internat. J. Theoret. Phys. 19 (1980), no. 5, 347-368. (Authors' ary) 82f:83012 83C10 (53B50)
- McKenna, J. (with Mitra, Debasis; Ramakrishnan, K. G.) A class of closed Markovian

- queuing networks: integral representations, asymptotic expansions, and generalization Bell System Tech. J. 60 (1981), no. 5, 599-641. (J. Chandramohan) 82g:60117 60K. 60K 20 (65U05, 68C15)
- McKenna, P. J. (with Shaw, Howard) On the structure of the set of solutions to some nonlinear boundary-value problems. J. Differential Equations 35 (1980), no. 2, 183-199. (L. Cesari) 824:47070 47H15 (35G30)
- McKennon, Kelly (with Fric, Roman; Richardson, Gary D.) Sequential convergence in C(X). Convergence structures and applications to analysis (Proc. Internat. Summer School, Frankfurt a.d. Oder, 1978), pp. 57-65, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1979, 4, Akademie-Verlag, Berlin, 1980. (C. H. Cook) 82i:54009 54A20 (with Richardson, Gary D.) Convergence of certain probability distribution
 - Math. Nachr. 94 (1980), 51-56. (Balram S. Rajput) 82b:46029 (43A15, 60B10)
 - Letter to the editors: "Multipliers of the ring L_i^{tr} " [Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1976, vyp. 1, 21–22; MR 55 #984] by McKennon and J. Griffin. (Russian) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 2, 122. (Editors) 43A22
 - (with Novak, David) Exponentials on locally compact abelian groups. Proc. Amer.
 Math. Soc. 83 (1981), no. 2, 307-314. (Pierre Eymard) 82j:43005
 43A40
 The complexification and differential structure of a locally compact group. Trans.
- Amer. Math. Soc. 267 (1981), no. 1, 237-258. (Pierre Eymard) 82k:22007
- McKenzie, D. S. Discrete physical systems. J. Phys. A 14 (1981), no. 12, 3267–3276. (H. N. V. Temperley) 82m:82012 82A05 (05C75, 58F13)
- McKenzie, Ed Extending the correlation structure of exponential
 - autoregressive-moving-average processes. J. Appl. Probab. 18 (1981), no. 1, 181–189. (M. Arató) 82;62066 62M10 (60G10)
- McKenzie, Lionel (with Yano, M.) Some corrections: "Turnpike theory" [Econometrica 44 (1976), no. 5, 841-865; MR 56 #17735] by the first author. Econometrica 48 (1980), no. 7, 1839-1840. (Editors) 82f:90024 90A15 See also Green, Jerry R.; et al., 82d:01027
- McKenzie, R. (with Szebehely, Victor) Deformation of a line-element in the phase space at the triangular libration point. Celestial Mech. 23 (1981), no. 2, 131-137. (Authors' mmary) 82b:58058 58F13 (58F40, 70F07)
- (with Szebehely, Victor) Nonlinear stability around the triangular libration points. Celestial Mech. 23 (1981), no. 3, 223-229. (Authors' summary) 82d:70015
- McKenzie, Ralph Residually small varieties of semigroups. Algebra Universalis 13 (1981), no. 2, 171-201. (Sheila Oates-Williams) 82k:20097 20M07 (08B99)
- (with Quackenbush, R. W.) The spectrum of a lattice-primal algebra. Discrete Math. 35 (1981), 157-163. (Evelyn Nelson) 82j:08004 08A40 (06C05)
- (with Burris, Stanley) Decidable varieties with modular congruence lattices. Amer. Math. Soc. (N.S.) 4 (1981), no. 3, 350-352. (Alden Pixley) 82m:08006 08B10 (03B25)
- McKeown, J. J. Nonlinear least-squares problems. Nonlinear optimization (Proc. Internat. Summer School, Univ. Bergamo, Bergamo, 1979), pp. 91-105, Birkhäuser, Boston, Mass., 1980. (V. F. Dem'janov) 82a:90144 90C30 1980. (V. F. Dem'janov) 82a:90144
 - Parametric sensitivity analysis of nonlinear programming problems. Nonlinear optimization (Proc. Internat. Summer School, Univ. Bergamo, Bergamo, 1979),
- pp. 387-406, Birkhäuser, Boston, Mass., 1980. (J. C. Allwright) 82a:90157 Sensitivity analysis with respect to independent variables. Nonlinear optimization
- (Proc. Internat. Summer School, Univ. Bergamo, Bergamo, 1979), pp. 407-427, Birkhäuser, Boston, Mass., 1980. (Asen L. Dončev) 82a:90158 90C31 (65K05)
- An approach to sensitivity analysis. Numerical optimisation of dynami pp. 349-362, North-Holland, Amsterdam, 1980. (Author's summary) 82b:49064
- McKerrell, A. (with Phillips, C.; Delves, L. M.) Chebyshev expansion methods for the solution of elliptic partial differential equations. J. Comput. Phys. 41 (1981), no. 2, 444-452. (Authors' summary) 82h:65084 65N30
- McKinsey, Michael The ambiguity of definite descriptions. Theoria 45 (1979), no. 2, 78-89
- (1980) (Robert P. McArthur) 82h:03015 03A05

 McKirahan, R. Diodorus and Prior and the master argument. Philosophical logic. Synthese 42 (1979), no. 2, 223-253. (From the text) 82i:03004 03-03 (01A20, 03B45)
- McKoy, Vincent (with Takatsuka, Kazuo) Schwinger variational principle for multichannel scattering. Phys. Rev. Lett. 45 (1980), no. 17, 1396-1399. (Authors' summary) 82d:81129
- McLachlan, G. J. A comparison of the estimative and predictive methods of estimating posterior probabilities. Comm. Statist. A-Theory Methods 8 (1979), no. 9, 919-929. (Jack C. Lee) 82c:62090 62H30 (62F15)
- McLaren, Keith R. (with Cooper, Russel J.) Intertemporal duality: application to the theory of the firm. Econometrica 48 (1980), no. 7, 1755-1762. (From the introduction)
- 82j:90012 90A10 (90A11) bey-McLaughlin, Barbara See Ownbey-McLaughlin, Barbara
- Laughlin, Charles D. (with Lambert, Joseph B.; Ownbey-McLaughlin, Barbara) Maya arithmetic. Amer. Sci. 68 (1980), no. 3, 249-255. (M. P. Closs) 82f-01002 01A10
- McLaughlin, David W. A physical description of the spectral transform. Nonlin gnetics, pp. 65-86, Academic Press, New York, 1980. (A. Degasperis) 82b:35143 35O20 (58F07, 81K05)
 - (with Lamb, George L., Jr.) Aspects of soliton physics. Solitons, pp. 65-106, Topics Current Phys., 17, Springer, Berlin, 1980. (See 82m:35001) 00A69 (01A60, 35Q20) An overview of soliton mathematics. Physics in one dimension (Proc. Internat. Conf., Fribourg, 1980), pp. 13-26, Springer Ser. Solid-State Sci., 23, Springer, Berlin, 1981. (See
- 35Q20 (58F07) McLaughlin, H. W. (with Zacharski, J. J.) Segmented approximation. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 647–654, Academic Press, New York, 1980. (From the text) 82e:65016 65D10
- McLaughlin, John B. The role of dissipation in a truncation of Hénon's map. Phys. Lett. A
 - 72 (1979), no. 4-5, 271-274. (Editors) 82a:58040 58F13 (70G99)
 Period-doubling bifurcations and chaotic motion for a parametrically forced endulum. J. Statist. Phys. 24 (1981), no. 2, 375-388. (Robert L. Devaney) 82e:58074 58F14 (58F13, 70K40, 70K50)

- McLaughlin, Tom Intersection types and the terms of a regressive sum. Aspects of effective algebra (Clayton, 1979), pp. 189–195, Upside Down A Book Co., Yarra Glen, Vic., 1981. (Charles Applebaum) 82k:03072 03D50
 See also Crossley, John N., 82m:03060
- McLean, J. W. (with Ma, Y. C.; Martin, David U.; Saffman, Philip G.; Yuen, Henry C.) Three-dimensional instability of finite-amplitude water waves. Phys. R (1981), no. 13, 817-820. (Authors' summary) 82c:76017 76B15 (35Q20) Phys. Rev. Lett. 46

McLean, T. B. (with Fugate, J. B.) Compact groups of homeomorphisms on tree-like continua. Trans. Amer. Math. Soc. 267 (1981), no. 2, 609-620. (Lee Mohler) 82m:54036 54F50 (54F20, 54H25)

McLeish, Mary A direct construction of Latin squares with no subsquares of order two. Ars Combin. 10 (1980), 179-186. (Jean M. Turgeon) 821:05016 05B15

McLenaghan, R. (with Debever, Robert) Erratum: "Repères symétriques de solutions de type D des équations de Maxwell-Einstein avec constante cosmologique" [Acad. Roy. elg. Bull. Cl. Sci. (5) 66 (1980), no. 3, 204-222; MR 81m:83031]. Acad. Roy. Belg. Bull. Cl. Sci. (5) 66 (1980), no. 9, 739. (Editors) 82h:83037 83C50 (53B50, 83C20)
McLeod, Angus Ian (with Hipel, Keith William) Perspectives in stochastic hydrology. Time

Series (Proc. Internat. Meeting, Unio. Nottingham, Nottingham, 1979), pp. 73–102, North-Holland, Amsterdam, 1980. (Authors' summary) 82g:86002 86A05 (62I 86A05 (62P99) (with Li, W. K.) Distribution of the residual autocorrelations in multivariate ARMA time series models. J. Roy. Statist. Soc. Ser. B 43 (1981), no. 2, 231-239. (Roch Roy) 82m:62204 62M10

McLeod, Kevin (with Serrin, James) Uniqueness of solutions of semilinear Poisson equations. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 11, part 1, 6592-6595. (Authors' summary) 82k:35029 35J05 (58E07, 81G25, 82A25)

McLeod, Robert M. ★The generalized Riemann integral. Carus Mathematical Monographs, 20. Mathematical Association of America, Washington, D.C., 1980. xiii + 275 pp. ISBN 0-88385-021-4 (Ralph Henstock) 82h:26015 26A42 (28-26A42 (28-01)

Symmetrized separable convex programming. Trans. Amer. Math. Soc. 247 (1979), 1-44. (Elmor L. Peterson) 82c:90075 90C25

An analogue of Moreau's proximation theorem, with application to the nonlinear

ementarity problem. Pacific J. Math. 88 (1980), no. 1, 101-161. (V. F. Dem'janov) 82k:90118 90C33 (90C25)

McMahon, Douglas C. (with Wu, T. S.) Notes on topological dynamics. IV. Relative ticontinuity and its variations. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 2-3, part 1, 277-281. (J. Auslander) 82b:54057a 54H20

(with Wu, T. S.) Notes on topological dynamics. V. Equicontinuous structure relations of minimal transformation groups. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 2-3, part 1, 283–294. (J. Auslander) 82b:54057b 54H20

Relativized weak mixing of uncountable order. Canad. J. Math. 32 (1980), no. 3, 559-566. (M. Shmuel Glasner) 82a:54079 54H20

(with Nachman, Louis J.) An intrinsic characterization for PI flows. Pacific J. Math.

89 (1980), no. 2, 391-403. (M. Eisenberg) 82d:54048 54H20 (with Wu, T. S.) Distal homomorphisms of nonmetric minimal flows. Proc. Amer. Math. Soc. 82 (1981), no. 2, 283-287. (M. Shmuel Glasner) 82i:54074

McMaster, T. B. M. (with Donegan, H. A.) Concerning the "panneaux" of M. Sova. Proc. Roy. Soc. Edinburgh Sect. A 87 (1980/81), no. 3-4, 231-233. (S. Simons) 82g:46003

McMath, John S. (with Sims, S. E.; Hallum, C. R.) A comparison of various derivatives for matrix-valued functions. Comput. Math. Appl. 6 (1980), no. 2, 161-166. (Authors' summary) 82d:65043 65F99 (15A09, 26E99) summary) 82d:65043

(with Sims, S. E.) Mean value theorems for a matrix valued derivative. Linear and Multilinear Algebra 9 (1980/81), no. 4, 255-261. (Jean H. Bevis) 82j:65025 (15A45, 26A24)

McMeeking, R. M. (with Lee, E. H.) Erratum: "Concerning elastic and plastic components of deformation" [Internat. J. Solids and Structures 16 (1980), no. 8, 715-721; MR 81e:73038]. Internat. J. Solids and Structures 17 (1981), no. 9, 929. (Editors) 82e:73038

McMichael, Alan (with Zalta, Ed) An alternative theory of nonexistent objects.

Logic 9 (1980), no. 3, 298-313. (John R. Chidgey) 82c:03008 03A05 (03B45)
McMillan, Edwin M. (with Brent, Richard P.) Some new algorithms for high-precision computation of Euler's constant. Math. Comp. 34 (1980), no. 149, 305-312. (Authors' summary) 82g:10002 10-04 (10A40, 68C05)

McMorris, F. R. (with Estabrook, G. F.) When is one estimate of evolutionary relationships

a refinement of another? J. Math. Biol. 10 (1980), no. 4, 367-373. (Authors introduction) 82g:92005 92A05 (06A12, 68G99)

(with Zaslavsky, Thomas) The number of cladistic characters. Math. Biosci. 54 (1981), no. 1-2, 3-10. (David J. Strauss) 82j:92008 92A05 (05C05)

McMorris, Michael N. The categorical questions in science. (Italian su Physis-Riv. Internaz. Storia Sci. 22 (1980), no. 1, 5-26. (C. M. Taisbak) 82e:00026 00A25 (01A80)

McMullen, John R. (with Cartwright, Donald I.; Howlett, Robert B.) Extreme values for the Sidon constant. Proc. Amer. Math. Soc. 81 (1981), no. 4, 531-537. (Colin C. Graham) 82c:43005 43A46 (43A65)

llen, P. Convex bodies which tile space by translation. Mathematika 27 (1980), no. 1, 113-121. (A. Florian) 82c:52016 52A45 (52A25)

(with Gallivan, S.; Lockeberg, E. R.) Complete subgraphs of the graphs of convex polytopes. Discrete Math. 34 (1981), no. 1, 25-29. (A. Altshuler) 821:52009 52A25 (05C99)

McMurry, Robert E., Jr. (with Chew, G. F.; Finkelstein, J.; Poénaru, V.) A topological theory of electric charge. Phys. Lett. B 100 (1981), no. 1, 53-56. (Authors' summary) 82481152 81G10 (81G05)

McMurtrie, R. A plant-water model with implications for the management of water

catchments. Renewable resource management (Proc. Workshop, Univ. Canterbury, Christchurch, 1980), pp. 206-224, Lecture Notes in Biomath., 40, Springer, Berlin, 1981. 90A30

McNabb, A. The asymptotic response of a calorimeter. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 3, 348-352. (Author's summary) 82d:80016 80A20

McNair, James N. A stochastic foraging model with predator training effects. II. Optimal diets. Theoret. Population Biol. 19 (1981), no. 2, 147-162. (K. Gopalsamy) 82k:92052 92A15 (92A17)

- McNamara, J. M. Optimal stopping for a Markov process: a new characterisation of the optimal policy. Math. Oper. Res. 5 (1980), no. 4, 567-575. (P. Neumann) 82f:60091 60G40 (60J25, 90C40)
- McNamee, John Michael A program to integrate a function tabulated at unequal intervals Internat. J. Numer. Methods Engrg. 17 (1981), no. 2, 271-279. (Author's summary) 65-04 (65D30)
- McNeil, Donald R. (with Schach, Siegfried) Central limit analogues for Markov population processes. Computational probability (Proc. Actuarial Res. Conf., Brown Univ., Providence, R. I., 1975), pp. 39-69, Academic Press, New York, 1980. (Walter A Rosenkrantz) 82f:60070 60F17 (60J60, 60J70, 60J80)

McNickle, Donald C. (with Disney, Ralph L.; Simon, Burton) The M/G/1 queue with instantaneous Bernoulli feedback. Naval Res. Logist. Quart. 27 (1980), no. 4, 635–644.

(M. M. Siddiqui) 82h:60180 60k25 (9082).

MeNolty, Frank (with Doyle, James; Hansen, Eldon) Properties of the mixed exponential failure process. Technometrics 22 (1980), no. 4, 555-565. (H. K. Hsieh) 82e:62135

McNulty, George F. Classes which generate the variety of all lattice-ordered groups. Ordered groups (Proc. Conf., Boise State Univ., Boise, Idaho, 1978), pp. 135-140, Lecture Notes in Pure and Appl. Math., 62, Dekker, New York, 1980. (A. M. W. Glass) 82c:06031 06F15 (03C05)

(with Harary, Frank) The orbital partition of a graph. J. Combin. Inform. System Sci. 5 (1980), no. 2, 131-133. (William Arlinghaus) 82f:05052 05C25 (05C70)

(with Larson, Jean A.; Laver, Richard) Square-free and cube-free colorings of the ordinals. Pacific J. Math. 89 (1980), no. 1, 137-141. (J. M. Henle) 82c:03069 03E10 (04A10)

McOwen, Robert C. Fredholm theory of partial differential equations on complete Riemannian manifolds. Pacific J. Math. 87 (1980), no. 1, 169-185. (V. S. Rabinovič) 82g:58082 58G15 (35B99)

McPhedran, R. C. (with Derrick, G. H.; Botten, L. C.) Theory of crossed gratings. Electromagnetic theory of gratings, pp. 227-276, Topics Current Phys., 22, Springer, Berlin, 1980. (See 82a:78001) 78A45

(with Botten, L. C.; Craig, M. S.; Adams, J. L.; Andrewartha, J. R.) The finitely conducting lamellar diffraction grating. Optica Acta 28 (1981), no. 8, 1087-1102.

(Authors' summary) 82i:78022 78A45

McQuillan, Donald L. On subfields in extension rings. Arch. Math. (Basel) 35 (1980), no. 5, 424-433. (Yves Lequain) 82b:16045 16A99

McQuilton, D. More high-rate "cyclic" convolutional self-orthogonal codes. Proc. IEE-F

127 (1980), no. 6, 427-429. (Author's summary) 82b:94024 94B10 Effective constraint length of "cyclic" convolutional self-orthogonal codes. Proc.

IEE-F 128 (1981), no. 2, 69-73. (Author's summary) 82e:94054 94B10 (94B15) McQuistan, R. B. Exact composite nearest neighbor degeneracies for one-dimensional lattice spaces. J. Math. Phys. 22 (1981), no. 6, 1260-1263. (Author's summary) 82A67

McRobbie, Michael A. (with Thistlewaite, Paul B.; Meyer, Robert K.) A mechanized decision procedure for nonclassical logics: the program KRIPKE. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 9 (1980), no. 4, 189-192. (Editors) 82b:03035 (03B25, 03B60)

McWilliams, James C. (with Gent, Peter R.) Intermediate models of planetary circulations in the atmosphere and ocean. J. Atmospheric Sci. 37 (1980), no. 8, 1657-1678. (From the

summary) 82h:86004 86A10 (86A35)
McWilliams, K. J. Completeness of the Alexandrov topology for space-time. *Internat. J. Theoret. Phys.* 20 (1981), no. 12, 905–910. (Author's summary) 82m:83036 83C99 (53C50, 54E15)

Mdzinarišvili, L. D. (with Inasaridze, H. N.) The interconnection between continuity and exactness in homology theory. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 99 (1980), no. 2, 317-320. (Authors' summary) 82b:55008

On Künneth's relation and the functor lim. (Russian, Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 99 (1980), no. 3, 561-564. (Author's summary) 82f:18016 18G15 (55N99)

Mead, Lawrence R. (with Bender, Carl M.; Simmons, L. M., Jr.) Strong-coupling expansion for the ground-state energy in the $|x|^a$ potential. Phys. Rev. D (3) 24 (1981), 10, 2674-2682. (Authors' summary) 82k:81069 81E99 (81C12, 81E25)

Meakin, John (with Byleen, Karl; Pastijn, Francis) Building bisim idempotent-generated semigroups. J. Algebra 65 (1980), no. 1, 60-83. (T. E. Hall) 20M10

(with Pastijn, Francis) The structure of pseudosemilattices. Algebra Universalis 13

(with Tanks) The structure of peacocamartics. Argeon Contention 15 (1981), no. 3, 355–372. (S. M. Goberstein) 82k;20100 20M10 (06A12)

Mebkhout, M. (with Grossmann, A.; Høegh-Krohn, Raphael) The one particle theory of periodic point interactions. Polymers, monomolecular layers, and crystals. Comm. Math. Phys. 77 (1980), no. 1, 87-110. (Nicolae Angelescu) 82i:81022 81C05 (35P99, 81C10,

man Sur le problème de Hilbert-Riemann. Complex analysis, microlocal Mebkhout, Zogh calculus and relativistic quantum theory (Proc. Internat. Colloq., Centre Phys., Les Houches, 1979), pp. 90-110, Lecture Notes in Phys., 126, Springer, Berlin, 1980. (Tosiaki Kori)

82a:32015 32C36 (14D05, 32C37, 32C40, 35Q15, 58G07)

Mečetnýi, V. S. Construction of the static characteristic of a multidimensional linear system. Automatika 1980, no. 3, 51-58, 94 (Russian. English summary); translated as Soviet Automat. Control 13 (1980), no. 3, 43-49 (1981). (Author's summary) 82e:93004 93A10

Mecke, Joseph Palm methods for stationary random mosaics. Combinatory principles in stochastic geometry (Russian), pp. 124-132, Akad. Nauk Armjan. SSR, Erevan, 1980. (See 82k:60027) 60D05 (60G55)

(with Stoyan, Dietrich) A general approach to Buffon's needle and Wicksell's corpuscle problem. Combinatory principles in stochastic geometry (Russian), pp. 164-171, 60D05 k Armjan. SSR, Erevan, 1980. (See 82k:60027)

(with Nagel, Werner) Stationäre räumliche Faserprozesse und ihre Schnittzahlrosen. (English and Russian summaries) Elektron. Informationscerath Kybernet. 16 (1980), no. 8-9, 475–483. (Pamela J. Dichomides) 82j:60016 60D05 (60G55)

(with Stoyan, Dietrich) Stereological problems for spherical particles. Math. Nachr.

96 (1980), 311-317. (Pamela J. Dichomides) 821:60037 60D05 (60G55)

Stereological formulas for manifold processes. *Probab. Math. Statist.* 2 (1981), *no.* 1,
31-35. (Dietrich Stoyan) 82m:60030 60D05 (52A22, 60G55)

chlembräuker, W. F. G. (with Classen, T. A. C. M.) The Wigner distribution—a tool for

chleabraker, W. F. G. (with Classen, T. A. C. M.) The Wigner distribution—a tool for time-frequency signal analysis. I. Continuous-time signals. Philips J. Res. 35 (1980), no. 3, 217-250. (Authors' summary) 82c-94066a 94A12 (81C20)
(with Classen, T. A. C. M.) The Wigner distribution—a tool for time-frequency signal analysis. II. Discrete-time signals. Philips J. Res. 35 (1980), no. 4-5, 276-300. (Authors' summary) 82c-94066b 94A12 (81C20)
(with Classen, T. A. C. M.) The Wigner distribution—a tool for time-frequency signal analysis. III. Relations with other time-frequency signal transformations. Philips J. Res. 35 (1980), no. 6, 372-389. (Authors' summary) 82c-94066c 94A12 (81C20)

Res. 35 (1980), no. 6, 372-389. (Authors' summary) \$2e:94006c 94A12 (81C20)
ecklenburg, W. (with Martin, P. P.) Constant Yang-Mills fields. Phys. Rev. D (3) 22
(1980), no. 12, 3088-3089 (Authors' summary) \$2e:81008 81E10 (53C05)
eddis, Ray Unified analysis of variance by ranks. British J. Math. Statist. Psych. 33
(1980), no. 1, 84-98. (Author's summary) \$2d:62065 62G10
edienos, L. A. Initiations to elliptic variational inequalities. (Portuguese) Proceedings of
the Tenth Brazilian Mathematical Colloquium (Poços de Caldas, 1975), Vol. I
(Portuguese), pp. 257-278, Cons. Nac. Desenoolvimento Ci. Tec., Inst. Mat. Pura Apl.,
Rio de Janeiro, 1978. (Editors) \$2f:35084 35185 (46G99, 49A29)
Nonlinear hyperbolic-parabolic partial differential equations. Funkcial. Ekvac. 23
(1980), no. 2, 151-158. (John M. S. Rassias) \$2f:35136 35M05

On the weak solutions of nonlinear partial differential equation. An. Acad. Brasil. Ciênc. 53 (1981), no. 1, 13-15. (Renuka Ravindran) 82j:35099 35L70 (35D05)

dina Perea, Alberto *Autour des connexions plates invariantes à gauche sur les groupes de Lie. (French) [On left-invariant flat connections on Lie groups] Cahiers Mathématiques Montpellier [Montpellier Mathematical Reports], 16. Université des Sciences et Techniques du Languedoc, U.E.R. de Mathématiques, Montpellier, 1979. iv+10+142 pp. (Adrian C. Albu) 821:53047 53C05 (17805, 22E20) ditch, James S. (with Mandojana, J. C.) A decentralized algorithm for optimal routing in data-communication networks. Large Scale Systems 1 (1980), no. 3, 149-157. (Authors' summary) 821:68009 68A05 (94C15)

See also Porter, B., 82a:93049 nik, A. I. Tiling of E" into space crosses. (Russian) Ukrain. Geom. Sb. No. 23 (1980),

84-90, iii. (J. C. Fisher) 82j:51032 51M20 (52A45)

84-90, in. (J. C. Fisher) 823-1832 51M20 (32A45) Medley, Don See Conference: AFIPS, Computer, 821:68004 Mednickii, V. G. (with Komogorov, V. V.; Vasenkova, N. V.) A convex programming problem with separable variables. (Russian) Ekonom. i Mat. Metody 16 (1980), no. 4, 778-784. (I. B. Medvedovskii) 82h:90090 90C25 (49D27)

is, P. M. (with Maksimov, Ju. M.; Rasulkulov, M. S.) Time and phase means of dynamical systems. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 5, 73-77, 101. (Authors' summary) 82c:82015 82A05 (70G35)

dnyh, A. D. Riemann surfaces with a cyclic group of automorphi questions of the theory of functions (Russian), pp. 72-77, 1980. (È. Jakubov) 82h:30049 30F10 (14H30) Medvedev, F. A. A theorem of Ampère. (Russian. English su pp. 72-77, 160, "Naukova Dumka", Kiev,

ethodology of the natural sciences, No. XX (Russian), pp. 106-110, Moskov. Gos. Univ.,

Moscow, 1978. (E. Stipanić) 82c-01028 01A55 (26-03)
Cantor's theory of real numbers. (Russian) Istor.-Mat. Issled. No. 23 (1978), 56-70,

357. (I. Grattan-Guinness) 82h:01035a 01A55 (04-03, 54-03)

The axiom of choice and mathematical analysis. (Russian) Istor.-Mat. Issled. No. 25 (1980), 167-188, 379. (Esther R. Phillips) 82:91030 01A55 (04-03, 04A25, 28-03)

On the role of axiomatic method in the development of ancient mathematics.

Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science (Second Internat. Conf., Pisa, 1978), Vol. 1, pp. 223–225, Synthese Library, 145, Reidel, Dordrecht, 1981. (Given and Proceedings), 223–224, Synthese Library, 145, Reidel, Dordrecht, 1981. (Given and Proceedings), 223–224, Synthese Library, 145, Reidel, Dordrecht, 1981. 1981. (Giovanna Derenzini) 82m:01009 01A20 See also Markuševič, A. I., 82h:01035b; Corresp

nce: Egorov, D. F.-Luzin, N. N., 82k:01028 and Arboleda, L. C., 82k:01039

Medvedev, Ju. A. Identities of finite Jordan Φ-algebras. (Russian) Algebra i Logika 18

(1979), no. 6, 723-748, 755. (Harry F. Smith) 82c:17012 17C05

Example of a variety of alternative algebras over a field of characteristic 2 that does not have a finite basis of identities. (Russian) Algebra i Logika 19 (1980), no. 3, 300-313,

382. (A. A. Iskander) 82e:17021 17D05 Cross varieties of algebras. (Russian) Mat. Sb. (N.S.) 115(157) (1981), no. 3, 391–425, 495–496. (A. P. Popov) 82k:08007 08B99 (17C05, 17D05, 17D10)

lvedev, Ju. I. (with Ivčenko, G. I.) Decomposable statistics and hypothesis testing for grouped data. (Russian. English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 3, 549-560. (M. S. Nikulin) 82m:62059 62F05

dvedev, Ju. T. Transformations of information and calculi that describe them: a model for oriented information retrieval. (Russian) Semiotics and information science, No. 14 (Russian), pp. 3-31, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (Witold Lipski) 821:68098 68H05 (68G99)

Advisory, 190. (with Litvinov, V. G.) Complementary methods in the problems of the state of stress in shells of revolution. Prikl. Mat. Meh. 42 (1978), no. 4, 724–730 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 4, 773–780 (1979). (Authors' summary) 82g:73042 73L99 (49A29)

rdvedev, N. Ja. Decomposition of free l-groups into an l-direct product. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 5, 63-69, 190. (V. K. Zaharov) 82b:06018 06F15

Medvedev, S. B. (with Petrov, V. V.; Ageev, V. M.; Zaporožec, A. V.; Kort'ev, A. V.; Kostjukov, V. M.; Poljakov, I. N.) Information theory of complex systems functioning under conditions of incomplete information. (Russian) Engineering cybernetics, Vol. 13 (Russian), pp. 121-151, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii,

Moscow, 1980. (Authors' summary) 821:90074 90C15 (92A20) edvedev, S. Ju. (with Muzyčuk, O. V.) Effect of nonlinear damping on the probability characteristics of stochastic systems. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 6, 701-706 (Russian. English summary); translated as Radiophys. and Qua 23 (1980), no. 6, 469-473 (1981). (Authors' summary) 82b:93041 931 93F11

dveder, S. V. (with Thal, V. N.) On stability in one critical case. Prikl. Mat. Meh. 43 (1979), no. 6, 963-969 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 6, 1041-1048 (1981). (Authors' summary) 82k:34061 34D20

Medvedev, S. Yu. See Medvedev, S. Ju.

Medvedev, V. B. Convergence of difference schemes for a system of fourth-order partial differential equations, (Russian) Numerical analysis (Russian), pp. 11-20, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1978. (J. Mikliček) 82j:65075 65N10

Ukrain. SSK, Inst. Kibernet., Kiev., 1978. (J. Mikliček) 82j:65075 65N10
Medvedev, V. S. (with Vereśčagin, A. F.; Puzanov, V. P.) Algorithms for optimizing the trajectories of motion in the case of controllable search for objects. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 2, 146–153, 222 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 2, 115–122 (1981). (Authors' summary) 824:93014 93B05 (90B40, 90D26)

dev, V. S. A new type of bifurcations on manifolds. (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 3(11), 487-492, 496. (W. S. Loud) 82c:58047

Medvedkov, O. I. Determination of deflection of prismatic shells. Prikl. Meh. 16 (1980), no. 6, 46-52 (Russian); translated as Societ Appl. Mech. 16 (1980), no. 6, 492-497 (1981). (Murat Dikmen) 82e:73067 73L99 (73K15) secham, W. C. Discussion of the pressure-source aerosonic theory and of Doak's

criticism. J. Acoust. Soc. Amer. 69 (1981), no. 3, 643-646. (Author's summary) 76Q05 (76N99)

eden, Glen (with Ghosh, Malay) Admissibility of the mle of the normal integer mean. Sankhyā Ser. B 40 (1978), no. 1-2, 1-10. (Khursheed Alam) 82c:62014 62C15 Betting against a Bayesian bookie. J. Amer. Statist. Assoc. 76 (1981), no. 373, 202-204. (James Berger) 82f:62018 62C10

Meek, D. S. What to do when the Peano kernel changes sign. Proceedings of the Ninth

Manitoba Conference on Numerical Mathematics and Computing (Univ. Ma Winnipeg, Man., 1979), pp. 305-313, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (J. Albrycht) 82a:65023 65D99

(with Isa, Mohammad; Usmani, Riaz A.) On quintic spline solution for a two-point dary value problem involving a third order differential equation. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. II (Winnipeg, Man., 1980). Congr. Numer. 31 (1981), 77-93. (From the introduction) 65L10

See also Proceedings: Manitoba Conference on Numerical Mathematics and Computing, 82j:00010 and 82j:00011

Meeker, William Q., Jr. A conditional sequential test for the equality of two binomial proportions. J. Roy. Statist. Soc. Ser. C 30 (1981), no. 2, 109-115. (Author's summary) 621.10

Meeks, William H., III The classification of complete minimal surfaces in R³ with total curvature greater than -8π. Duke Math. J. 48 (1981), no. 3, 523-535. (R. Osserman) 53A10

Uniqueness theorems for minimal surfaces. Illinois J. Math. 25 (1981), no. 2, 318-336. (Chi Cheng Chen) 82e:53012 53A10

The topological uniqueness of minimal surfaces in three-dimensional Euclidean pace. Topology 20 (1981), no. 4, 389-410. (R. Osserman) 82h:53010 53A10 (49F10) van der Meer, A. Bridging the gulf between formal calculus and physical reasoning. Internat. J. Math. Ed. Sci. Tech. 11 (1980), no. 3, 307-318. (F. J. Murray) 82e:00015 00A69

van der Meer, P. J. C. (with Sikkema, P. C.; Roos, Maria) Determination of the exact degree of local approximation by some linear positive operators involving the modulus of continuity of the pth derivative. Nederl. Akad. Wetensch. Indag. Math. 43 (1981), no. 1, 117-128. (A. K. Varma) 82g:41024 41A36

Meertens, Lambert G. L. T. (with Apt, Krzysztof R.) Completeness with finite systems of

ertens, Lambert G. L. T. (with Apt, Krzysztof R.) Completeness with finite systems of intermediate assertions for recursive program schemes. SIAM J. Comput. 9 (1980), no. 4, 665-671. (Stephen L. Bloom) 82j:68004 68B10

(with van Vliet, J. C.) ★An operator-priority grammar for ALGOL 68+. Afdeling Informatica [Department of Computer Science], 173. Mathematisch Centrum, Amsterdam, 1981. i+24 pp. (Authors' summary) 82m:68122 68F05 (68F25)

(with van Vliet, J. C.) ★An underlying context-free grammar of ALGOL 68+. Afdeling Informatica [Department of Computer Science], 171. Mathematisch Centrum, Amsterdam, 1981. i 9 pp. (Authors' summary) 82m:68127 68F05 (68F25)

Mees, Alistair I. ★Dynamics of feedback systems. A Wiley-Interscience Publication. John Wiley & Sons, Ltd., Chichester, 1981. x+214 pp. ISBN 0-471-27822-X (P. J. Holmes) 82h:34033 34Cxx (58Fxx, 93D10)

Meese, Richard Dynamic factor demand schedules for labor and capital under rational expectations. Econometric modeling and policy design at the Federal Reserve, Part I. J. metrics 14 (1980), no. 1, 141-158. (See 82c:90003a) 62P20

(with Geweke, John F.) Estimating regression models of finite but unknown order.

Internat. Econom. Rev. 22 (1981), no. 1, 55-70. (D. E. A. Giles) 82g:62140 62P20 Meetz, Kurt Finite energy solutions for interacting Yang-Mills and Dirac fields on

Minkowski space. Z. Phys. C 6 (1980), no. 1, 41-46. (S. G. Mamaev) 82e:81041a 81E99 (53C50, 58D25)

Errata: "Finite energy solutions for interacting Yang-Mills and Dirac fields on Minkowski space". Z. Phys. C 8 (1981), no. 1, 94. (Editors) 82e:81041b 81E99 (53C50, 58D25) Meeus, Jean (with Dumont, Michel) The four-numbers same, J. Recreational Math. 13

(1980/81), no. 2, 89-96. (Rodney T. Hansen) 82e:10010 10A20 (10A40)
Megahed, I. E. A. (with Elghobashi, S. E.) On the numerical solution of indeterminate

steady elliptic flows. Comput. Methods Appl. Mech. Engrg. 26 (1981), no. 2, 225-240. (Authors' summary) 82h:80010 80A32 (65P05, 76A60)

Megan, Mihail Positive systems in Hilbert spaces. An. Univ. Timişoara Ser. Ştiinţ. Mat. 17 (1979), no. 1, 49-58. (V. M. Popov) 82a:93046 93Dlo
Dichotomy of linear controllable systems in Hilbert spaces. An. Univ. Timişoara

Ser. Ştiinţ. Mat. 17 (1979), no. 2, 125-131. (V. Popescu) 82b:34081 34G10 (34H05,

(with Hiris, Viorel) Hyperstability for linear parabolic systems. An. Ştiinţ. Univ. 'Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 26 (1980), no. 2, 337-344. (Marshall Slemrod) 82e:93090 93D10 (34H05)

Stability and observability for linear discrete-time systems in Hilbert spaces. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 3, 277-284. (From the introduction) 82h:93010 93B05 (47A50, 93D99)

introduction) 82h:93010 93B05 (47A50, 93D99)
(with Hiris, Viorel) Hyperstability of linear control systems in Hilbert spaces.

Internat. J. Control 32 (1980), no. 1, 63–72. (V. M. Popov) 82h:93061 93D99

(with Preda, Petre) On exponential dichotomy in Banach spaces. Bull. Austral. Math. Soc. 23 (1981), no. 2, 293-306. (S. Leela) 82nc34062 34G10 (47D05)
 Megibben, Charles K. Separable mixed groups. Comment. Math. Univ. Carolin. 21 (1980), no. 4, 755-768. (L. Bican) 82bc20074 20K21

Megiddo, N. On repeated games with incomplete information played by non-Bayesia players. Internat. J. Game Theory 9 (1980), no. 3, 157-167. (J. W. Pratt) 82e:90118

(with Tamir, A.; Zemel, Eitan; Chandrasekaran, R.) An O(n log2n) algorithm for the kth longest path in a tree with applications to location problems. SIAM J. Com 10 (1981), no. 2, 328-337. (Authors' summary) 82j:68063 68E10 (68C25, 90B05) SIAM J. Comput.

kii, V. V. (with Buriškin, M. L.) Solutions of metaharmonic equations of the theory of thick isotropic plates for generalized symmetric problems. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 4, 28-32, 96. (Authors' summary) 73K10 (35C99)

rabjan, L. H. Parametric representations of certain classes of functions that are regular in the upper half-plane. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 6, 71-83, 220. (P. T. Mocanu) 82i:30037 30D10

Mehaute, Alain Prolongement d'un champ taylorien connu sur les côtes d'un triangle. (English summary) Numerical methods of approximation theory, Vol. 5 (Conf., Math. Res. Inst., Oberwolfach, 1979), pp. 184–199, Internat. Ser. Numer. Math., 52, Birkhäuser, Basel, 1980. (Author's summary) 82a:41005 41A05 (65D05)

Explicit C"-extensions of functions of two variables in a strip between two curves, or in a corner, in R². Approximation theory and applications (Proc. Workshop, Technion—Israel Inst. Tech., Haifa, 1980), pp. 159-169, Academic Press, New York, 1981. (Dietrich Braess) 82j:26013 26B40 (58C25)

Mehdi, Jafar Com-compression in groups. Ranchi Univ. Math. J. 9 (1978), 53-58. (From the introduction) 82d:20036 20F12

Meher, F. M. (with Patel, L. M.) Projective motion in a PS- F_n . (Italian summary) Boll. Un. Mat. Ital. A (5) 16 (1979), no. 3, 554-559. (I. Ghinea) 82g:53035 53B40

Mehlberg, Henry Time, causality, and the quantum theory. Vol. I. Essay on the causal theory of time. Edited and with an introduction by Robert S. Cohen. With a preface by Adolf Grünbaum. Boston Studies in the Philosophy of Science, 19. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xix + 303 pp. (1 plate). ISBN 90-277-0721-9,

90-277-1074-0 (Lawrence Sklar) 82/:81006a 81B05 (83B05)

*Time, causality, and the quantum theory. Vol. II. Time in a quantized universe. Edited by Robert S. Cohen. Boston Studies in the Philosophy of Science, 19. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. x+292 pp. (1 plate). ISBN 90-277-1075-9, 90-277-1076-7 (Lawrence Sklar) 82f:81006b 81B05 (83B05)

chilhorn, Kurt Sorting presorted files. Theoretical computer science (Fourth GI Conf., Aachen, 1979), pp. 199–212, Lecture Notes in Comput. Sci., 67, Springer, Berlin, 1979. (Thomas G. Szymanski) 82b:68028 68C05 (68E05)

(with Güttler, Reiner; Schneider, Wolfgang) Binary search trees: average and worst case behavior. (German and Russian summaries) Elektron. Informationsverarb. Kybernet. 16 (1980), no. 1-3, 41-61. (E. M. Reingold) 82g:68057 68E05 (90B05)

An efficient algorithm for constructing nearly optimal prefix codes. IEEE Trans. Inform. Theory 26 (1980), no. 5, 513-517. (Author's summary) 82a:94081

(with Altenkamp, Doris) Codes: unequal probabilities, unequal letter costs. J. Assoc. Comput. Mach. 27 (1980), no. 3, 412-427. (R. J. McEliece) 82a:68114 68E05 (94B45) (with Hong, Jia Wei; Rosenberg, Arnold L.) Cost tradeoffs in graph embeddings, with applications (preliminary version). Automata, languages and programming (Akko, 1981), pp. 41–55, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (See 82:68003) 68E10

A new data structure for representing sorted lists. Graph-theoretic computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980, pp. 90-112, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Author's summary) 82h:68023 68B15 (68E05)

(with Lengauer, Thomas) On the complexity of VLSI computations. VLSI systems and computations (Pittsburgh, Pa., 1981), pp. 89-99, Computer Sci. Press, Rockville, Md.,

1981. (Authors' summary) 82m:68066 68C25
(with Overmars, Mark H.) Optimal dynamization of decomposable searching problems. Inform. Process. Lett. 12 (1981), no. 2, 93–98. 82d:68043 68E05

Lower bounds on the efficiency of transforming static data structures into dynamic structures. Math. Systems Theory 15 (1981/82), no. 1, 1-16. (Author's summary) 82m:68046 68B15

Arbitrary weight changes in dynamic trees. (French summary) RAIRO Inform. Théor. 15 (1981), no. 3, 183-211. (Author's summary) 82m:68045 68B15 (05C05)

hihorn, Thomas A. (with Duderstadt, James J.) A discrete ordinates solution of the Fokker-Planck equation characterizing charged particle transport. J. Comput. Phys. 38 (1980), no. 1, 86–106. (Janusz Mika) 82h:82098 82A70 (35A40, 65M20)

Mehra, A. L. Gravitational field of a sphere composed of concentric shells. Internat. J. Theoret. Phys. 20 (1981), no. 5, 377-382. (Author's summary) 82h:83019 83C15 hra, K. L. (with Lam, Kin) A note on some results of Tamhane. J. Roy. Statist. Soc.

Ser. B 43 (1981), no. 3, 368-369. (Authors' summary) 82k:62055 62F03 Mehran, F. (with Aghevli, B. B.) Optimal grouping of income distribution data. J. Amer. Statist. Assoc. 76 (1981), no. 373, 22-26. (Authors' summary) 82b:90016 90A10

Mehri, B. On the existence of periodic solution for certain nonlinear differential equation Rev. Roumaine Math. Pures Appl. 23 (1978), no. 9, 1367-1373. (J. A. Marlin) 82a:34054

(with Emamirad, Hassan Ali) On the existence of a periodic solution of nth order

nonlinear differential equations. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 6, 516-522. (A. Vanderbauwhede) 824:34050

Periodic solution of certain second order differential equation. Arch. Math. (Brno) 16 (1980), no. 1, 39-44. (T. Yoshizawa) 82c:34045 34C25

Periodic solutions for a certain nonlinear third order differential equation. Bull. nian Math. Soc. 8 (1980/81), no. 1, 9-13. (Ch. G. Philos) 82i:34043

Periodic solution for certain nonlinear second-order autonomous differential on. Indian J. Pure Appl. Math. 12 (1981), no. 6, 681-684. (Ch. G. Philos) 82o:34053 34C25

Mehrok, Beant Singh (with Goel, R. M.) On the coefficients of a subclass of starlike functions. Indian J. Pure Appl. Math. 12 (1981), no. 5, 634-647. (Herb Silverman) 829:30026 30C45 (30C80)

with Goel, R. M.) On a class of close-to-convex functions. Indian J. Pure Appl. Math. 12 (1981), no. 5, 648-658. (S. Ruscheweyh) 82e:30017 30C45 (30C70)

hrotra, Kishan G. A note on the mixture of new worse than used in expectation.

Res. Logist. Quart. 28 (1981), no. 1, 181-184. (Hira L. Koul) 82h:62028 Mehrotra, Kisha

Mehta, B. S. Theoretical consideration of slowing-down density of neutrons in a spherical symmetry. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 2, 122-128. (Author's summary) 82f:82874 82A75

Mehta, C. L. (with Sharma, J. K.; Mukunda, N.; Sudarshan, E. C. G.) Representation and properties of para-Bose oscillator operators. II. Coherent states and the minimus uncertainty states. J. Math. Phys. 22 (1981), no. 1, 78-90. (F. R. Halpern) 82g:81043

Mehta, Cyrus R. (with Begg, Colin B.) Sequential analysis of cor Biometrika 66 (1979), no. 1, 97-103. (Authors' summary) 82h:62131 621.10 (62P10) Sequential comparison of two exponential distributions with censored survival data. rika 68 (1981), no. 3, 669-675. (Author's summary) 82m:62228

Mehta, F. C. Generalized sampling expansions of signals for finite Hankel and other transforms. Elektron. Informationsverarb. Kybernet. 16 (1980), no. 7, 353–361. (Author's summary) 82m:44005 44A15 (94A05)

Mehta, Ghanshyam A new extension procedure for the Arrow-Halm theorem. Internat.

Econom. Rev. 22 (1981), no. 1, 113–118. (From the introduction) 822:90020 90A10

Mehta, Gobind P. (with Deshpande, Jayant V.) Selection rules for IFRA populations.

Indian J. Pure Appl. Math. 12 (1981), no. 1, 1-6. (Eve Bofinger) 82h:62044 Mehta, J. S. (with Swamy, P. A. V. B.) On the existence of moments of partially restricted reduced form coefficients. J. Econometrics 14 (1980), no. 2, 183-194. (A. L. Nagar) 82g:62141 62P20

Mehta, M. L. (with Ball, Robin Christopher) Sequence of invariants for knots and links. (French summary) J. Physique 42 (1981), no. 9, 1193-1199. (Authors' summary) 57M25 (82A51)

Mehta, R. D. (with Vasavada, M. H.) Tensor product of URM algebras. Mat. Vesnik 4(17)(32) (1980), no. 2, 169-173. (W. Żelazko) 821:46075 46M05 (46J10)

Mehtiev, T. R. (with Abdullaev, G. B.; Rypnevskii, V. S.) Some models of the conduction of an impulse along a nerve fiber. I. Geometrically inhomogeneous fiber in a closed medium. (Russian, Azerbaijani and English summaries) Akad, Nauk Azerbaidžan, SSR Dokl. 35 (1979), no. 11, 43-48. (A. L. Rebenko) 82a:92008 92A09

Mei, Xiang Ming The transgression of Pontrjagin characteristic classes. (Chinese) Acta

 Math. Sinica 23 (1980), no. 1, 37-45. (Editors) 82k:57014
 57R20

 Meidan, R. On the connection between ordinary and generalized stochastic processes.

 Math. Anal. Appl. 76 (1980), no. 1, 124-133. (C. L. Scheffer) 82d:60069
 600

 (46F10, 60G10)

(with Knowles, Ian W.) On nonlinear nuclear operators. J. Math. Anal. Appl. 79 (1981), no. 2, 521-535. (M. Edelstein) 82i:47103 47H99 (60G99)

Meier, David On the homological dimension of poly-locally free groups. Soc. (2) 22 (1980), no. 3, 449-459. (U. Stammbach) 82c:20091 20J05 (with Wiegold, James) Growth sequences of finite groups. V. J. Austral. Math. Soc. Ser. A 31 (1981), no. 3, 374-375. (F. Levin) 82i:20041b 20D60

Meier, Willi Minimal models for nonnilpotent spaces. Commo. 4, 622-633. (Jean-Claude Hausmann) 82h:55011 55 ment. Math. Helv. 55 (1980). 55P62 (55P15) (with Strebel, Ralph) Homotopy groups of acyclic spaces. Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 125, 81-95. (Jean-Claude Hausmann) 82h:55007

Meier, olfgang Charakterisierung von Produkten harmonischer Räume. [Characterization of harmonic spaces] Math. Ann. 257 (1981), no. 2, 199-218. (Ursula

Schirmeier) 82i:31010 31D05 Meilahs, A. M. (with Pospelova, M. V.) A maximin problem of resource distribution. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 3, 43-46, 129. (Authors' summary) 82e:90036 90B05

Meilier, T. K. On the question of the asymptotic representation of solutions of a system of integro-differential equations, containing a small parameter. (Russian) Analytic methods for investigating nonlinear oscillations (Russian), pp. 96-99, 181, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (C. Corduneanu) 82i:45010 45J05 (45L05)

Construction of asymptotic solutions of second-order equations with a small parameter multiplying the derivative of fractional rank. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 6, 27-30, 91. (N. A. Sidorov) 82g:34078 34E05 Meinardus, Günter On the sequence of the powers of a given matrix. J. Comput. Appl.

Math. 7 (1981), no. 3, 225-226. (Editors) 82j:15022 15A60 (65F99) (with Hadeler, K. P.) On the roots of Cauchy polynomials. Linear Algebra Appl. 38 (1981), 81-102. (Marilyn Breen) 82k:52016 52A30 (30C15)

See also Constructive methods of finite nonlinear optimization, 82g:49001 guet, Jean From Dirac distributions to multivariate representation formulas Approximation theory and applications (Proc. Workshop, Technion—Israel Inst. Tech., Haifa, 1980), pp. 224-248, Academic Press, New York, 1981. (J. N. Pandey) 82g:46080 46F10 (35C99, 65P05, 65T05)

Meinhardt, Hans Similarities between pattern formation and pattern recognition (interpretation) during biological development. Pattern formation by dynamic systems and pattern recognition (Proc. Internat. Sympos. Synerget., Garmisch-Partenkirchen, 1979), pp. 135-143, Springer Ser. Synergetics, 5, Springer, Berlin, 1979. (See 82k:00028)

(with Gierer, Alfred) Generation and regeneration of sequence of structures during morphogenesis. J. Theoret. Biol. 85 (1980), no. 3, 429-450. (Michael Conrad) 82e:92006

(with Gierer, Alfred) Generation of spatial sequences of structures during development of higher organisms. Some mathematical questions in biology (Toronto, Ont., 1981), pp. 1-20, Lectures Math. Life Sci., 14, Amer. Math. Soc., Providence, R.I., 1981. (Authors' summary) 82k:92000 92A09

Meir, A. (with Moon, J. W.) Terminal path numbers for certain families of trees. J.

Austral. Math. Soc. Ser. A 31 (1981), no. 4, 429-438. (G. R. Grimmett) 82m:05039 05C05 (05A15, 05C38)

- - Mech. 23 (1981), no. 1, 89-95. (Author's summary) 824:70016 70F07
- abelion, K. A. Remarks on theories with a bounded spectrum. (Russian) Theory of dels and its applications (Russian), pp. 65-72, Kazah. Gos. Univ., Alma-Ata, 1980. (M. odels and its app 03C60 (03C45, 08C10, 20A15)
- Uber windschiefe Flächen mit ausgezeichneten Scharen ebener Kurven. First Geometry Colloquium (Graz, 1980) (German), Ber. No. 164, 18 pp., Bericht, 163-167, Forschungszentrum Graz, Graz, 1981. (J. Hoschek) 82j:53006 53A05 (53A25)
 - Die windschiefen Flächen mit einer stetigen Schar ebener Schattengrenzen. I (English sum nary) Monatsh. Math. 91 (1981), no. 1, 39-71. (J. Hoschek) 82d:53013 53A25
- eiri, A. Zvi Come ents on: "Source coding of the discrete Fourier transform" [IEEE Trans. Inform. Theory 24 (1978), no. 6, 683-692; MR 80f:94012] by W. A. Pearlman and R. M. Gray. With replies by Pearlman and Gray. IEEE Trans. Inform. Theory 26 (1980), no. 5, 626-627. (Editors) 82x:94051 94A29
 - (with Porat, B.) Nonlinear estimation of generalized vector she Aerospace Electron. Systems 17 (1981), no. 4, 520-530. (Authors' summary) 075 93E11 Trans. Ac. 82h:93075
- (with Mitchell, Andrew Ronald; Griffiths, D. F.) Finite element Galerkin methods for convection-diffusion and reaction-diffusion. Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ. Nijmegen, Nijmegen, 1980), pp. 157–177, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (Authors' summary) 820c65134 65N30 (35K55, 80A20)
- manov, A. M. On the substantiation of the hydraulic Boussinesq equation. (Russian) ika Splošn. Sredy No. 43 Mat. Problemy Meh. (1979), 169-172, 188. (J. F. Heyda) 76B99 (35Q10, 76S05)
 - (with Puhnačev, V. V.) Lagrangian coordinates in the Stefan problem. (Russian) namika Splošn. Sredy No. 47 Mat. Problemy Meh. Splošn. Sred (1980), 90-111, 165-166. (Authors' summary) 82m:35089 35K85 (58G40)
 - Solvability of Verigin's problem in an exact formulation. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 3, 588-591. (J. Kačur) 82f:35103 35K99 (76S05)
- iron, Daniel I. (with Morf, Rudolf H.; Orszag, Steven A.; Frisch, Uriel; Meneguzzi, Maurice) Analytic structure of high Reynolds number flows. Seventh Intern Conference on Numerical Methods in Fluid Dynamics (Stanford Univ., Stanford, Calif., NASA/Ames Res. Center, Moffett Field, Calif., 1980), pp. 292-298, Lecture Notes in Phys., 141, Springer, Berlin, 1981. (Authors' introduction) 82j:76049
- ard *Computational methods in structural dynamics. Monographs and Textbooks on Mechanics of Solids and Fluids: Mechanics of Dynamical Systems, 5. Sijthoff & Noordhoff, Alphen aan den Rijn-Germantown, Md., 1980. xiv+439 pp. ISBN 90-286-0580-0 (Vadim Komkov) 82f:73001 73-01 (65-01, 73K30)
- (with Öz, H.) Active control of structures by modal synthesis. Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 505-521, m, 1980. (See 82g:93003) 93B50
- (with Baruh, H.) On the Cholesky algorithm with shifts for the eigensolution of real symmetric matrices. Internat. J. Numer. Methods Engrg. 17 (1981), no. 6, 923-930. (Robert Todd Gregory) 82k:65018 65F15
- Meise, Reinhold (with Colombeau, Jean-François) C∞-functions on locally convex and on bornological vector spaces. Functional analysis, holomorphy, and approximation theory (Proc. Sem., Univ. Fed. Rio de Janeiro, Rio de Janeiro, 1978), pp. 195-216, Lecture Notes in Math., 843, Springer, Berlin, 1981. (Richard M. Aron) 82k:46037 46E10 (46F05, 46G05, 58C20)
- sner, James F. Maximum entropy regressions. Econom. Lett. 5 (1980), no. 3 1-255. (K. R. Shah) 82f:62098 62H12
- Meiss, James D. (with Cary, John R.; Bhattacharjee, A.) Statistical characterization of periodic, area-preserving mappings. Phys. Rev. A (3) 23 (1981), no. 5, 2744-2746. (Richard Cushman) 82;:58102 58F22 (58F12, 70K50, 82A05)
- Meissl, P. (with Killian, K.) Bestimmung der Lage von gegenseitig nicht sichtbaren Stationen der Erdoberfläche aus Dopplereffekt-Messungen zu bewegten Zielen mit unbekannten Koordinaten. (English summary) Festschrift on the retirement of Karl Hubeny (German), pp. 109-123, Mitt. Geodät. Inst. Tech. Univ. Graz, 35, Tech. Univ. Graz, Graz, 1980. (Authors' summary) 82g:86013 86A30
- Meissner, Günther (with Yamazaki, Yoshitake; Hilhorst, Henk J.) Differential real-space renormalization of the d-dimensional Gaussian model. J. Statist. Phys. 23 (1980), no. 5, 609-625. (R. Delbourgo) 82h:82025 82A15 (82A67)
- Meißner, Hansgeorg See Ghiskov, V. M.; et al., 82b:68001

 Meister, B. Waiting time in a preemptive resume system with compound-Poisson input. (German summary) Computing 25 (1980), no. 1, 17-28. (Author's summary) 82f:60223 60K25
- Meister, E. (with Sommer, H. J.) Ein algebraisches Verfahren zur Lösung von gemischten Anfangsrandwertproblemen aus der Theorie instationärer Gitterströmungen. (English summary) Math. Methods Appl. Sci. 1 (1979), no. 2, 158-186. (H. C. Kranzer) 82b:65158 65P05 (76G99)
- er, Josef Orthogonal polynomials in the theory of Mathieu functions. I. Arch. Math. (Basel) 36 (1981), no. 2, 162-167. (T. S. Chihara) 82f:33008 33A65 (34B30) See also de Groot, S. R., 82f:01107
- Meixner, Thomas (with Hartley, Brian) Finite soluble groups containing an element of prime order whose centralizer is small. Arch. Math. (Basel) 36 (1981), no. 3, 211-213. (Michael B, Ward) 82m:20019 20D10 (20D45)
 - Metabelsche Gruppen mit einem fixpunktfreien Automorphismus von Primzahlordnung. Arch. Math. (Basel) 35 (1980), no. 6, 497-500 (1981). (H. Heineken) 82h:20036 20D45 (20D15)
 - Verallgemeinerte Hughes-Untergruppen endlicher Gruppen. Arch. Math. (Basel) 36
 - Power automorphisms of finite p-groups. Israel J. Math. 38 (1981), no. 4, 345–360.

 [J. J. Malone) 82f:20044 20D45 (20D15)
 - Eine Anmerkung zu Diedergruppen der Ordnung 2p, p eine ungerade Primzahl.

 Mitt. Math. Sem. Giessen No. 149 (1981), 103-105. (From the text) 82j:20055 20D99

- Mejia, Luis A proposal for operational semantics and equivalence of finite asynchronous processes. Formalization of programming concepts (Proc. Internat. Colloq., Peñiscola, 1981), pp. 387-400, Lecture Notes in Comput. Sci., 107, Springer, Berlin, 1981. (Author's summary) 82h:68037 68B20 summary) 82h:68037
- Mejlbo, Lars C. Orthogonal trajectories 1694-1720. A chapter of the early history of analysis. (Danish. English summary) Normai 28 (1980), no. 2, 41-51, 87. (Kirsti Andersen) 82m:01031 01A45 (01A50, 49-03)
 - On nonstandard analysis. (Danish) Normat 29 (1981), no. 1, 7-19. (Editors) 82b:03002 03-01 (03H05, 26-01, 26E35)
- Mejza, S. (with Ceranka, B.) On the efficiency factor for a contrast of treatment
- parameters. Biometrical J. 21 (1979), no. 2, 99-102. (Henry Beker) 82a:62117 Mekerov, D. G. Differential geometry of surfaces in a degenerate biaxial space. (Bulgarian Russian and German summaries) Plovdiv. Univ. Naučn. Trud. 16 (1978), no. 1, 63-79 (1980). (Hans Sachs) 82g:53018 53A35 (53A40)
 - (with Kožuharova, R.) Hyperbolic and elliptic congruences of straight lines in degenerate biaxial space. (Bulgarian. Russian and German summaries) Plovdiv. Univ. Naučn. Trud. 16 (1978), no. 1, 81-103 (1980). (Hans Sachs) 82g:53016 53A25
 - eter systems of lines in a generalized biaxial space. (Russian) C. R. Acad. Bulgare Sci. 34 (1981), no. 3, 323-326. (Libuše Marková) 82i:53014 53A35
 - Geometric interpretation of the invariants of a two-parameter system of lines in a generalized biaxial space P₄^{1,2}. (Russian) C. R. Acad. Bulgare Sci. 34 (1981), no. 4,
- 481-483. (Leo Boček) 82k:5022 53A20

 Mekler, Alan H. (with Eklof, Paul C.) Stationary logic of finitely determinate structures. Ann. Math. Logic 17 (1979), no. 3, 227-269. (Authors' summary) 82f:03033 (03B25, 12L05, 20A15)
 - How to construct almost free groups. Canad. J. Math. 32 (1980), no. 5, 1206-1228. (D. E. Cohen) 82b:20038 20E05 (03E35, 20K99)
 - (with Eklof, Paul C.) Infinitary stationary logic and abelian groups. Fund. Math.

 112 (1981), no. 1, 1–15. (U. Felgner) 82j:03042 03C80 (03C60, 03C75, 20A15, 20K99) (with Pelletier, Donald H.; Taylor, Alan D.) A note on a lemma of Shelah
 - concerning stationary sets. Proc. Amer. Math. Soc. 83 (1981), no. 4, 764-768. (A. Kanamori) 82k:04007 04A20
- Meladze, R. V. (with Giorgašvili, L. G.; Cagareli, I. I.; Bakradze, I. D.) Solution of fundamental boundary contact problems of the theory of elasticity in the case of a many-layered infinite cylinder. (Russian. Georgian and English summaries) Some problems of the theory of elasticity (Russian), pp. 39-55, Tbilis. Gos. Univ., Inst. Prikl. Mat., Tbilisi, 1980. (Authors' summary) 82c:73081 73T05
- Melamed, Benjamin On Poisson traffic processes in discrete-state Markovian systems with applications to queueing theory. Adv. in Appl. Probab. 11 (1979), no. 1, 218-239. (Erol Gelenbe) 82a:60121a 60J75 (60K25)
 - Correction: "On Poisson traffic processes in discrete-state Markovian systems with pplications to queueing theory". Adv. in Appl. Probab. 11 (1979), no. 2, 456. (Editors) 82a:60121b 60J75 (60K25)
- Melamed, I. I. (with Gabovič, E. Ja.) An approach to the analysis of discrete problems regarding lengths of permutations. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 1, 17-25, 218 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 1, 13-21 (1981). 90C35 (05A05) (Authors' summary) 82m:90151
- nud, E. Ja. Realization of positive matrix-valued functions according to Darlington. Polynomial realization in the case of degeneration. (Russian. Armenian and English maries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 14 (1979), no. 4, 237-250, 314. (W. 15A57 (30E99) H. J. Fuchs) 82f:15016
- Mélard, Guy Some links between the Harrison-Stevens and Box-Jenkins methods for univariate time series. Time series (Proc. Internat. Meeting, Univ. Nottingham, Nottingham, 1979), pp. 319-323, North-Holland, Amsterdam, 1980. (Author's sum
 - 62M10 (with Kiehm, J.-L.) Spécification d'un modèle ARIMA évolutif: approche par
 - décomposition. Cahiers Centre Études Rech. Opér. 22 (1980), no. 3-4, 265-277. (Robert 62M10 (90A20) Fernholz) 82g:62127
 - (with Kiehm, J.-L.) Evolutive cospectral analysis of time-dependent ARMA processes. Time series analysis (Houston, Tex., 1980), pp. 227-236, North-Holland,
 - Amsterdam, 1981. (See 82k:62005) 62M10 (with Lentz, J.-R.) Statistical analysis of a nonlinear time series model. Time series
- analysis (Houston, Tex., 1980), pp. 287-293, North-Holland, Amsterdam, 1981. (See 82k:62005) 62M10 Melbin, Julius (with Cecchini, Albert B. P.; Noordergraaf, Abraham) Set-point: is it a
- distinct structural entity in biological control? J. Theoret. Biol. 93 (1981), no. 2, 387-394. (Authors' summary) 82m:92006 92A05 (93A10)

 Melchers, R. E. Reinforcement minimization of cylindrical shells. (German summary)
- Internat. J. Non-Linear Mech. 15 (1980), no. 6, 505-516. (Author's summary) 82b:73043 73K40
- Melcon, David (with Hamilton, Howard; Tamura, Takayuki) Finite inverse semigroups satisfying some conditions on congruences (abstract). Proceedings of a Symposium Regular Semigroups (Northern Illinois Univ., De Kalb, Ill., 1979), pp. 80–82, Northern Illinois Univ., DeKalb, Ill., 1979. (See 82j:20120) 20M10
- drum, J. D. P. (with Lyons, C. G.) N-series and tame near-rings. Proc. Roy. Soc. Edinburgh Sect. A 86 (1980), no. 1-2, 153-163. (G. Betsch) 82d:16033 16A76 (with Mahmood, S. J.; O'Carroll, L.) Inverse semigroups and near-rings. J. London
- Math. Soc. (2) 23 (1981), no. 1, 45-60. (Steve Ligh) 82e:16033 16A76 (20M20) Melen', L. M. (with Kożevnikova, G. P.; Kostyrko, V. S.; Tal'janskaja, O. I.) A method of computer modeling of the analysis of algorithm complexity. (Russian) Questions of the stational complexity of algorithms (Russian), pp. 3-13, 46, Preprint 79, 14, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Authors' summary) 82e:68040 68C25 (68B10)
- Melencov, A. A. (with Rudakov, S. A.) Pseudoconvergence and summability of iterations of nonlinear operators. (Russian) Ural. Gos. Univ. Mat. Zap. 11 (1978/79), no. 4, 38-71, 131. (P. P. Zabreiko) 82f:47067 47H09 (47H10)
- Melendreras Gimeno, Ramiro Invariance in minimal information. (Spanish) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 72 (1978), no. 4, 573-591. (J. M. Bernardo) 82g:62009 62A05 (62B10, 94A15)

Singular properties of the theory of domination. (Spanish) Trabajos Estadist.

Investigación Oper. 30 (1979), no. 1, 11-25. (Vincențiu Dumitru) 821:90090 90C31
Meleško, A. N. Interpolation quadrature formulas for Schwarz and Hilbert integrals.
(Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1980, no. 3, 26-29, 78. (Yury Girshovich) 41A55 (65D32)

Approximate solution of a homogeneous Hilbert boundary value problem for a disk olylogarithms. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 3, 678-684, 811. (Zbigniew Binderman) 82j:30066 30E25 (65E05)

- eleško, I. N. Approximate solution of a Hilbert boundary value problem. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 10, 29-35. (I. A. Džaršeisvili) 824:30044 30E25 (30E10)
- Melesko, S. V. DP-conditions and the problem of joining various DP-solutions to each other. (Russian) Cisl. Metody Meh. Splošn. Sredy 11 (1980), no. 6 Mat. Modelirovanie, 96–109. (J. Chrastina) 82m:58002 58A15 (35L67)
- Meleško, V. I. Regularized and recurrent estimates using pseudoinverse operators. (Russian) Operations research (models, systems, solutions), No. 7 (Russian), pp. 61-99, 2, Akad. Nauk SSSR, Vyčisl. Centr, Moscow, 1979. (Vladimir Katkovnik) 82c:62045 (47A99, 65J99, 93E12)

(with Dol'berg, O. M.) Design of compromise experiments in the presence of correlated noise. (Russian) Mathe ematical methods of cybernetics (Russian), pp. 14-22, 89, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (Authors' summary) 82h:62123 62K05 (93E10)

The solution of ill-posed stochastic algebraic equations. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 1, 11-26, 259. (B. L. Rozovskii) 82d:65035 65F10 (60H25)

Perturbed iteration methods for determining L generalized solutions of nonlinear operator equations. (Russian) Differencial nye Uravnenija 17 (1981), no. 3, 541-557, 574-575. (M. A. Jagubov) 82i:47097 47H17 (65J15)

- Melihov, A. N. (with Korovin, S. Ja.; Celyh, A. N.) Some principles of program realization for fuzzy control algorithms. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Tehn. Nauk. 1981, no. 3, 9-13, 101. (From the text) 82m:94074 03E72)
- Melija, V. I. (with Sitnikov, K. A.) On the second fundamental theorem of homological dimension theory. (Russian) Uspehi Mat. Nauk 35 (1980), no. 5(215), 231-232. (Jože
- Vrabec) 82k:55002 55M10 (54F45, 55N05)
 Melikjan, A. A. (with Korneev, V. A.) Impulse-differential encounter game. Prikl. Mat. Meh. 42 (1978), no. 2, 210-218 (Russian); translated as J. Appl. Math. Mech. 42 (1978),
- no. 2, 220-228 (1979). (Authors' summary) 82j:90089 90D26

 Melikjan, A. O. (with Simonjan, K. H.) A two-level system in a field of two intense waves.

 (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 8, 23-25. (Authors' summary)

(with Simonjan, K. H.) Limiting transition $T \rightarrow \infty$ in the Hill method for quasi-energetic states. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 1, 76-79. (Authors' summary) 82b:81044 81C99

- Melikov, T. K. (with Mardanov, M. D.) On necessary optimality conditions in systems with lag. (Russian. Azerbaijani and English summaries) Izo. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1979, no. 6, 47-51. (K. B. Mansimov) 82g:49015 49B10 Meliksetjan, E. P. The Dirichlet problem for elliptic systems of second-order differential
- equations in a class of summable functions. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 14 (1979), no. 6, 407-415, 501. (B. P. Panejah) 35J55

The Dirichlet problem for elliptic systems of second-order differential equations in some classes in the domain |z| > 1. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 15 (1980), no. 5, 335-348, 416. (S. Kamin) 82i:35052 35J25

- Melis, A. On the potential of forces concerning a fixed family of orbits. (Italian. English summary) Rend. Sem. Fac. Sci. Univ. Cagliari 49 (1979), no. 1-2, 157-164. (Author's summary) 82b:70010 70M05 (73F15)
- Melkanoff, Michel A. (with Silva, Antonio M.) A method for helping discover the dependencies of a relation. Advances in data base theory, Vol. 1 (Proc. Workshop, Toulouse, 1979), pp. 115-133, Plenum, New York, 1981. (See 82a:68040) 68B15 (with Zaniolo, Carlo) On the design of relational database schemata. ACM Trans. Database Systems 6 (1981), no. 1, 1-47. (Authors' summary) 82b:68019
- (with Bühler, Wolfgang J.) Integrals of birth and death processes. J. Math. Biol. 10 (1980), no. 2, 205-207. (Prem S. Puri) 82g:60107 Mellin, Hjalmar See Elfving, G., 82b:01043
- de Mello, Alciléa A. H. (with Barone, Mário, Jr.) ★Equações diferenciais. Uma introdução aos sistemas dinâmicos. (Portuguese) [Differential equations. An introduction to dynamical systems] Universidade de São Paulo, Instituto de Matemática e Estatística, São Paulo, 1979. v+194 pp. (Freddy Dumortier) 82a:58001 58-01 (34-01, 58Fxx)
- Mello, P. A. (with Flores, J.; Henestroza, E.; Moshinsky, M.) Decay of a compound particle and the Einstein-Podolsky-Rosen argument. Amer. J. Phys. 49 (1981), no. 1, 59-63. (Authors' summary) 82x81005 81B05 (81D05) (with Brody, T. A.; Flores, J.; French, J. B.; Pandey, A.; Wong, S. S. M.)

Random-matrix physics: spectrum and strength fluctuations. Rev. Modern Phys. 53 (1981), no. 3, 385-479. (Authors' summary) 82f:81090 81G35

- Melloni, Franca Gallerani On an approximate integration for the equations of a mecha nonautonomous system. (Italian) Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 312-318 (1981). (Author's summary) 82h:70028 70K99
- Mellor, David Hugh See Science, belief and behaviour, 82g:03014

 Mel'ničak, P. P. The Cauchy problem for equations in radial differentials. (Russian)

 Ukrain. Mat. Z. 32 (1980), no. 6, 843-846. (Stefan Balint) 82d:34092 34G20

 Mel'ničenko, A. S. (with Adeev, A. V.) Estimation of the difference between absorbed and
- radiated energy in radiative heat transfer problems. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 3, 786-790, 815. (Author's summary) 82a:89006 80A20 (with Adeev, A. V.) Linearization of the energy equation when it is simultaneously
- solved with the equation of radiative transfer. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 1, 107-112, 254. (V. Protopopescu) 82d:85008 85A25 (45L05)
- Melnick, Edward L. Moments of ranked discrete variables with an application to independent Poisson variates. J. Statist. Comput. Simulation 12 (1980/81), no. 1, 51-60. (Author's summary) 82a:62030 62E15

- Mel'ničuk, Ju. V. Hausdorff dimension in Diophantine approximations on curves. (Ukrainian. Russian summary) Studies in the qualitative theory of differential equations and its applications (Ukrainian), pp. 35–38, 73, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (F. Schweiger) 82j:10067 10K15
- Mel'nik, I. M. (with Oksimec, V. I.) An interactive approach to the solution of a class of problems of vector optimization. (Russian). Complex control systems (Russian). pp. 41-51, 98, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (Authors' sum 82m:90146 90C31
- Met'nik, Ju. L. Dirichlet series of functions that are regular in convex polygons. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 6, 837–843. (R. P. Boas, Jr.) 82b:30003 30B50
- Mel'nik, O. M. Investigation of a system of matrix equations. (Russian. English sum Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 1, 20-21, 91. (B. Crstici) 82m:15019
- Mel'nik, T. E. Conjugation of the second-order hyperbolic equation solutions along the unknown boundary. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1960, no. 12, 10-12, 91. (Author's summary) 82h:35059 35L20
- Mel'nik, V. I. A Tauberian theorem in the L metric for convolution transformations. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 6, 831-836. (E. Reimers) 82e:40008
- Mel'nik, V. S. Boundary control of objects described by a nonlinear mixed boundary value problem containing a time derivative in the boundary condition. (Russian) Adaptive control systems (Russian), pp. 68-75, 82, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, touring systems (Russian), pp. 66–73, 62, Aradi. Natic Urruin. SSR, 1931. Algernet., Riev., 1980. (Author's summary) 82b-35033 35620 (35820, 93C20)

 Mel'nikov, A. I. Stability in the critical case of systems with aftereffect. (Russian) Ural.
- Gos. Univ. Mat. Zap. 12 (1979), no. 1, 95-117, 157-158. (Snežana Hristova) 82f:34101 34K20
- Mel'nikov, B. G. A multidimensional linear filter that is optimal on the criterion of the maximum of the probability of a hit. (Russian) Mathematical methods of optimization as structuring of systems (Russian), pp. 10-13, 165, Kalinin. Gos. Univ., Kalinin, 1980. (Author's summary) 82d:93064 93E11

On the problem of determining an optimal system. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 2, 134–140, 222 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 2, 109–114 (1981). (Author's summary) 82d:93063 93E11

- Mel'nikov, Ju. A. (with Dolgova, I. M.) Construction of Green's functions and matrices for equations and systems of the elliptic type. Prikl. Mat. Meh. 42 (1978), no. 4, 695-700 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 4, 740-746 (1979). (Authors'
- summary) 821:3504 3500 (35155, 73C35)

 Mel'nikov, O. V. Projective limits of free profinite groups. (Russian. English summary) Dokl. Akad. Nauk BSSR 24 (1980), no. 11, 968-970, 1051. (G. A. Soifer) 82c:20056 20E18
- Mel'nikov, V. K. Inverse scattering method in the theory of nonlinear evolution equations. (Russian. English summary) Fiz. Elementar. Častic i Atom. Jadra 11 (1980), no. 5, 1224-1272. (Eugene Gutkin) 82f:35169 35O20 (58F07, 81F99)
 - Conservation laws for a class of systems of nonlinear evolution equations. (Russian) Funkcional. Anal. i Priložen. 15 (1981), no. 1, 43-60, 96. (J. Chrastina) 82f:49028 49C10 (35Q20, 58F07)
- Mel'nikov, V. N. Theory of gravitation with conformal Higgs field and fundamental constants. (Russian) Problemy Teor. Gravitacii i Element. Castic No. 11 (1980), 164-171. (P. K. Smrz) 82f:83064 83C99 (81D20, 81E99)
- de Melo, W. (with Palis, J.) Moduli of stability for diffeomorphisms. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 318-339, Lecture Notes in Math., 819, Springer, Berlin, 1980. (Carmen Chicone) 58F14 (58F10) 82b:58063
- Meloni, Gian Carlo (with Radaelli, Giorgio) A natural deduction system for residuated categories. (Italian. English summary) Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 45-53 (1981). (Anna Labella) 821:18001 18A15 (03G30) (1979), 45-53 (1981). (Anna Labella) 82h:18001
 - (with Bozzi, Silvio) Representation of Heyting algebras with covering and propositional intuitionistic logic with local operator. Boll. Un. Mat. Ital. A (5) 17 (1980),
- no. 3, 436-442. (Leo Esakia) 82k:03099 03G25 (03B25, 03B45, 06D20)

 Melrose, R. B. Weyl's conjecture for manifolds with concave boundary. Geometry of the Laplace operator (Proc. Sympos. Pure Math., Univ. Hawaii, Honolulu, Hawaii, 1979), pp. 257-274, Proc. Sympos. Pure Math., XXXVI, Amer. Math. Soc., Providence, R.I., 1980. (P. Günther) 82b:\$8101 58G25 (35P20)
- See also Helffer, Bernard, 82d:35030 Mels, T. A functional approach to the basic concepts of the theory of probability. (Russian. English summary) Tartu Riikl, Ül. Toimetised No. 541 Trudy Mat. Meh. (1980), 3-17. (Author's summary) 82d:60008 60A05
 - A geometric approach to testing the sufficiency of sets of parameters in the normal theory of least squares. (Russian. English summary) Tartu Riikl. Ül. Toimetised No. 541 Trudy Mat. Meh. (1980), 37-56. (Author's summary) 82e62113 62J05 (62F03)
- Melter, R. A. A representation theorem for B.M. algebras. Bul. Ştiinţ. Tehn. Inst. Politehn "Traian Vuia" Timişoara 24(38) (1979), no. 2, 5-6. (Editors) 82m:06017 06E05
- Melton, Austin Which dispersed diafactorization structures on Top are hereditary? General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 281-290, Academic Press, New York, 1981. (Roy Dyckhoff) 82g:54023 (18B30, 54B30)
- Melton, William C. (with Roley, V. Vance) Imperfect asset elasticities and financial model building. Econometric modeling and policy design at the Federal Reserve, Part II. J. Econometrics 15 (1981), no. 1, 139-154. (See 82c:90003b) 90A09
- Melvin, Paul On 4-manifolds with singular torus actions. Math. Ann. 256 (1981), no. 2, 255-276. (Hae Soo Oh) 82m:57027 57525
- Metzak, Z. A. Multi-indexing and multiple clustering. Math. Proc. Cambridge Philos. Soc. 86 (1979), no. 2, 313-337. (Dominique Foata) 82e:60018 60C05 (05A99, 60D05)
- Mémin, Jean (with Lépingle, D.) Intégrabilité uniforme et dans L' des martingales exponentielles. Seminar on Probability, Rennes 1978 (French), Exp. No. 9, 14 pp., Univ. Rennes, Rennes, 1978. (Author's review (J.M.)) 821:60104 60G44 (60G30)
 - (with Sirjaev, A. N.) Un critère prévisible pour l'uniforme intégrabilité des semimartingales exponentielles. Seminaire de Probabilités, XIII (Unio. Strasbourg, Strasbourg, 1977/78), pp. 147–161, Lecture Noies in Math., 721, Springer, Berlin, 1979. (Ralph Henstock) 82c:60091 60G48 (60G44, 60H05)
 - (with Jacod, Jean) Un nouveau critère de compacité relative pour une suite de

er on Probability, Rennes 1979 (French), Exp. No. 4, 27 pp., Univ. unes, Rennes, 1979. (E. Cinlar) 82k:60110 60G48 (60B10) (with Jacod, Jean) Existence of weak solutions for stochastic differential equations

with driving semimartingales. Stochastics 4 (1980/81), no. 4, 317-337. (I. M. Stojanov) 60H10 (60G48)

dler, Richard E.; Faulkner, Gary D.; Guglieln ry, Margaret C. (with Cha hine P.) Generalizing the Alexandroff-Urysohn double ci Proc. Amer. Math. Soc. 83 (1981), no. 3, 606-608. (G. L. Cain, Jr.) 82m:54019 54D35

n', B. A. A theorem of the statistical sum of the Ising lattice with arbitrary spin. (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 1, 85-89. (From the text) 82a:82047

On the theory of invariant transformations of Ising lattices. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 11, 5-11. (From the text) 82g:82052 82A67 (82A68)

Ocean. Aucust 1980, 11, 5-11. (From the text) Sugardon 2020 62407 (Mar. Roberto A. (with Bridges, William G.) x*-digraphs. J. Combin. Theory Ser. B 30 (1981), no. 2, 136-143. (Guy Chaty) 828:e8054 05C20 (05C50) (with Byrd, Richard D.; Lloyd, Justin T.; Teller, J. Roger) Extensions of group retractions. Internat. J. Math. Math. Sci. 3 (1980), no. 4, 719-730. (L. Bican) 20E99 (20K15, 20K20)

nal, Pere On rings of polynomials that are Bezout rings. (Spanish) Collect. Math. 31 (1980), no. 3, 229-241. (From the text) 82i:16021 16A42 (16A66)

The monoid rings that are Bezout domains. Arch. Math. (Basel) 37 (1981), no. 1, 16A06 (20M25) 43-47. (Warren Dicks) 82j:16004

On tensor products of algebras being von Neumann regular or self-injective. Con Algebra 9 (1981), no. 7, 691-697. (Jean-Marie Goursaud) 82m:16023 16A56 (16A 16A56 (16A30.

naldi, José-Luis On the optimal stopping time problem for degenerate diffusions. SIAM J. Control Optim. 18 (1980), no. 6, 697–721. (B. Marchal) 821:60092a 60G40 (49A29,

On the optimal impulse control problem for degenerate diffusions. SIAM J. Con Optim. 18 (1980), no. 6, 722-739. (B. Marchal) 821:60092b 60G40 (49A29, 60J60) (with Lions, Pierre-Louis; Sznitman, Alain-Sol) Construction de processus de sion réfléchis par pénalisation du domaine. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 11, 559-562. (Authors' summary) 82f:60172 (60H10)

The separation principle for impulse control problems. Proc. Amer. Math. Soc. 82

(1981), no. 3, 439-445. (Author's summary) 821-93093 93E99 (60G35)

nchi, O. (with Cimatti, G.) On the numerical solution of a variational inequality connected with the hydrodynamic lubrication of a complete journal bearing. Calcolo 15 (1978), no. 3, 249-258. (Editors) 82j:35138 35R35 (49A29, 65P05, 76D99)

adaglio, Vincent (with Dube, L. S.) On fixed points of multivalued mappings. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 25(73) (1981), no. 2, 167-170. (R. E. Main. 30c. 3ct. main. N. 3. Rolamante (17.3.) Sector (18.1) 18. Smithson) 82k-54074 54H25 (54C60)
Mende, Helmut See Gluškov, V. M.; et al., 82b:68001
Mendel, Jerry M. (with Habibi-Ashrafi, Farrokh) A survey of approaches to solving inverse

lems for lossless layered media systems. IEEE Trans. Geosci. Remote Sensing 18

(1980), no. 4, 320-330. (Authors' summary) **82a:94006** 94A05 (86A20) endelsohn, E. (with Bennett, F. E.; Mendelsohn, N. S.) Resolvable perfect cyclic designs. J. Combin. Theory Ser. A **29** (1980), no. 2, 142-150. (Nicholas Krier) **82b:05030** 05B15 (05B10)

(with Andersen, Lars Dovling; Hilton, A. J. W.) Embedding partial Steiner triple systems. Proc. London Math. Soc. (3) 41 (1980), no. 3, 557-576. (Luc Teirlinck) 05B05 (51E10)

(with Foldes, Stephane) Concrete categories and monoids of relational structures

Algebra Universalis 12 (1981), no. 2, 145–147. (Wilfred G. Malcolm) 82j:18006

1880 18B05

ndelsohn, N. S. Self-orthogonal Weisner designs. Second Internation Combinatorial Mathematics (New York, 1978), pp. 391-396, Ann. New York Acad. Sci., 319, New York Acad. Sci., New York, 1979. (Charles C. Lindner) 82a:05021 05B15

(with Lindner, C. C.; Sun, S. R.) On the construction of Schroeder qu asigroups. Discrete Math. 32 (1980), no. 3, 271-280. (V. Havel) 82h:20104 20N05 (05B15) (with Bennett, F. E.; Mendelsohn, E.) Resolvable perfect cyclic designs. J. Combin. ory Ser. A 29 (1980), no. 2, 142-150. (Nicholas Krier) 82h:05030

ndelsohn, Paul N. The Pentanacci numbers. A collection of manuscripts related to the Fibonacci sequence, pp. 31-33, Fibonacci Assoc., Santa Clara, Calif., 1980. (Editors) 82g:10022 10A35

ndelson, Haim (with Yechiali, Uri) Controlling the GI/M/1 queue by conditional acceptance of customers. European J. Oper. Res. 7 (1981), no. 1, 77–85. (B. W. Stuck) 82i:60163 60K25 (90B22)

On permutations with limited repetition. J. Combin. Theory Ser. A 30 (1981), no. 3,

351-353. (J. Knopfmacher) 82g:05008 05A15 (with Yechiali, Uri) Optimal policies for data base reorganization. Oper. Res. 29 (1981), no. 1, 23-36. (Authors' summary) 82m:68047 68B15 (60K10, 68H05)

ndelssohn, Roy Pareto optimal policies for harvesting with multiple objectives. Biosci. 51 (1980), no. 3-4, 213–224. (Mohamed El-Hodiri) 82b:90119 90C39 90C39 (90A30) Improved bounds for aggregated linear programs. Oper. Res. 28 (1980), no. 6, 1450–1453. (Author's summary) 82b:90074 90C05 90C

Adequacy of decompositions of relational databases. Advances in data base theory, Vol. 1 (Proc. Workshop, Toulouse, 1979), pp. 101-114, Plenum, New York, 1981. (See 68B15

(with Beeri, Catriel; Sagiv, Yehoshua; Ullman, Jeffrey D.) Equivalence of relational abase schemes. SIAM J. Comput. 16 (1981), no. 2, 352-370. (Authors' summary) database scheme 82m:68033 68B15

ndes, R. See Vilela Mendes, R.

Mendes-France, Michel Algebraic numbers and automata theory. Proceedings of the Queen's Number Theory Conference, 1979 (Kingston, Ont., 1979), pp. 79-89, Queen's Papers in Pure and Appl. Math., 54, Queen's Univ., Kingston, Ont., 1980. (See 82j:10003) 10K 10 (68D05)

(with Christol, Gilles; Kamae, Teturo; Rauzy, Gérard) Suites algébrique

tomates et substitutions. (English summary) Bull. Soc. Math. France 108 (1980), no. 4, 401-419. (Maurice Mignotte) 82e:10092 10K99

Nombres algébriques et théorie des automates. Enseign. Math. (2) 26 (1980), no. 3-4, 193-199 (1981). (A. J. van der Poorten) 82g:10053 10F35 (68D30)

(with Tenenbaum, Gérald) Dimension des courbes planes, papiers pliés et suites de Rudin-Shapiro. (English summary) Bull. Soc. Math. France 109 (1981), no. 2, 207-215. (Gérard Rauzy) 82k:10073 10K50 (28A75)

Mendez, J. A. (with Santana, O.; Moreno-Diaz, R.) Normalized moments for processing visual data (Spanish English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 75 (1981), no. 1, 287-289. (Authors' summary) 82m:92089 92A25 (68G10)
Méndez, Raúl (with Marshall, Guillermo) Computational aspects of the random choice

method for shallow water equations. J. Comput. Phys. 39 (1981), no. 1, 1-21. (Darrell L. Hicks) 824:76014 76B15 (35L67, 65M05)

erez-Mendez, V. See Perez-Mendez, V.

nca, I. (with Adam, J. C.; Laval, G.) Time-dependent nonlinear Langman 76X05

Phys. Fluids 24 (1981), no. 2, 260–267. (Authors' summary) 82b:76071 763
Mendoza, Eduardo R. *Cohomology of PGL₂ over imaginary quadratic integers.
Dissertation, Rheinische Friedrich-Wilhelms-Universität, Bonn, 1979. Bonner Mathematische Schriften [Bonn Mathematical Publications], 128. Universität Bo Mathematisches Institut, Bonn, 1979. vi+83 pp. (K. Vogtmann) 82g:22012 (10D21, 20G30, 32N10)

-Menegaux, Renée See Lewin-Ménégaux, Renée eguzzi, Maurice (with Morf, Rudolf H.; Orszag, Steven A.; Meiron, Daniel I.; Frisch, Uriel) Analytic structure of high Reynolds number flows. Seventh International Conference on Numerical Methods in Fluid Dynamics (Stanford Univ., Stanford, Calif.; NASA/Ames Res. Center, Moffett Field, Calif., 1980), pp. 292–298, Lecture Notes in Phys., 141, Springer, Berlin, 1981. (Authors' introduction) 82j:76049 76F05 (82A25) Meneides, John Contributions to the mathematical education of the blind. Eleutheria 1979,

no. 2, 212-213. (Editors) 82m:00005 00A05

neimeneh, A. (with Balbi, J.-H.) Approximated periodic solutions of differential equations. Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 26 (1981), no. 1, 61-68. (Authors' summary) 82f:65085 65L10

arrillo Menéndez, José See Carrillo Menéndez, José

Menger, Karl See Hahn, Hans, 82b:01073

Mengersen, Ingrid Dreiecke in Darstellungen des vollständigen Graphen. Abh. Math. Sem.

Univ. Hamburg 50 (1980), 147–156. (Heiko Harborth) 82c:05045 05C10 (05C35) (with Harary, Frank; Harborth, Heiko) Generalized Ramsey theory for graphs. XII. Bipartite Ramsey sets. Glasgow Math. J. 22 (1981), no. 1, 31–41. (Jean-Claude Bermond)

(with Harborth, Heiko) Geradenanordnungen mit maximaler Anzahl vierseitiger Flächen. Period. Math. Hungar. 12 (1981), no. 2, 93-98. (E. Jucovič) 82e:51010 51A99 (05A15, 05B30)

enges, Günter (with Kofler, Eduard) The structuring of uncertainty and the Max E_{min}-principle. Third Symposium on Operations Research (Univ. Mannheim, Mannheim, 1978), Section 4, pp. 223-234, Operations Research Verfahren, 34, Hain, Meisenheim, 1979. (James Berger) 82a:62016 62C05 (90A05)

(with Kofler, Eduard) Über unscharfe Mengen (nicht im Sinne Zadehs). (English, French and Russian summaries) Statist. Hefte (N.F.) 20 (1979), no. 4, 237-249.

(Authors' summary) 82a:60010 60A99 (03E72)

Adaptive Statistik. (English, French and Russian summaries) [Adaptive statistics] Bemerkungen über neuere Bestrebungen in der statistischen Methodologie. [Notes on recent trends in statistical methodology] Statist. Hefte (N.F.) 21 (1980), no. 3, 182-208. (Author's summary) 82k:62069 62F35

enikoff, A. (with Sjöstrand, Johannes) The eigenvalues of hypoelliptic operators. Équations aux dérivées partielles (Proc. Conf., Saint-Jean-de-Monts, 1977), pp. 157-163, Lecture Notes in Math., 660, Springer, Berlin, 1978. (Editors) 82b;35120 35P20

(with Sjöstrand, Johannes) On the eigenvalues of a class of hypoelliptic operators. II. Global analysis (Proc. Biennial Sem. Canad. Math. Congr., Univ. Calgary, Calgary, Alta., 1978), pp. 201-247, Lecture Notes in Math., 755, Springer, Berlin, 1979. (Akira Asada) 82m:35114 35P20 (58G15)

(with Sjöstrand, Johannes) The eigenvalues of hypoelliptic operators. III. The emibounded case. J. Analyse Math. 35 (1979), 123-150. (Akira Asada) 82m:35115 35P20 (58G15)

Menikoff, Ralph (with Goldin, Gerald A.; Sharp, David H.) Particle statistics from induced representations of a local current group. J. Math. Phys. 21 (1980), no. 4, 650–664. (Authors' summary) 82h81064 81D15 (22D30)

630-604. (Authors summary) a2zestees 61D10 (22D39) (with Clark, T. E.; Sharp, David H.) Quantum mechanics on the half-line using path integrals. Phys. Rev. D (3) 22 (1980), no. 12, 3012-3016. (Steven M. Moore) 82b:81032 81C35 (58D30, 58G40)

(with Goldin, Gerald A.; Sharp, David H.) Induced representations of diffeomorphism groups described by cylindrical measures. Measure theory and its applications (Proc. Conf., Northern Illinois Univ., De Kalb, Ill., 1980), pp. 207-218, Northern Illinois Univ., DeKalb, Ill., 1981. (See 82g:28002) 28C20 (81D15)

(with Goldin, Gerald A.; Sharp, David H.) Representations of a local current algebra in nonsimply connected space and the Aharonov-Bohm effect. J. Math. Phys. 22

(1981), no. 8, 1664–1668. (G. R. Allcock) 82k:81036 81D15 (81ED5)

Menne, Albert Philosophische Probleme der Mathematik. Philos. Natur. 18 (1980/81), no. 1, 103–115. (Yehuda Rav) 82k:00016 00A25 (03A05)

sier, G. (with Auberson, G.) On the computation of bounds for low energy Compton scattering parameters: proof of a conjecture. Ann. Inst. H. Poincaré Sect. A Compton scattering parameters: proof of a conjecture. Ann. Inst. It. Foncare Sect. A (N.S.) 30 (1979), no. 4, 263–274. (Gheorghe Nenciu) 82e-81052 81F30 (30E05) nnicke, J. L. (with Grunewald, Fritz J.; Havas, George; Newman, M. F.) Groups of

exponent eight. Burnside groups (Proc. Workshop, Univ. Bielefeld, Bielefeld, 1977), pp. 49-188, Lecture Notes in Math., 806, Springer, Berlin, 1980. (Peter M. Neumann)

(with Grunewald, Fritz J.) Finiteness proofs for groups of exponent 8. Burnside groups (Proc. Workshop, Univ. Bielefeld, Bielefeld, 1977), pp. 189-210, Lecture Notes in Math., 806, Springer, Berlin, 1980. (Peter M. Neumann) 82d:20039b 20F50 (with Grunewald, Fritz J.) Some 3-manifolds arising from PSL2(Z[i]). Arch. Math.

- (Basel) 35 (1980), no. 3, 275-291. (William Harvey) 82f:57009 57N10 (10D07, 20H15, 22E40, 57M99)
- non, V. V. (with Sharma, V. D.) Characteristic wave fronts in magnetohydrodynam J. Math. Anal. Appl. 81 (1981), no. 1, 189-203. (Authors' summary) 82f:76042
 - (with Sharma, V. D.; Shyam, Radhe) Behaviour of finite amplitude waves in a radiating gas. (German and Russian summaries) Z. Angew. Math. Mech. 61 (1981), no. 9, 443-448. (Authors' summary) 82m:85003 85A25 (76L05)
- enotti, P. (with Onofri, Enrico) The action of SU(N) lattice gauge theory in terms of the heat kernel on the group manifold. Nuclear Phys. B 190 (1981), no. 2, FS 3, 288-300. (Authors' summary) 82k:81066 81E25
- me subgroups of the general linear groups. (Russian) Ural. Gos. Univ. Mat. Zap. 11 (1979), no. 3 Issled. po Sovremen. Algebre, 116-126, 211-212. (A. I. Škuratskii) 82k:20070 20G15
- Men'sov, D. E. Limits of indeterminacy in measure of T-means of subseries of a ometric series. Translated by R. P. Boas. A translation of Trudy Mat. Inst. Steklov 149 (1978). Proc. Steklov Inst. Math. 1981, no. 3, 56 pp. (Editors) 82k:42004 42A24
- nzala, Gustavo Perla On a Hartree type equation: existence of regular solutions. Functional differential equations and bifurcation (Proc. Conf., Inst. Ciènc. Mat. São Carlos, Unio. São Paulo, São Carlos, 1979), pp. 277-288, Lecture Notes in Math., 799, Springer, Berlin, 1980. (From the introduction) 82a:81056 81G45 (35J99)
 - On regular solutions of a nonlinear equation of Choquard's type. Proc. Roy. Soc. Edinburgh Sect. A 86 (1980), no. 3-4, 291-301. (R. Glassey) 82a:35035 35120 (45K05,
- Menzefricke, Ulrich A decision-theoretic approach to variable selection in discriminant analysis. Comm. Statist. A—Theory Methods 10 (1981), no. 7, 669-686. (Z. Šidák) 82g:62087 62H30 (62C10)
 - A Bayesian analysis of a change in the precision of a sequence of independent normal random variables at an unknown time point. J. Roy. Statist. Soc. Ser. C 30 (1981), no. 2, 141-146. (Author's summary) 82j:62021 62F15
- Merajver, Sofia D. (with Ziff, Robert M.; Stell, G.) Approach to equilibrium of a Boltzmann-equation solution. Phys. Rev. Lett. 47 (1981), no. 21, 1493-1496. (Authors' summary) 82;82046 82A40
- perez-Mercader, Juan See Perez-Mercader, Juan
- Mercer, John (with Keyes, T.; Morita, Terumitsu) Further development of the approach of Peralta and Zwanzig. I. The drag on a sphere at high bath densities. J. Chem. Phys. 74 (1981), no. 9, 5281-5286. (Authors' summary) 82e:76007 76A99
- Merches, Ioan (with Agop, Marcel) Transport equations in the relativistic hydromagnetics of spin-fluids. An. Stiint. Univ. "Al. I. Cuza" Iaşi Sect. I b Fiz. (N.S.) 25 (1979), 17-20. (Authors' summary) 82b:83045 83C55 (76Y05, 82A70)
- Mercier, Armel Quelques identités arithmétiques. Ann. Sci. Math. Québec 5 (1981), no. 1, 59-67. (Christian Radoux) 82h:10059 10H25 (10A20)
 - Sommes de la forme $\Sigma g(n)/f(n)$. [Sums of the form $\Sigma g(n)/f(n)$] Canad. Math. Bull. 24 (1981), no. 3, 299–307. (Christian Radoux) 82m:10068 10H25
- *Lectures on topics in finite element solution of elliptic problems. With notes by G. Vijayasundaram. Tata Institute of Fundamental Research Lectures on Mathematics and Physics, 63. Springer-Verlag, Berlin-New York, 1979. v + 191 pp. ISBN 3-540-09543-8 (J. D. Atkinson) 82e:65112 65N30
 - (with Lions, Pierre-Louis) Approximation numérique des équations de Hamilton-Jacobi-Bellman. (English summary) RAIRO Anal. Numér. 14 (1980), no. 4, 369-393. (W. Börsch-Supan) 82b:65055 65K10 (35J20, 49C10, 49D30)
 - (with Osborn, John E.; Rappaz, J.; Raviart, P.-A.) Eigenvalue approximation by mixed and hybrid methods. *Math. Comp.* **36** (1981), *no.* 154, 427–453. (Authors' summary) **82b:65108** 65N25 (65N15, 65N30)
- Mercier, Christiane (with Dubois, Jacques-Émile; Sobel, Yves) Théorie des graphes chimiques: méthode DARC/PELCO. Corrélations de topologie-information et concept de régularité. (English summary) C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci.
- Univers Sci. Terre 292 (1981), no. 10, 783-788. (Authors' summary) 82h:92061 Necessary and sufficient conditions for designing optimal feedback controllers for linear dynamical systems with multiple time delays. Control of distributed parameter systems (Proc. Second IFAC Sympos., Cocentry, 1977), pp. 285–292, IFAC, Düsseldorf, 1978. (Author's summary) 82m:49017 49A34

 Mercier, Philippe (with Deville, Michel) A multidimensional compact higher-order scheme
- for 3-D Poisson's equation. J. Comput. Phys. 39 (1981), no. 2, 443-455. (V. Girault) 65N05 (65N15)
- Mercier, Raymond Newly discovered mathematical relations between Greek and Indian astronomy. Proceedings of the Symposium on the 1500th Birth Anniversary of Aryabhata I (New Delhi, 1976). Indian J. Hist. Sci. 12 (1977), no. 2, 120-126. (A. I. Volodarskii) 82e:01010 01A20 (01A32)
- Mercik, Jacek W. On a winning coalition of the characteristic function game as a solution of the resource allocation problem. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 2, pp. 397-403, Lecture Notes in Control and Inform Springer, Berlin, 1980. (Kare M. Mjelde) 82a:90186 90D12 (90B05)
- Moredith, David A positive logic proof procedure. To H. B. Curry: essays on combinatory logic, lambda calculus and formalism, pp. 503-510, Academic Press, London, 1980. (From the text) 82a:03014 03B35 (03B20, 03B40)
- Meredov, M. Boundary value problems for a system of multidimensional mixed equations. (Russian) Differencial'nye Uravnenija 17 (1981), no. 5, 886-892, 957. (Megumi Saigo) 82i:35106 35M05
- Merenkov, Ju. N. Investigation of a complex singular point of a differential system by the blow-up method. (Russian) Differencial'nye Uravnenija 16 (1980), no. 12, 2278-2280, 2304. (G. R. Belickii) 82i:58049 58F14 (34C05)
- (with Sestakov, A. A.) Localization of the cluster set of a solution with a bounded interval of definition. (Russian) Differencial'nye Uravnenija 17 (1981), no. 8, 1515-1517, 1536. (V. M. Popov) 82k:34062 34D20
- Meres, Lucjan Some properties of G₈ type sets in two-dimensional Euclidean space. (Polish. Russian and English summaries) Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 31 (1980), 49–63. (M. Hušek) 82g:54012 54B15 (54F99, 57N05)
- Mereuca, I. V. The decomposition of a polynomial operator pencil into linear factors.

- (Russian) Investigations in functional analysis and differential equations, pp. 61-64, 141, "Štiinca", Kishinev, 1981. (K. S. Mamedov) 82k:47025
- (with Targam, D. 1). On some properties of divisors of a holomorphic operator-valued function. (Russian) Investigations in functional analysis and differential
- tions, pp. 65-75, 141, "Štiinca", Kishinev, 1981. (K. S. Mamedov) 82kc47026 47468
- (with Taragan, D. I.) Divisors of a holomorphic operator-valued function. (Russian) Linear operators and integral equations. Mat. Issled. No. 61 (1981), 130-140, 157-158. (E. R. Cekanovs'kii) 82h:47014 47A68
- Mereža, V. L. On the controllability of systems with delay. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1981, no. 1, 61-63, 80. (A. Halanay) 82:93011 93B05 (34K35)
- Algebra 9 (1980/81), no. 4, 341–344. (D. P. Rašković) 82i:15025
 - On operator norms of submatrices. Linear Algebra Appl. 36 (1981), 173-183. (D. B.
- On operator instance:

 Hunter) 82f:15018 15A60

 Submultiplicativity of some norms of matrices. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz.

 Submultiplicativity of some norms of matrices. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz.

 15A60
- Meril, A. (with Colombeau, Jean-François) A remark on equations $y'' + p_1y' + p_2y = 0$ at an irregular singular point. SIAM J. Math. Anal. 11 (1980), no. 6, 1002-1010. (Klaus Deimling) 82j:34061 34G10 (35C20)
- Mérindol, Jean-Yves Surfaces normales dont le faisceau dualisant est trivial. (English ary) [Normal surfaces with a trivial dualizing sheaf] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 8, 417-420. (Author's summary) 82m:14019 14J10 (14J17.
- Meriste, M. B. Methods of implementing attribute schemes in compiler-construction systems (review). Programmirovanie 1980, no. 5, 40-49, 95 (Russian); translated as Programming and Comput. Software 6 (1980), no. 5, 253-261 (1981). (Author's summary) 68F20 (68B10)
- Merkel, Günter A moment method for solving stochastic time problems in network planning. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 11 (1980), no. 1, 109-116. (Author's summary) 824:90058 90B15 (90B35)
- (with Keogh, F. R.) Preservation of subordination. J. Analyse Math. 36 (1979), 179-183 (1980). (V. Linis) 82a:30013 30C45 A covering theorem for odd typically real functions. Internat. J. Math. Math. Sci. 3
 - (1980), no. 1, 189-192. (W. E. Kirwan) 82c:30008 30C25
 - (with Byers, Robert B.) Subordinations for typically real and related functions. Rocky Mountain J. Math. 11 (1981), no. 2, 297-304. (M. S. Robertson) 82g:30015
- Merkin, D. R. ★Ввеление в механику гибкой нити. (Russian) [Introduction to the mechanics of a flexible filament] "Nauka", Moscow, 1980. 240 pp. (P. P. Teodorescu) 73-02 (73C99, 73K03)
- Merkle, Milan J. Mills ratio for the gamma distribution. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 68-70 (1981). (From
- the introduction) 82:62039 62:E15

 Merkle, Ralph C. (with Hellman, Martin E.) On the security of multiple encryption. m. ACM 24 (1981), no. 7, 465-467. (Authors' summary) 82f:68103 (94A24, 94B99)
- Merklen, Héctor A. Group bases of group rings. Bol. Soc. Brasil. Mat. 10 (1979), no. 2, 15-23. (I. B. S. Passi) 824:20011 20C05
 - (with Polcino Milies, Francisco César) Group rings over Z_(p), with FC unit groups. Canad. J. Math. 32 (1980), no. 5, 1266–1269. (S. K. Sehgal) 82c:20013 20C07
 - On the supercenter of a group over domains of characteristic 0. Proc. Amer. Math. Soc. 83 (1981), no. 1, 16-18. (S. K. Sehgal) 82i:16024 16A27
- Merkur'ev, A. S. Projective modules over rings of invariants. (Russian) Modules and linear groups. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 103 (1980), 90-95, 158. (Chr. U. Jensen) 82h:13603 13B05 (13C10)
- Merkur'ev, S. P. (with Buslaev, V. S.; Salikov, S. P.) Description of pair potentials for which the scattering in the quantum system of three one-dimensional particles is free of diffractional effects. (Russian. English summary) Boundary value problems of mathematical physics and related questions in the theory of functions, 11. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 84 (1979), 16-22, 310, 316. (S. T. Kuroda) 82b:81107 81F10 (34B25)
 - On the three-body Coulomb scattering problem. Ann. Physics 130 (1980), no. 2, 426. (Author's summary) 82e:81048 81F10 (35P25, 47F05) 395-426. (Author's summary) 82e:81048
- Merlante, Lucia (with Caponetto, Maria Angelica) For a theory of classes however large. Rend. Circ. Mat. Palermo (2) 29 (1980), no. 1, 42-48. (N. C. A. da Costa) 821:03069
- Merle, Michel (with Henry, Jean-Pierre-Georges) Sections planes, limites d'espaces
- tangents et transversalité de variétés polaires. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 4, A291-A294. (Robert M. Hardt) 82c:32010 32C40 (32C45) Merlier, Thérèse Quelques propriétés des idéaux d'un demi-groupe. Semigroups (Proc Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 73-81, Lecture Notes in Math., 855, Springer, Berlin, 1981. (From the text) 82g:20096 20M12 (06F05)
 - Sur les bandes réticulées. (English summary) Semigroup Forum 22 (1981), no. 3,
- 191-198. (Keith R. Pierce) 82:06020 06F05 (20M10)

 rlina, N. I. On the question of approximating continuous functions by singular integrals.

 (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 9, 82-85. (W. R. Madych) 41A35 (41A25)
- errien, Jean Faisceaux analytiques semi-cohérents. Ann. Inst. Fourier (Grenoble) 30 (1980), no. 4, 165-219. (A. Tognoli) 82f:32018 32C05
- Applications des faisceaux analytiques semi-cohérents aux fonctions différentiables. (English summary) Ann. Inst. Fourier (Grenoble) 31 (1981), no. 1, x, 63-82. (J. G. Timourian) 82g:58015 58C25 (26E99, 32B05)
- errifield, R. E. (with Simmons, H. E.) Generalized molecular duplexes. Chem. Phys. Lett. 74 (1980), no. 2, 348-353. (Brian G. Wybourne) 82d:81171 81G55 (05C99)
- (with Simmons, H. E.) Enumeration of structure-sensitive graphical st calculations. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 3, part 1, 1329-1332. (Authors' summary) 826:05068 05C30 (05C99)

 Metrill, M. L. (with Leung, Joseph Y.-T.) A note on preemptive scheduling of periodic,

real-time tasks. Inform. Process. Lett. 11 (1980), no. 3, 115-118. (From the introduction) 68C15

rill, Stephen J. (with LeFever, Ann V.) A model of complement activation by antigen-antibody complexes. Differential equations (Proc. Eighth Fall Conf., Oklahoma State Univ., Stillwater, Okla., 1979), pp. 221–233, Academic Press, New York, 1980. (B. F.

Mathematical models of humoral immune response. Modeling and differential attions in biology (Conf., Southern Illinois Univ., Carbondale, Ill., 1978), pp. 13-50, ture Notes in Pure and Appl. Math., 58, Dekker, New York, 1980. (J. Myron Hood) 82h:92004 92A05 (92-02)

Limit cycles in a model of B-cell stimulation. Modeling and differential equations in biology (Conf., Southern Illinois Univ., Carbondale, Ill., 1978), pp. 225-238, Lecture Notes in Pure and Appl. Math., 58, Dekker, New York, 1980. (J. Myron Hood) 82b:92005 92A05 (34C05, 92A15)

rsereau, Russell M. (with Speake, Theresa C.) A unified treatment of Cooley-Tukey ation of the multidim onal DFT. IEEE Trans. Acoust. Speed enal Process. 29 (1981), no. 5, 1011-1018. (Authors' summary) 82h:65102 (94A12)

otisch optimale Relaxationsparameter bei nichtlinearen SOR-Verfahren Merten, K. Asym (Newton-SOR-Verfahren). (English summary) Computing 26 (1981), no. 4, 327-332. (Author's summary) 82:65102 65N10 (65F10)

rtens, F. (with Goovaerts, M. J.; De Vylder, Fl.; Hardy, R.) An extension of an invariance property of the Swiss premium calculation principle. Astin Bull. 11 (1980/81), no. 2, 145–153. (Authors' summary) 82c:62143 62P05

ertens, F. G. (with Büttner, H.) The soliton-gas analogy for the Toda lattice. Phys. Lett. A 84 (1981), no. 6, 335–337. (V. Z. Enol'skii) 82;82013 82A05

Mertens, Franz See Dick, Auguste, 82:01048
Mertens, H. J. (with Nessel, Rolf J.) An equivalence theorem concerning multipliers of strong convergence. J. Approx. Theory 30 (1980), no. 4, 284–308. (Walter Trebels) 82i:41041a 41A65 (42C10)

(with Nessel, Rolf J.) Quasikonvexe Multiplikatoren starker Konvergenz. (Russian mary) Anal. Math. 7 (1981), no. 1, 49-67. (Walter Trebels) 82i:41041b 41A65

Game Theory 9 (1980), no. 4, 189–190. (Author's summary) 82e:90132 90D99 Values and derivatives. Math. Oper. Res. 5 (1980), no. 4, 523-552. (Zvi Artstein)

(with Zamir, Shmuel) Incomplete information games with transcendental values.

Math. Oper. Res. 6 (1981), no. 2, 313-318. (Authors' summary) 82k:90134 90D05

Mertrios, B. G. (with Paraskevopoulos, P. N.) Transfer function matrix of 2-D systems.

IEEE Trans. Automat. Control 26 (1981), no. 3, 722-724. (Authors' summary) 82j:93038 93D25 (93C55)

der Merwe, A. (with Zidek, James V.) Multivariate regression analysis and canonical variates. (French summary) Canad. J. Statist. 8 (1980), no. 1, 27-39. (Edward M. Carter) 82a:62099 62J07 (62H20)

van der Merwe, Alwyn See Perspectives in quantum theory, 82d:81002

van der Merwe, P. du T. On the nonlinear propagator. Nuovo Cimento A (11) 59 (1980), no. 3, 344-350. (E. Wieczorek) 82c:81112 81E99

Classical excitations of the conformally covariant Gürsey equation. Phys. Lett. B 106 (1981), no. 6, 485-486. (Author's summary) 82k:81039

Merwin, Richard E. See Conference: AFIPS, Computer, 82f:68003

Merz, Gerhard Normen von Spline-Interpolationsoperatoren. Approximation in Theorie und Praxis (Proc. Sympos., Siegen, 1979), pp. 183–208, Bibliographisches Inst., Mannheim, 1979. (C. Dierieck) 82c:65009 65D07 (41A15)

no. 1, 11–19, 20–28. (Gheorghe Micula) 82b:41010 41A15 (65D07)

Eine Kettenbruchdarstellung für die Norm des kubischen periodischen

Spline-Interpolationsoperators. Z. Angew. Math. Mech. 60 (1980), no. 2, 111-112. (G. C. Barozzi) 82b:65007 65D07

Merz, Philip (with Schuster, Peter; Sigmund, Karl; Hofbauer, Josef; Gottlieb, Ramon) Self-regulation of behaviour in animal societies. III. Games between two populations with self-interaction. Biol. Cybernet. 40 (1981), no. 1, 17-25. (Peter D. Taylor) 82e:92039c

Meržanov, A. G. (with Ivleva, T. P.; Škadinskii, K. G.) A new type of nonuniqueness of stationary modes of combustion wave propagation. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 4, 897-900. 82e:80009 80A25

ova, R. F. (with Nikitina, E. P.) *Каталог планов третьего порядка. (Russian) [Catalog of third-order designs] Moskov. Gos. Univ., Moscow, 1979. 171 pp. (E. Seiden) 62K05

erzbach, Ely Stopping for two-dimensional stochastic processes. Stochastic Process. Appl. 60G40 no. 1, 49-63. (F. B. Knight) 82e:60071

(with Zakai, Moshe) Predictable and dual predictable projections of two-parameter astic processes. Z. Wahrsch. Verw. Gebiete 53 (1980), no. 3, 263-269. (J. Walsh) 60G48 (60H05) 82b-60053

(with Mazziotto, Gérald; Szpirglas, Jacques) Discontinuités des processus croissants et martingales à variation intégrable. [Discontinuities of increasing processes and martingales with integrable variation] Two-index random processes (Paris, 1980), pp. 59-83, Lecture Notes in Math., 863, Springer, Berlin, 1981. (Xavier Guyon)

60G07 (60G44) Merzijakov, Ju. I. ** Раппональные группы. (Russian) [Rational groups] Современная Алгебра. [Modern algebra] "Nauka" 82m:20001 20-02 (14L10, 20G1) , Moscow, 1980. 464 pp. (A. H. Kuškulei) 20-02 (14L10, 20G15)

Isomorphism theory for classical groups from 1976 to 1980. (Russian) Isomorphisms of classical groups over integral rings (Russian), pp. 252-258, Mal.: Novoe Zarub. Nauke, 20, "Mir", Moscow, 1980. (G. A. Soifer) 82e:20050 20Gxx

State of problems from the Kourovka notebook toward the end of the 1970s. (Russian) Sixth All-Union Symposium on Group Theory (Čerkassy, 1978) (Russian), pp. 82-96, 220, "Naukova Dumka", Kiev, 1980. (Author's summary) 82f;20004 20-02

See also Isomorphisms of classical groups over integral rings, 82b:20001; Coxeter, Harold Scott MacDonald; et al., 82c:20002; Solvable and simple infinite groups, 82e:20046 and Kourovka notebook. 82f:20005

Mešalkin, L. D. (with Kuročkina, A. I.) A new approach to parametrization of regression nmary) Studies in mathem relations. (Russian. English sur tical statistics, 3. Zap. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 87 (1979), 79-86, 208, 213. (Lubomír Kubáček) 82e:62093 62J02

ikin, V. P. (with Kafarov, V. V.; Nguen Suan Nguen; Nguen Van Bao) An algorithm for the synthesis of heat exchange systems using the Lagrange function and implicit decomposition strategy. (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 1, 150-154. (Editors) 82e:90113 90C50

Serjakov, M. V. A note on dynamical systems on semisimple Lie algebras. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1980, no. 6, 17–19, 116. (A. Morimoto) 82c:58029 58F07 (22E30, 70G25)

Meschiari, Alberto A relevant case concerning the philosophy of the science of statistics. (Italian) Physis-Riv. Internaz. Storia Sci. 19 (1977), no. 1-4, 383-392 (1979). (Editors) 01A55

Meschkowski, Herbert *Mathematiker-Lexikon. (German) [Lexicon of mathematicians] Third edition. Bibliographisches Institut, Mannheim, 1980. 342 pp. ISBN 3-411-01576-4 (D. J. Struik) 82h:01062 01A70

Meseguer Guaita, José A Birkhoff-like theorem for algebraic classes of interpretations of program schemes. Formalization of programming concepts (Proc. Internat. Colloq., Peñiscola, 1981), pp. 152-168, Lecture Notes in Comput. Sci., 107, Springer, Berlin, 1981. (From the introduction) 82m:68026 68B10 (06A99, 08A99, 18B20)

(with Sols Lucia, Ignacio) Categorical tensor representation of deterministic,

relational and probabilistic finite functions. Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 340-346, Consejo Sup. Ino. Cient., Madrid, 1977. (Jiří Adâmek) 82h:18013 18D10

Varieties of chain-complete algebras. J. Pure Appl. Algebra 19 (1980), 347-383. srst Reichel) 82g:18005 18C10 (08A99, 68C30) (Horst Reichel) 82g:18005

Meshkani, M. R. See Kempthorne, Oscar, 82:62037

Mesiar, Radko A generalization of the individual ergodic theorem. (Russian summary) Math. Slovaca 30 (1980), no. 3, 327-330. (Furnio Hiai) 82b:28032 28D05

Meskhi, Slava (with Grigolija, R. Š.) Critical varieties of biclosure algebras. Polish Acad.

Sci. Inst. Philos. Sociol. Bull. Sect. Logic 10 (1981), no. 1, 2-8. (Editors) 82f:06021 06E99

Mesnard, Jean Leibniz et les papiers de Pascal. Leibniz in Paris (1672-1676) (Sympos. G. W. Leibniz Soc./CNRS, Chantilly, 1976), Vol. I (French), pp. 45-58, Studia Leibnitiana Suppl., XVII, Steiner, Wiesbaden, 1978. (Eberhard Knobloch) 82d:01011 01A45

Message, P. J. Bounds on secular terms in celestial mechanics. Instabilities in dynamical systems (Proc. NATO Adv. Study Inst., Cortina d'Ampezzo, 1978), pp. 165-176, NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci., 47, Reidel, Dordrecht, 1979. (Ram Krishan Sharma) 824:70025 70F15

Arishaa shahina joan 1942. Asserschmit, David G. (with Honig, Michael L.) Convergence properties of an adaptive digital lattice filter. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 3, part 3, Messing, William (with Berthelot, Pierre) Théorie de Dieudonné cristalline. I. Journées de

Géométrie Algébrique de Rennes (Rennes, 1978), Vol. I, pp. 17-37, Astérisque, 63, Soc. Math. France, Paris, 1979. (Kenneth A. Ribet) 82f:14041 14L05 (14F30)

Mestre, Jean-François Courbes elliptiques et groupes de classes d'idéaux de certains corps quadratiques. Seminar on Number Theory, 1979–1980 (French), Exp. No. 15, 18 pp., Univ. Bordeaux I, Talence, 1980. (Loren D. Olson) 82j:12004 12A25 (14K07)

(with Vlasov, A. A.; Denisov, V. I.; Logunov, A. A.) Gravitational Mestvirišvili, M. A. effects in the field theory of gravitation. (Russian, English summary) Teoret, Mat. Fiz. 43 (1980), no. 2, 147-186. (Authors' summary) 82m:83019 83C25 (83B05)

(with Kvinihidze, A. N.; Magradze, B. A.; Matveev, V. A.; Tavhelidze, A. N.) An integral equation for causal distributions and their self-similar asymptotic behavior in the ladder Φ³-model. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 302-312. (Authors' summary) 82c:81086 81E10 (81D15)

(with Denisov, V. I.; Logunov, A. A.) A field theory of gravitation and new notions of space and time. Fiz. Elementar. Castic i Atom. Jadra 12 (1981), no. 1, 5-99 (Russian. English summary); translated as Soviet J. Particles and Nuclei 12 (1981), no. 1, 1-37. (D. 83D05 Cox) 82m:83038

Metakides, G. (with Nerode, Anil) Effective content of field theory. Ann. Math. Logic 17 (1979), no. 3, 289-320. (John W. Berry) 82h:03082 03D45 (12L05)

Metcalf, F. T. (with Chalmers, Bruce L.) Multiplicative variations lead to the variational equations for minimal projections. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 285-291, Academic Press, New York, 1980. (C. Franchetti) 82e:41052 41A65

Metelka, Václav On certain planar configurations (124, 163) containing B, C and E points and on singular configurations. (Czech. German summary) Časopis Pēst. Mat. 105 (1980), no. 3, 219–255. (K. Strambach) 82e:51007 51A20 (05B30, 51A45)

Métivier, Guy Une classe d'opérateurs non hypoelliptiques analytiques. Indiana Univ Math. J. 29 (1980), no. 6, 823-860. (David S. Tartakoff) 82a:35029 35H05 (58G05) 35H05 (58G05) Non-hypoellipticité analytique pour $D_x^2 + (x^2 + y^2)D_y^2$. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 7, 401-404. (Author's summary) 82b:35039 35H05

Analytic hypoellipticity for operators with multiple characteristics. Comm. Partial Differential Equations 6 (1981), no. 1, 1-90. (David S. Tartakoff) 82g:35030 (35N15)

Métivier, Michel (with Pellaumail, Jean) *Stochastic integration. Probability and Mathematical Statistics. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London-Toronto, Ont., 1980. xii + 196 pp. ISBN 0-12-491450-0 (Jean-Yves Ouvrard) 82b:60060 60H05 (60G44, 60G46, 60H10)

Stochastic equations driven by random measures and semimartingales. Contribu to probability, pp. 173-188, Academic Press, New York, 1981. (Jean Mémin) 82m:60073

Metropolis, N. (with Louck, J. D.) Hidden symmetry and the number-theoretic structure of the energy levels of a perturbed harmonic oscilllator. Adv. in Appl. Math. 1 (1980), no. 2, 182-220. (R. N. Jain) 82j:81018 81C05

Summation of imprecise numbers. Comput. Math. Appl. 6 (1980), no. 3, 297-299. (Author's summary) 82d:65092 65U05

(with Stein, Paul R.) The enumeration of graphical partitions. European J. Combin. 1 (1980), no. 2, 139-153. (K. Vesztergombi) 82e:05080 05C30 (05A17)

(with Louck, J. D.) Number-theoretic degeneracy of the energy levels of a perturbed N-dimensional isotropic harmonic oscillator. Adv. in Appl. Math. 2 (1981), no. 2, 138–171. (M. Dutta) 82m:10032 10B30 (58F19, 81C05)

onanz im Dreikörperproblem. (English and Russian Mettler, E. Über eine Kombinationsre summaries) Z. Angew. Math. Mech. 61 (1981), no. 1, 1-6. (Author's summary) 821:70004

Metz, Charles (with Tretiak, Oleh) The exponential Radon transform. SIAM J. Appl. Math. 39 (1980), no. 2, 341-354. (L. Debnath) 82a:44004 44A15

Metz, Joachim ★Abstrakte Rechnermodelle. (German) [Abstract computer models]

Akademie-Verlag, Berlin, 1980. 144 pp. (H. Jürgensen) 82j:68001

Metz, Rudolf (with Mäurer, Helmut; Nolte, Wolfgang) Die Automorphismengruppe der Möbiusgeometrie einer Körpererweiterung. Aequationes Math. 21 (1980), no. 1, 110-112. 51B10 (Armin Herzer) 82c:51009

Metzger, Thomas A. On the nonvanishing of certain Poincaré series. Math. Z. 175 (1980), no. 2, 165-170. (I. Kra) 82b:30055 30F35 (20H10)

On BMOA for Riemann surfaces. Canad. J. Math. 33 (1981), no. 5, 1255-1260. (Ch.

Pommerenke) 82m:30034 30D50 (30F20, 30F35)

Metzler, Hans Transzendente Werte der Winkelfunktionen. Praxis Math. 23 (1981), no. 7, 207-209. (H. G. Meijer) 82j:10063 10F35

Metzler, Helmut (with Asser, Günter; Alexander, Dietrich) Gottlob Frege-Persönlichkeit und Werk. Begriffsschrift-Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 6-32, Friedrich-Schiller-Univ., Jena, 1979. (J. van Heijenoort) 82]:01061 01A70 (03-03, 03A05)

Metzler, James A. (with Fried, Isaac) The conjugate gradient method with finite elem Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 165-169, IMACS, New

**Brusswick, N.J., 1977. (Authors' summary) 82e:49049 49D07 (65N30)

Metzler, W. (with Cohen, Marshall M.; Zimmermann, A.) What does a basis of F(a,b) look like? **Math. Ann. 257 (1981), no. 4, 435–445. (D. E. Cohen) 82m:20028 20E05

Meulen, Alice An intensional logic for mass terms. Philos. Stud. 40 (1981), no. 1, 105-125. (Merrie Bergmann) 82j:03031 03B65 (03B45)

van der Meulen, Edward (with El Gamal, Abbas A.) A proof of Marton's coding theorem for the discrete memoryless broadcast channel. IEEE Trans. Inform. Theory 27 (1981),

no. 1, 120-122. (Prem Nath) 82j:94011 94A24

Meunargija, O. V. Construction of an effective solution of the linear conjugation problem for several unknown functions. (Russian. English summary) Teoret. Mat. Fiz. 37 (1978), no. 3, 423-426. (N. K. Karapetjanc) 82d:30045 30E25

Meunargija, T. V. Symmetrical bending of a circular plate of constant thickness. (Russian) Differential and integral equations. Boundary value problems (Russian), pp. 229-235, Tbilis. Gos. Univ., Tbilisi, 1979. (S. Matysiak) 82e:73060

de Meur, Gisèle See De Meur, Gisèle van der Mey, G. (with van der Poel, W. L.; Schaap, C. E.) New arithmetical operators in the theory of combinators. I, II, III. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 3, 271–286, 287–302, 303–325. (John Staples) 82a:68163 68F20 (03B40)

Meyberg, Kurt (with McCrimmon, Kevin) Coordinatization of Jordan triple systems Comm. Algebra 9 (1981), no. 14, 1495-1542. (Joseph C. Ferrar) 82k:17012

Meyer, Albert R. (with Bruss, Anna R.) On time-space classes and their relation to the theory of real addition. With an introduction "On space, time and alternation". *Theoret. Comput. Sci.* 11 (1980), no. 1, 57, 59–69. (A. M. Dawes) 82c:03061a 03D15 (03F30,

(with Mayr, Ernst W.) The complexity of the finite containment problem for Petri nets. J. Assoc. Comput. Mach. 28 (1981), no. 3, 561-576. (Authors' summary) 82f:68061 68D90 (03B25, 03D15, 68C25)

Dedicated to our colleague and friend Michael Machtey. Special issue dedicated to Michael Machtey. J. Comput. System Sci. 22 (1981), no. 3, 262-264. (Editors) 82m:01063 01A70

See also Special issue: Machtey, Michael, 82i:68005

Meyer, Burnett Inequalities for the generalized transfinite diameter. Rocky Mountain J. Math. 11 (1981), no. 2, 267-270. (Bernt Øksendal) 82g:31011 31C15 (28A12)

Meyer, Carl D., Jr. (with Hall, Frank J.) Corrigendum: "Generalized inverses of the fundamental bordered matrix used in linear estimation" [Sankhyā Ser. A 37 (1975), 428-438; MR 55 #10478]. Sankhyā Ser. A 40 (1978), no. 4, 399. (Editors) 82a:15002

(with Shoaf, James M.) Updating finite Markov chains by using techniques of group matrix inversion. J. Statist. Comput. Simulation 11 (1980), no. 3-4, 163–181. (Alan F. Karr) 82d-60122 60J10 (15A09)

Meyer, Daniel Courbure des sommes de métriques. (English summary) Bull. Soc. Math. France 109 (1981), no. 1, 123-142. (J. R. Vanstone) 82m:53044 53C20 (58D17) (with Bérard, Pierre H.) Une généralisation de l'inégalité de Faber-Krahn. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 8, 437-439. (Aut) summary) 82j:58107 58G25 (49G05)

Meyer, Eugen *Humes und Berkeleys Philosophie der Mathematik vergleichend und kritisch dargestellt. (German) [A comparative and critical presentation of Hume's and Berkeley's philosophies of mathematics] Reprint of the 1894 original. Abhandlungen zur Philosophie und ihrer Geschichte [Transactions on Philosophy and its History], 3. Georg Olms Verlag, Hildesheim, 1980. iii + 57 pp. ISBN 3-487-06769-2 (Roland Fischer) 01A50 (00A25, 01A55, 01A75, 03A05)

Meyer, G. (with Kurss, H.) Limit-point (LP) criteria for real symmetric differential expressions of order 2n. Proc. Roy. Soc. Edinburgh Sect. A 88 (1981), no. 3-4, 203-217.

(D. Hinton) 82:34024 34825

Meyer, Gerard G. L. A fault diagnosis algorithm for asymmetric modular architectures. IEEE Trans. Comput. 30 (1981), no. 1, 81–83. (G. Saucier) 824:94091 94C99
Meyer, Gottfried P. (with Gackstatter, Fritz) Zur Wertverteilung der Quotienten von

Exponentialpolynomen. Arch. Math. (Basel) 36 (1981), no. 3, 255–274. (Norbert Steinmetz) 82g:30054

Meyer, Gunter H. The method of lines and invariant imbedding for elliptic and parabolic free boundary problems. SIAM J. Numer. Anal. 18 (1981), no. 1, 150-164. (Author's summary) 82b:65148 65N40

An analysis of the method of lines for the Reynolds equation in hydrodynam lubrication. SIAM J. Numer. Anal. 18 (1981), no. 1, 165-177. (From the introduction) 76D99 (65N40)

Meyer, H. See Meyer, Heiner

Meyer, H. E. See De Meyer, H. E.

Meyer, Harold D. (with Smith, Thomas C.) Convergence for a finite difference solution of a Stefan problem. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 196–200, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82bc65087 65M10

Meyer, Heiner Integralgleichungen in Entscheidungsnetzwerken. IX. Oberwolfach

Conference on Operations Research (Oberwolfach, 1978), pp. 235-238, Operations Research Verfahren, 36, Athenaum/Hain/Scriptor/Hanstein, Königstein/Ts., 1980. (Author's 90B25 (45D05) nary) 82c:90042

Über einige historische und philosophische Aspekte des Unendlichkeitsbegriffs in der Mathematik. Wiss. Z. Tech. Hochsch. Ilmenau 26 (1980), no. 6, 3-40. (Joseph W. Dauben) 82d:01005 01A05 (00A25)

 Bauben) 82601005
 U1AU3 (U0A25)
 Meyer, Jack Mean-variance efficient sets and expected utility. J. Finance 34 (1979), no. 5, 1221-1229. (From the introduction) 82690022
 90A10 (90A09)
 Meyer, Jacques Ensembles d'unicité pour les fonctions additives. Étude analogue dans le cas des fonctions multiplicatives. Conference on Analytic and Elementary Number Theory (Orsay, 1980) (French), pp. 50-66, Publ. Math. Orsay 81, 1, Univ. Paris XI, Orsay, 1981. 10K20 (10A20) (F. Dress) 82m:10077

Meyer, Kenneth R. (with Schmidt, D. S.) Entrainment domains. Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. I (Prague, 1978), pp. 479-482, Academia, Prague, 1979. (Authors' summary) 82j:34038 34C25

Periodic orbits near infinity in the restricted N-body problem. Celestial Mech. 23

(1981), no. 1, 69–81. (Author's summary) 82c:70015 70F10 yer, Mathieu Les algèbres réticulées archimédiennes. Publ. U.E.R. Math. Pures Appl. IRMA 2 (1980), no. 4, exp. no. 1, 14 pp. (Author's introduction) 82g:46017 (46J99)

Les homomorphismes d'espaces vectoriels réticulés complexes. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 17, 793-796. (Author's summary) 82f:47051 47B55

Meyer, Michel Science as a questioning-process: a prospect for a new type of rationality. Philosophy of science: contemporary issues. Rev. Internat. Philos. 34 (1980), no. 1-2, 49-89. (See 82e:00034) 03A05 (00A25)

Meyer, Paul-André Introduction au calcul différentiel stochastique. Contributions in

probability and mathematical statistics, teaching of mathematics and analysis (Spanish), pp. 91-108, Grindley, Granada, 1979. (Halim Doss) 82d:60106 60H05

(with Doléans-Dade, Catherine) Un petit théorème de projection pour processus à deux indices. Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 204-215, Lecture Notes in Math., 721, Springer, Berlin, 1979. (François Broi 60G07

(with Stricker, Christophe; Yor, Marc) Sur une formule de la théorie du balayage. minaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 478-487, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Jacques Azema) 82f:60118c 60G48 (60H05, 60J45)

Construction de quasi martingales s'annulant sur un ensemble donné. Sémina Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1971/78), pp. 488-489, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Jacques Azèma) 821:601181 60G48 (60J65) Présentation de l'"inégalité de Doob" de Métivier-Pellaumail. Séminaire de

Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 611-613, Lecture Notes in Math., 721, Springer, Berlin, 1979. (M. Metivier) 821:69106 60G44 (with Dellacherie, Claude) ★Probabilités et potentiel. Chapitres V à VIII. (French)

[Probability and potential. Chapters V-VIII] Théorie des martingales. [Martingale theory] Revised edition. Publications de l'Institut de Mathématiques de l'Université de Strasbourg [Publications of the Mathematical Institute of the University of Strasbourg], XVII. Actualités Scientifiques et Industrielles [Current Scientific and Industrial Topics], 1385. Hermann, Paris, 1980. xviii+476 pp. ISBN 2-7056-1385-4 (M. G. Šur) 82b:60001 60-02 (60Gxx, 60H05)

Introduction to stochastic differential calculus. Quantum fields-algebras, processes Proc. Sympos., Univ. Bielefeld, Bielefeld, 1978), pp. 21-40, Springer, Vienna, 1980. (Philip Protter) 82g:60074 60H05 (60H10)

Sur un résultat de L. Schwartz. Seminar on Probability, XIV (Paris, 1978/1979) French), pp. 102-103, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Louis Blake) 60G48

Les résultats de Jeulin sur le grossissement des tribus. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 173-188, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Louis Blake) 82h:60089 60G44

Retour sur la théorie de Littlewood-Paley. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 151-166, Lecture Notes in Math., 850, Berlin, 1981. (Mario Milman) 82m:60050 60G46 (42B25, 60J65)

(with Lépingle, D.; Yor, Marc) Extrémalité et remplissage de tribus pour certaines martingales purement discontinues. Seminar on Probability, XV (Univ. Strasbowrg, Strasbourg, 1979/1980) (French), pp. 604-617, Lecture Notes in Math., 850, Springer,

Berlin, 1981. (B. Marchal) 82i:60086 60G44 (60J75)

Meyer, Paul R. (with Neumann-Lara, Victor: Wilson, Richard G.) Is every GO-topology a join of two orderable topologies? Proc. Amer. Math. Soc. 84 (1982), no. 2, 291-296. (Richard A. Alò) 82k:54053 54F05

Meyer, R. R. A theoretical and computational comparison of "equivalent" mixed-integer formulations. Naval Res. Logist. Quart. 28 (1981), no. 1, 115-131. (Author's summary) 82h;90081 90C11

Meyer, Reinhold (with Schroeter, Gerhard) The application of differential geometry to ray acoustics in inhomogeneous and moving media. (German and French summaries) Acustica 47 (1980/81), no. 2, 105-113. (Authors' summary) 82d:76079

Meyer, Richard E. (with Painter, J. F.) New connection method across more general turning

on and to ce, 82k:76002

See also Transition bert K. (with McRobbie, Michael A.; Thistlewaite, Paul B.) A mecha are for nonclassical logics: the program KRIPKE. Polish Acad. Sci. Inst. ciol. Bull. Sect. Logic 9 (1980), no. 4, 189-192. (Editors) 82h:03035 (03B25, 03B60)

(10362.) Olsoon vor Spille Eine asymptotische Lösungsdarstellung von nichtselbst-adjungierten Randwertaufgaben für entartete gewöhnliche Differentialgleichungen 2. Ordnung mit einem kleinen Parameter bei den höchsten Ableitungen. Demonstratio Math. 14 (1981), no. 1, 59–76. (Johannes Elschner) 82g-34079 34EDS (34BDS)

Meyer, Werner (with Sczech, R.) Über eine topologische und zahle Anwendung von Hirzebruchs Spitzenauflösung. Math. Ann. 240 (1979), no. 1, 69–96. (I. Dolgachev) 82::10035 10D21 (12A50)

rer, Yves Estimations L² pour les opérateurs pseudo-différentiels. Séminaire d'Analyse Harmonique (1977/1978), pp. 47-53, Publ. Math. Orsay 78, 12, Univ. Paris XI, Orsay, 1978. (M. Nagase (Zbl 401:47026)) 82g:35014 35B45 (35S05, 47G05)

Inégalités L² à poids pour les opérateurs différentiels. Séminaire d'Analyse Harmonique (1977/1978), pp. 54-62, Publ. Math. Orsay 78, 12, Univ. Paris XI, Orsay, 1978. (M. Nagase (Zbl 406:35061)) 82g:35015 35B45 (47F05) (with Coifman, R. R.) Une généralisation du théorème de Calderón sur l'intégrale de

Cauchy. Fourier analysis (Proc. Sem., El Escorial, 1979), pp. 87-116, Asoc. Mat. Española, 1, Asoc. Mat. Española, Madrid, 1980. (A. B. Aleksandrov) 82a:42015 42B20 (30E20)

Les nouvelles intégrales singulières de Calderón. Séminaire Bourbaki (1978/79), Exp. No. 528, pp. 57-65, Lecture Notes in Math., 770, Springer, Berlin, 1980. (Eugene B. 42B20 Fabes) 82c:42017

Multiplication of distributions. Mathematical analysis and applications, Part B, pp. 603-615, Advances in Math., Suppl. Studies, 7b, Academic Press, New York, 1981. (M. Itano) 82m:46045 46F10

Meyer and der Heide, Friedhelm A comparison between two variations of a pebble game on

graphs. Automata, languages and programming (Sixth Colloq., Graz, 1979), pp. 411–421.

Lecture Notes in Comput. Sci., 71, Springer, Berlin, 1979. (Author's summary) 82e:68068
68E10 (05C20, 68C25)

A comparison of two variations of a pebble game on graphs. Theoret. Comput. Sci. 13 (1981), no. 3, 315-322. (Author's summary) 82j:05065 05C20 (68B20)

Meyer-König, W. (with Jakimovski, Amnon; Zeller, K.) Power series methods of ility: positivity and gap perfectness. Trans. Amer. Math. Soc. 266 (1981), no. 1, 309-317. (E. Jürimäe) 82g:40011 40H05 (40G10)

Meyer-Nieberg, Peter On permanence properties of sublinear operators. Arch. Math. (Basel) 37 (1981), no. 3, 267–271. (Peter Dodds) 82k:47084 47H99 (47B55)

Meyers, R. E. (with Lee, H. N.) On time dependent multigrid numerical technique Comput. Math. Appl. 6 (1980), no. 1, Special Issue, 61–65. (Ian Gladwell) 82b:65082 65M05 (62H20)

on, Mark D. Equilateral triangles and continuous curves. Fund. Math. 110 (1980), no. 1, 1-9. (H. W. Guggenheimer) 82m:57004 57N05 (53C70, 57N15)
Every power series is a Taylor series. Amer. Math. Monthly 88 (1981), no. 1, 51-52. (Editors) 82h:26005 26A06 (30B10)

Meyler, Dorothy S. Vernon Charles Morton. Bull. London Math. Soc. 11 (1979), no. 1, 104-105 (1 plate). (Editors) 82e:01097 01A70

Meyn, K. H. Convergent solution bounds for linear elliptic boundary value problems of monotone kind. (German summary) Computing 24 (1980), no. 1, 9-19. (Author's summary) 82e:65113 65N30

A discretization method for systems of linear inequalities. J. Optim. Theory Appl. 34

(1981), no. 3, 355–369. (Gerhard Telschow) 82m:49047 49D39 (65K10)

Mezei, Mihaly On the selection of the particle to be perturbed in the Monte Carlo method.

J. Comput. Phys. 39 (1981), no. 1, 128–136. (From the text) 82i:65005 65C05 (82A99) On a class of homogeneous spaces of compact Lie groups. (Russian) V. G.

Uspehi Mat. Nauk 36 (1981), no. 2(218), 193-194. (K. Teleman) 82j:53087 53C30

Mipdowicz, Zdzisław B. Strong connectivity of periodic sums of finite automata. (Russian)

Automata theory in application to the design of discrete devices and systems (Proc. Sympos., Jachranka and Donovaly, 1977-1978). Tanulmányok—MTA Számítástech Automat. Kutató Int. Budapest No. 99 (1979), 54-61 (1980). (A. D. Koršunov) 82a:68104

See also Gècseg, Ferenc; et al., 82i:68039

Mino, L. C. (with Lee, Y. L.; Chu, C. I.) On spaces of C(r,s) differentiable maps. Soochow J. Math. 6 (1980), 105-108. (Editors) 82k:58027 58D15 (46E99)

Miao, Quan Sheng The random walk method for the general neutron transport equation. (Chinese. English summary) Numer. Math. J. Chinese Univ. 2 (1980), no. 2, 21–30. (Author's summary) 82h:82052 82A70 (60J65, 65C05)

Miao, Tian De (with Chen, Chang Jun) On the Reissner theory of bending of an elastic plate. (Chinese. English summary) Appl. Math. Mech. 1 (1980), no. 2, 221-235. (Authors' summary) 82e:73061 73K10 (49H05)

de Miatello, Isabel Dotti (with Leite, Maria Luiza) A geometric property of central elements. Math. Z. 175 (1980), no. 2, 139-141. (J. A. Wolf) 82b:22013 (22E60, 53C20)

(with Leite, Maria Luiza) Linear vector fields on $\tilde{G}_{k}(\mathbb{R}^{n})$. Proc. Amer. Math. Soc. 80 (1980), no. 4, 673-677. (Duane Randall) 82c:57014 57R25

Miazga, Józef (with Lewandowski, Zdzisław) The Koebe domain for the class of typically-real functions under Montel's normalization. (Russian summary) Bull. Acad. olon. Sci. Sér. Sci. Math. 28 (1980), no. 9-10, 465-470 (1981). (M. S. Robertson)

82i:30013 30C45

Micale, Biagio The nucleus and the center of a distributive Ω -group. (Italian) Matematiche (Catania) 31 (1976), no. 2, 277-296 (1977). (Rainer Mlitz) 82e:17004 20N99)

(with Ferro, Alfredo) On models of a first-order theory in which certain formulas define a model of another theory. (Italian. English summary) Matematiche (Catania) 33 (1978), no. 1, 203-224 (1980). (Sauro Tulipani) 82i:03043 03C52 (03C68, 03F25,

to (with Castillon, J. B.) A-endomorphismes de A{X}. (English summary)

scripta Math. 25 (1978), no. 3, 249-261. (Authors' summary) 82k:13007 13B10

(with El-Agawany, Mohamed) Algèbre mesonique d'une forme bilinéaire symétrique. (English summary) Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 1, 1–12. (A. H. Kuškulei) 82m:15036 15A78 (15A90, 17B35, 81D05)

(with el-Mallah, Mohamed Lamei) Sur les dimensions des algèbres absolument valuées. (English summary) J. Algebra 68 (1981), no. 2, 237-246. (Aleksei Gainov)
82e:17001 17A20 (17A30, 46H99)

Micali, Silvio Two-way deterministic finite automata are exponentially more succinct than

sweeping automata. Inform. Process. Lett. 12 (1981), no. 2, 103-105. (From the text) 82d:68034 68C25 (03D05, 68C40)

Micchelli, Charles A. (with Gal, Shmuel) Optimal sequential and nonsequential procedures for evaluating a functional. Applicable Anal. 10 (1980), no. 2, 105-120. (Avraham A. Melkman) 82c:65033 65J05 (90C15)

(with Sharma, Ambikeshwar) Spline functions on the circle: cardinal L-splines revisited. Canad. J. Math. 32 (1980), no. 6, 1459-1473. (Jean Tzimbalario) 82b:41011

(with Fisher, S. D.) The n-width of sets of analytic functions. Duke Math. J. 47 (1980), no. 4, 789-801. (L. B. Sofman) 82b;30035 30D50 (41A46)

(with Milman, Pierre) A formula for Kergin interpolation in R^k. J. Approx. Theory 29 (1980), no. 4, 294-296. (Jean Tzimbalario) 82h:41008 41A10 (41A05)

(with Fisher, S. D.) The n-widths of sets of analytic functions. Approxim and applications (Proc. Workshop, Technion—Israel Inst. Tech., Haifa, 1980), pp. 131-133, Academic Press, New York, 1981. (M. I. Kadec) 82j:30052

(30C85, 41A46) (with Dahmen, Wolfgang A.) On limits of multivariate B-splines. J. Analyse Math. 39 (1981), 256-278. (Jean Tzimbalario) 82j:41013 41A15 (41A63) (with Cavaretta, A. S., Jr.; Dahmen, Wolfgang A.; Smith, Philip W.) A factorization

theorem for banded matrices. Linear Algebra Appl. 39 (1981), 229-245. (H.-J. Rack) 15A23

(with Dahmen, Wolfgang A.) Computation of inner products of multivariate B-splines. Numer. Funct. Anal. Optim. 3 (1981), no. 3, 367-375. (Authors' summary) 82h:65006 65D07 (41A15)

Michael, D. H. Meniscus stability. Annual review of fluid mechanics, Vol. 13, pp. 189-215,

Annual Reviews, Palo Alto, Calif., 1981. (See 821:76001) 49F10 (49F22)

Michael, Ernest A. Continuous selections and countable sets. Fund. Math. 111 (1981), no. 1, 1–10. (Bhamidi V. Rao) 82h:54025 54C60 (54C65)

Inductively perfect maps and tri-quotient maps. no. 1, 115-119. (K. Nagami) 82f:54019 54C10 (5 Proc. Amer. Math. Soc. 82 (1981), 54C10 (54E35)

Michael, J. H. Barriers for uniformly elliptic equations and the exterior cone condition. J. th. Anal. Appl. 79 (1981), no. 1, 203-217. (Ileana Toma) 82i:35053

Michael, Mark Some hyperspaces homeomorphic to separable Hilbert space. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 291-294, Academic Press, New York, 1981. (L. E. Ward, Jr.) 82j:54012 54B20

Michaelidis, P. (with Contopoulos, G.) Bifurcations of triple-periodic orbits. Celestial Mech. 22 (1980), no. 4, 403-413. (K. R. Meyer) 82b:34050 34C25 (58F05, 58F14,

Michaelis, Walter Lie coalgebras. Adv. in Math. 38 (1980), no. 1, 1-54. (E. J. Taft) 82b:17016 17B45 (16A24, 17B35)

Michalczyk, Barbara (with Majewska-Tronowicz, Jadwiga; Kinowska, Malgorzata) Current bibliography of the history of science and technology. No. 34 (April-July 1979). (Polish) Kwart. Hist. Nauk. Tech. 25 (1980), no. 1, suppl., 22 pp. (Editors) 82h:01004a

(with Majewska-Tronowicz, Jadwiga; Kinowska, Małgorzata) Current bibliography of the history of science and technology. No. 35/36 (July-Dec. 1979). (Polish) Kwart. Hist. Nauk. Tech. 25 (1980), no. 2, suppl., 30 pp. (Editors) 82k:01004b 01A05 (00A15) Michalczyk, Jerzy See Gass, Saul I., 82c:90053

Michalczyk, Marek (with Malinowski, Grzegorz) Interpolation properties for a class of many-valued propositional calculi. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 10 (1981), no. 1, 9-16. (Henry Africk) 82g:03037 03B50 (03C40)

Michalek, Joel E. (with Tripathi, Ram C.) The effect of errors in diagnosis and measurement on the estimation of the probability of an event. J. Amer. Statist. Assoc. 75 (1980), no. 371, 713-721. (Vitalijus Pikelis) 82m:62134 62H30

dodimitrakis, M. (with Ichtiaroglou, S.; Katopodis, K.) General three-body problem: families of vertical critical periodic orbits. Astrophys. and Space Sci. 73 (1980), no. 2, 445-451. (V. Szebehely) 82c:70010 70F07 (58F22, 58F40, 70F15)

chalopoulos, Panos G. (with Stephanopoulos, Gregory; Pisharody, Vijay B.) Modeling of traffic flow at signalized links. *Transportation Sci.* 14 (1980), no. 1, 9-41. (Authors' summary) 82m:90080 90B20

Michalska-Trautman, R. Exact solution of the initial eigenvalue problem for coherent pulse propagation. Phys. Rev. A (3) 23 (1981), no. 1, 352-359. (R. Delbourgo) 82b:81157 81K05 (35A25, 35O20)

Michalski, Ryszard S. Conceptual clustering: a theoretical foundation and a method for partitioning data into conjunctive concepts. Automatic pattern recognition and perception by a computer (IRIA Sem., Rocquencourt, 1978/1979) (French), pp. 253–295, INRIA, Rocquencourt, 1980. (From the introduction) 82k:68052 68G10 (03B50, 92A25)

Detection of conceptual patterns through inductive inference. Autor recognition and perception by a computer (IRIA Sem., Rocquencourt, 1978/1979) (French), pp. 297-339, INRIA, Rocquencourt, 1980. (Author's summary) 82g:92061

(with Dietterich, Thomas G.) Inductive learning of structural descriptions: evaluation criteria and comparative review of selected methods. Artificial Intelligence 16 (1981), no. 3, 257-294. (Authors' summary) 82i:68054 68G05 (03B48)

Michaud, Pierre (with Marcotorchino, François) Modèles d'optimisation en analyse des données relationnelles (English summary) Métriques et relations. Math. Sci. Humaines No. 67 (1979), 7–38, 125. (See 82e:92060) 92A27

Michel, Anthony N. (with Miller, Richard K.) Asymptotic stability of systems: results involving the system topology. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 587–592, IEEE, New York, 1979. (N. Harris McClamroch) 82b:93031 93D20

(with Miller, Richard K.) Stability theory for countably infinite systems of differential equations. Tohoku Math. J. (2) 32 (1980), no. 2, 155-168. (N. Fenichel) 34D20

(with Herget, Charles J.) *Mathematical foundations in engineering and science. Algebra and analysis. Prentice-Hall, Inc., Englewood Cliffs, N.J., 1981. xi+484 pp. (with Miller, Richard K.) Sinusoidal input-periodic response in nonlinear differential

quations containing discontinuous elements. Integral and functional differential equations (Proc. Conf., West Virginia Unio., Morgantown, W. Va., 1979), pp. 109-117, Lecture Notes in Pure and Appl. Math., 67, Dekker, New York, 1981. (M. K. Grammatikopoulos)

Michel, C. (with Pirl, U.) Normalformen für schlichte endlich-vielfach zusammenhängen Gebiete bezüglich schlichter konformer Abbildung mit vier Fixpunkten. Math. Nachr. 95 (1980), 119–133. (R. Kühnau) 82e:30021 30C55

el, Dominique Formule de Stokes stochastique. (English summary) Bull. Sci. Math. (2) 103 (1979), no. 2, 193-240. (Jean-Louis Ducourtioux) 82e:60090 60H05 (58G32,

olution récursive de l'équation de filtrage non linéaire. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A159-A161. (Author's summary) 82bs 60G35 (58G32, 93E11)

(with Bismut, Jean-Michel) Structure des diffusions conditionnelles et calcul des ations. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 15,

731-734. (Authors' summary) 82f:60170 60J60 (58G32, 60H15, 93E10)
Régularité des lois conditionnelles en théorie du filtrage non-linéaire et calcul des variations stochastique. J. Funct. Anal. 41 (1981), no. 1, 8-36. (D. W. Stroock) 82f:60090 60G35 (58G32, 60H05, 93E11)

Michel, Jean (with Digne, François) Descente de Shintani des caractères d'un groupe de Chevalley fini. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 10, A571-A574. (Authors' summary) 82b:20065 20G40 (10D40)

(with Digne, François) Descente de Shintani des caractères de Deligne-Lusztig. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 13, A651-A653. (Authors' summary) 82a:20053 20G40

Michel, John R. (with Gudder, Stanley P.) Representations of Baer *-semigroups. Proc.

Amer. Math. Soc. 81 (1981), no. 2, 157-163. (J. Kist) 82j:20127 20M30 (81B10)

Michel, Louis (with Mozrzymas, Jan) Weak equivalence of irreducible representations of little space groups. Proceedings of the Conference on Kristallographische Gruppen (Univ. Bielefeld, Bielefeld, 1979), Part II. Match No. 10 (1981), 223-225. (Editors) 82p: 22015 22E45 (20C35)

Michel, Reinhard A remark on nonuniform estimates in the central limit theorem for sums of independent random vectors. Sankhyā Ser. A 40 (1978), no. 4, 388-392. (Roy V. Frickson) 82h:60044 60F05

On the asymptotic efficiency of conditional tests for exponential families. Ann. Statist. 7 (1979), no. 6, 1256-1263. (Author's summary) 82h:62042 62F05

On the constant in the nonuniform version of the Berry-Esseen theorem. Wahrsch. Verw. Gebiete 55 (1981), no. 1, 109-117. (Roy V. Erickson) 82c:60042

-Michele, Leonede See De-Michele, Leonede

Michelet, Gilles (with Darrozes, Jean-Sylvestre) Flux d'entropie d'un fluide

micromorphique. (English summary) C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci. Univers Sci. Terre 292 (1981), no. 16, 1093–1096. (Authors' summary) 82g:73002

Micheletti, Anna Maria Questions of genericity for ergodic motions. (Italian) Matematich (Catania) 31 (1976), no. 2, 404-414 (1977). (G. P. Bava) 82e:35055 35L10 (73K05)

Michelman, Eric H. The design and operation of public-key cryptosystem Computer Conference (Proc. AFIPS Conf., New York, 1979), pp. 305-311, AFIPS Conf. Proc., 48, AFIPS Press, Arlington, Va., 1979. (See 82f:68003) 94B35

Michelotti, Margherita (with Pellegrino, Consolato) A theorem on the creation of limits for a generalization of the comma categories. (Italian. English summary) Atti Sem. Mat. Fis. Univ. Modena 29 (1980), no. 1, 95-100. (G. M. Kelly) 82m:18001 18A25 (18A30) thelsohn, M. L. Clifford and spinor cohomology of Kähler manifolds. Amer. J. Math.

102 (1980), no. 6, 1083-1146. (N. J. Hitchin) 82d:53041 53C55 (32L20, 58A14, 58G05)

(with Lawson, H. Blaine, Jr.) Clifford bundles, immersions of manifolds and the vector field problem. J. Differential Geom. 15 (1980), no. 2, 237-267 (1981). (N. J. Hitchin) 82g:53065 53C42 (49F10, 57R20)

Michelucci, M. L. (with Reas, Pier Giorgio; Di Pisa, Giovanni) A mathematical-statistical model concerning a biological community of harbor pollution. (Italian) Atti Accad. Sci. Lett. Arti Palermo Parte I (4) 36 (1976/77), 249-257 (1978). (From the text) 82b:92040

Michihiro, Keiji (with Inoue, Yoshinori) A method of multiple scales for integral equations. J. Phys. Soc. Japan 50 (1981), no. 2, 681-686. (T. A. Ebanoidze) 82f:45007

Michiwaki, Yoshimasa On the resemblance between the presentations and the formation processes of modern mathematical papers and those of old mathematical tablets in Japan. Japan. Stud. Hist. Sci. No. 18 (1979), 117-125. (Joong Fang) 82k:01011 (01A80)

Japanische Mathematik unter dem Gesichtspunkt der Berechnungstechnik: Henkei Jutsu. Sudhoffs Arch. 64 (1980), no. 3, 226-233. (K. Masuda) 82e:01013 01A27

Michler, Ernst Zuverlässigkeitsmodelle für zeitlich diskret arbeitende Systeme. Tech. Hochsch. Magdeburg 23 (1979), no. 7, 735-737. (Author's summary) 82k:90061 90B25 (60K10, 62N05)

Michler, Gerhard O. (with Landrock, Peter) A criterion for cyclicity. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 419–422, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (From the introduction) 82h:20015 20C20 (20D20)

Michlin, S. G. See Mihlin, S. G.

Michling, Horst Einige Erläuterungen zum folgenden Artikel: "Neue Aussicht zur Erweiterung des Gebiets der Himmelskunde". Festschrift zum 200. Geburtstag von Carl Friedrich Gauß. Gauss-Ges. Göttingen Mitt. No. 14 (1977), 26-29. (Editors) 82f:01183 01A75 (01A55)

Vom Hohen Hagen zum Hamburger Michel. Festschrift zum 200. Geburtstag von

Carl Friedrich Gauß. Gauss-Ges. Göttingen Mitt. No. 14 (1977), 94-110. (Editors) 82e-01066 01A55

Michniewicz, Maciej An application of the Kalman filter for optimization in the presence of noise. (Polish. Russian and English summaries) Arch. Automat. Telemech. 25 (1980), no. 2, 167–177. (Author's summary) 82d:90090 90C15

Michon, Grand (with Coste, Michel) Petits et gros topos en géometrie algébrique. Third Colloquium on Categories (Amiens, 1980), Part II. Cahiers Topologie Géom. Différentielle 22 (1981), no. 1, 25-30. (Marta C. Bunge) 82g:14024 14F20 (18B25)

Michor, P. Manifolds of smooth maps. Cahiers Topologie Géom. Différentielle 19 (1978), no. 1, 47-78. (Sadayuki Yamamuro) 82h:58022a 58D15 (46G05, 58C20)

Manifolds of smooth maps. II. The Lie group of diffeomorphisms of a noncompact smooth manifold. Cahiers Topologie Géom. Différentielle 21 (1980), no. 1, 63-86. (Sadayuki Yamamuro) 82b:58022b 58D15 (46G05, 58D05)

Manifolds of smooth maps. III. The principal bundle of embeddings of a

noncompact smooth manifold. Cahiers Topologie Géom. Différentielle 21 (1980), no. 3, 325-337. (Sadayuki Yamamuro) 82b:58022c 58D15 (46G05, 58D10)

The division theorem on Banach spaces. Österreich. Akad. Wiss. Math.-Natur. Kl.

Sitzungsber. II 189 (1980), no. 1-3, 1-18. (J. Bochnak) 82m:58008 58C25 (26E15,

See also Binz, E.; et al., 829:58019

Miéić, Vladimir Quasiconformal mappings in a space. (Serbo-Croatian. English summary) Mat. Vesnik 3(16)(31) (1979), no. 3, 361-380. (Author's summary) 82b:30018 Mickevič, N. V. (with Aronov, R. A.; Bolotovskii, B. M.) Elements of materialism and dialectics in shaping A. Einstein's philosophical views. (Russian. English summary) Voprosy Filos. 1979, no. 11, 56-66, 187. (Authors' summary) 82f:01075

(with Senin, Y. E.) Nonvacuum cosmologies with toroidal topology of space-sections. Acta Phys. Polon. B 12 (1981), no. 6, 541-547. (Authors' summary) 82j:83071

Micnas, R. (with Kishore, R.) Self-consistent many-body theory for the standard basis operator Green's functions. Phys. A 108 (1981), no. 1, 180-204. (Authors' summary) 82i:82020 82A15 (81H99)

Micu, N. Sur un théorème de comparabilité. An. Univ. București Mat. 29 (1980), 63-67. (Uwe Küchler) 82i:60045 60F05

On the random subsequences of some series of real numbers. (Romanian, French summary) Stud. Cerc. Mat. 32 (1980), no. 2, 187-192. (G. Niculescu) 82a:60032

Comparison models for sequences of random variables that diverge a.e. to +∞. (Romanian. French summary) Stud. Cerc. Mat. 32 (1980), no. 5, 521-525. (Author's summary) 82h:60063 60F99

Middleton, David (with Breton, J. R.) General theory of acoustic propagation through arbitrary fluid media. I. Propagation equations, conditions of the medium, and general dynamical solutions. J. Acoust. Soc. Amer. 69 (1981), no. 5, 1245-1260. (S. H. Lam) 82e:76053 76Q05

Midgarden, Bette (with Wiegand, Sylvia) Commutative rings of bounded module type. Comm. Algebra 9 (1981), no. 10, 1001-1025. (C. P. L. Rhodes) 82i:13020 13F0

Miech, R. J. A metabelian, prime power classification problem. J. London Math. Soc. (2) 23 (1981), no. 1, 68-84. (J. Wiegold) 82j:20047 20D15 (20E34)
Miech, R. P. (with Banks, H. T.; Olson, S. L.) A comparison of mathematical models for a

recycling cascade in glycogenolysis. Math. Modelling 1 (1980), no. 1, 13-26. (Authors' summary) 82j:92019 92A09 erry-Mieg, Jean See Thierry-Mieg, Jean

Miel, George J. Evaluation of complex logarithms and related functions. SIAM J. Nur

 Anal. 18 (1981), no. 4, 744-750. (M. Brannigan) 82k:65010
 65D20
 Miele, A. (with Liu, C. T.) Supplementary optimality properties of gradient-restoration algorithms for optimal control problems. J. Optim. Theory Appl. 32 (1980), no. 4, 577-593. (William W. Hager) 82d:49025 49D07

Mielke, Eckehard W. The eightfold way to color geometrodynamics. Internat. J. Theoret. Phys. 19 (1980), no. 3, 189-209. (Author's summary) 82j:83055 83E05 (81G20)

Gauge-theoretical foundation of color geometrodynamics. Differential geomethods in mathematical physics (Proc. Internat. Conf., Tech. Univ. Clausthal, Clausthal-Zellerfeld, 1978), pp. 135-151, Lecture Notes in Phys., 139, Springer, Berlin, 1981. (Author's summary) 82k:83043 83E05 (81E20, 81G20) On pseudoparticle solutions in Yang's theory of gravity. Gen. Relativity Gravitation

13 (1981), no. 2, 175–187. (Author's summary) 82i-83061 83D05 (53C0, 83E05)

Mielke, M. V. The interval in algebraic topology. Illinois J. Math. 25 (1981), no. 1, 51–62.

(Harold Hastings) 82g:55013 55P99 (18G30)

Mielke, Paul W. (with Berry, Kenneth J.; Brockwell, Peter J.; Williams, James S.) A class

of nonparametric tests based on multiresponse permutation procedures. Biometrika 68 (1981), no. 3, 720-724. (Authors' summary) 82k:62088 62G10

Erratum: "On asymptotic nonnormality of mull distributions of MRPP statistics" [Comm. Statist. A—Theory Methods 8 (1979), no. 15, 1541–1550; MR 81i:62077]. Comm. Statist. A-Theory Methods 10 (1981), no. 17, 1795. (From the text) 82j:62011

Miellou, J. C. (with Lhote, F.; Lang, B.; Spiteri, P.) Relaxation methods for parallel in line calculations of the optimum control of large systems. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 324–331, Lecture Notes in Control and Information Sci., 22, Springer, Berlin, 1980. (J. Stoer) 82bc49045 49D20 (49D27)

Miers, C. Robert Closed Lie ideals in operator algebras. Canad. J. Math. 33 (1981), no. 5, 1271–1278. (Pierre de la Harpe) 82mc46064 46L10 (17B65)

Miersemann, Erich Über nichtlineare Eigenwertaufgaben in konvexen Mengen. (English summary) Math. Nachr. 88 (1979), 191–205. (Author's summary) 82k:49018 49A29 (47H15, 73H05)

Zur Regularität der quasistatischen elasto-viskoplastischen Verschiebungen und Spannungen. (English summary) Math. Nuchr. 96 (1980), 293–299. (W. Velte) 82h:73039 73F15 (73E99)

cke, Klaus-J. Γ-minimax selection procedures in simultaneous testing problems. Ann. Statist. 9 (1981), no. 1, 215-220. (J. V. Deshpande) 82f-62060 62F07 (with Bühler, Wolfgang J.) On (n-1)-wise and joint independence and normality of n random variables: an example. Comm. Statist. A-Theory Methods 10 (1981), no. 9,

ary) 82f:62032 62E10

927-930. (Authors' summary) 821:62032 62E10 russens, Michel Sur les cycles limites des systèmes quadratiques. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 5, A337-A340. (K. R. Schneider) 82h:34037

power problems: the mathematical challenge (Proc. Conf., Seattle, Wash., 1980), pp. 393-402, SIAM, Philadelphia, Pa., 1980. (Author's summary) 82c:90081 90C30 (with Nguyen, V. Hien; Strodiot, J.-J.) On conditions to have bounded multipliers in locally Lipschitz programming. Math. Programming 18 (1980), no. 1, 100-106. (Authors' summary) 82:9007 90C30 rt Some applications of and a method for nonsmooth optimization. Electric

Miftshov, V. I. (with Bendrikov, G. A.) Investigation of the stability of linear and linearized systems by formulas of the free parameter of the analytic root locus method. (Russian) Vestnik Moskov. Univ. Ser. III Fiz. Astronom. 22 (1981), no. 2, 38-43, 95-96. (Authors' ary) 82i:93050 93D05 (34D20)

B 96 (1980), no. 3-4, 333-336. (Author's summary) 82i:81078
 8 96 (1980), no. 3-4, 333-336. (Author's summary) 82i:81078
 8 96 (1980), no. 3-4, 333-336. (Author's summary) 82i:81078
 8 1G05
 (with Makeenko, Ju. M.) Quantum chromodynamics as dynamics of loops. Nuclear

Phys. B 188 (1981), no. 2, 269-316. (Authors' summary) 82i:81137 81605 (81C35)
QCD=Fermi string theory. Nuclear Phys. B 189 (1981), no. 2, 253-294. (Author's summary) 82i:81056 81G05 (81E99)

dal, A. B. See Krylov, N. S., 82e:82001

Migdal, A. B. See Krylor, N. S., 82e:82001
Mighell, A. D. (with Santoro, A.; Rodgers, J. R.) The determination of the relationship between derivative lattices. Acta Cryst. Sect. A 36 (1980), no. 5, 796-800. (H. Groemer) 52A43 (15A90, 52A15, 82A60)

Miglietta, F. (with Ghirardi, G. C.; Rimini, A.; Weber, Tullio) Limitations on quantum measurements. I. Determination of the minimal amount of nonideality and identification of the optimal measuring apparatuses. Phys. Rev. D (3) 24 (1981), no. 2, 347-352. (Authors' summary) 82m:81005a 81B05 (with Ghirardi, G. C.; Rimini, A.; Weber, Tullio) Limitations on quantum

rements. II. Analysis of a model example. Phys. Rev. D (3) 24 (1981), no. 2,

353-358. (Authors' summary) 82m:81005b 81B05

Miglioli, P. A. (with Bertoni, Alberto; Mauri, Giancarlo) A characterization of abstract data as model-theoretic invariants. Automata, languages and programming (Sixth Colloq., Graz, 1979), pp. 26–37, Lecture Notes in Comput. Sci., 71, Springer, Berlin, 1979. (János (with Bertoni, Alberto; Mauri, Giancarlo) Towards a theory of abstract data types:

a discussion on problems and tools. International Symposium on Programming (Proc. Fourth Internat. Sympos., Paris, 1980), pp. 44–58, Lecture Notes in Comput. Sci., 83, Springer, Berlin, 1980. (Authors' summary) 82::68013 68B15 (03:09), 03:D99)

Migliorini, Franco Minimal subsets and maximal nonincreasable subsets in semigroups with sing elements. (Italian. English summary) Matematiche (Catania) 32 (1977), no. 2, 271-284. (Author's review) 82c:20106 20M10

Mignaco, Juan A. (with Roditi, Itzhak) Ground-state energy of three-body Coulomb systems through hyperspherical harmonics. J. Phys. B 14 (1981), no. 5, L161-L166. (Authors' summary) 82b:81144 81G50

nani, Roberto On Jordan- and Lie-admissibility of generalized superalgebras. Hadronic

J. 3 (1979/80), no. 4, 1313–1319. (J. Löhmus) 82a:17002 17A70 (17A15, 81C99) 2004, A. L. (with Surry, C.) A mixed finite element family in plane elasticity. Appl. Math. Modelling 5 (1981), no. 4, 259–262. (Authors' summary) 82m:73055 73K25 (73C99)

Mignot, Fulbert (with Murat, François; Puel, Jean-Pierre) Variation d'un point de retournement par rapport au domaine. (English summary) Comm. Partial Differential Equations 4 (1979), no. 11, 1263–1297. (G. Geymonat) 82f:35075 35J60

(with Puel, Jean-Pierre) Sur une classe de problèmes non linéaires avec non linéairité reint ruc, scan-retrie our une classe de proteines non inicaires avec non inicairité positive, croissante, convexe. Comm. Partial Différential Equations 5 (1980), no. 8, 791-836. (Lucio Boccardo) 82g:35041 35J60 (49A29) (with Puel, Jean-Pierre; Suquet, Pierre-M.) Flambage des plaques élastiques multiperforées. Publ. U.E. R. Math. Pures Appl. IRMA 2 (1980), no. 2, exp. no. II, 69 pp. (Jesús Hernández) 82f:73016 73C40 (35B32, 58E30)

(with Puel, Jean-Pierre; Suquet, Pierre-M.) Flambage des plaques élastiques

tiperforées. (English summary) Ann. Fac. Sci. Toulouse Math. (5) 3 (1981), no. 1, 7. (P. G. Ciarlet) 82m:73050 73K10 (35B32, 58E07, 73H99) 1-57. (P. G. Ciarlet) 82m:73050 Migoric, F. M. (with Kurpel', M. S.) Two-sided inequalities for functional-differential

equations, given in implicit form, and their applications. (Russian) Qualitative investigations of functional differential equations (Russian), pp. 60-64, 184, "Naukova Dumka", Kiev, 1980. (V. Rosa) 82i:34084 34K15

n Miguel, M. See San Miguel, M.

Migusov, I. 1. ★Механика текстильной нити и ткави. (Russian) [The mechanics of textile threads and fabrics] "Legkaja Industrija", Moskva, 1980. 160 pp. (N. Cristescu) 82;73001 73-02 (73D99, 73K03, 73K12)

Mihai, Alexandru Complex analytic projective connections. J. Differential Geom. 14 (1979), no. 4, 589-591 (1981). (Aurel Bejancu) 82e:53044 53C55 Sur les fibrés en droites uniformisables. Bull. Math. Soc. Sci. Math. R. S. Roumanie

(N.S.) 24(72) (1980), no. 2, 159-161. (From the text) 82d:55015 55R99

Un théorème de type Hamilton-Cayley pour la classe d'Atiyah. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 6, 859-860. (Editors) 82m:32025 32L10 (32C35) i, P. See Tataru-Mihai, P.

Mihailec, V. A. Distribution of eigenvalues of operators that are close to selfadjoint. (Russian) Funkcional. Anal. i Priložen. 15 (1981), no. 1 78-79. (M. Demuth) 82d:47027 47A70 (47A55)

ailenko, B. G. (with Hron, F.) Numerical modeling of nongeometrical effects by the Alekseev-Mikhailenko method. Bull. Seismol. Soc. Amer. 71 (1981), no. 4, 1011-1029. 73D25 (86A15)

enko, V. E. (with Anpilogova, V. A.; Kovalev, S. N.; Levina, Ž. G.; Malinovskaja, V. I.; Oleščuk, T. Ju.; Panasjuk, L. S.; Puhov, I. K.; Sedleckaja, N. I.) ★C6opt задач по вачертательной геометрии с елементами программирования. (Russian) [A collection of problems in descriptive geometry with elements of programming] Second edition, revised and augmented. "Višča Škola", Kiev, 1980. 208 pp. (E. Otto) 82e:51004 51-01 (00A07)

cu, Tiberiu See Obituary: Mihăilescu, Tiberiu, 82b:01068 and Tarină, Marian, 821-01067Mihailov, A. A. Bessel's letters. (Russian) Istor.-Astronom. Issled. No. 14 (1978), 317-330. 01A55 (Peeter Müürsepp) 82h:01036

lov, A. G. (with Tokarev, V. V.) Guaranteed estimates of the performance of program control and of control with complete information in economic systems. Automat. Telemeh. 1980, no. 7, 108–118 (Russian. English summary); translated as Automat. nte Control 41 (1980), no. 7, part 2, 973-981 (1981). (Authors' summary) 82m:93057 93C15 (90A16)

illov, A. I. See Sen tics and information science, 82a:68007 and 82k:03004

Mihailov, A. V. (with Kuznecov, E. N.) On the topological meaning of canonical Clebsch variables. Phys. Lett. A 77 (1980), no. 1, 37–38. (Takayuki Nôno) 82f:58041 58F05 (49C10, 76C99)

hailov, E. N. Duality in categories of topological groups. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 5, 1059-1062. (S. Ju. Priščepionok) 82e:22013 22D30 (18B99,

Mihailov, G. A. (with Elepov, B. S.; Kronberg, A. A.; Sabel'fel'd, K. K.) ★Решение краевых задач методом Мовте-Карло. (Russian) [Solution of boundary value problems by the Monte Carlo method] "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. 175 pp. (В. L. Granovskii) 82e:65120 65N99 (65C05)

Nonlinear equations connected with the optimization of Monte Carlo methods for solving integral equations of the second kind. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 4, 792-796. (R. S. Anderssen) 82c:65088 65R20

(with Musihin, S. G.) Algorithms for calculations of a complex reactor cell by the Monte Carlo method. (Russian) Z. Vyčisi. Mat. i Mat. Fiz. 21 (1981), no. 2, 432–440, 526. (Authors' summary) 82h:82056 82A75 (65C05)

Mihailov, G. I. (with Rudnev, V. V.) Automaton interconnected graph system with simple nets. Avtomat. i Telemeh. 1980, no. 5, 132-141 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 5, part 2, 697-705. (Authors' summary)

Mihailov, G. K. Current state and problems of the history of mechanics. (Russian) Current problems in theoretical and applied mechanics (Proc. Fourth All-Union Congress Theoret. Appl. Mech., Kiev, 1976) (Russian), pp. 168-185, 407, "Naukova Dumka", Kiev, 1978. (Author's summary) 82f:01066 01A60 (01A55, 70-03)

Mihailov, I. E. (with Borisov, V. M.) Optimization of supersonic parts of three-dimensional nozzles. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 2, 517–519, 528. (Ilija Lukačević) 82j:76057 76J10

Mihailov, I. I. Some Diophantine equations of the third degree. (Russian. Czech summary) With a loose English summary. Casopis Pēst. Mat. 105 (1980), no. 4, 350–353, 409. (S. V. Kotov) 82c:10018 10B10 (10B15)

Mihailov, Ju. I. Classification of two-webs of the type $T_{m,n}^{mn}$ (Russian) Differential geometry (Russian), pp. 88-94, 141, Kalinin. Gos. Univ., Kalinin, 1977. (Author's summary) 82j:53028 53A60

Mihailov, K. I. A boundary value problem for an equation of mixed type with discontinuous coefficients. (Bulgarian. Russian and French summaries) Godišnik Visš. Učebn. Zaved. Priložna Mat. 13 (1977), no. 3, 51-58 (1978). (Author's summary) 82c:35048 35M05

nilov, L. G. Some overdetermined systems of partial differential equations. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 44-47, 248, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (S. S. Titov) 82m:35111 35N10 (30G20) On the representation of solutions of a second-order partial differential equation on the plane by holomorphic functions. (Russian. Tajiki summary) Dokl. Akad. Nauk Tadžik. SSR 23 (1980), no. 7, 359–362. (A. Džuraev) 82j:35026 35C99 (35J15)

Reconstruction of a generalized analytic function from its real or imaginary part. (Russian. Tajiki summary) Dokl. Akad. Nauk Tadžik. SSR 23 (1980), no. 12, 687–689. (Wolfgang Tutschke) 82k:30052 30G20 (35345)

On a problem of conjugation of the solutions of a second-order partial differential ation on the plane. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 2, 276–281. (R. N. Abdulaev) 82i:35054 35J25

Mihailov, V. A. Adaptive random access in broadcast channels. (Russian) Methods of information transmission and processing (Russian), pp. 109-114, 117, "Nauka", Moscow, 1980. (Author's summary) 82d:94039 94A40

Mihailo, V. G. Convergence to the multidimensional normal law in an equiprobable scheme for the distribution of particles by complexes. (Russian) Mat. Sb. (N.S.) 111(153) (1980), no. 2, 163-186, 319. (G. K. Eagleson) 82c:60043 60F05 (60C05)

Mihailov, V. N. Plane problem of the theory of elasticity in multiply-connected domains with cyclic and mirror symmetry. Prikl. Mat. Meh. 43 (1979), no. 2, 371-374 (Russian); lated as J. Appl. Math. Mech. 43 (1979), no. 2, 401-404 (1980). (Author's summary) 82h:73005 73C02 (31A30)

Mihailov, V. P. ★Partial differential equations. Translated from the Russian by P. Č.

na. "Mir", Moscow, 1978. 397 pp. (Editors) 82a;35003a 35-01

★Équations aux dérivées partielles. (French) [Partial differential equations]

Translated from the Russian by Irina Petrova. "Mir", Moscow, 1980. 390 pp. (Editors) 35-01

See also Vladimirov, V. S.; et al., 82g:01077

Mihailov, V. V. (with Čekalin, A. N.) Calculation of pressure and water saturation in a region with boreholes. (Russian) Computational methods and computer software, No. 2 (Russian), pp. 39-48, Kazan. Gos. Univ., Kazan, 1980. (See 82b:76001) 76S05 (65P05)

Addition of an arbitrary number of different angular momenta. J. Phys. A 14 (1981), no. 5, 1107-1116. (Author's summary) 82d:81054

Mihailov, Valentin Petrovič See Mihailov, V. P.

Mihailova, M. A. Finite imprimitive groups generated by pseudoreflections. (Russian) Studies in geometry and algebra (Russian), pp. 82-93, Kirgiz. Gos. Univ., Frunze, 1978. (From the text) 82d:20046 20H15 (51F15)

Mihailovskaja, L. G. Optimal stopping of a controllable diffusion process. (Russian. English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 2, 303-312. (Constantin Tudor) 60G40 (60J60)

Mihailovs'kii, V. I. (with Serkuziev, M.) Infinitesimal bending of first-order surfaces of revolution of positive Gaussian curvature subject to conical sleevelike constraints (Russian) Differential geometry of manifolds (Russian), pp. 34–45, 59–60, Taškent. Gos. Ped. Inst., Tashkent, 1980. (A. V. Pogorelov) 82j:53103 53C45 (76L05)

Ped. Inst., Tashkent, 1980. (A. V. Pogorelov) 82j:53103 53C45 (76L05)
Mihajlova, M. Reduction of modalities in several intuitionistic modal logics. C. R. Acad.

are Sci. 33 (1980), no. 6, 743-745. (L. L. Maksimova) 82h:03015 03B45

Mihal'čuk, R. I. A test of convergence of integral continued fractions. (Ukrainian. Russian summary) Studies in the qualitative theory of differential equations and its applications (Ukrainian), pp. 39–40, 74, Akad. Nauk Ukrain. SSR, Inst. Mat., Kieo, 1978. (Author's

Summary, 82:40002 40A15

Mihalev, A. V. (with Knauer, Ulrich) Endomorphism monoids of free acts and 0-wreath products of monoids. I. Annihilator properties. Semigroup Forum 19 (1980), no. 2,

177-187. (Heinrich Seidel) 82c:20104a 20M10 (20M30) (with Knauer, Ulrich) Endomorphism monoids of free acts and 0-wreath products of ioids. II. Regularity. Semigroup Forum 19 (1980), no. 3, 189-198. (Heinrich Seidel) 20M10 (20M30)

(with Knauer, Ulrich) Endomorphism monoids of free acts and 0-wreath products of monoids. III. Standard involution and continuous endomorphisms. Semigroup Forum 19 (1980), no. 4, 355-369. (Heinrich Seidel) 82c:20104c 20M10 (20M30)

(with Golubčik, I. Z.) Generalized group identities in classical groups. (Russian)
Uspehi Mat. Nauk 35 (1980), no. 6(216), 155-156. (A. I. Škuratskii) 82i-20091 20G33 (20H20, 20H25)

Mihalevič, M. V. Search for the largest preferred element of a compact set in the case of a nondifferentiable index of utility. (Russian) Methods of solution of problems of nonsmooth optimization and stochastic programming (Russian), pp. 25–32, 35, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Author's summary) 82f:90021

A stochastic search algorithm for the most preferred element of a compact set. (Russian. English summary) Issled. Operacii i ASU No. 15 (1980), 71-76, 135. (Author's

Mihalēvič, V. S. (with Ermol'ev, Ju. M.; Ljaško, I. I.; Тјирtја, V. I.) ★Математические методы исследования операций. (Russian) [Mathematical methods in operations research] "Višča Škola", Kiev, 1979. 312 pp. (J. S. Joel) 82e:90001 90-01 (49-01. 90Cxx, 90Dxx)

(with Mitropol'skii, Ju. A.; Koroljuk, V. S.; Kovalenko, I. M.) On A. V. Skorohod's works on the theory of random processes. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 4, 523-527. (Editors) 82g:60049 60Gxx (01A70)

Mihalik, Michael L. Ends of fundamental groups in shape and proper homotopy. Pacific J. Math. 90 (1980), no. 2, 431-458. (Jerzy Dydak) 82g:55014 55007 (55070)

Mihalin, G. O. (with Davidov, M. O.) Kernels of bounded sequences. (Russian) Mat. Zametki 23 (1978), no. 4, 537-550. (Authors' summary) 82c:40004 A property of a class of Stieltjes integrals. (Russian) Teor. Funkcii Funkcional. Anal. i Priložen. No. 35 (1981), 61-69, iv. (J. Benkö) 82m:26012 26A99 (40E05)

Mihalko, Daniel (with Tong, Yung Liang) A sequential regression method in Monte Carlo studies. J. Statist. Comput. Simulation 12 (1980/81), no. 1, 41-50. (Authors' summary) 82a:62130 62L12 (65C05)

Mihalyi, Margareta Syntactic projectivities in languages generated by dependency grammars. (Romanian. English summary) Stud. Cerc. Mat. 32 (1980), no. 3, 321-332. (Gheorghe Paun) 82h:68106 68F05

Mihara, Kikuo The earliest table of trigonometric functions, the "chord table" in the Almagest. (Japanese) Sûgakushi Kenkyû No. 84 (1980), 1-7. (S. Hitotumatu) 82e:01011 01A20 (65A05)

Mihelčić, M. $A(\alpha)$ -stable cyclic composite multistep methods of order 5. (German summary) Computing 20 (1978), no. 3, 267-272. (Author's summary) 82h:65057

(with Wingerath, K.) $A(\alpha)$ -stable cyclic composite multistep methods of orders 6 and 7 for numerical integration of stiff ordinary differential equations. (German and Russian summaries) Z. Angew. Math. Mech. 61 (1981), no. 6, 261-264. (Authors' summary) 82k:65045 651.20

Mihich, L. (with Antoci, S.) Timeless paths in spacetime, Einstein's unified field theory, Sommerfeld's quantum conditions and the Lamb shift. *Lett. Nuovo Cimento* (2) 31 (1981), no. 7, 241-247. (L. K. Patel) 82j:83047 83D05 (83E10)

Mildin, S. G. Constant multipliers in the estimates of the error of the variational difference approximation. (Russian) Numerical methods and questions in the organization of calculations. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 80 (1978), 125-166, 268-269. (A. Cotiu) 82i:65008 65D15 (49D25)

(with Prössdorf, Siegfried) #Singulare Integral operatoren. (German) [Singular integral operators] Mathematische Lehrbücher und Monographien, II. Abteilung: Mathematische Monographien [Mathematical Textbooks and Monographs, Part 2: Mathematical Monographs], 52. Akademie-Verlag, Berlin, 1980. xii + 514 pp. (J. V. 45-02 (45P05, 47G05, 58G10, 65R20)

Error of the approximate solution of one-sided variational problems. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 3, 46-50, 129-130. (C. Ilioi) 82i:65070 65K10 (49A29)

On the stability of solutions of one-sided variational problems; applications to plasticity theory. (Russian) Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 102 (1980), 68-101, 192-193. (Vadim Komkov) 82t:49007 49A29 (73E99)

On the error of the Bubnov-Galerkin method for elliptic boundary value problems. (Russian) Numerical methods and questions in the organization of calculations. 5. Zap Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 111 (1981), 137-144, 237. (Author's summary) 82k:65064 65N30

Mihók, Peter On the structure of the point arboricity critical graphs. (Russian summary)

Math. Slovaca 31 (1981), no. 1, 101–106. (J. Mitchem) 82f:05033 05C05 (05C35)

Mihova-Nehmer, V. M. On the generalized S-curvature-like tensor field on an almost contact manifold. C. R. Acad. Bulgare Sci. 32 (1979), no. 8, 1029-1031. (S. S. Singh) 53C15 (53B20)

Mikadze, I. S. (with Tavlalašvili, V. D.) Probability characteristic of the performance of a time-redundant technical system. Avtomat. i Vyčisl. Tehn. (Riga) 1980, no. 4, 60-64, 97 (Russian); translated as Automat. Control Comput. Sci. 14 (1980), no. 4, 56-60. (Authors' 90B25 summary) 82c:90043

(with Kakubava, R. V.) On a duplicated system. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 101 (1981), no. 1, 105-108. (Authors' summary) 82i:60157 60K25 (90B22)

Mikaeljan, G. S. D-theorems in some classes of Wielandt groups. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 12 (1977), no. 5, 399-413, 416. (D. I. Zaicev) 82e:20029 20D20 (20E07)

Γ-conjugacy of Sylow bases and Hall subgroups in a class of locally finite groups. (Russian Armenian summary) Akad. Nauk Armjan. SSR Dokl. 72 (1981), no. 1, 3-5. (From the introduction) 82h:20039 20E25

Mikaeljan, G. V. (with Džrbašjan, A. M.) Construction and basic properties of a family of Blaschke-type functions for a half plane. (Russian. Armenian and English sun Izv. Akad. Nauk Armjan. SSR Ser. Mat. 15 (1980), no. 6, 461-474, 506. (S. V. Hruščev) 30D50

kami, Kentaro The existence of a coadjoint equivariant momentum mapping for a semidirect product. Proc. Amer. Math. Soc. 82 (1981), no. 3, 465-469. (Ralph Abraham) 58F05 (70H99) 82i:58047

se A simple expression of the characters of certain discrete series resentations. II. J. Math. Kyoto Univ. 20 (1980), no. 3, 435-446. (Wulf Rossmann) 82c-22016 22F46

Mikeladze, Š. Е. ★Набранные труды. Том. І. (Russian) [Selected works. Vol. I]

Иислению решение дифференциальных уравнений с частимым производимым и интегральных уравнений. [Numerical solution of partial differential equations and integral equations] "Mecniereba", Tbilisi, 1979. 328 pp. (1 plate). (Walter Gautschi) 01A75 (65Mxx)

★Избранные труды. Том II. (Russian) [Selected works. Vol. II] Численный анализ и теории обыкновенных дифференциальных уравнений. [Numerical analysis and the theory of ordinary differential equations] "Mecniereba", Tbilisi, 1980. 331 pp. (1

plate). (Walter Gautschi) 82:01072b 01A75 (34-03, 65Lxx)

Mikelson, A. K. (with Krauze, A. V.) Method of digital stochastic conversion of nonlinear distortion factor. Automat. i Vyčisl. Tehn. (Riga) 1980, no. 4, 81-86, 99 (Russian); translated as Auto at. Control Comput. Sci. 14 (1980), no. 4, 77-81. (Authors' summary) 82a-94056 94A34

Estimation of broadband signal parameters at relatively low average discretization frequencies. Avtomat. i Vyčisl. Tehn. (Riga) 1981, no. 1, 90-94, 99 (Russian); translated as Automat. Control Comput. Sci. 15 (1981), no. 1, 73-76. (Author's summary) 82m:94023 94A12 (62F12)

Mikeš, I. Geodesic mappings of Ricci 2-symmetric Riemannian spaces. (Russian) Mat. Zametki 28 (1980), no. 2, 313-317, 320. (Esther Portnoy) 82b:53055

Geodesic mappings of Einstein spaces. (Russian) Mat. Zametki 28 (1980), no. 6, 935-938, 962. (Adrian C. Albu) 82e:53071 53C25 (83C99)

Holomorphically projective mappings of Kähler spaces. (Russian) Ukrain. Geo-Sb. No. 23 (1980), 90-98, iii. (D. I. Papue) 82j:53040 53B35

Mikeska, H. J. (with Patzak, E.) On the dynamics of impure classical Heisenberg chains.

Z. Phys. B 42 (1981), no. 4, 317-322. (Authors' summary) 82i:82072

Mikhail, N. N. (with Malik, H. J.) Unbiased estimates of cumulants and products of cumulants. J. Natur. Sci. Math. 18 (1978), no. 2, 7-17. (D. S. Tracy) 82d:62043 62E30 (62D05)

Mikhailenko, B. G. See Mihailenko, B. G.

Mikhailov, A. G. See Mihailov, A. G. Mikhailov, A. V. See Mihailov, A. V.

Mikhailov, G. I. See Mihailov, G. I.

Mikhailov, V. See Mihailov, V. P.

Mikhailov, V. N. See Mihailov, V. N.

Mikhailov, V. P. See Mihailov, V. P. Mikhailov, V. V. See Mihailov, V. V.

Mikhalev, Alexander See Mihalev, A. V.

Mikhov, S. G. (with Aneva, B. L.; Stojanov, D. C.) On the none nique definition of the current in the Thirring model. J. Phys. A 14 (1981), no. 2, 493-500. (Authors' summary) 82c:81074 81E10

torwin-Mikke, Janusz See Korwin-Mikke, Janusz

Mikkelson, Ruth L. Totally and partially ambiguous points of planar functions. Z. Math. Logik Grundlag. Math. 26 (1980), no. 5, 405–428. (Paul D. Humke) 82b:30033 30D40

tola, S. Refraction in a piecewise polytropic atmosphere. Astronom. and Astrophys. 94 (1981), no. 1, 20-24. (Author's summary) 82c:86005 86A35 (85A99)

Miklos, Stanislaw (with Charatonik, Janusz J.) Real functions on connected metric spaces.

(Italian summary) Rend. Mat. (6) 13 (1980), no. 1, 49-58. (V. Kannan) 82e:54016

Mikloško, J. Accelerated multiple calculation of linear recurrences. Numerical methods (Third College, Keszthely, 1977), pp. 463–469, Collog. Math. Soc. János Bolyai, 22, North-Holland, Amsterdam, 1980. (R. M. M. Mattheij) 82a:65098 65Q05

Mikolajczyk, L. (with Walczak, S.) Application of the extremum principle to investigating certain extremal problems. Trans. Amer. Math. Soc. 259 (1980), no. 1, 147–155. (Editors)

Mikolajska, Z. Sur le prolongement à gauche de l'intégrale d'une équation différentielle à paramètre retardé. Ann. Polon. Math. 37 (1980), no. 2, 211-218. (Ioan I. Vrabie) 34K05

Mikosz, Mirosława The modulus of variation and convergence of double Fourier gap series Funct. Approx. Comment. Math. 8 (1980), 129-138. (J. Musielak) 82g:42011 (42A28)

el (with Vanden-Broeck, Jean-Marc; Keller, Joseph B.) Axisymmetric bubble or drop in a uniform flow. J. Fluid Mech. 108 (1981), 89-100. (Authors' summary) 82i:76010 76B10 (76B40)

Mikula, Gerold Aufteilungsentscheidungen und Gerechtigkeit: Ergebnisse eines

Forschungsprojekts. (English summary) Decision in small groups (Workshop, Jungholz, 1977) (German), pp. 124–135, Math. Systems in Econom., 45, Hain, Königstein/Ts., 1979. (Sec 82e:90130) 90A30

ulevičius, R. (with Grigelionis, Bronius) On semimartingales with values in Euclidean halfspaces. Stochastic differential systems (Proc. IFIP-WG 7/1 Working Conf., Vilnius, 1978), pp. 28-37, Lecture Notes in Control and Information Sci., 25, Springer, Berlin, 1980. (Jean Mémin) 82i:60089 60G48 (60G30, 60J50)

On the existence and uniqueness of the solutions of the martingale problem on a manifold with boundary. (Russian, Lithuanian and English summaries) Litousk. Mat. Sb. 20 (1980), no. 1, 99-111, 218. (R. Morkvènas) 82k:60105 60G44 (58G32, 60H10)

(with Grigelionis, Bronius) Stochastic processes with penetrable boundaries.
(Russian, Lithuanian and English summaries) Litovsk, Mat. Sb. 20 (1980), no. 2, 27-40,

On the existence of solutions of the martingale problem in a manifold with a boundary. (Russian. Lithuanian and English summaries) Litoosk. Mat. Sb. 20 (1980), no. 2, 95-108, 209. (R. Morkwenas) \$2ex60096 OlH10 (60G44) audorid, V. I. (with Belyl, A. A.; Bovbel, A. L.) Investigation of algorithms of the fast Fourier transform, base 4, with a constant structure. Radiotehn. i Elektron. 25 (1980), no.

Pourier transform, oase 4, with a constant structure. Remoterni. 1 Etektron. 25 (1980), no. 8, 1639–1647 (Russiam); translated as Radio Engrg. Electron. Phys. 25 (1980), no. 8, 43–50 (1981). (Authors' summary) 82m:65117 65R10 (65T05)
kumi, Tetsuro (with Fukui, Masaki; Iwai, Noritsugu; Ogasawara, Kaori; Kizu, Kazuhiro; Hashizume, Kozi) On the U-tensor in Riemannian spaces. J. Hokkaido Univ. Ed. Sect. II A 31 (1980/81), no. 1, 9–14. (Krishna Amur) 82g:53026 53B21

usinski, Piotr On extension of pseudonorms. Proceedings of the Conference on Convergence (Szczyrk, 1979), pp. 84–86, Polsk. Akad. Nauk, Oddział Katowicach, vice, 1980. (See 82k:54001) 46A15

(with Burzyk, Józef) On normability of semigroups. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 1-2, 33-35 (1981). (Bernard L. Madison) 82g:54064

lanese, Mario (with Belforte, Gustavo) Structural problems in identification, state estimation and aggregation. Large Scale Systems 2 (1981), no. 2, 97-104. (Authors' summary) 828-93026 93B30 (92A05)

ami, Albert On a singular perturbation problem for the Maxwell equations in a multiply connected domain. Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 1, 123–132. (R. 78A25 (47H15)

ni, Basilio E. A. On the computation of the optimal constant output feedback gains for large-scale linear time-invariant systems subjected to control structure constraints.

Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 332-341, Lecture Notes in Control and Information Sci., 22, Springer, Berlin, 1980. (Ascn L. Dončev) 82g-49028 49D15 (93B40)

Milani, N. (with Minelli, T. A.; Pascolini, A.) An extension of Kato's perturbation theory to resonant states. (Italian summary) Nuovo Cimento A (11) 61 (1981), no. 1, 12-27. (K. Kumar) 82h:81033 81C12 (47A55, 81F05)

Milaševičius, Jonas On the convergence of Franken-Grigelionis asymptotic expansions. (Russian. Lithuanian and English summaries) Primenen. Teor. Verojatnost. i Mat. Statist. No. 3 (1980), 87–109, 157. (M. M. Leonenko) 82k:60059 60F10 (60E10)

aszewicz, J. P. On fixed point linear equations. *Numer. Math.* 38 (1981/82), no. 1, 53-59. (Author's summary) 82k:65035 65K05 (47B55)

Mile, Isabella (with Farkas, M.; Lokos, Agnes) A dynamic model of simultaneo memorization. (Spanish summary) Acta Cient. Venezolana 32 (1981), no. 2, 132–137. (Authors' summary) 82j:92067 92A90 (62P15)
er, Miroslav Theoretical study of thin off-axis hologram. Acta Tech. ČSAV 26 (1981),

no. 1, 117-133. (Author's summary) 824:78005 78A10

Miles, John W. Solitary waves. Annual review of fluid mechanics, Vol. 12, pp. 11-43, Annu Reviews, Palo Alto, Calif., 1980. (From the introduction) 82e:76018 76B25

The second Painlevé transcendent: a nonlinear Airy function. Mechanics today, Vol. 5, pp. 297-313, Pergamon, Oxford, 1980. (H. E. Fettis) 82g:34008 34A25 (33A40) A note on the drag on a slowly moving body in an axisymmetric rotating flow. J. Fluid Mech. 100 (1980), no. 1, 35-40. (Author's summary) 82b:76061 76U05

Hamiltonian formulations for surface waves. Appl. Sci. Res. 37 (1981), no. 1-2, 103–110. (Author's summary) 82m:76013 76B25 (49C10, 58F05, 76B15)
The Korteweg-de Vries equations: a historical essay. 25th anniversary issue:

editorial reflections on the development of fluid mechanics. *J. Fluid Mech.* **106** (1981), 131–147. (See **83g**:76002) 76B25 (01A55, 01A60, 35Q20, 76–03)

Waves in a rapidly rotating gas. *J. Fluid Mech.* **107** (1981), 487–497. (Author's summary) **82i:76067** 76N15 (76U05)

On internal solitary waves. II. (Russian summary) Telhus 33 (1981), no. 4, 397-401.

(Author's summary) 82j:76021 76B25 Miles, Robert D. (with Chang, Chia Juch; Sinha, Kumares C.) A regional railroad network optimization model for coal transportation. Transportation Res. Part B 15 (1981), no. 4, 227–238. (Authors' summary) 82g:90043 90B10

Miletic, J. A finite Laplace transform method for the solution of a mixed boundary value problem in the theory of elasticity. J. Méc. Appl. 4 (1980), no. 4, 407-419. (Author's

summary) 82±73012 73C35 (44A10)

Milewski, Jan On Nicolescu problem for the iterated ultraparabolic equation. Fasc. Math. No. 11 (1979), 207–212. (William Rundell) 82g:35021 35C15 (35K35, 35K70)

On the Green function and Cauchy-Dirichlet problem for polyparabolic equ Wyż. Szkoła Ped. Krakow. Rocznik Nauk.-Dydakt. Prace Mat. No. 9 (1979), 85-96. (Enrico Obrecht) 82a:35053 35K35 (35C15)

(with Wachnicki, Eugeniusz) Solution d'un problème aux limites pour l'équation stratio Math. 13 (1980), no. 1, 77-102. (G. Wildenhain) 82a:31003 rmonique. Dem 31A30 (35J40)

Milgram, A. N. See Bers, Lipman; et al., 82c:35001
Milgram, R. James (with Carlsson, Gunnar) Some exact sequences in the theory of Hermitian forms. J. Pure Appl. Algebra 18 (1980), no. 3, 233-252. (A. A. Ranicki)

18F25 (10C05, 57R65) (with May, J. P.) The Bockstein and the Adams spectral sequences. Proc. Amer.

Math. Soc. 83 (1981), no. 1, 128-130. (J. F. Adams) 82i:55019 55T15 Milić, Mirko M. (with Novak, Ladislav A.) A general method of formulation of Lagrangian and anti-Lagrangian equations for nonlinear RLCMTG networks. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 231–234, IEEE, New York, 1979. (See 82e:94002) 78A55 (58F05, 58F40, 94C05)

(with Novak, Ladislav A.) Formulation of equations in terms of scalar functions for ed nonlinear networks. Internat. J. Circuit Theory Appl. 9 (1981), no. 1, 15-32. (Authors' summary) 82a:94099 94C05

Millé, Svetozar On n-anti-inverse semigroups. (Serbo-Croatian. English summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 161–167 (1980). (Author's summary) 82h:20089 20M10

Milicer-Grużewska, Halina Les propriétés d'un opérateur différentiel apparaissant en mécanique des fluides. Demonstratio Math. 12 (1979), no. 4, 837-864. (V. B. Smirnova) 76C99 (35R40)

(with Cakala, Sylwin) Analyse d'hypothèses sur les noyaux liés avec la solution

fondamentale spéciale du système parabolique au sens de Petrovsky. Demonstratio Math. 13 (1980), no. 1, 45-63. (Kenneth J. Brown) 82g:35048 35K40 ino Milles, Francisco César See Polcino Milles, Francisco César

Milin, I. M. A property of logarithmic coefficients of univalent functions. (Russian) Metric questions of the theory of functions (Russian), pp. 86–90, 161, "Naukova Dumka", Kiev, 1980. (V. Linis) 82i:30026 30C50 (30C45)

Milin, V. I. Estimate of the coefficients of odd univalent functions. (Russian) Metric questions of the theory of functions (Russian), pp. 78-86, 160, "Naukova Dumka", Kiev, 1980. (V. Linis) 82i:30025 30C50 (30C45)

Neighboring coefficients of odd univalent functions. (Russian) Sibirsk. Mat. Ž. 22 (1981), no. 2, 149–157, 237. (V. Linis) 82k:30027 30C50 (30C45)

Miliotis, P. (with Laporte, G.; Nobert, Y.) Computational comparison of two methods for finding the shortest complete cycle or circuit in a graph. (French summary) RAIRO Rech. Opér. 15 (1981), no. 3, 233-239. (Authors' summary) 82j:90032 90B10 (05C35, 05C38, 90C10)

Milisavljević, B. M. (with Atanacković, T. M.) Some estimates for a buckling problem. (German summary) Acta Mech. 41 (1981), no. 1-2, 63-71. (Authors' summary) 82i:73023 73H05

Militaru, V. A method of gradual generating the co-trees of a linear graph. (French summary) Rev. Roumaine Phys. 26 (1981), no. 1, 3-6. (W.-K. Chen) 82h:94034 94C15 (05C05)

Miljakova, L. V. (with Golotina, L. A.; Kolčanova, E. A.) Application of the finite difference method to the solution of a two-dimensional problem of the theory of clasticity. (Russian). Problems in the theory of elasticity and viscoelasticity (Russian),
 pp. 39-44, 122, Akad. Nauk SSSR, Ural. Naučn. Centr, Sverdlovsk, 1978. (I. N. Molčanov). 82b:73007
 73C05

Miljutin, A. A. (with Dmitruk, A. V.; Osmolovskii, N. P.) Ljusternik's theorem and the theory of the extremum. (Russian) Uspehi Mat. Nauk 35 (1980), no. 6(216), 11-46, 215. (Jiří V. Outrata) 82c:58010 58C99 (49B27)

Milka, A. D. Unique determinacy of general closed convex surfaces in Lobačevskii space. (Russian) Ukrain. Geom. Sb. No. 23 (1980), 99-107, iii. (A. V. Pogorelov) 82j:53104 53C45

An analogue of Liberman's theorem in Riemannian space. (Russian) Ukrain. Geom. Sb. No. 24 (1981), 82-84, iv. (M. C. Chaki) 82k:53084 53C45

Milkiewicz, Franciszek The formulation of and ideas for solving the problem of the control of production and product shipment. (Polish. Russian and English summaries) Arch. Automat. Telemech. 25 (1980), no. 4, 453-471 (1981). (Author's summary) 82g:90038 90B05 (90B30, 90C30)

van Mill, Jan Weak P-points in compact F-spaces. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979). Topology Proc. 4 (1979), no. 2, 609-628 (1980). (R. Grant Woods) 82d:54042 54G05

(with Mills, Charles F.) A boojum and other snarks. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 4, 419–424. (Donald Plank) 82h:54066 54G15 (54A10)

(with Dow, Alan) On nowhere dense ccc P-sets. Proc. Amer. Math. Soc. 80 (1980), 4, 697–700. (N. C. Heldermann) 82a:54032 54D20

Men. U(κ) can be mapped onto U(ω). Proc. Amer. Math. Soc. 80 (1980), no. 4, 701–702. (W. W. Comfort) 82a:54010 54A25 (04A20, 54D40)

(with Wattel, Evert) Dendrons. Topology and order structures, Part 1 (Lubbock, Tex., 1980), pp. 59-81, Math. Centre Tracts, 142, Math. Centrum, Amsterdam, 1981. (L. E. Ward, Jr.) 82m:54037 54F50 (54F05)

(with van de Vel, Marcel) Subbases, convex sets, and hyperspaces. Pacific J. Math. 92 (1981), no. 2, 385-402. (V. P. Soltan) 82k:52007 52A01 (46A99)

A rigid space X for which $X \times X$ is homogeneous; an application of infinite-dimensional topology. Proc. Amer. Math. Soc. 83 (1981), no. 3, 597-600. (R. J. Daverman) 82h:54067 54G15 (57N20)

(with Wattel, Evert) Selections and orderability. Proc. Amer. Math. Soc. 83 (1981), no. 3, 601-605. (E. Michael) 82i:54038 54C65 (54B20)

Characterization of some zero-dimensional separable metric spaces. 54F50 (54D99) Math. Soc. 264 (1981), no. 1, 205-215. (C. M. Pareek) 82f:54061 (with van Douwen, Eric K.) Supercompact spaces. Topology Appl. 13 (1982), no. 1, 21-32. (A. I. Baškirov) 82m:54017

Mill, John Stuart See Kitcher, Philip, 82f:01051

Millar, Alan Truth and understanding. Mind 86 (1977), no. 343, 405-416. (Author's summary) 82b:03016 03A05

Millar, P. Warwick Comparison theorems for sample function growth. Ann. Probab. 9 (1981), no. 2, 330-334. (P. Laurie Davies) 82d:60077 60G30 Robust estimation via minimum distance methods. Z. Wahrsch. Verw. Gebiete 55

(1981), no. 1, 73-89. (L. B. Klebanov) 82h:62064 62F35

Millar, Terrence Vaught's theorem recursively revisited. J. Symbolic Logic 46 (1981), no. 2, 397-411. (J. M. Plotkin) 82d:03053 03C57 (03C15, 03D45)

Miller, A. G. Application of group representation theory to symmetric structures. Appl. Math. Modelling 5 (1981), no. 4, 290-294. (Author's summary) 82i:20020 (73K05)

Miller, Arnold W. On generating the category algebra and the Baire order problem. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 10, 751-755.

(Aleksander Blaszczyk) 82k:04005 04A15 (06E10, 54H05)

(Alexsander Biaszczyk) απόστου (OPAT) (ODEIO, 34703)

Covering 2^ω with ω₁ disjoint closed sets. The Kleene Symposium (Proc. Sympos., Unio. Wisconsin, Madison, Wis., 1978), pp. 415–421, Stud. Logic Foundations Math., 101, North-Holland, Amsterdam, 1980. (L. Bukovský) 82k:03083

03E35

Vaught's conjecture for theories of one unary operation. Fund. Math. 111 (1981), no. 2, 135-141. (Annalisa Marcja) 82m:03044 03C15

Miller, Arthur I. On some other approaches to electrodynamics in 1905. Some strangeness in the proportion (Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 66-91, Addison-Wesley, Reading, Mass., 1980. (See 82d:83002) 01A60 (78-03,

★Albert Einstein's special theory of relativity. Emergence (1905) and early interpretation (1905–1911). Addison-Wesley Publishing Co., Reading, Mass., 1981. xxviii+466 pp. (2 plates). ISBN 0-201-04680-6 (S. D. Chatterji) 82m:83001 (01A60, 83A05)

Unipolar induction: a case study of the interaction between science and technology.

- Ann. of Sci. 38 (1981), no. 2, 155-189. (M. Kline) 82c:01037 01A60 (78-03)
- Miller, Bruce L. Countable-state average-cost regenerative stopping problems. Probab. 18 (1981), no. 2, 361-377. (Douglas P. Kennedy) 82h:90093 90C4
- Miller, Charles F., III (with Baumslag, Gilbert; Cannonito, Frank B.) Infinitely generated subgroups of finitely presented groups. II. Math. Z. 172 (1980), no. 2, 97–105. (M. Greendlinger) 82f:20058 20F05

The word problem in quotients of a group. Aspects of effective algebra (Clayton, 1979), pp. 246-250, Upside Down A Book Co., Yarra Glen, Vic., 1981. (From the text) 821:20048 20F10 (03D40) 20F10 (03D40)

(with Baumslag, Gilbert; Dyer, Eldon) On the integral homology of finitely

presented groups. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 3, 321-324. (From the text) 82c:20089 20J05 (03D40, 03D80) text) Szc. Dues 2010 (031-04), 031-00] (with Baumslag, Gilbert; Cannonito, Frank B.) Computable algebra and group embeddings. J. Algebra 69 (1981), no. 1, 186-212. (D. E. Cohen) 82e:20042 20F10

(03D40, 03D45, 16A53) (with Baumslag, Gilbert; Cannonito, Frank B.) Some recognizable properties of solvable groups. Math. Z. 178 (1981), no. 3, 289-295. (V. A. Roman'kov) 82k:20061

20F16 (03D40, 20F10) Miller, David Erratum: "What's in a numeral?" [Philos. Stud. 35 (1979), no. 4, 323-344; MR 80m:03018]. Philos. Stud. 36 (1979), no. 4, 433. (Editors) 82b:03017 03A05

Miller, David P. High recursively enumerable degrees and the anticupping property. Logic Year 1979-80 (Proc. Seminars and Conf. Math. Logic, Univ. Connecticut, Storrs, Conn., 1979/80), pp. 230-245, Lecture Notes in Math., 859, Springer, Berlin, 1981. (C. G. Jockusch, Jr.) 82i:03048 03D25

Miller, Douglas E. Borel selectors for separated quotients. Pacific J. Math. 91 (1980), no. 1,

187-198. (John P. Burgess) 82d:54016 54C65 (54H15)

Miller, Douglas R. Computation of steady-state probabilities for M/M/1 priority queues. Oper. Res. 29 (1981), no. 5, 945-958. (Gerald A. Anderson) 82m:60120

Miller, Gary L. (with Gill, John) Newton's method and ratios of Fibonacci numbers. Fibonacci Quart. 19 (1981), no. 1, 1-4. (From the summary) 82h:65090 65Q05

Miller, Grady (with Cambanis, Stamatis) Some path properties of pth order and symmetric stable processes. Ann. Probab. 8 (1980), no. 6, 1148-1156. (J. L. Mijnheer) 82c:60070

(with Cambanis, Stamatis) Linear problems in pth order and stable proces SIAM J. Appl. Math. 41 (1981), no. 1, 43-69. (M. H. A. Davis) 82j:60070 60

Miller, Guthrie Statistical theory of magnetohydrodynamic turbulence. Phys. Fluids 24 (1981), no. 3, 560-561. (Author's summary) 82e:76035 76F99 (76W05)

Miller, H. G. (with Kreuzer, K.-G.; Dreizler, R. M.; Berger, W. A.) Extension of an iterative method to obtain low-lying eigenstates of unbounded Hermitian operators. J. Phys. A 13 (1980), no. 8, 2645-2652. (E. I. Glazman) 82f:47032 47B25 (47A70, 47E05, 81C05)

(with Kreuzer, K.-G.; Berger, W. A.) The Lanczos algorithm for selfadjoint operators. Phys. Lett. A 81 (1981), no. 8, 429-432. (W. Allegretto) 82e:47037 (47A70, 49G20, 65J10, 81C05)

Miller, Harry I. Some results connected with a problem of Erdős. II. Proc. Amer. Math. Soc. 75 (1979), no. 2, 265-268. (T. Neubrunn) 82c:28003 28A05 (26A21)

(with Xenikakis, Polychronis J.) Some results connected with a problem of Erdős. (Serbo-Croatian summary) Akad. Nauka Umjet. Bosne Hercegov. Rad. Odjelj. Prirod. Mat. Nauka No. 19 (1980), 71-75. (T. Neubrunn) 82c:28002 28A05 (26A21)

A general partition theorem for sets of reals. (Serbo-Croatian summary) Akad. Nauka Umjet. Bosne Hercegov. Rad. Odjelj. Prirod. Mat. Nauka No. 19 (1980), 87-89. (S. A. Peregudov) 82h:04004 04A15 (28A05)

(with Alajbegović, Jusuf; Kulenović, Mustafa; Radić, Mirko) On a result of Carathéodory. (Serbo-Croatian summary) Akad. Nauka Umjet. Bosne Hercegov. Rad. Odieli, Prirod. Mat. Nauka No. 19 (1980), 91–94. (B. Rodriguez-Salinas) 82a:28001

An analogue of a result of Carathéodory. Časopis Pest. Mat. 106 (1981), no. 1,

38-41. (G. Mägerl) 82g:28008 28A20 (26A30)

Miller, Haynes R. On relations between Adams spectral sequences, with an application to e stable homotopy of a Moore space. J. Pure Appl. Algebra 20 (1981), no. 3, 287-312.

(J. F. Adams) 82:55029 55T15 (55P42)
(with Wilkerson, Clarence) Vanishing lines for modules over the Steenrod algebra.

J. Pure Appl. Algebra 22 (1981), no. 3, 293–307. (Harvey Margolis) 82m:55024 55S16

Miller, J. C. (with Sciama, Dennis W.) Gravitational collapse to the black hole state. General relativity and gravitation, Vol. 2, pp. 359-391, Plenum, New York, 1980. (Peter Szekeres) 82f:83098 83F05

Miller, J. C. P. On rotational tessellations and copses. Philos. Trans. Roy. Soc. London Ser. A 293 (1980), no. 1407, 599-641 (1 foldout; 2 plates). (H. C. Im Hof) 82e:05056 05B45 (12C05, 52A45)

Miller, J. J. H. (with Doolan, E. P.; Schilders, W. H. A.) *Uniform numerical methods for problems with initial and boundary layers. Boole Press, Din Laoghaire, 1980. xv+324 pp. ISBN 0-906783-02-X (Kevin Burrage) 82h:65053 65L05 (65L10, 76A60)

Miller, Jill (with Rus, Teodor) Abstract data types in communication system languages. Mathematica (Cluj) 21(44) (1979), no. 1, 43-56. (Authors' summary) 82a:68024

Miller, John Grier (with Kaminker, Jerome) A comment on the Novikov conjecture. Proc. Amer. Math. Soc. 83 (1981), no. 3, 656-658. (A. A. Ranicki) 82m:57018 57R6

Miller, Keith (with Gelinas, R. J.; Doss, S. K.) The moving finite element method: applications to general partial differential equations with multiple large gradients. J. Comput. Phys. 40 (1981), no. 1, 202-249. (Rolf Rannacher) 82e:65110 65N30

Miller, Kenneth G. Parametrices for hypoelliptic operators on step two nilpotent Lie groups Comm. Partial Differential Equations 5 (1980), no. 11, 1153-1184. (A. S. Dynin) 82b:35040 35H05 (22E25, 35S05)

Miller, Kenneth S. *Hypothesis testing with complex distributions. Applied Mathematics

Series. Robert E. Krieger Publishing Co., Huntington, N.Y., 1980. viii + 176 pp.
ISBN 0-88275-463-7 (C. G. Khatri) 821c62026 62F03 (62-02)
On the inverse of the sum of matrices. Math. Mag. 54 (1981), no. 2, 67-72. (C. F.

Moppert) 82f:15004 15A09 (65F05)

Miller, Raymond E. *Switching theory. Vol. I, II. Vol. I: Combinatorial circuits. Vol. II: Sequential circuits and machines. Reprint in one volume of the 1965 original. Robert E. Krieger Publishing Co., Inc., Huntington, N.Y., 1979, xiii + 351 + 250 pp. ISBN 0-88275-759-8 (Editors) 82a:94117 94C10 (94-02)

(with Rosenberg, Arnold L.) On computing distances between leaves in a complete tree. Internat. J. Comput. Math. 8 (1980), no. 4, 289-301. (Authors' summary) 82a:68126 68E10 (68C25)

Miller, Richard K. (with Michel, Anthony N.) Asymptotic stability of systems: results involving the system topology. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 587-592, IEEE, New York, 1979. (N. Harris McClamroch) 82b:93031 93D20

(with Michel, Anthony N.) Stability theory for countably infinite systems of differential equations. Tohoku Math. J. (2) 32 (1980), no. 2, 155-168. (N. Fenichel) 824:34065 34D20

(with Michel, Anthony N.) Sinusoidal input-periodic response in nonlinear differential equations containing discontinuous elements. Integral and functional differential equations (Proc. Conf., West Virginia Univ., Morgantown, W. Va., 1979), pp. 109-117, Lecture Notes in Pure and Appl. Math., 67, Dekker, New York, 1981. (M. K. Grammatikopoulos) 82h:34055 34C25

Miller, Robert B. Actuarial applications of Bayesian statistics. Bayesian analysis in econometrics and statistics, pp. 197–212, Stud. Bayesian Econometrics, 1, North-Holland,
Amsterdam, 1980. (See 82d:62170) 62P05
See also Martin, R. Douglas, 82h:62157

Miller, Robert L. (with Reed, I. S.; Truong, T. K.) A theorem for computing primitive elements in the field of complex integers of a characteristic Mersenne prime Trans. Acoust. Speech Signal Process. 29 (1981), no. 1, 119-120. (Bart Rice) 82b:12022

A characterization of weight-preserving automorphisms of group algebras. J. Inform. Optim. Sci. 2 (1981), no. 1, 19-21. (Author's summary) 82g:20031 20C99 (94B05) (with Reed, I. S.; Truong, T. K.; Huang, J. P.) Fast transforms for decoding Reed-Solomon codes. Proc. IEE-F 128 (1981), no. 1, 9-14. (Prem Nath) 82j:94020 94R35

Miller, Rupert G., Jr. Editorial note on: "Pao Lu Hsü: 1909-1970" [Ann. Statist. 7 (1979), no. 3, 467-470; MR 82h:01042a] by T. W. Anderson, K. L. Chung and E. L. Lehm Ann. Statist. 8 (1980), no. 2, 456. (Editors) 82h:01042e 01A70 (62-03)

★Simultaneous statistical inference. Second edition. Springer Series in Statistics.

Springer-Verlag, New York-Berlin, 1981. xvi + 299 pp. ISBN 0-387-90548-0 (Editors) 62F15 (62G05, 62J10)

Miller, Sanford S. (with Mocanu, Petru T.) On classes of functions subordinate to the Koebe function. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 1, 95–99. (T. H. MacGregor) 82i:30033 30C80

Miller, T. J. E. (with Lawrenson, P. J.) Transient solution of the diffusion equation by discrete Fourier transformation. Finite elements in electrical and magnetic field problems, pp. 145-160, Wiley, Chichester, 1980. (Sang Lung Chan) 82c:78026

Miller, Webb (with Wrathall, Celia) *Software for roundoff analysis of matrix algorithms. Computer Science and Applied Mathematics. Academic Press, Inc. [Harcourt Brace novich, Publishers], New York-London, 1980. x+151 pp. ISBN 0-12-497250-0 (N. N. Abdelmalek) 82e:65047 65G05 (05C20)

Miller, Willard, Jr. (with Kalnins, E. G.) Separable coordinates for three-dimensional complex Riemannian spaces. J. Differential Geom. 14 (1979), no. 2, 221-236. (I. P. Egorov) 82e:53038

orov) 82e:53038 53B20 (35A30)
(with Kalnins, E. G.) Some remarkable R-separable coordinate systems for the Helmholtz equation. Lett. Math. Phys. 4 (1980), no. 6, 469-474. (Gerd Grubb) 53B30 (35J05, 81C05) 824-53043

(with Patera, J.; Winternitz, P.) Subgroups of Lie groups and separation of variables. J. Math. Phys. 22 (1981), no. 2, 251–260. (Anthony J. Bracken) 82h:81055 81C40 (53B20, 58G35)

(with Kalnins, E. G.) Killing tensors and nonorthogonal variable separation for Hamilton-Jacobi equations. SIAM J. Math. Anal. 12 (1981), no. 4, 617-629. (Charles P. Boyer) 82j:53033 53B20 (35C99, 58F05, 70H05)

Miller, Zevi (with Blass, Andreas; Harary, Frank) Which trees are link graphs? J. Combin Theory Ser. B 29 (1980), no. 3, 277-292. (Gareth A. Jones) 82h:05016 05C05 (05C25,

(with Müller, Heinrich) Chromatic numbers of hypergraphs and coverings of graphs J. Graph Theory 5 (1981), no. 3, 299-305. (O. V. Borodin) 82m:05046 05C15 (05C6) 05C15 (05C65,

(with Buckley, Fred; Slater, Peter J.) On graphs containing a given graph as center.

J. Graph Theory 5 (1981), no. 4, 427-434. (Saul Stahl) 82k:05090 05C99

let, Annie (with Sucheston, Louis) On covering conditions and convergence. Measure Millet, Ann theory, Oberwolfach 1979 (Proc. Conf., Oberwolfach, 1979), pp. 431-454, Lecture Notes in Math., 794, Springer, Berlin, 1980. (Ju. M. Kabanov) 82f:60111 60G46 (28B05.

(with Sucheston, Louis) Convergence et régularité des martingales à indices multiples. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980). no. 2, A147-A150. (Authors' summary) 82b:60049 60G44

(with Sucheston, Louis) On convergence of L1-bounded martingales indexed by directed sets. Probab. Math. Statist. 1 (1980), no. 2, 151-169 (1981). (W. A. Woyczyński) 82k:60016 60B12 (60G42)

Convergence and regularity of strong submartingales. Two-index ran (Paris, 1980), pp. 50-58, Lecture Notes in Math., 863, Springer, Berlin, 1981. (Bernard Prum) 82k:60111 60G48 (60G60)

(with Sucheston, Louis) Demi-convergence des processus à deux indices. (English summary) [Demiconvergence of two-parameter processes] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 8, 435-438. (Authors' summary) 82m:60053 60G48 (with Sucheston, Louis) On regularity of multiparameter amarts and martingales. Z.

- Wahrsch, Verw. Gebiete 56 (1981), no. 1, 21-45. (Allan Gut) 82f:60120
- eth C. Smooth families of knots. Houston J. Math. 6 (1980), no. 1, 85-111. (D. a) 82c:57012 57099 (55052, 57R99) tt, Ker rghelea) 82c:57012
- lett, T. (with Tang, I.) Using inners to determine multiple roots of polynomials. Second sal Conj ence on Information Sciences and Systems (Un 1979), Vol. II, pp. 236-246, Reidel, Dordrecht, 1980. (Editors) 82i:12021 12D10
- liken, Keith R. A partition theorem for the infinite subtrees of a tree. Trans. Amer Math. Soc. 263 (1981), no. 1, 137-148. (E. C. Milner) 82g:04003 04A20 (05C05 04A20 (05C05. 06A10)
- Bondelkov, V. M. (with Vladimirov, V. S.; Guščin, A. K.; Dezin, A. A.; Pontrjagin, L. S.) Valentin Petrovič Mihaflov (on the occasion of his fiftieth birthday). (Russian) 01A70 rencial'nye Uravnenija 17 (1981), no. 4, 757-762. (Editors) 82g:01077
- Differencial mye Urannenya 17 (1981), no. 4, 757-762. (Editors) 82,e01077 01A70

 Millman, Richard S. The normal degree of immersions. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 2-3, part 1, 241-249. (Siegfried Steiner) 82b:53072 53C40 (57R42)

 Mills, Charles F. When Colorado is homeomorphic to Utah. Topological structures, 11 (Proc. Sympos. Topology and Geom., Amsterdam, 1978), Part 1, pp. 187-189, Math. Centre Tracts, 115, Math. Centrum, Amsterdam, 1979. (J. Kist) 82a:54060 54F05 (with Wattel, Evert) Nowhere densely generated topological properties. Topological structures, 11 (Proc. Sympos. Topology and Geom., Amsterdam, 1978), Part 2, pp. 191-198, Math. Centre Tracts, 116, Math. Centrum, Amsterdam, 1979. (Eric K. van Douwen) 82a:54045 54D20 (54B05)
 - 82a:54045 54D20 (54B05) (with Balcar, Bohuslav; Frankiewicz, Ryszard) More on nowhere dense closed P-sets (Russian summary) Bull. Acad. Polon. Sci. Ser. Sci. Math. 28 (1980), no. 5-6, 295-299 (1981). (W. W. Comfort) 82i:54068 54G10 (54D40)
- (with van Mill, Jan) A boojum and other snarks. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 4, 419–424. (Donald Plank) 32h:54066 54G15 (54A10)

 Mills, Janet E. Describing uniform bands in terms of uniform semilattices. Semigroup
- Forum 21 (1980), no. 4, 373-381. (T. S. Blyth) 82a:20073 20M12 (06A12)
- Mills, P. L. (with Duduković, M. P.) Triple series relations solution by the method of weighted residuals. Proceedings of the Second International Conference on Mathematical Modelling (St. Louis, Mo., 1979), Vol. I, II, pp. 231-243, Univ. Missouri-Rolla, Rolla, Mo., 1980. (F. M. Pascal) 82a:65091 65N30 (65R20)
- Mills, T. M. (with Sendov, Blagovest) An estimate for approximation with Fejer's interpolation polynomial. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 11, 1447-1449. (P. Vértesi) 82h:41003 41A05 (41A10)
 - Some techniques in approximation theory. *Math. Sci.* 5 (1980), *no.* 2, 105-120. (P. tesi) 82d:41003 41A05 (41A25) Vértesi) 82d-41003
 - (with Goodenough, S. J.) On interpolation polynomials of the Hermite-Fejer type II. Bull. Austral. Math. Soc. 23 (1981), no. 2, 283-291. (J. Prasad) 82k:41001 41A05 (with Goodenough, S. J.) A new estimate for the approximation of functions by Hermite-Fejér interpolation polynomials. J. Approx. Theory 31 (1981), no. 3, 253-260.
- (P. Vértesi) 82h:41002 41A05 (41A10) Ison, John J. Real vector bundles with discrete structure group. Topology 18 (1979),
 no. 1, 83-89. (From the text) 82i:55016 55R15 (53C05, 57R22)
- (with Kudla, Stephen S.) The Poincaré dual of a geodesic algebraic curve in a tient of the 2-ball. Canad. J. Math. 33 (1981), no. 2, 485-499. (A. L. Oniščik)
- 82r:32043 32J25 (53C55)

 'man, D. A. Solution of a nonlinear singular integral equation with a Cauchy kernel. (Russian) Questions of mathematical cybernetics and applied mathematics, No. 4 (Russian), pp. 117-128, "Èlm", Baku, 1980. (V. B. Dybin) 82m:45021 45L05 man, David The central function of the boundary of a domain and its differentiable
- properties. J. Geom. 14 (1980), no. 2, 182-202. (J. S. Lipiński) 82k:26007 26B05 (with Waksman, Zeev) On topological properties of the central set of a bounded domain in R.". J. Geom. 15, no. 1, 1-7 (1981). (H. W. Guggenheimer) 82g:53008
- 53A07 (90C31) man, Mario On the interpolation of martingale L^p spaces. *Indiana Univ. Math. J.* 30 (1981), no. 2, 313-318. (S. D. Chatterji) 82d:46048 46E30 (46M35, 60G46)
 - 81), no. 2, 313-318. (S. D. Chatterji) 828-909-0 On interpolation of 2" Banach spaces and Lorentz spaces with mixed norms. J. 41 (1981), no. 1, 1-7. (Jöran Bergh) 82g:46117 46M35 (46E30) Funct. Anal. 41 (1981), no. 1, 1-7. (Jöran Bergh) 82g:46117 A note on L(p,q) spaces and Orlicz spaces with mixed norms. *Proc. Amer. Math. Soc.* **83** (1981), no. 4, 743–746. (W. A. J. Luxemburg) **82m:46028** 46E30
- nan, Pierre (with Micchelli, Charles A.) A formula for Kergin interpolation in R^k. J. Approx. Theory 29 (1980), no. 4, 294-296. (Jean Tzimbalario) 82h:41008
- Iman, V. D. (with Davis, W. J.; Tomczak-Jaegermann, Nicole) The distance between certain n-dimensional Banach spaces. Israel J. Math. 39 (1981), no. 1-2, 1-15. (H. E. Lacev) 82h:46024 46B20
- Milne, J. S. Points on Shimura varieties mod p. Automorphic forms, representations and L.functions (Proc. Sympos. Pure Math., Oregon State Univ., Corvallis, Ore., 1977), Part 2, pp. 165-184, Proc. Sympos. Pure Math., XXXIII, Amer. Math. Soc., Providence, R.I., 1979. (A. B. Venkov) 82e:10048 10D40 (10D20, 14G10, 14K10)
- Milne, R. K. (with Brown, Thomas Craig; Silverman, B. W.) A class of two-type point processes. Z. Wahrsch. Verw. Gebiete 58 (1981), no. 3, 299-308. (Brian D. Ripley) 60G55
- Milne, Stephen C. (with Lepowsky, James) Lie algebraic approaches to classical partition identities. Adv. in Math. 29 (1978), no. 1, 15–59. (S. I. Gel'fand) 821:17005 17B10 (05A17, 05A19, 10J20)
 - (with Biedenharn, L. C.; Holman, Wayne J., III) The invariant polynomials characterizing U(n) tensor operators $(p,q,\cdots,q,0,\cdots,0)$ having maximal null spac Adv. in Appl. Math. 1 (1980), no. 4, 390-472. (S. N. Biswas) 82k:81025 81C (22E70)
 - Peano curves and smoothness of functions. Adv. in Math. 35 (1980), no. 2, 129-157. (Paul R. Beesack) 82e:26017 26D15 (05A20, 26B35)
 - A multiple series transformation of the very well poised $2k+4\Psi_{2k+4}$. Pacific J. Math. 91 (1980), no. 2, 419-430. (L. J. Slater) 82d:33007 33A30
- (with Garsia, Adriano M.) Method for constructing bijections for classical partition identities. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 4, part 1, 2026-2028. (Authors' nary) 82d:05020 05A19
- Milner, E. C. (with Sauer, Norbert) Remarks on the cofinality of a partially ordered set,

- and a generalization of König's lemma. Discrete Math. 35 (1981), 165-171. (J. R. Griggs) 04 04A20 (05C35, 05C38, 06A10)
- (with Sauer, Norbert) On chains and antichains in well-founded partially ordered J. London Math. Soc. (2) 24 (1981), no. 1, 15-33. (Diana Schmidt) 82j:04002 04A20 (04A05, 04A10, 06A10)
- mer, Robin A calculus of communicating systems. Lecture Notes in Computer Science, 92. Springer-Verlag, Berlin-New York, 1980. vi+171 pp. ISBN 3-540-10235-3 (Armin Cremers) 82p:68001 68-02 (68B10)
 - A modal characterisation of observable machine-behaviour. CAAP '81 (Proc. Sixth Colloq., Genoa, 1981), pp. 25-34, Lecture Notes in Comput. Sci., 112, Springer, Berlin, 1981. (Author's introduction) 82j:68037 68D50 (03B45)
- Milnes, Harold Willis (with Hildebrand, S. K.) Endpoint conditions for the problem of extremizing a nonparametric integral in the plane. Indian J. Math. 18 (1976), no. 1, 19-22. (From the text) 82a:49022 49B05
- s, Paul On vector-valued weakly almost periodic functions. J. London Math. Soc. (2) 22 (1980), no. 3, 467-472. (John F. Berglund) 82i:43007 43A60 (22A20)
- On extending characters. Proc. Amer. Math. Soc. 82 (1981), no. 2, 196-198. (R. W.
- Henrichs) 821c43005 43A40 (43A35)

 Amenable groups for which every topologically left invariant mean is right invariant Rocky Mountain J. Math. 11 (1981), no. 2, 261-266. (Joseph Max Rosenblatt) 82i:43002 43A07
- (with Bondar, James V.) Amenability: a survey for statistical applications of Hunt-Stein and related conditions on groups. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 1, 103–128. (R. A. Wijsman) 82h:62015 62C20 (43A07)
- 103-125 (R. A. wijshian) *anaeolos* 5 (25767) (103-125 (R. A. wijshian) *anaeolos* 104 (103-125 (R. A. wijshian) *anaeolos* 105 (R. A. wijs 22F40)
 - See also Uesu, Kagumi, 82m:53050
- r, Tilla Klotz Abstract Weingarten surfaces. J. Differential Geom. 15 (1980), no. 3, 365-380 (1981). (Z. Nádeník) 82i:53048
 - -380 (1981). (Z. Nádeník) 82i:53048 53C40

 The energy 1 metric on harmonically immersed surfaces. Michigan Math. J. 28 (1981), no. 3, 341-346. (Samuel I. Goldberg) 82j:53101 53C42 (58E20)
- See also Selected papers: Geometry, 82c:01041 Milojevic, P. S. Approximation-solvability of some nonlinear operator equations with applications. Functional differential equations and bifurcation (Proc. Conf., Inst. Cienc. Mat. São Carlos, Univ. São Paulo, São Carlos, 1979), pp. 289–316, Lecture Notes in Math., 799, Springer, Berlin, 1980. (Simeon Reich) 82d:47069 47H15 (47H05, 47H09)
 Fredholm alternatives and surjectivity results for multivalued A-proper and
- condensing mappings with applications to nonlinear integral and differential equations With a loose Russian summary. Czechoslovak Math. J. 30(105) (1980), no. 3, 387-41 With a loose Russian summary. Czechoslovak Math. J. 30(105) (1980), no. 3, 387-417. (Jean Mawhin) 82a:47051 47H09 (34B15, 35G30, 45G05)
- mi, P. W. Quantum mechanics of the Einstein-Hopf model. Amer. J. Phys. 49 (1981),
 - no. 2, 177–184. (Author's summary) 82c-81179 81K05
 Radiation reaction and the nonrelativistic theory of the electron. Phys. Lett. A 82 (1981), no. 5, 225–226. (Author's summary) 82c-81144 81G10
- ević, Dragoljub Bernoulli's inequality. (Serbo-Croatian) Maten (1976), no. 1, 81-82 (Editors) 821:26001 26-01 (01A45)

 Milošević, Radivoje On an iterative procedure for the solution of differential equations.
- (Serbo-Croatian. English summary) Mat. Vesnik 3(16)(31) (1979), no. 2, 179-186. (D.
- Bobrowski) 82k:34005 34A10 (34A34)
 (with Starun, Î. Î.) Asymptotics of the solutions of singular perturbed systems.
 (Russian) Mat. Vesnik 4(17)(32) (1980), no. 2, 235-243. (G. S. Žukova) 82g:34084
- On an application of the Čaplygin theorem to the solution of first- and second-order ordinary differential equations. (Serbo-Croatian. English summary) Mat. Vesnik 4(17)(32) (1980), no. 3, 313-322. (Vlajko Lj. Kocić) 82j:34005
- (with Knežević, M.) Exact solution of the impure one-dimensional n-vector model with bilinear and biquadratic exchange interactions. Phys. A 107 (1981), no. 2, 255-279. (Authors' summary) 82g:82034 82A42 (82A68)
- Milov, L. T. (with Solodovnikov, V. V.) Spectral representation of nonstationary systems in the state space. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 5, 182-188, 223 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 5, 133-139 (1980). (Tamer
- Başar) 82e:93072 93C50 (93B99) oranov, M. V. Description of solvable Lie groups with a given uniform subgroup. (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 1(9), 98-117, 175. (Dragomir Ž. Đoković)
- 82h:22017 22E25 (22E40)

 Milovanov, V. F. Operator connection of integrals of Temljakov-Bavrin type of the first kind and first order in the case of a bicylinder. (Russian) Mathematical analysis and the theory of functions (Russian), pp. 79-83, Moskov. Oblast. Ped. Inst., Moscow, 1980.
- (Editors) 82k-32007 32A25

 Milovanović, Gradimir V. (with Milovanović, Igor Ž.) The best constant in some integral inequalities of Opial type. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 48-53 (1981). (Paul R. Beesack) 82k:26013
 - (with Petković, Miodrag S.) On some modifications of a third order method for solving equations. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 63-67 (1981). (J. D. Lambert) 82j:65028 65H05
- Milovanović, Igor Ž. (with Milovanović, Gradimir V.) The best constant in some integral inequalities of Opial type. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. . Ser. Mat. Fiz. No. 678-715 (1980), 48-53 (1981). (Paul R. Beesack) 82k:26013 26D10
- A generalization of an inequality of A. Meir. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 54-55 (1981). (Paul R. Beesack) 82k:26015 26D15 (26A51)
- (with Stanković, Ljubomir R.) Some inequalities for convex functions.
- (Serbo-Croatian summary) Univ. Beograd. Pub. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 191-198 (1981). (E. F. Beckenbach) 82g:26028 26D15 (1980), 191-198 (1981), 191-19 26D15 (26A51)
- heat-conduction problems for a semitransparent body. Inž.-Fiz. Ž. 38 (1980), no. 3, 522-527 (Russian); translated as J. Engrg. Phys. 38 (1980), no. 3, 312-316. (K. K. Sen) 80A20

- Mil'stein, G. N. Quadratic Ljapunov functionals for systems with aftereffect. (Russian) Differencial nye Uravnenija 17 (1981), no. 6, 984-993, 1146-1147. (A. I. Kir'janen) 82k:34085 34K20
- Milstein, Laurence B. Maximum-likelihood estimation of the angular position and extent of a target. IEEE Trans. Inform. Theory 27 (1981), no. 2, 187-199. (Author's summary) 94A12 (62M09)
- Milton, E. O. (with Carmichael, Richard D.) Abelian theorems for the distributional Stieltjes transform. J. Math. Anal. Appl. 72 (1979), no. 1, 195-205. (D. T. Haimo) 829-44002 44A15 (46F12)
- Miluševa, S. D. (with Balnov, D. D.) Application of the freezing coefficient method for the solution of multipoint boundary value problems with a nonlinear boundary condition for a class of integro-differential equations. (Russian) Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 25 (1980), no. 3, 483-488. (M. M. Konstantinov) 82a:45016 45J05 (34C29)
- Miminośvili, Z. R. On strong homotopy in the category of sequences of topological spaces and its applications to shape theory. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 98 (1980), no. 2, 301-304. (S. Mardešić) 82c:55012 55P55 (55Q07)
- On the connection between shape homotopy groups and the homology of compact spaces. (Russian. Georgian and English summaries). Soobië. Akad. Nauk Gruzin. SSR 101 (1981), no. 2, 305–308. (From the text) 82j:55012 55P55.

 Mimura, Fumitake (with Nono, Takayuki) Dynamical symmetries. VI. Bull. Kyushu Inst. Tech. Math. Natur. Sci. No. 26 (1979), 1–11. (Manfred Andriè) 82k:58042 58F05
- (70H30)
- (with Ikushima, Akira) Structure of generalized Poisson algebras. Bull. Kyushu Inst. Tech. Math. Natur. Sci. No. 27 (1980), 1-10. (Virgil Obădeanu) 82b:58040 58F06 (17B65, 81D99)
- (with Nôno, Takayuki) Generalized contact transformations. Bull. Kyushu Inst. Tech. Math. Natur. Sci. No. 28 (1981), 1-5. (H. Rund) 82i:35010 35A30 (58A15, 58G35, 70H15)
- Mimura, Mamoru (with Oda, Nobuyuki) Periodic families in homotopy group Kyoto Univ. 21 (1981), no. 1, 171–187. (Shichirô Oka) 82d:55013 55O52
 - (with Sambe, Yuriko) Collapsing of the Eilenberg-Moore spectral sequence mod 5 of the compact exceptional group E₈. J. Math. Kyoto Univ. 21 (1981), no. 2, 203-230. (J. F. Adams) 82j:57040 57T35
 - Adams) aga-70-00 57135 (with Sawashita, Norichika) On the group of self-homotopy equivalences of H-spaces of rank 2. J. Math. Kyoto Univ. 21 (1981), no. 2, 331-349. (J. W. Rutter) 82k:55009
- Mimura, Masayasu (with Namba, Toshiyuki) Spatial distribution of competing populations. J. Theoret. Biol. 87 (1980), no. 4, 795-814. (Authors' summary) 821:92035 92A15
- Mimura, Yoshio On 2-lattices in an Hermitian space. Proceedings of the 4th Symposium on Semigroups (Yamaguchi Univ., Yamaguchi, 1980), pp. 40-47, Yamaguchi Univ., Yamaguchi, 1980. (Dennis Estes) 82h:10030 10C02
- On orthogonal groups over the integers of a nondyadic local field. J. Num 13 (1981), no. 3, 415-419. (D. G. James) 82k:10022 10C03 (10C30, 20G25)
- ang le Min' See Hoang Le Min' Min, B. G. (with Welkowitz, W.; Fich, S.) Frequency analysis of time-varying elastance model of the left ventricle. Bull. Math. Biol. 42 (1980), no. 2, 173-180. (Authors' summary) 82k:92013 92A07 (73P10)
- Mináč, Ján Some counterexamples in p-adic analysis. (Russian summary) Math. Slovaca 30 (1980), no. 3, 305-311. (N. De Grande-De Kimpe) 82f:12025 12B40 (26E30, 46P05)
- Minaev, Ju. N. ★Стабильность экономико-математических моделей оптимизаци (Russian) [Stability of mathematical economic models of optimization] Методы
 - Оптимальных Решений. [Methods of Optimal Decisions] "Statistika", Moscow, 1980. 104 pp. (Mohamed El-Hodiri) 82h:90001 90-02 (with Volkov, A. A.) Use of the heuristic self-organization principle in synthesizing
- solution algorithms for optimization problems in computer systems. Automat. i Vyčisl. Tehn. (Riga) 1981, no. 1, 52-58, 99 (Russian); translated as Automat. Control Comp Sci. 15 (1981), no. 1, 42-47. (Authors' summary) 82m:90123 90C10 (65K05, 68C25) Minahin, V. V. The Liouville theorem and the Harnack inequality for the Beltrami equation
- on an arbitrary manifold. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 2, 71-72. (V. T. Fomenko) 82b:53056 53C20 (31C12, 35J65)

 Minami, Akihiko (with Furukawa, Tomozo) Three-dimensional image reconstruction from
- the projections under limited view angle. Systems-Comput.-Controls 10 (1979), no. 4,
- 58-68 (1981). (Authors' summary) 82m:68132 68G10 (92A07)

 Minami, Masatsugu Functional evaluation of the dual partition functions. How do we "hear the shape of a drum" in dual models? Progr. Theoret. Phys. 59 (1978), no. 5, 1709-1722. (P. D. F. Ion) 82g:81059 81E10 (10D15, 58G25, 82A05)
- Minami, Toshiro (with Kawahara, Yasuo) On the categories of complete Heyting algebras and topological spaces. Mem. Fac. Sci. Kyushu Unio. Ser. A 35 (1981), no. 2, 325–340. (H. A. Priestley) 82i:06013 06D20 (03G10, 18B30, 54B30)
- miyama, Motomu (with Niimi, Hideyuki; Hanai, Sotaro) Steady axisymmetrical
- stagnation-point flow impinging obliquely on a wall. J. Phys. Soc. Japan 50 (1981), no. 1, 17–18. (Authors' summary) 82e:76023 76D05 (76Z99)
- Minaříková, Květa Some comments on the differential equation x''' + ax'' + bx' + h(x) = e(t). (Czech. Russian and English summaries) Knižnice Odborn. Věd. Spisů Vysoké. Učení Tech. v Brně B 73 (1977), 15-26 (1979). (Author's summary) 34A10
- stancu-Minasian, I. M. See Stancu-Minasian, I. M. Minasjan, M. H. (with Avetisjan, A. K.; Papojan, V. V.) Magnetodipole configurations in general relativity. Astrophys. and Space Sci. 69 (1980), no. 1, 71–77. (Authors' summary) 82c:83037 83C50 (83C25)
- Minc, G. E. (with Maslov, S. Ju.: Matijasevič, Ju. V.: Orevkov, V. P.: Slisenko, A. O.) Nikolaĭ Aleksandrovič Šanin (on the occasion of his 60th birthday). (Russian) Uspehi Mat. Nauk 35 (1980), no. 2(212), 241-245. (Editors) 82g:01063 01A70
- Minc, Henryk Inverse elementary divisor problem for nonnegative matrices. Proc. Amer. Math. Soc. 83 (1981), no. 4, 665-669. (Donald Kershaw) 82j:15012 15A18 (15A48) Minc, R. I. See Physical methods for investigating the solid state, 82h:82002
- Minčev, M. C. (with d'Emilio, E.) Perturbation theory in covariant gauges for two-dimensional quantum electrodynamics. Some new aspects of confinement. (Italian naries) Nuovo Cimento A (11) 59 (1980), no. 2, 151-172. (Authors' summary) 82c:81106 81E99 (81L05)

- Minčeva, M. I. A solution of the Duffing equation by the method of "close" operators lgarian. Russian and French summaries) Godišnik Visš. Učebn. Zaved. Priložna Mat. 14 (1978), no. 1, 163-170. (G. V. Hmelevskaja-Plotnikova) 82b:34011
- Minda, Carl David The hyperbolic metric and coverings of Riemann surfaces. Pacifi Math. 84 (1979), no. 1, 171–182. (Author's summary) 82e:30063 30F20 (57M12) (with Näkki, Raimo) Invariant metrics on Riemann surfaces. J. Analyse Math. 39
 - (1981), 25-44. (Jane Gilman) 82k:30049 30F99 (30D40)
 The image of the Ahlfors function. Proc. Amer. Math. Soc. 83 (1981), no. 4, 751-756. (E. Netanyahu) 82m:30035 30D50 (30C55)
- Minder, Ch. E. (with Ferreira, P. E.) On a concept of ancillarity. Biometrika 68 (1981), no. 1, 344. (V. P. Godambe) 82h:62003 62A30
- Mindlin, R. D. On Reissner's equations for sandwich plates. Mechanics today, Vol. 5, pp. 315-328, Pergamon, Oxford, 1980. (D. Durban) 82g:73032 73K10
- Mine, Hisashi (with Kimura, Toshikazu; Ohno, Katsuhisa) Approximate analysis of optimal operating policies for a *GI/G/*1 queueing system. *Mem. Fac. Engrg. Kyoto Univ.* **42** (1980), *no.* 4, 377–390 (1981). (Martin J. Fischer) **82i:60218** 60K25
 - (with Fukushima, Masao; Ryang, Yong Joon) On solving a certain multiparametric nonlinear programming problem. Mem. Fac. Engrg. Kyoto Univ. 42 (1980), no. 4, 404-412 (1981). (Authors' summary) 82m:90140 90C30
 - (with Fukushima, Masao; Ryang, Yong Joon) Methods of parametric nonlinear programming. Internat. J. Systems Sci. 12 (1981), no. 1, 95-110. (Authors' summary) 824-90110 90C30
 - (with Navarrete, Norberto, Jr.; Fukushima, Masao) A fuzzy preference model in
 - decision making. Mem. Fac. Engrg. Kyoto Univ. 43 (1981), no. 1, 145-158. (Jiří Šústal) 82k:90013 90A06 (03E72, 92A25) (with Katoh, N.; Ibaraki, Toshihide) An algorithm for finding K minimu
- trees. SIAM J. Comput. 10 (1981), no. 2, 247-255. (Authors' summary) 82k:68037 68E10 (05C05, 68C25)
- Minea, Gheorghe The linear first integrals of the Euler equations. J. Math. Pures Appl. (9) 59 (1980), no. 4, 441-464. (D. G. Ebin) 82g:58020 58D25 (35Q20, 76B99)
 Minelli, T. A. (with Milani, N.; Pascolini, A.) An extension of Kato's perturbation theory
- to resonant states. (Italian summary) Nuovo Cimento A (11) 61 (1981), no. 1, 12-27. (K. 81C12 (47A55, 81F05) Kumar) 82h:81033
- Mines, Ray (with Richman, Fred; Bridges, Douglas S.; Calder, Allan; Julian, William)
 Compactly generated Banach spaces. Arch. Math. (Basel) 36 (1981), no. 3, 239-243.
 (From the introduction) 82m:46013 46B15 (03F65)
- (with Calder, Allan; Julian, William; Richman, Fred) e-covering dimension. Pacific J. Math. 95 (1981), no. 2, 257-262. (K. Nagami) 82:54080 54F45
- yue chi Ming, Roger See Yue Chi Ming, Roger Mingaleev, N. Z. (with Garifullin, F. A.; Zapparov, F. I.; Norden, P. A.) Cellular convection in a viscoelastic fluid. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1981, no. 1, 133-136, 174. (Authors' summary) 82k:76032 76E15 (76R99)
- Mingarelli, Angelo B. An oscillation criterion for second-order selfadjoint differential systems. C. R. Math. Rep. Acad. Sci. Canada 2 (1980), no. 6, 287-290. (G. J. Etgen) 82h:34042 34C10
 - A limit-point criterion for a three-term recurrence relation. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 3, 171-175. (Miomir S. Stanković) 82g:39001 (39A12)
 - On a Stieltjes version of Gronwall's inequality. Proc. Amer. Math. Soc. 82 (1981), no. 2, 249-252. (B. L. Sehter) 82e:34014 34A40
 - On a conjecture for oscillation of second-order ordinary differential systems. Proc. Amer. Math. Soc. 82 (1981), no. 4, 593-598. (G. J. Etgen) 82j:34028 34C10 (34A30)
- Mingozzi, Aristide (with Christofides, Nicos; Toth, Paolo) The vehicle routing probl Combinatorial optimization (Lectures, Summer School, Urbino, 1977), pp. 315-338, Wiley, Chichester, 1979. (See 82a:90099) 90B05
 - (with Christofides, Nicos; Toth, Paolo) Loading problems. Combin mization (Lectures, Summer School, Urbino, 1977), pp. 339-369, Wiley, Chichester, c. (See 82a:90099) 90B99
- 1979. (See 82a:90099) (with Christofides, Nicos; Toth, Paolo) Exact algorithms for the vehicle routing
- problem, based on spanning tree and shortest path relaxations. Math. Programming 20 (1981), no. 3, 255–282. (Authors' summary) 82i:90038 90B10 (with Christofides, Nicos; Toth, Paolo) State-space relaxation procedures for the
- computation of bounds to routing problems. Networks 11 (1981), no. 2, 145-164. (Authors' summary) 82k:90122

 See also Combinatorial optim 90C39 (90B10, 90C10) ation, 82a:90099
- nguyễn sĩ Minh See Nguyễn Sĩ Minh
- nguyen Minh Khue See Nguyen Minh Khue
- Mininni, Michele (with Muni, Giuseppe) A degree theory with respect to a pseudo-inner product in a locally convex vector space. Ricerche Mat. 28 (1979), no. 2, 365-374. (A. J. B. Potter) 82h:47085 47H99 (58C30)
- (with Basile, Nicola) A multiplicity result for a class of nonlinear boundary value problems of the Ambrosetti-Prodi type. (Italian summary) Ann. Univ. Ferrara Sez. VII (N.S.) 26 (1980), 91-101 (1981). (Walter G. Kelley) 82j:35060 35J65
- niowitz, Ruth Spherically mean p-valent quasiregular mappings. Israel J. Math. 38 (1981), no. 3, 199-208. (Uri Srebro) 82e:30023 30C60
- Minker, Jack (with Aronson, Alan R.; Jacobs, Barry E.) A note on fuzzy deduction. ut. Mach. 27 (1980), no. 4, 599-603. (John Hooley) 82g:03038 (03B35, 68G15)
 - (with Gallaire, Hervé; Nicolas, Jean-Marie) Background for advances in data be theory. Advances in data base theory, Vol. 1 (Proc. Workshop, Toulouse, 1979), pp. 3-21, Plenum, New York, 1981. (See 82a:68040) 68B15
- (with Grant, John) Optimization in deductive and conventional relational database systems. Advances in data base theory, Vol. 1 (Proc. Workshop, Toulouse, 1979),
- pp. 195-234, Plenum, New York, 1981. (See 82a:68040) 68B15 Logical inference as an aid to analysis in large databases. Computer-assisted analysis and model simplification (Proc. First Sympos., Univ. Colorado, Boulder, Colo., 1980). pp. 405-430, Academic Press, New York, 1981. (See 82g:00016) 68G20 (68B15. 68G15, 90C08)
- See also Advances in data base theory, 82a:68040
 Minkevič, A. V. (with Fedorov, F. I.) Lagrangian formulation of field theory. (Russian.

English summary) Acta Phys. Polon. B 11 (1980), no. 5, 367-377. (B. N. Frolov) 22243070 83D05 (49H05, 83E99)

Generalised cosmological Friedmann equations without gravitational singularity. Phys. Lett. A 30 (1980), no. 4, 232-234. (Author's summary) 82a:83659

83F05

nary) Acta Phys. Polon. B 11 (1980), no. 5, 367-377. (B. N. Frolov)

(with Fedorov, F. I.; Kudin, V. I.) On the definition of space-time symmetries in tetrad field theory. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 5, 406-408, 476. (Authors' summary) 821:83041 83C40

(with Kudin, V. I.) An analogue of the internal Schwarzschild solution in the gauge theory of gravity. (Russian. English summary) Vesci Akad. Navuk BSSR Sev. Fiz.-Mat. Navuk 1961, no. 3, 103-113, 143. (Authors' summary) 82f:83071 83D05

(with Kudin, V. I.; Fedorov, F. I.) Homogeneous isotropic cosmological models with torsion. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 4, 59-67, 141. (Authors' summary) 82j:83070 83F05 (83E10)

Min'ko, A. A. (with Petunin, Ju. I.; Stognii, B. S.) Confidence boundaries for the extremal value of a specific function. (Russian) Ukrain. Mat. Z. 33 (1981), no. 4, 453-458. (L. B. Klebanov) 82i:62022 62F25

Mirkova, R. M. Weak Korovkin spaces. (Russian) Mat. Zametki 25 (1979), no. 3, 435-443, 477. (Author's summary) 82g-46011 46A15 (41A65)
Minkovik, B. M. Optimization of linear, equally spaced, symmetrically excited antenna arrays. (Russian) Dok. Akad. Nauk SSSR 252 (1980), no. 1, 80-82. (Corneliu Eftimiu) 82b:78026 78A50 (49D99, 65K05)

nkus, Jerome Circulants and Horadam's sequences. A collection of mo the Fibonacci sequence, pp. 48-52, Fibonacci Assoc., Santa Clara, Calif., 1980. (Ronald L. Smith) 82i:15009 15A15

Minlos, R. A. (with Abdulla-Zadeh, F. H.; Pogosjan, S. K.) Cluster estimates for Gibbs random fields and some applications. Multicomponent random systems, pp. 1-36, Advances in Probability and Related Topics, 6, Dekker, New York, 1980. (D. Szász) 82A05 (60K35)

Minoli, Daniel Exact solution for the initialization time of packet radio networks with two station buffers. 1979 National Computer Conference (Proc. AFIPS Conf., New York, 1979), pp. 875-885, AFIPS Conf. Proc., 48, AFIPS Press, Arlington, Va., 1979. (See 90B22 (60K20) 82f:680

Selection of communication facilities under a multigraduated tariff. Comput.

Networks 4 (1980), no. 6, 295–301. (Author's summary) 82h-90044 90805

Issues in nonlinear hyperperfect numbers. Math. Comp. 34 (1980), no. 150, 639–645. (Masao Kishore) 82c:10005 10A20

Structure issues for hyperperfect nu bers. Fibonacci Quart. 19 (1981), no. 1, 6-14. (Masao Kishore) 82m:10011 10A20

(with Gondran, Michel) ★Graphes et algorithmes. (French) [Graphs and algorithms] Collection de la Direction des Études et Recherches d'Électricité de France [Collection of the Department of Studies and Research of Électricité de France], 37. Éditions Eyrolles, Paris, 1979. xxvii + 518 pp. (Selim G. Akl) 82g:68059 (05B35, 05Cxx, 68C05, 68C25, 90Bxx, 90Cxx)

tchev, M. See Minčev, M. C.

Minzoni, A. A. (with Garcia R., Catherine) An asymptotic solution for the wave equation in a time-dependent domain. SIAM Rev. 23 (1981), no. 1, 1-9. (G. P. Bava) 82h:35058

Mioc, Vasile The difference between the nodal and Keplerian periods of artificial satellites as an effect of atmospheric drag. (French summary) Astronom. Nachr. 301 (1980), no. 6, 311–315. (Author's summary) 82e:70033 70M05 (85A10)

Salaszewski, J. An approach to BR – R. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 853–854, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (A. R. Pears) 82g:54040 54D40

el Mir, Hassine See El Mir, Hassine
Mira, Christian Complex dynamics in two-dimensional endomorphisms. Nonlinear Anal. 4
(1980), no. 6, 1167–1187. (Joseph Ford) 82c:58040 58F13

Singularités non classiques d'une récurrence, et d'une équation différentielle d'ordre (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 2, 147–151.
 (Carmen Chicone) 82g:58067 58F14 (34C05)

Mirabel', A. P. (with Monin, A. S.) Two-dimensional turbulence. (Russian. English nary) Ado. in Mech. 2 (1979), no. 3, 47-95. (J. S. Joel) 82i:76047 76F99 (35Q10,

Niracchi, Silvano (with Oaklander, L. Nathan) Russell, negative facts, and ontology.

Philos. Cc; 47 (1981), no. 3, 434–455. (Authors' summary) 82a:03010 03A05 (00A69)

 Philos. Sci. 47 (1980), no. 3, 434–455. (Authors' summary)
 Baza3010
 O3A05 (0048)
 Miraglia, Francisco
 Relations between structures of stable continuous functions and filtered powers.
 Proceedings of the Third Brazilian Conference on Mathematical Logic (Inst. powers. Proceedings of the Third Brazilian Conference on Mathematical Logic (Inst. Math., Fed. Univ. Pernambuco, Recife, 1979), pp. 225-244, Soc. Brasil. Lógica, São Paulo, 1980. (S. R. Kogalovskii) 82g.03049 03C30 (54C35) vila Miranda, M. A. See Vila Miranda, M. A. See Vila Miranda, M. A. See Vila Miranda, M. E. See Fernandes Mirand

Miranda, Manuel Milla Convergence d'un certain type d'opérateurs hyperboliques. (English summary) Seminar on Numerical Analysis and its Applications to Continuum Physics (Rio de Janeiro, 1980), pp. 75-85, Soc. Brasil. Mat., Rio de Janeiro, 1980. (Maria Cinquini-Cibrario) 82a:35060 35L20

Miranda, Rick On the stability of pencils of cubic curves. Amer. J. Math. 102 (1980), no. 6, 1177-1202. (P. E. Newstead) 82j:14009 14D25

Miranker, Willard L. Parallel methods for solving equations. Parallel computers—parallel mathematics (Munich, 1977), pp. 9-15, North-Holland, Amsterdam, 1977. (See 82k:68003) 68C05 (65H05, 68B20)

Hierarchical relaxation. (German summary) Computing 23 (1979), no. 3, 267-285. (Author's summary) 82f:65033 65F10

thor's summary) acressed (with Pan, V. Ya.) Methods of aggregation. Linear Algebra Appl. 29 (1980), –257. (L. Berg) 82±65036 65F10 (15A06, 65B05)

231-257. (L. Berg) 824:65036

*Numerical methods for stiff equations and singular perturbation problems.

Mathematics and its Applications, 5. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xiii + 202 pp. ISBN 90-277-1107-0 (Kevin Burrage) 821c65058 65L05 (34E15)

(with Chern, I.-L.) Dichotomy and conjugate gradients in the stiff initial value problem. Linear Algebra Appl. 36 (1981), 57-77. (Peter Alfeld) 82c:65047 65L0

chandani, Pitu B. (with Oudjit, Aissa) Localizing 2-medians on probabilistic and deterministic tree networks. Networks 10 (1980), no. 4, 329–350. (Authors' summary) 90B05 (94C15)

Mir-Kasimov, R. M. (with Amirhanov, I. V.; Gruša, G. V.) Analytical properties of quasipotential scattering amplitude in the complex planes of the rapidity and angular momentum. (Russian. English summary) Teoret. Mat. Fiz. 40 (1979), no. 3, 384-393. (Gheorghe Nenciu) 824:81135 81F20 (34B25)

Mirkin, В. G. ★Анализ качественных признаков и структур. (Russian) [Analysis of qualitative attributes and structures] "Statistika", Moscow, 1980. 320 pp. (Jiří Anděl)

62H30 (92A25)

Mirkina, A. S. (with Hodžaev, K. Š.) Approximation of nonstationary processes on an infinite time interval for exponential stability of slow motions. (Russian) Prikl. Mat. Meh. 43 (1979), no. 2, 219-228 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 2, 237-246 (1980). (V. G. Zadorožnii) 82h:34058 34C29

Mirković, Branislav An application of homological methods to locally convex groups. Mat. Vesnik 3(16)(31) (1979), no. 4, 443-449, (T. Husain) 82i:22002a 22A05 (46A99) Errata: "An application of homological methods to locally convex groups".

Vesnik 4(17)(32) (1980), no. 3, 393. (Editors) 82i:22002b 22A05 (46A99)
Mirkowska, Grażyna Model existence theorem in algorithmic logic with nondeterministic programs. Fund. Inform. (4) 3 (1980), no. 2, 157-170. (H. Jürgensen) 82e:03024 03B60 (68B05)

Mirman, Leonard J. One sector economic growth and uncertainty: a survey. Stochastic programming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 537-567, Academic Press, London, 1980. (Bojan Popović) 82c:90005 90A05 (90-02, 90A16, 90C39, 90C40)

(with Levhari, David; Zilcha, Itzhak) Capital accumulation under uncertainty. Internat. Econom. Rev. 21 (1980), no. 3, 661-671. (Bojan Popović) 82e:90004 (90C50)

Mirman, R. (with Soto, M. F., Jr.) Objects for the symmetric group. J. Math. Phys. 22 (1981), no. 6, 1144–1148. (Authors' summary) 82;20027a 20C30 (20–04, 20B30,

(with Soto, M. F., Jr.) Addendum: "Objects for the symmetric group". J. Math. Phys. 22 (1981), no. 12, 3010. (Editors) 82j:20027b 20C30 (20-04, 20B30, 81C40)

Miron, Radu (with Georgiev, Georgi Iv.) À l'occasion du demi-centenaire de la géométrie des systèmes mécaniques non holonomes. Proceedings of the National Conference on Nonholonomic Spaces (Iași, 1976), pp. 17–25, Ed. Acad. R.S. România, Bucharest, 1979. (Bernard Rouxel) 82i:01067a 01A72 (53A40)

(with Hashiguchi, Masao) Conformal Finsler connections. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 6, 861-878. (S. Kawaguchi) 82j:53044 53B40 conenko, V. I. A method that allows one to determine the initial data of periodic

solutions of differential systems and to compare the mappings for a period. (Russian) Differencial' nye Uravnenija 16 (1980), no. 11, 1985-1994, 2108-2109. (O. Vejvoda) 34C25

Mironov, A. (with Mroz, Zenon) Optimal design for global mechanical constraints. (Polish and Russian summaries) Arch. Mech. (Arch. Mech. Stos.) 32 (1980), no. 4, 505-516. (Authors' summary) 82j:73058 73K40

Mironov, A. A. Some properties of collections of numbers realizable in a graph. (Russian) Moskov. Inst. Inž. Železnodorož. Transporta Trudy No. 640 Prikl. Mat. i Zadači Železnodorož. Transporta (1979), 115-120, 157. (H.-J. Voss) 82c:05084 05C99

Mironov, G. A. (with Krinickii, N. A.; Frolov, G. D.) *Programmation et langages symboliques. (French) [Programming and algorithmic languages] Translated from the Russian by V. Kharine [V. Harin]. "Mir", Moscow, 1978. 510 pp. (Editors) 82c:68001 68-01 (68B10)

Mironov, O. K. Steenrod-Dieck operations and obstructions to admissible multiplications in cobordism theories with singularities. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 203–206. (I. Pop) 82c:55005 55N45

Mironov, O. V. (with Korablev, A. I.) An algorithm for the e-subgradient method of minimization and its application. (Russian) Issled. Prikl. Mat. No. 7 (1979), 12-18. (E. G. Gol'šteĭn) 82a:90142 90C30 (65J15)

(with Korablev, A. I.) An attempt at solution of model problems of minimization by the e-subgradient method. (Russian) Issled. Prikl. Mat. No. 8 (1980), 9-14. (From the text) 82m:90137 90C30 (65K05, 90C05)

ovskii, L. A. (with Britov, G. S.) A criterion for redundancy of dynamic systems. Izv. Miro Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 1, 149-155, 222 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 1, 116-123 (1981). (Authors' summary) 82m:93047

Miroshnikov, V. A. See Mirošnikov, V. A.

Mirošin, R. N. Conditions for local regularity and finiteness of moments of the number of zeros for a differentiable Gaussian stationary process. (Russian. English summary)
Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 2, 83-92, 125. (G. Niculescu) 82e:60065 60G15

Convergence of Longuet-Higgins series for stationary Gaussian Markov processes of the first order. (Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 1, 101-120. (D. A. Darling) 82e:60066 60G15

Mirokkina, N. A. Congruences of two-dimensional planes that have two families of torses, in the five-dimensional projective space P₃. (Russian) Collection of articles on differential

etry, No. 2 (Russian), pp. 26-34, Kalinin. Gos. Univ., Kalinin, 1975. (V. Goldberg (RŽMat 1976:3 A796)) 82d:53012 53A20 Focal congruences of two-planes in the five-dimen

ional projective space Pa (Russian) Differential geometry (Russian), pp. 80–87, 140, Kalinin. Gos. Univ., Kalinin, 1977. (Author's summary) 82g:53015 53A20

1977. (Author's summary) 82g:53015
 53.AZO
 rosinicenko, T. P. Testing of two simple hypotheses in the presence of delayed observations. (Russian. English summary) Teor. Verojatnost. i Primenen. 24 (1979), no. 3, 463-474. (Ryszard Zieliński) 82j:62064
 (with Krylov, N. V.) Extension of the region of optimality of Wald's test. (Russian.

- English summary) Teor. Verojatnost, i Primenen, 25 (1980), no. 1, 167-171, (R. Döhler)
- chikov, A. L. (with Rogozin, B. A.) Inequalities for concentration functions. (Russia English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 1, 178-183. (G. I. Ivčenko) 82b:60054 60G50 (60E99)
- ikov, V. A. Nonstationary convective magnetic sedimentation in the field of a straight-line conductor with a current. Magnit. Gidrodinamika No. 4 (1979), 10-16 (Russian); translated as Magnetohydrodynamics 15 (1979), no. 4, 365-370 (1980). (From 80A20 (76W05, 80A15)
- Mirotin, A. R. An invariant Borel measure extends from a semigroup to the group of its quotients. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 5, 48-49, 138. (Beloslav Riečan) 82k:28014 28C10
- rov, M. A nonlocal boundary value problem for an equation of mixed type with singular coefficients on a line of degeneration. (Russian) Izo. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1981, no. 1, 27–33, 91. (Megumi Saigo) 82j:35107 35M05
- rahmedov, M. A. A quadratic measure of deviation of nonparametric estimates of the derivative of the probability density. (Russian) Dokl. Akad. Nauk UzSSR 1981, no. 1, 5-7. (László Győrfi) 82g:62061 62G05
 - Estimation of the derivatives of multidimensional probability density. (Russian) Dokl. Akad. Nauk UzSSR 1981, no. 8, 3-5. (Editors) 82k:60030 60E05
- Mirzoahmedov, F. (with Petrenko, V. L.) A dynamic problem of inventory planning with random demand. (Russian) Methods in operations research and reliability theory in systems of analysis (Russian), pp. 89–94, 103, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev.
- 1979. (Authors' summary) 82b:90045 90B05 (90C15)
 Mirzoev, G. A. Description of selfadjoint extensions of quasiregular operators generated by binomial differential expressions. (Russian) Mat. Zametki 29 (1981), no. 2, 225–233, 317. (M. M. Skriganov) 82d:34032 34B25 (47E05)
- Mirzoeva, T. M. Asymptotic behavior of the number of crossings by a transient walk of a certain level. (Russian) Random processes in problems of mathematical physics (Russian), pp. 107-112, 152, Akad. Nauk Ukrain. SSR, Inst. Mat., Kieo, 1979. (N. H. Bingham)
- 82x60105 60315
 Mirzojan, V. A. Submanifolds with commuting normal vector field. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 72 (1981), no. 1, 14-17. (S. S. Singh) 92h:53072 53C40
- Mirzov, D. D. The oscillatory nature of the solutions of a nonlinear differential system of Emden-Fowler type. (Russian) Differencial'nye Uravnenija 16 (1980), no. 11, 1980-1984, 2108. (M. K. Grammatikopoulos) 82a:34046 34C15
 - Some asymptotic properties of solutions of a nonlinear differential system. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk. 1980, no. 4, 18–22, 109. (Vincent Šoltės) 82g:34042 34C11 (34D05)
 - Oscillatory nature of the solutions of a differential system. (Russian) Differencial'nye
- Uravnenija 17 (1981), no. 8, 1504-1508, 1535. (L. Pintér) 82k:34042 34C15

 Misawa, Susumu (with Takada, Satoshi; Sakaguchi, Toshifumi) The Kosterlitz-Thouless transition in the quantum sine-Gordon model and the corresponding classical film system. Progr. Theoret. Phys. 66 (1981), no. 3, 820-830. (Authors' summary) 82k:82021 82A25 (81E99)
- Misawa, Tsuneo Consistency properties for Hausdorff logic. Comment. Math. Univ. St. Paul. 29 (1980), no. 2, 169-181. (Matt Kaufmann) 82g:03067 03C75
- Miscenko, A. S. Banach algebras, pseudodifferential operators and their applications to K-theory. (Russian) Uspehi Mat. Nauk 34 (1979), no. 6(210), 67-79. (V. Cruceanu) 46M20 (35S05, 58G12, 58G15)
 - (with Solov'ev, Ju. P.) Representations of Banach algebras and formulas of Hirzebruch type (Russian) Mat. Sb. (N.S.) 111(153) (1980), no. 2, 209–226, 319. (V. Cruceanu) 821:46059 46125 (57N65, 58G12)
 - (with Fomenko, A. T.) Integration of Hamiltonian systems with noncommutative symmetries. (Russian) Trudy Sem. Vektor. Tenzor. Anal. No. 20 (1981), 5-54. (A. Morimoto) 82k:58041 58F05 (58F07)
- Miščenko, B. I. Locally finite groups with complemented infinite nonabelian subgroups. (Russian) Constructive description of groups with properties prescribed on their subgroups (Russian), pp. 55-71, 144, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (M. J. Tomkinson) 82e:20045 20F16
- Miscenko, I. I. A possible method of optimization on infinite matrices of limiting conditions. (Russian. French summary) Issled. Operacii i ASU No. 15 (1980), 76-80, 135. (Author's summary) 82f:90093 90C32
- enkov, G. V. (with Samsonov, Ju. P.) Induced vibrations of coaxial viscoelastic cylindrical shells in a fluid. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 459 (1980), 102-108, 135. (Authors' summary) 82e:73050 73J06 (76Q05)
- Misenkova, T. A. Investigation of a nonlinear integral equation. (Russian) Differencial 'nye Uravnenija (Ryazan) No. 14 (1979), 116-127. (A. Corduneanu) 82f:45006 45G05 Misercque, D. Solutions de deux problemes posés par H. Simmons. Proceedings of the Model Theory Meeting (Univ. Brussels, Brussels/Univ. Mons, Mons, 1980). Bull. Soc. Math. Belg. Sér. B 33 (1981), no. 1, 65-72. (A. M. Dawes) 82k:03091 03F30 (03C62, 03H15)
- Mishkin, E. A. (with Fujimoto, Y.) Analysis of a cylindrical imploding shock wave. J. Fluid Mech. 89 (1978), no. 1, 61-78. (H. K. Cheng) 82i:76056 76L05 (35Q99)
- Mishra, B. K. (with Fujimoto, Y.) Analysis of a cylindrical imploding shock wave. J. Fluid Mech. 89 (1978), no. 1, 61–78. (H. K. Cheng) 82i:76056 76L05 (35Q99)
 Mishra, B. K. (with Das, C.) Minimax and symmetric duality for a nonlinear mixed-integer programming problem. Opsearch 17 (1980), no. 1, 1–11. (O. Pokorná) 82h:90103 90C30
- (with Das, C.) A note on sufficiency theorem in complex space. Math. Japon. 26 (1981), no. 1, 139-144. (Authors' introduction) 82k:90100 90C30
 Mishra, Babban Prasad Some theorems concerning the absolute summability of infinite
- series. Progr. Math. (Allahabad) 13 (1979), no. 1-2, 77-84. (N. Kishore) 82h:40011
- A theorem on strong summability. Progr. Math. (Allahabad) 14 (1980), no. 1-2, 93-100. (Amnon Jakimovski) 82j:40005 40F05 (40G10) Mishra, K. K. (with Sharma, Krishna Gopal) On strong summability of ultraspherical series. J. Indian Acad. Math. 2 (1980), no. 1, 18-22 (R. K. Gupta) 82b:33013 33A45
- Mishra, Pradeep Life sketch of Prof. R. S. Mishra. Progr. Math. (Allahabad) 12 (1978), no. 1-2, i-xiv (1 plate). (Editors) 82g:01064 01A70

- Mishra, R. K. (with Subba Rao, Gita; Tyagi, R. S.) Calculation of the minim conformation of biomolecules using a global optimization technique. I. Methodology and application to a model molecular fragment (normal pentane). J. Theoret. Biol. 90 (1981), no. 3, 377–389. (Authors' summary) 82e-92059a 92.A40 (81055, 90230) (with Subba Rao, Gita; Tyagi, R. S.) Calculation of the minimum energy conformation of biomolecules using a global optimization technique. II. Conformation of
- N-acetylglycine N-methyl amide, a model dipeptide unit. J. Theoret. Biol. 90 (1981),
- no. 3, 391-395. (Authors' summary) 82e:92059b 92A40 (81G55, 90C30)
 Mishra, R. N. Modelling and reduction of a biological system. Internat. J. Systems Sci. 12
- (1981), no. 5, 649-654. (Author's summary) 82k-92031 92A09

 shra, R. S. (with Mathur, K. K.) Lacunary interpolation by splines: (0; 0, 2, 3) and (0; 0, 2, 4) cases. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 3-4, 251-260 (1981). (A. Meir) 82g:41012 41A15
- Mishra, Ramadhar On certain generalized q-Laplace and Stieltjes transforms. J. Math. Sci. 5 (1970), no. 2, 22-37 (1979). (U. C. Jain) 82h:44001 44A10
- Mishra, Ratan Shanker Einstein-Maxwell field equations-null field. Proc. Indian Nat. Sci. Acad. Part A 42 (1976), no. 6, 439-443. (Author's summary) 82d:83035 83C50
 - (with Quaraishi, R.) Collineation and motion in relativistic thermodynamics. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 2, 129-132, (Authors' summary) 82e-83050
 - (with Pandey, Kanti) Gradients behind three-dimensional pseudostationary
 - shock-waves in radiating gases. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 3, 193-200. (Authors' summary) 821:76021 76L05 (35L67, 53A05)
 - (with Pandey, H. B.) Integrability of a manifold equipped with a certain structure. Bull. Calcutta Math. Soc. 70 (1978), no. 5, 327-329. (K. L. Duggal) 82a:53044 (53C10)
- Conformal change of Hermitian metric. Indian J. Math. 20 (1978), no. 3, 193-199. 53C15 (J. Ferrand) 82h:53043
- (with Pal, R. B.) Hypersurfaces of Riemannian manifold with quarter-symmetric metric connection. Ann. Fac. Sci. Univ. Nat. Zaïre (Kinshasa) Sect. Math.-Phys. 5 (1979), no. 1-2, 81-93. (K. Nomizu) 82f:53030 53B15
- (with Pal, R. B.) On generalized 3-structure manifolds. Ann. Fac. Sci. Univ. Nat. Zaïre (Kinshasa) Sect. Math.-Phys. 5 (1979), no. 1-2, 95-108. (Jean-Marie Morvan)
- (with Pandey, S. B.) On almost contact metric manifolds (Nijenhuis tensor). Ganita
- 30 (1979), no. 1-2, 20-26. (S. S. Singh) 82h:53051 53C15 (with Chandna, O. P.) Steady plane magnetogasdynamics flow. Ganita 30 (1979),
- no. 1-2, 83-94. (From the introduction) 82i:76098 76W05 (35Q10)
- (with Srivastava, J. P.) Connections in the tangent bundle T(M*). Nepali Math. Sci. Rep. 4 (1979), no. 2, 55-61. (S. S. Singh) 82e:53049 53C05 (with Pal, R. B.) Hypersurfaces of almost hyperbolic Hermite manifolds. Indi
- Pure Appl. Math. 11 (1980), no. 5, 628-632. (Shigeru Ishihara) 82f:53076 53C55
- See also Mishra, Pradeep, 82g:01064

 Mishra, S. K. (with Rajbans, B. K.) Diffraction of impulsive elastic waves by a fluid cylinder. Proc. Indian Acad. Sci. Sect. A Math. Sci. 89 (1980), no. 3, 159-170. (Authors' summary) 82a:73016 73D25 (73J06)
 - (with Das, Gokulananda) A note on a theorem of Maddox on strong almost convergence. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 3, 393-396. (Robert DeVos) 82d:40009 40D99 (46A45)
- Mishra, S. N. Wong's fixed point theorems. Indian J. Pure Appl. Math. 12 (1981), no. 6, 671-676. (Roman Manka) 82m:54055 54H25
 Mišić, V. B. Sensitivity evaluation for multiple feedback active filters. Electron. Lett. 17
- (1981), no. 6, 240-241. (Author's summary) 82d:94088 94C15
 Misiewicz, Hanna (with Kaliszewski, Ignacy; Libura, Marek) Integer program tool for plant adjustment problem. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 2, pp. 380–387, Lecture Notes in Control and Information Sci., 23, Springer, Berlin, 1980. (U. Derigs) 82a:90101 90C11 (90B30)
- tk, Ladislav Additivity of the gauge. (Russian summary) Math. Slovaca 28 (1978), no. 3, 261–262. (From the text) 82k:46072 46G99

 Academician Štefan Schwarz awarded the 1980 National Prize of the Slovak Socialist
 - Republic. Czechoslovak Math. J. 31(106) (1981), no. 2, 338-339. (Editors) 82i:01055
 - Maximal additive and maximal multiplicative family for the family of B-Darboux Baire one functions. (Russian summary) Math. Slovaca 31 (1981), no. 4, 405-415. (A. M. Bruckner) 82k:54021 54C50 (54C30)
- See also Neubrunn, Tibor, 82h:01063 Mišin, V. M. (with Bazaržapov, A. D.; Matveev, M. I.) ★Геомагинтные вариации и бури. (Russian) [Geomagnetic variations and storms] "Nauka" Sibirsk. Otdel
- Novosibirsk, 1979. 248 pp. (Publisher's description) 82h:86001 86-02 (86A25) Misiura, V. A. See Misjura, V. A.
- Misiurewicz, Michał (with Block, Louis; Guckenheimer, John; Young, Lai Sang) Periodic points and topological entropy of one-dimensional maps. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 18-34, Lecture Notes in Math., 819, Springer, Berlin, 1980. (Ethan M. Coven) 82j:58097
 - 58F20 (28D20, 54C70) (with Szewc, Boleslaw) Existence of a homoclinic point for the Hénon map. Com Math. Phys. 75 (1980), no. 3, 285-291. (D. L. Rod) 824:58046 58F13 (65L99)
 - (with Szlenk, W.) Entropy of piecewise monotone mappings. Studia Math. 67 (1980), no. 1, 45–63. (Carmen Chicone) 82a:58030 58F11 (28D20, 54C70, 54H20,
 - The result of Rafal Kolodziej. Ergodic theory (Sem., Les Plans-sur-Bex, 1980) (French), pp. 57-60, Monograph. Enseign. Math., 29, Univ. Genève, Geneva, 1981. (M. I. Brin) \$2g:28026 28D99 (58F11)
 - Topological entropy and metric entropy. Ergodic theory (Sem., Les Plans-sur-Bex, 1980) (French), pp. 61–66, Monograph. Enseign. Math., 29, Univ. Genève, Geneva, 1981. (Manfred Denker) 82d:28020 28D20 (54H20) (Manfred Denker) 82d:28020
 - antreal penacy actions of theory Dynamical Systems 1 (1981), no. 1, 103–106. (H. B. ffiths) 82i:58058 58F25 (54H20)
- Misjura, V. A. (with Berdičevskii, V. L.) On a dual variational principle in geometrically nonlinear elasticity theory. Prikl. Mat. Meh. 43 (1979), no. 2, 321-329 (Russian);

d as J. Appl. Math. Mech. 43 (1979), no. 2, 343-352 (1980). (Authors' summary) 82=73014 73C50 (49H05)

likoi, G. K. (with Klimov, G. P.) ★Приоритетные системы обслуживания с ориситацией. (Russian) [Priority queueing systems with setup times] Moskov. Gos. Univ., Moscow, 1979. 223 pp. (B. Dimitrov) 82c:60166 60K25

Mislin, Guido (with Glover, Henry; Homer, William D.) Immersions in manifolds of positive weights. Algebraic topology (Proc. Conf., Univ. British Columbia, Vancouver, B.C., 1977), pp. 88–92, Lecture Notes in Math., 673, Springer, Berlin, 1978. (R. E. Stong) 57R42

(with Eckmann, Beno) On the Euler class of representations of finite gro ent. Math. Helv. 55 (1980), no. 3, 319-329. (J. F. Adams) 82f:55024 55R40 (20C15)

Solve, Michael W. (with Gierz, Gerhard; Hofmann, Karl Heinrich; Keimel, Klaus; Lawson, Jimmie D.; Scott, Dana S.) ★A compendium of continuous lattices.

Springer-Verlag, Berlin-New York, 1980. xx+371 pp. ISBN 3-540-10111-X (James W. Lea, Jr.) 82h:06005 06B30 (03G10, 30G30, 54H12)

(with Liukkonen, John R.) Fourier-Stieltjes alge ilpotent groups. J. Reine Angew. Math. 325 (1981), 210-220. (Hans G. Feichtinger) 82m:430 43A25 (22E25)

Misner, Charles W. Symmetry paradoxes and other cosmological comments. Some strungeness in the proportion (Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 405-415, Addison-Wesley, Reading, Mass., 1980. (See 82d:83002)

Misra, Arati (with Ray, Brajakishore) On the absolute matrix summability of the series conjugate to a Fourier series. Indian J. Pure Appl. Math. 11 (1980), no. 11, 1482-1496.

(B. Kuttner) 82h-42007 42A50 (42A28)

Misra, B. L. (with Chandak, M. L.) Construction of symmetric PBIB designs and related Discrete Math. 34 (1981), no. 1, 85-87. (From the introduction) 824:05028 05B05 (05B10)

Misra, Baidyanath (with Prigogine, Ilya; Courbage, Maurice) From deterministic dynar to probabilistic descriptions. Phys. A 98 (1979), no. 1-2, 1-26. (A. S. Wightman)

58F13 (47D07, 60J25, 82A05) (with Goodrich, K.; Gustafson, Karl E.) On converse to Koopman's lemma. Phys. A 102 (1980), no. 2, 379-388. (P. D. F. Ion) 82i:82007 82A05 (28D10)

(with Courbage, Maurice) On the equivalence between Bernoulli dynamical systems and stochastic Markov processes. Phys. A 104 (1980), no. 3, 359-377. (Authors' nary) 82c:82008 82A05 (28D05, 58F11, 60J05)

(with Prigogine, Ilya) On the foundations of kinetic theory. Progr. Theoret. Phys. ol. No. 69 (1980), 101-110 (1981). (K. Kumar) 82k:82009 82A05 (60J25, 82A40)

Misra, Jayadev (with Chandy, K. Mani) Asynchronous distributed simulation via a sequence of parallel computations. Comm. ACM 24 (1981), no. 4, 198-206. (Authors' summary) 82d:68058 68J05 (68B20)

summary) 824:68058 68J05 (68B20) (with Chandy, K. Mani) Proofs of networks of processes. IEEE Trans. Software Engrg. 7 (1981), no. 4, 417–426. (Authors' summary) 821:68038 68B20

Misra, K. B. Reliability engineering and its relevance to India. J. Combin. Inform. System Sci. 6 (1981), no. 1, Special Issue on Reliability, i-iii. 82h:60003 60-03 (60K10) Misra, N. On the convergence of Hermite-Fejér and Hermite-Fejér type processes. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 4, 383-389. (P. Vértesi) 82h:41004 (41A10)

Misra, Prabduh Ram (with Magill, K. D., Jr.; Tewari, U. B.) Unifying congruences on S(I). Semigroup Forum 21 (1980), no. 4, 361-371. (Bridget B. Baird) 82e:20079 20M20 (54C35)

(with Vinodkumar) A characterization of pseudocompactness. Internat. J. Math. th. Sci. 4 (1981), no. 2, 407-409. (C. E. Aull) 82f:54035

Misra, R. Sets with countable base of neighbourhoods. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 4, 381–382. (A. R. Pears) 82h:54036 54D35 (54C50)
 Misra, S. S. (with Naik, N.; Swamy, B. L. N.) Lattice-ordered commutative loops. Math.

Sem. Notes Kobe Univ. 8 (1980), no. 1, 57-71. (D. A. Robinson) 82a:06033 06F99 (20N05)

(with Naik, N.; Swamy, B. L. N.) Ideals in a representable dually residuated lattice-ordered semigroup. Bull. Inst. Math. Acad. Sinica 9 (1981), no. 1, 101–110. (Marlow Anderson) 82:06021 06F05

Misra, U. K. (with Kishore, Nand) On the consistency of limitation methods for (N, p_n) summable sequences. Internat. J. Math. Math. Sci. 4 (1981), no. 1, 155-164. (Hubert Tietz) 82i:40008 40G05

Missarov, M. D. (with Bleher, P. M.) Solution of Wilson equations and analytical renormalization. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 39, 32 pp. (James D. Fabrey) 82j:81044 81E15

(with Bleher, P. M.) Wilson's renormalization group and projective Hamiltonians. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 40, 30 pp. (James D. Fabrey) 82j:81045 81E15

Critical indices for models with long-range interaction. (Russian. English summary)

Teoret. Mat. Fiz. 46 (1981), no. 2, 232-241. (Nicolae Angelescu) 82g:82022 82A2:

Missirlis, Nikolaos M. (with Evans, David J.; Lipitakis, Elias A.) On sparse and compact preconditioned conjugate gradient methods for partial differential equations. Internat. J. Comput. Math. 9 (1981), no. 1, 55–80. (Authors' summary) 82c:65017 65F10 (65N20) (with Evans, David J.) On the acceleration of the preconditioned simultane displacement method. Math. Comput. Simulation 23 (1981), no. 2, 191-198. (Authors' summary) 82k:65016 65F10 (65N20) ary) 82k:65016

(with Evans, David J.) On the convergence of some generalized preconditioned iterative methods. SIAM J. Numer. Anal. 18 (1981), no. 4, 591-596. (Authors' summary)

Mista, Krystyna Sur les inégalités bilinéaires de Grunsky pour les couples de fonctions qui n'empiètent pas l'une sur l'autre. II. Demonstratio Math. 14 (1981), no. 1, 33-58. (A. W. Goodman) 82i:30015 30C45 (30A10)

strangioli, Luigia Wave solutions of the field equations of general relativity. (Italian) Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur. 113 (1979), no. 5-6, 373-382. (Author's nary) 82c:83017 83C15 (83C35)

tura, Luciano On the shape of the coexistence curve and of the critical isotherm in a

density-density plane. Phys. A 104 (1980), no. 1-2, 181-188. (Author's summary) 824:80003 80A10

Misura, Ju. S. Convergence of certain functionals of integral type in the uniform topology. (Russian) Theory of random processes, No. 7 (Russian), pp. 85-95, 131, "Na Dumka", Kiev, 1979. (Serban Grigorescu) 82d:60097 60G60 (60F17, 60J60)

The Doob-Meyer decomposition for two-parameter semimartingales. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 6, 19-21, 92. (Dominique Lépingle) 82f:60115 60G48

Two-parameter semimartingales and point random fields. (Russian. English ost. i Mat. Statist. 23 (1980), 109-120, 149. (A. A. Novikov)

60G48 (60G55, 60G60) Expansion of two-parameter martingales into orthogonal components. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 23 (1980), 120-130, 150. (Dominique

Limit theorems for stochastic Schärf-Stieltjes integrals. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 3, 340–347. (D. Surgailis) 82h:60110 60H05 (60F99)

Solution of the general martingale problem for two-parameter functions. (Ukrainia English and Russian summaries) Visnik Kiïv. Univ. Ser. Mat. Meh. No. 22 (1980), 72-77, 150. (Ju. M. Kabanov) 82m:60055 60G48 (60H10) (with Leonenko, M. M.) On the invariance principle for multiparameter martingales.

(Russian. English summary) Teor. Verojatnost. i Mat. Statist. 24 (1981), 81-91, 153. (M.

P. Eršov) 82;60083 60G48 (60F17)
Properties of quadratic variation of two-parameter strong martingales. (Russian. English summary) Teor. Verojamost. i Mat. Statist. 25 (1981), 92–99, 168. (Ju. M. Kabanov) 82m:60054 60G48 (60G42, 60G60)

Mita, Katsunori (with Laursen, M. L.) Some integrals involving associated Legendre functions and Gegenbauer polynomials. J. Phys. A 14 (1981), no. 5, 1065–1068. (B. D. Agrawal) 82f:33006 33A45 (33A50)

Mita, Tsutomu Eigenvector assignment using state feedback. J. Fac. Engrg. Chiba Univ. 32 (1980), no. 1, 119-132. (Author's summary) 82e:93070 93C45

(with Yoshida, Hiroshi) Undershooting phenomenon and its control in linear multivariable servomechanisms. IEEE Trans. Automat. Control 26 (1981), no. 2, 402-407. (Authors' summary) 824:93038 93C35

Mitchell, Andrew Ronald (with Griffiths, D. F.) *The finite difference method in partial differential equations. A Wiley-Interscience Publication. John Wiley & Sons, Chichester, 1980. xii+272 pp. ISBN 0-471-27641-3 (J. Mikliček) 82a:65002

(with Wait, R.) * Метод конечных элементов для уравнений с части производивами. (Russian) [The finite element method in partial differential equations] Translated from the English by V. E. Kondrašov and V. F. Kurjakin. "Mir", Moscow, 1981. 216 pp. (Editors) 82f:65117 65N30

(with Griffiths, D. F.; Meiring, A.) Finite element Galerkin methods for convection-diffusion and reaction-diffusion. Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ. Nimegen, Njimegen, 1980), pp. 157–177, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (Authors' summary) 82b:65134 65N30 (35K55, 80A20)

Numerical studies of travelling waves in nonlinear diffusion equations. Bull. Inst. Math. Appl. 17 (1981), no. 1, 14-20. (W. F. Ames) 82g:65054 65N30 (35K55, 92A10) (with Barnhill, R. E.; Brown, J. H.) A comparison of finite element error bounds for Poisson's equation. IMA J. Numer. Anal. 1 (1981), no. 1, 95-103. (Authors' summary) 65N30 (65N15)

Mitchell, Barry A remark on projectives in functor categories. J. Algebra 69 (1981), no. 1, 24-31. (B. L. Osofsky) 82i:18012 18E99 (18G20)

A quick proof of the Gabriel-Popesco theorem. J. Pure Appl. Algebra 20 (1981), no. 3, 313-315. (R. H. Street) 82e:18015 18E15 (18E35)

Mitchell, Christopher J. An infinite family of symmetric designs. Discrete Math. 26 (1979), no. 3, 247-250. (Spyros S. Magliveras) 82c:05017 05B05

Mitchell, Josephine Lipschitz spaces of holomorphic and pluriharmonic functions on bounded symmetric domains in C^N (N>1). Ann. Polon. Math. 39 (1981), 131-141. (A. Korányi) 82i:32061 32M15 (31C10, 46E15, 46J15)

Mitchell, Robert (with Tydeman, John) A note on the Kounias and Marin method of best linear Bonferroni bounds. SIAM J. Appl. Math. 39 (1980), no. 1, 173-177. (Stratis Kounias) 82c:60031 60E15 (90C05)

Mitchell, Thomas P. Dynamical symmetries of the Schrödinger equation. J. Math. Phys. 22 (1981), no. 9, 1948-1951. (Daniel A. Akyeampong) 82m:81032 81C40 (22E70)

Mitchell, W. F. (with Houstis, Elias N.; Papatheodorou, Theodore S.) A C¹-collocation method for mildly nonlinear elliptic equations on general 2-D domains. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 18-27, IMACS, New Brunswick, N.J., 1979. (See 82a:65005) 65N35

Mitchell, W. J. R. Universal coefficient theorems and a paper of Dinh The Luc. Math. Nachr. 95 (1980), 89-91. (Hans-E. Porst) 82b:18017 18G35 (55U20)

Local homology and cohomology. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 2, 309–324. (Jože Vrabec) 82e:55006 55N99

Mitchell, William Hypermeasurable cardinals. Logic Colloquium '78 (Mons, 1978) pp. 303-316, Stud. Logic Foundations Math., 97, North-Holland, Amsterdam, 1979. (William Zwicker) 82j:03067 03E55 (03E45)

Mitek, Zbigniew (with Krause, Adam) Identification of linear multivariable continuous systems from input-output data. (Polish. Russian and English summaries) Arch. Automat. Telemech. 25 (1980), no. 4, 495-505 (1981). (Authors' summary) 82i:93027

Mitjagin, B. S. (with Džakov, P. B.) The structure of polynomial ideals in the algebra of entire functions. Studia Math. 68 (1980), no. 1, 87-104. (T. W. Gamelin) 82a:32006 32A15 (32A99, 46J15)

Mitjugov, V. V. (with Krest'janinov, A. S.) Minimum uncertainties in an open system. Radiotehn. i Elektron. 25 (1980), no. 5, 1030-1037 (Russian); translated as Radio Engrg. Electron. Phys. 25 (1980), no. 5, 98-104 (1981). (From the text) 82j:82023 82A15 (82A35, 94A17)

Mitjuk, I. P. Estimates in certain classes of analytic functions. (Russian) Metric questions of the theory of functions (Russian), pp. 90-99, 161, "Naukova Dumka", Kiev, 1980. (Z. Lewandowski) 82i:30032 30C70

- Mitoma, Itaru (with Ikeshoji, Kiyoshi; Okazaki, Yoshiaki) The Eberlein theorem on noncommutative locally compact groups. Mem. Fac. Sci. Kyushu Univ. Ser. A 34 (1980), no. 2, 347–349. (Pierre Eymard) 82e:22014a 22D35 (43A65)

 Martingales of random distributions. Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981),
 - no. 1, 185-197. (L. Egghe) 82e:60079 60G44 (46F05, 60H05)
 - On the norm continuity of S'-valued Gaussian processes. Nagoya Math. J. 82 (1981), 209-220. (Franz Schmidt) 82h:60070 60G15 (46G99, 60B11, 60G17, 60G20)
- Mitov, D. (with Grigorova, L.; Simidčiev, G.) An approach to the autoparallel submanifolds of a linearly connected manifold. C. R. Acad. Bulgare Sci. 33 (1980), no. 6, 751-752. (P. G. Walczak) 82g:53062 53C40 (53C05)
- Mitra, Amitava (with Alam, Khursheed) Polarization test for the multinomial distribution. J. Amer. Statist. Assoc. 76 (1981), no. 373, 107-109. (Authors' summary) 82d:62045 62F03
- Mitra, D. (with Basu, Debabrata) The Lorentz group in the oscillator realization. III. The group SO(3, 1). J. Math. Phys. 22 (1981), no. 5, 946-953. (A. O. Barut) 82m:81031 81C40 (22E70)
- Mitra, Debasis (with McKenna, J.; Ramakrishnan, K. G.) A class of closed Markovian queuing networks: integral representations, asymptotic expansions, and generalizations. Bell System Tech. J. 60 (1981), no. 5, 599-641. (J. Chandramohan) 82g:60117 60K20 (65U05, 68C15)
 - (with Lawrence, Victor B.) Controlled rounding arithmetics, for second-order direct-form digital filters, that eliminate all self-sustained oscillations. IEEE Trans. Circuits and Systems 28 (1981), no. 9, 894-905. (From the summary) 82h:94004 94A05
- (with Jahanshahlou, G. R.) Linear complementarity problem and a tree search algorithm for its solution. Survey of mathematical programming (Proc. Ninth Internat. Math. Programming Sympos., Budapest, 1976), Vol. 2, pp. 35–55, North-Holland, Amsterdam, 1979. (Michael Minkoff) 82a:90167 90C33
 - (with Welsh, A. P. G.) A computer based crew scheduling system using a
- mathematical programming approach. Computer scheduling of public transport (Internat. Workshop, Univ. Leeds, Leeds, 1980), pp. 281-296, North-Holland, Amsterdam, 1981. (See 82f:90053) 90C35
- (See 82f:90053) 90C35
 Mitra, P. Higgs multiplets in the adjoint representation of SU(N). J. Math. Phys. 22 (1981), no. 9, 2069–2072. (Jules Beckers) 82m:81040 81D20 (81G20)
- itra, R. K. On G-efficiency of some second order rotatable designs. B (1981), no. 8, 749-757. (Author's summary) 82m:62181 62K99
- Mitra, Sanjit K. (with Bhattacharyya, S. P.) Topology equations for closed Coates' flow graph. Matrix Tensor Quart. 31 (1980/81), no. 1, 21-22. (Authors' summary) 82h:94035 94C15 (05C99, 58F40)
- (with Chakrabarti, Satyabrata) Corrections to: "Decision methods and realization of 2-D digital filters using minimum number of delay elements" [IEEE Trans. Circuits and Systems 27 (1980), no. 8, 657-666; MR 81g:94011]. IEEE Trans. Circuits and Systems 28 (1981), no. 3, 262-263. (Editors) 82d:94005 94A05

 Mitra, Shashanka S. Distribution of symmetric stable laws of index 2⁻⁸. Ann. Probab. 9
- (1981), no. 4, 710-711. (Author's summary) 82k:60032 60E07
- Mitra, Sujit Kumar (with Moore Thorne, Betty Jeanne) Linear estimation in general linear models. Essays in probability and statistics, pp. 189–201, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 82b:62083 62J05
 - Generalized inverse of matrices and applications to linear models. Analysis of variance, pp. 471-512, Handbook of Statistics, 1, North-Holland, Amsterdam, 1980. (See 15A09 (62J05)
- On optimal depletion of exhaustible resources: existence and characterization results. Econometrica 48 (1980), no. 6, 1431-1450. (From the introduction) 82g:90026
- (with Zilcha, Itzhak) On optimal economic growth with changing technology and characterization and stability results. Internat. Econom. Rev. 22 (1981), no. 1, 221-238. (From the introduction) 82k:90041 90A16
- Mitrani, I. (with Sevcik, K. C.) The distribution of queuing network states at input and stants. J. Assoc. Comput. Mach. 28 (1981), no. 2, 358-371. (Authors' summary) 824-68031 68C15 (60K25)
- Mitrea, A. (with Froda-Schechter, M.; Mitrea-Dolea, P.) k-relations de tolérance. Publ. Centre Rech. Math. Pures (1) No. 15 (1980), 13-16. (Authors' introduction) 82f:08001 08A02 (68F99, 90A06, 92A27)
- Mitrea-Dolea, P. (with Froda-Schechter, M.; Mitrea, A.) k-relations de tolérance. Publ. Centre Rech. Math. Pures (1) No. 15 (1980), 13-16. (Authors' introduction) 82f:08001 08A02 (68F99, 90A06, 92A27)
- Mitrinović, Dragoslav S. (with Lacković, Ivan B.; Stanković, Miomir S.) Addenda to: Analytic inequalities [Springer, New York, 1970; MR 43 #448] by Mitrinović. Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 634-677 (1979), 3-24. (R. A. Askey) 82c:26011 26A51
 - (with Kalajdžić, G.) On an inequality. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 3-9 (1981). (D. C. Russell) 26D15
- See also Popor, Blagoj S., 82f:01130 and Dimitrovski, Dragan S., 82f:01176
 Mitrofanova, E. A. The group A_{n-1}(n) and its representations. (Russian) Kaliningrad. Gos.
 Univ. Differencial'naja Geom. Mnogoobraz. Figur No. 12 (1981), 52-55, 147. (From the text) 82k:22008 22E05 (53A05)
- Mitropol'skii, Ju. A. (with Koroljuk, V. S.; Skorohod, A. V.) Josif Il'ič Gihman (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 33 (1978), no. 5(203), 205-208. (Editors) 82d:01028 01A70
 - (with Vladimirov, V. S.; Erugin, N. P.; Parasjuk, O. S.) Nikolai Nikolaevič
 - Bogoljubov (on the occasion of his 70th birthday). (Russian) Differencial'nye Uravnenija 15 (1979), no. 8, 1347-1359. (Editors) 82f:01152 01A70 (34-03)
- (with Vladimirov, V. S.; Parasjuk, O. S.) A survey of the major papers of N. N. Bogoljubov in mathematics and theoretical physics. (Russian) Ukrain. Mat. Z. 31 (1979), no. 4, 341-350, 476. (Editors) 82k:01036 01A70
- Nikolai Mitrofanovič Krylov (on the occasion of the 100th anniversary of his birth). (Russian) Ukrain. Mat. Z. 31 (1979), no. 6, 731-734. (Editors) 82f-91124 01A70
 - (with Tamrazov, P. M.; Gudz', L. A.) V. A. Zmorovič's investigations in the field of

- the geometric theory of functions. (Russian) Ukrain. Mat. Z. 31 (1979), no. 6, 756-760, 768. (R. P. Boas, Jr.) 82f:01123 01A70 (30-03)
- (with Svec, A. Ju.) The effect of lag on the stability of a pendulum with a vibrating point of suspension (Russian) Analytic methods for investigating nonlinear oscillations (Russian), pp. 115-120, 182, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1980. (J. Daneš) 70J99 (34K20, 70K20)
- (with Svec, A. Ju.) Oscillations of a pendulum with a vibrating point of suspension in the presence of lag. (Russian) Analytic methods for investigating nonlinear oscillation tian), pp. 120-128, 183, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (J. Daneš) 70J99 (34K20, 70K20)
- (with Valeev, K. G.; Finin, G. S.) Numerical synthesis of optimal control for linear
- (with Valeev, K. G.; Fraini, G. S.) Numerical synthesis of optimal control for linear steady-state systems. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 4, 75 pp. (A. Vanèček) 82d:49040 49F99 (93B50)
 (with Strižak, T. G.) On the motions of a mathematical pendulum. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 37, 44 pp. (V. G. Zadorožnii) 82g:34044 34C15 (58F21)
- (with Martinjuk, A. A.) Development of the Lyapunov functions method in nonlinear mechanics. (French and German summaries) Internat. J. Non-Linear Mech. 15 (1980), no. 4-5, 377-386. (C. Corduneanu) 82d:34055 34C29 (70K15)
- Jules-Henri Poincaré (on the 125th anniversary of his birth). (Russian) Ukrain. Mat. Ž. 32 (1980), no. 3, 361-364. (Editors) 82a:01042 01A70
- (with Koroljuk, V. S.; Mihalëvič, V. S.; Kovalenko, Î. M.) On A. V. Skorohod's works on the theory of random processes. (Russian) Ukrain. Mat. Z. 32 (1980), no. 4, 523-527. (Editors) 82g:60049 60Gxx (01A70)
- with Krivošeja, S. A.) Asymptotic solution for a class of boundary value problems. sssian) Ukrain. Mat. Ž. 32 (1980), no. 6, 846-853. (A. V. Peržan) 82j:35094 35L20 (35C20)
- (with Koroljuk, V. S.; Bogoljubov, O. M.) Mihail Alekseevič Lavrent'ev. (Russian) Ukrain. Mat. Z. 32 (1980), no. 6, 861-864. (Editors) 82m:01064 01A70
- (with Valeev, K. G.; Finin, G. S.) Application of the optimal manifold principle to the synthesis of optimal regulators. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 4, 796-799. (Constantin Vårsan) 82g:49040 49F22
- (with Bogoljubov, N. N.; Fuščič, V. I.) Ostap Stepanovič Parasjuk (on the occasion of his sixtieth birthday). (Russian) Ukrain. Mat. Z. 33 (1981), no. 6, 800-801. (Editors) 01A70
 - See also Analytic methods for investigating nonlinear oscillations, 82e:34002;
- Qualitative investigations of functional differential equations, 82e:34070 and Studies of Ju. A. Mitropol'skii on the theory of nonlinear oscillations and nonlinear differential
- Mitsch, H. Derivations on I-semigroups and formal languages. Acta Sci. Math. (Szeged) 43 (1981), no. 1-2, 91-104. (T. Saitò) 82g:06025 06F05 (20M35, 68F05)
- Mitschka, Arno (with Strehl, Reinhard) *Einführung in die Geometrie. (German) [Introduction to geometry] Kongruenz- und Ähnlichkeitsabbildungen in der Ebene. [Congruence and similarity mappings in the plane]. Second edition. Studienbücher Mathematik. [Textbooks for mathematics] Verlag Herder, Freiburg, 1979. 271 pp. ISBN 3-451-16881-2 (J. C. Fisher) 82e:51004 51-01 (00A05)
- Mitschke, Gerd Infinite terms and infinite reductions. To H. B. Curry: essays on combinatory logic, lambda calculus and formalism, pp. 243-257, Academic Press, London, 1980. (Garrel Pottinger) 82g:03021
- Mitskiévič, N. V See Mickevič, N. V.
- Mitsuda, Tadashi Integral representations of cyclic groups of order pq. Proceedings of the 14th Symposium on Ring Theory (Matsumoto, 1981), pp. 85-92, Okayama Univ., Okayama, 1981. (Editors) 82k:20016 20C10 Okayama, 1981. (Editors) 82k:20016
- Mitsui, Takayoshi (with Tatuzawa, Tikao) Sur un problème en théorie additive des nombres. With the Japanese original. Analytic number theory (Proc. Sympos., Tokyo, 1980) (French), pp. 101-151, Monograph. Sci. Maison Franco-Japon., 3, Maiso 10J15 (12A99)
- co-Japon., Tokyo, 1981. (Jean-Marc Deshouillers) 82m:10074 Mitsui, Taketomo On the convergence of the initial-value adjusting method for nonlinear boundary value problems. Publ. Res. Inst. Math. Sci. 16 (1980), no. 2, 513-529. (Uri Ascher) 82a:65057 65L10
- The initial-value adjusting method for problems of the least squares type of ordinary differential equations. Publ. Res. Inst. Math. Sci. 16 (1980), no. 3, 785-810. (G. F. 65L10 (80A30)
- sumori, Sadamichi Optimal scheduling for load balance of two-machine production lines. IEEE Trans. Systems Man Cybernet. 11 (1981), no. 6, 400-409. (Author's summary) 82k:90065 90B35
- Mittag-Leffler, Magnus Gösta See Dauben, Joseph W., 82a:01056 and Ožigova, E. P., 82c:01029
- Mittal, A. K. (with Gupta, D. P.) A note on application of Struble's method to van der Pol type oscillators. Indian J. Math. 20 (1978), no. 2, 129-134. (Ch. G. Philos) 82d:34046 34C15 (34D10)
- (with Gupta, D. P.) Forced oscillations of a nonlinear equation of Mathieu type. un J. Math. 21 (1979), no. 1, 25-28. (B. S. Lalli) 82c:34046 34C25
- Mittal, K. C. Some new generating functions for Lagrange's polynomials. *Mathematica* (Chij) 21(44) (1979), no. 1, 57-62. (L. Carlitz) 82g:33029 33A65 (33A30)
- Mittal, Kumud K. (with Venetsanopoulos, Anastasios N.) On the dynamic control of the Urn scheme for multiple access broadcast communication systems. IEEE Trans. Comm. 29 (1981), no. 7, 962-970. (Authors' summary) 82f:94003 94405
- Mittal, S. C. (with Sinha, Rajiv; Arora, J. P.) On the degree of approximation. Acta Cienc. Indica 6 (1980), no. 3, 148-153. (N. Kishore) 82m:40003 40A05
- Mittal, Sunil Kumar (with Gupta, Surya Deo; Gupta, P. P.) Pointwise availability of a standby redundant complex system consisting of three subsystems under head of line repair policy. Acta Cienc. Indica 6 (1980), no. 3, 121-129. (Authors' summary) 826-60113 60K10 (90B25)
- Mittal, Yashaswini Smoothing of samples for maxima. Ann. Statist. 9 (1981), no. 1, 66-77.
- (Rashid Ahmad) 82c:60051 60F10 (60G15)

 Mittelhammer, Ron C. On specification error in the general linear model and weak mean uare error superiority of the mixed estimator. Comm. Statist. A-Theory Methods 10 (1981), no. 2, 167-176. (I. S. Alalouf) 82k:62135 62J05
- m, Hans-Detlef (with Weber, Helmut) Numerical methods for bifurcation

- problems—a survey and classification. Bifurcation problems and their numerical solution (Prec. Workshop, Univ. Dortmund, Dortmund, 1980), pp. 1-45, Internat. Ser. Numer. Math., 54, Birkhäuser, Basel, 1980. (B. V. Loginov) 82±58021 58E07 (47H15, 65J15) On the efficient solution of nonlinear finite element equations. II. Bound-constrained ns. Numer. Math. 36 (1980/81), no. 4, 375-387. (Manfred Dobros
- 22;45043 65K10 (49A29, 65N30)

 telstaedt, Peter *Quantum logic. Synthese Library, 126. D. Reidel Publishing Co.,

 Dordrecht-Baston, Mass., 1978. viii + 149 pp. 15BN 90-277-0925-4 (R. Cignoli) 82;03109 03G12 (03G10, 06C15, 81B10)

Quantum logic. Problems in the foundations of physics (Proc. Internat. School Phys. "Enrico Fermi", Course LXXII, Varenna, 1977), pp. 264-299, North-Holland, Amsterdam, 1979. (See 82m:81003) 81B10

Amsternam, 1979. (See Samstrous) 81B10
telestraß, Jürgen Erfahrung und Lebenswelt. Historische Bemerkungen zu einer
systematischen Frage. Theory and practice: on the relationship of theory and practice in the
secenteenth and eighteenth centuries, Vol. I (Hannover, 1977), pp. 69–84, Studia
Leibnitiana Suppl., XIX, Steiner, Wiesbaden, 1980. (Eberhard Knobloch) 82i:00021 00A25 (01A45)

Mitter, H. (with Gesztesy, F.) A note on quasiperiodic states. J. Phys. A 14 (1981), no. 4, L79-L83. (Authors' summary) 82f:81697 81K05 (81C10)

Mitter, Sanjoy K. (with Young, Stephen K.) Quantum estimation theory. International Symposium on Systems Optimization and Analysis (Rocquencourt, 1978), pp. 127-136.

Lecture Notes in Control and Information Sci., 14, Springer, Berlin, 1979. (See 80m:49002)

(with Marcus, Steven I.; Ocone, D.) Finite-dimensional nonlinear estimation for a (with Marcus, Steven I.; Ucone, D.) Finite-dimensional nonlinear estimation for a class of systems in continuous and discrete time. Analysis and optimisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 387-406, Academic Press, London, 1980. (Martin Morf) 82e:93101 93E10

ttermeir, R. Komplexitätserfordernisse von Modellen zur optimalen Indexselektion für

Datenbanken. (English summary) Computing 20 (1978), no. 4, 279–290. (Author's summary) 825:68026 68B15 (68H05)

Mitton, Jacqueline See Heidmann, Jean, 82g-83032
Mitton, Simon See Heidmann, Jean, 82g-83032
Mittyagov, V. V. See Mitjugov, V. V.
Miu, Chuan Sheng See Miso, Quan Sheng
Miura, Robert M. (with Plant, Richard E.) Rotating waves in models of excitable media. Differential equations and applications in ecology, epidemics, and population (Claremont, Calif., 1981), pp. 247-257, Academic Press, New York, 1981. (See ons and applications in ecology, epidemics, and population problems 82m:92003) 92A09

Miura, Ryozo Spacing estimation of the asymptotic variance of trimmed rank estimators of n. Scand. J. Statist. 8 (1981), no. 1, 48-54. (P. K. Sen) 82j:62027

Miwa, Takuo Adjunction spaces of weak L-spaces. Math. Japon. 25 (1980), no. 6, 661–664. (Yuh-Ching Chen) 82e:54011 54B17 (54E18)

Miwa, Tetsuji (with Sato, Mikio; Jimbo, Michoj) Holonomic quantum fields. I. Publ. Res. Inst. Math. Sci. 14 (1978), no. 1, 223–267. (Authors' review (Zbl 383:35066)) 821:81030 81C99

Miyadera, Isao (with Kobayasi, Kazuo) On the strong convergence of the Cesaro means of contractions in Banach spaces. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 6, 245-249. (A. J. B. Potter) 82bc47074 47H10 (47H20)

Miyahara, H. (with Watanabe, Masanobu; Hasegawa, Toshiharu) Queueing analysis of integrated switched networks. Evolutions in computer commi pp. 481-486, North-Holland, Amsterdam, 1978. (See 82m:94001) 68C15 (68A05)

Miyahara, Voshio Infinite-dimensional Langevin equation and Fokker-Planck equation.

Nagoya Math. J. 81 (1981), 177-223. (Michèle Mastrangelo-Dehen) 82e:60127 60166 (60G15, 60H15, 60J65)

Miyakawa, Tetsuro The L^p approach to the Navier-Stokes equations with the Neumann boundary condition. Hiroshima Math. J. 10 (1980), no. 3, 517-537. (Tai Pinz Lin) ma Math. J. 10 (1980), no. 3, 517-537. (Tai Ping Liu) 82c:35067 35Q10 (76D05)

Miyake, Katsuya On the structure of the idèle group of an algebraic number field. Nagoya Math. J. 80 (1980), 117-127. (Helmut Koch) 82f:12013 12A55

On the general principal ideal theorem. Proc. Japan Acad. Ser. A Math. Sci. 56 (180), no. 4, 171–174. (From the text) 22k:12008 12A55 (12A65)

Miyake, Masatake On the Cauchy-Kowalewski theorem for general systems of equations. (Japanese) Súgaku 30 (1978), no. 4, 289–300. (Yúsaku Hamada) 82b:35004 35A10 (35G20)

On Cauchy-Kowalevski's theorem for general systems. Publ. Res. Inst. Math. Sci. 15 (1979), no. 2, 315-337. (Yūsaku Hamada) 82b:35005 35A10 (35A20)

Reduction to the first order systems of the Kowalevskian systems in the sense of

Volevič. Publ. Res. Inst. Math. Sci. 15 (1979), no. 2, 339-355. (Yûsaku Hamada) 35A10 (35A30) 82b:35006

Global and local Goursat problems in a class of holomorphic or partially holomorphic functions. J. Differential Equations 39 (1981), no. 3, 445-463. (Jorge Hounie) 821e35003 35A10

Miyake, Yutaka (with Murata, Su ake, Yutaka (with Murata, Susumu; Inaba, Takehiko; Ogawa, Hiroshi) Laminar flow in a helically coiled pipe. Bull. JSME 24 (1981), no. 188, 355-362. (Authors' summary) 82=76022 76D05

82e-760z2 76103
Miyama, Shoken M. Time evolution of pure gravitational waves. Progr. Theoret. Phys. 65
(1981), no. 3, 894-909. (R. A. d'Inverno) 82h:83028 83C35 (65P05, 83-04, 83C05)
Miyama, Tôru On the study of many-valued logics. I. Bull. Osaka Prefect. Tech. College 13
(1979), 47-57. (Editors) 82h:63052a 03B50 (03G20)

On the study of many-valued logics. II. Bull. (125-132. (Editors) 82h:03052b 03B50 (03G20) ill. Osaka Prefect. Tech. College 14 (1980),

Miyamoto, Izumi Finite groups with a standard subgroup isomorphic to U₄(2"). Japan. J. Math. (N.S.) 5 (1979), no. 1, 209–244. (Gary M. Seitz) 82i:20027 20D05

Standard subgroups of Chevalley type of rank 2 and characteristic 2. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 91-93, Proc. s. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (From the text)

Sympto. 7 are 120D10

pamoto, Sadaaki (with Nakamori, Yoshiteru; Ikeda, Saburo; Sawaragi, Yoshikazu)

Measurement optimization with sensitivity criteria for distributed parameter systems.

25 (1980) no. 5, 889-901. (Authors' summary) 82f:4904 IEEE Trans. Automat. Control 25 (1980), no. 5, 889-901. (Authors' summary) 82f:49046

- Miyamoto, Yoshio Optimum spacing for goodness of fit test based on sample quantiles.

 Essays in probability and statistics, pp. 475-483, Shinko Tsusho, Tokyo, 1976. (Author's Essays in probability and statistics, pp. 475–483, Shinko Tsusho, Tokyo, 1976. (Author's summary) 82e:62066 62G10

 Miyamura, Tetsuo Statistical analysis of reliability data in randomly censored life testing.
- (Japanese summary) J. Oper. Res. Soc. Japan 23 (1980), no. 3, 191-204. (G. K. Bhattacharyya) 82b:62129 62N05
- Miyanishi, Masayoshi p-cyclic coverings of the affine space. J. Algebra 63 (1980), no. 1, 279-284. (T. Kambayashi) 82c:14015 14E20

Regular subrings of a polynomial ring. Osaka J. Math. 17 (1980), no. 2, 329-338.

(with Sugie, Tohru) Generically rational polynomials. Osaka J. Math. 17 (1960), no. 2, 329-35.
(M. H. Gizzatullin) 82b:13003 13B25 (14J10, 14M20)
(with Sugie, Tohru) Generically rational polynomials. Osaka J. Math. 17 (1980), no. 2, 339-362. (M. H. Gizzatullin) 82b:14019 14E05 (14D05, 14M20)
Singularities of normal affine surfaces containing cylinderlike open sets. J. Algebra 68 (1981), no. 2, 268-275. (M. H. Gizzatullin) 82b:14035 14J17

(with Sugie, Tohru) On a projective plane curve whose complement has logarithmic Kodaira dimension -∞. Osaka J. Math. 18 (1981), no. 1, 1-11. (M. H. Gizatullin) 14E05 (14C20)

82k:14013 Miyano, Satoru k+1 heads are better than k for one-way multihead stack-counter tomata. Res. Inst. Fund. Inform. Sci. Res. Rep. No. 98 (1980), ii+7 pp. (From the

introduction) 82e:68091 68F10 (68D15)
Miyao, Takahiro (with Shapiro, Perry) Discrete choice and variable returns to scale. Internat. Econom. Rev. 22 (1981), no. 2, 257-273. (O. N. Bondareva) 82j:90092 90D35 (90A08)

Miyaoka, Reiko Some results on minimal surfaces with the Ricci condition. Minimal submanifolds and geodesics (Proc. Japan-United States Sem., Tokyo, 1977), pp. 121-142, North-Holland, Amsterdam, 1979. (Jonathan Sacks) 82c:53642 53C42

Minimal hypersurfaces in the space form with three principal curvatures. Math. 170 (1980), no. 2, 137-151. (Author's review (Zbl 411:53041)) 82m:53058 53C42

Miyaoka, Yoichi On the Mumford-Ramanujam vanishing theorem on a surface. Journées de Géometrie Algébrique d'Angers, Jullet 1979/Algebraic Geometry, Angers, 1979, pp. 239-247, Sijthoff & Noordhoff, Alphen aan den Rijn, 1980. (Miles Reid) 82i:14012

Miyashita, Yôichi On a Krull order. Osaka J. Math. 18 (1981), no. 1, 33-54. (J. C. Robson) 82h:16003

SZh:16003 16A15 (16A18)
 Miyata, Takehiko On the units of the integral group ring of a dihedral group. J. Math. Soc. Japan 32 (1980), no. 4, 703-708. (Hans Opolka) SZh:12007 12A57 (16A26, 20C10)
 (with Endô, Shizuo) Corrigenda: "On a classification of the function fields of algebraic tori" [Nagoya Math. J. 56 (1975), 85-104; MR 51 #458]. Nagoya Math. J. 79

(1980), 187-190. (T. Ono) 82e:12028 12F10 (14L15)

Miyatake, Tohru On the length of proofs in formal systems. Tsukuba J. Math. 4 (1980), no. 1, 115-125. (Richard Statman) 82h:03065 03F20

Miyazaki, Nabuyoshi (with Liu, Jane W. S.; Liu, Chung L.; Yamazaki, Haruaki) Performance evaluation of multiprocessor systems containing special purpose processors. (Polish and Russian summaries) Podstawy Sterowania 10 (1980), no. 3, 201-222. (Authors' summary) 82e:68047 68C40

Miyazaki, Shigeji One-machine scheduling problem with dual criteria. (Japanese summary) J. Oper. Res. Soc. Japan 24 (1981), no. 1, 37-51. (Author's sum 90B35

Miyazawa, Masakiyo Note on Palm measures in the intensity conservation law and inversion formula in PMP and their applications. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 12 (1981), no. 2, 281-293. (Dietrich Stoyan) 82g:60052 60G10 (60K25)

Miyazawa, Teturo (with Adati, Tyuzi) Hypersurfaces immersed in an almost produ Riemannian manifold. II. TRU Math. 14 (1978), no. 2, 17-26. (V. C. Gupta) 82i:53030 53C15 (53C40)

Hypersurfaces immersed in an almost product Riemannian manifold. Tensor (N.S.) 33 (1979), no. 1, 114-116. (V. C. Gupta) 82i:53029 53C15 (53C40)

Invariant submanifolds of an almost paracontact Riemannian manifold. Tensor (N.S.) 34 (1980), no. 2, 205-210. (R. Roşca) 82e:53083 53C40 (53C15)
(with Adati, Tyuzi) An almost paracontact Riemannian manifold with a structure of

the concircular type. TRU Math. 16 (1980), no. 1, 31-39. (G. R. Jensen) 82b:53024

(with Adati, Tyuzi) An almost paracontact Riemannian manifold with an EP-Sasakian structure. TRU Math. 16 (1980), no. 2, 63-74. (R. Roşca) 82h:53063 53C25

Miyazima, S. (with Thorpe, M. F.) Thermodynamics of dilute XY quantum chains. Phys. Rev. B (3) 24 (1981), no. 11, 6686-6693. (Authors' summary) 82k:82056 (82A25)

Miyoshi, Tetsuhiko Elastic-plastic vibration of a rod. Publ. Res. Inst. Math. Sci. 16 (1980), no. 2, 377-392 (From the introduction) 82g-73016 73D05 (34C15, 73F99) Mizel, Victor J. (with Berger, Marc A.) Volterra equations with Itô integrals. I. J. Integral Equations 2 (1980), no. 3, 187-245. (Seppo Heikkila) 82e-60100a 60H20 (45D05)

(with Berger, Marc A.) Volterra equations with Itô integrals. II. J. Integral Equations 2 (1980), no. 4, 319–337. (Seppo Heikkilä) 82e:60100b 60H20 (45D05) (with Marcus, Moshe) Semilinear hereditary hyperbolic systems with nonlocal boundary conditions. I. J. Math. Anal. Appl. 76 (1980), no. 2, 440–475. (Sergiu

Aizicovici) 82f:35120a 351.50

with Marcus, Mosho Semilinear hereditary hyperbolic systems with nonlocal andary conditions. II. J. Math. Anal. Appl. 77 (1980), no. 1, 1–19. (Sergiu Aizicovici) 35L50 (35R10, 92A15)

Mizin, A. G. (with Gerbsommer, L. E.; Krugljakov, L. Z.) Complexes of multidim planes. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 5, 1039-1042. (Vladislav Goldberg) 82h:53018 53A20

Mizobuchi, Yutaka (with Kuratsuji, Hiroshi) A semiclassical treatment of path integrals for the spin system. J. Math. Phys. 22 (1981), no. 4, 757-764. (Andrzej Zardecki) 82j:81027

(with Kuratsuji, Hiroshi) Semiclassical quantization of a spin system by coherent state path integrals. Phys. Lett. A 82 (1981), no. 6, 279-284. (Takashi Miura) 82f:81026 81C35 (58G40, 81D99)

ta, Sigeru Sur l'unicité dans le problème de Cauchy. Séminaire Goulaouic-Schwartz,

1979-1980 (French), Exp. No. 6 bis, 8 pp., École Polytech., Palaiseau, 1980. (C. Wagschal) 82j:35002 35A05

On some Schrödinger type equations. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 2, 81–84. (P. A. Mišnaevskii) 82g;35032 35J10 (81C05) Mizokami, Takemi Cardinal functions on hyperspaces. Colloq. Math. 41 (1979), no. 2, 201–205. (R. Hodel) 82f;54007 54A25 (54B20)

On Nagata's problem for paracompact o-metric spaces. Topology Appl. 11 (1980), no. 2, 211-221. (Author's summary) 82i:54063 54F45

Dimension of special µ-spaces. Tsukuba J. Math. 4 (1980), no. 2, 221-240. (R. Engelking) 821:54064 54F45

On the dimension of cubic µ-spaces. Proc. Amer. Math. Soc. 82 (1981), no. 2, -298. (K. Nagami) 82e:54042 54F45 291-298. (K. Nagami) 82e:54042

On the dimension of µ-spaces. Proc. Amer. Math. Soc. 83 (1981), no. 1, 195-200. (M. G. Charalambous) 82h:54061 54F45

G. Charaiambous) San-Swoii 341-34 Mizrahi, Maurice M. On the WKB approximation to the propagator for arbitrary Hamiltonians. J. Math. Phys. 22 (1981), no. 1, 102-107. (André Hautot) 82h:58037 58F05 (34E20, 58G15, 81C15)

Correspondence rules and path integrals. (Italian and Russian summaries) Nuovo Cimento B (11) 61 (1981), no. 1, 81-98. (Author's summary) 82f:81027 81C35

Mizrahi, S. S. (with Brinati, J. R.) Quantum friction in the c-number picture: the damped harmonic oscillator. J. Math. Phys. 21 (1980), no. 8, 2154-2158. (K. Kumar) 82f:82068 82A70 (81D99, 81N05)

Mizuhara, Akira Three-dimer onal Hopf manifolds. (Japanese sun Sci. Univ. Sangio Kyotien. Natur. Sci. Ser. No. 8 (1978), 5-21. (W. D. Neumann) 82i:32028 32C10 (32M99)

Left invariant, complete affine structures on Lie groups. Tensor (N.S.) 34 (1980), no. 3, 295-296. (V. V. Trofimov) 82j:53063 53C10

Mo. 3, 295–296. (V. V. Ironmov) 843:39003 534:10 Mizukami, Koichi Decision making with partial information in a pursuit-evasion game. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 439–442, IEEE,

New York, 1979. (See 82e:94002) 90D26 Mizukami, M. (with Inose, H.) Rational equivalence of 0-cycles on some surfaces of general type with p_g =0. Math. Ann. 244 (1979), no. 3, 205–217. (Fabrizio Catanese) 82e:14009

zumoto, Masaharu (with Fukami, Satoru; Tanaka, Kokichi) On fuzzy reasoning. Systems-Comput.-Controls 9 (1978), no. 4, 44-53 (1980). (Editors) 82g:03039a Mizu

(with Fukami, Satoru; Tanaka, Kokichi) Some considerations on fuzzy conditional inference. Fuzzy Sets and Systems 4 (1980), no. 3, 243-273. (Editors) 82g:03039b 03B52 (03E72, 94D05)

(with Tanaka, Kokichi) Fuzzy sets and their operations

(1981), no. 1, 30–48. (John Hooley) 82k:03088 03E72 (94D05)

Mizuno, Kenzo The conjugate classes of unipotent elements of the Chevalley groups E₇ and Tokyo J. Math. 3 (1980), no. 2, 391-461. (James F. Hurley) 82m:20046 (20G40)

Mizuta, Yoshihiro On the behavior at infinity of Green potentials in a half space Hiroshima Math. J. 10 (1980), no. 3, 607-613. (H. L. Jackson) 82b:31011 (31C15)

(with Bui Huy Qui) On the existence of harmonic functions in L.P. J. Math. Soc. Japan 33 (1981), no. 3, 505-507. (D. H. Armitage) 82h:31005 31B05 (30E99)

Mjasnikov, A. G. Singular integral operators with non-Carleman shift and piecewise continuous coefficients. (Russian) Dokl. Akad. Nauk SSSR 245 (1979), no. 6, 1304-1307. (Ju. I. Karlovič) 82e:47069 47G05 (45E05, 47A53)

(with Sazonov, L. I.) On singular operators with a non-Carleman shift and their symbols. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1076-1080. (I. A. Džaršeisvili) 82a:47034 47B38 (47G05)

(with Sazonov, L. I.) Singular integral operators with non-Carleman shift. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 3, 22-31. (Ju. I. Karlovič) 82d:47051 47G05 (47B35)

Mjasnikov, V. P. (with Novikov, V. L.; Sazonov, Ju. V.) A direct problem of salt dome modeling. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1105-1107. 82b:86007 86A99 (35O10, 49D30)

Mjelde, K. M. Improvement of a method of the evaluation of allocations of resources to activities. European J. Oper. Res. 8 (1981), no. 1, 86-87. (Author's summary) 82h:90036

Properties of optimal allocations of resources according to a fractional objective. J. Oper. Res. Soc. 32 (1981), no. 5, 405-408. (Author's summary) 824:90051

ness, Eric (with Bender, Carl M.; Cooper, Fred; Guralnik, G. S.; Rose, Harvey A.; Sharp, David H.) A novel approach to the solution of boundary-layer problems. Adv. in Appl. Math. 1 (1980), no. 1, 22-36. (John P. Coleman) 82c:65050 65L10

Mkrtčjan, E. S. Reconstruction of holomorphic functions from their values on certain sets of uniqueness. (Russian) Some problems of multidimensional complex analysis (Russian), pp. 95-114, 266, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Fiz., Krasnoyarsk, 1980. (P. Agranovič) 82k:32006 32A10

(Russian) Neurobionics and mathematical modeling of living processes (Russian), pp. 61–68, 90, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. (Author's summary) 92A25 (05C35) R29:92040

Mkrtčjan, M. A. Reconstruction of a system of algebraic equations from simple roots. (Russian) Some problems of multidimensional complex analysis (Russian), pp. 115-122, 266-267, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Fiz., Krasnoyarsk, 1980. (Peter Giblin) 82h:14034 14M10

A problem of Young. (Russian) Some problems of multidimensional complex analysis m), pp. 237-242, 274, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Fiz., Krasnoyarsk, 1980. (M. S. Rangachari) 82j:30007 30C10 (30C15)

Mkrtčjan, R. Z. (with Aleksandrjan, R. A.) An analogue of Plancherel's theorem and the qualitative character of the spectrum of a selfadjoint operator. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 205–209, 255. "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (F.-H. Vasilescu) 82647027 47B2

Mkrtějan, S. M. Computation of the Banzhaf index for characteristic functions. (Russian. Lithuanian and English summaries) Mat. Metody v Social, Nauk. - Trudy Sem. Processy Optimal. Upravlenija II Sekcija No. 13 (1980), 20-31, 82. (Author's summary) 82m:90016 90A08 (90D45)

Mkrtčjan, S. T. (with Klebanov, L. B.) Estimate of the closeness of distributions in terms of identical moments. (Russian) Problems of stability of stochastic models (Proc. Fourth All-Union Sem., Palanga, 1979) (Russian), pp. 64-72, 124, "Vsesojuz. Nauč.-Issled. Inst. Sistem. Issled.", Moscow, 1980. (B. Jesiak) 82g:60029 60E05

Stability of the characterization of distributions and some characteristic properties, in a weak sense, of the normal distribution. (Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 1, 165-171. (B. Jesiak) 82g:62035 62E20 (60E10)

Mkrtějan, Senik See Mkrtějan, S. M. Mkrtějan, P. Z. Some properties of generalized solutions of second-order degenerate quasilinear elliptic equations. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 5, 292-296. (Author's introduction) 82i:35076 35J70

On the solvability of the Dirichlet problem for a class of degenerate quasilinear ations of elliptic type. (Russian) Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 102 (1980), 181-189, 196. (Johannes Elschner) 82i:35077 35J70

Mladenov, K. Eigenforms in Beck's problem. (Bulgarian. Russian and English summaries) Teoret. Prilož. Meh. 12 (1981), no. 2, 5, 9, 87-96. (Author's summary) 82i:73032 73K05 (73H05)

Mlak, W. (with Szafraniec, Franciszek Hugon) Dilations with operator multipliers. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Błażejewko, 1979), pp. 208-214, Lecture Notes in Math., 828, Springer, Berlin, 1980. (Boris Pavlov) 47A20 82i:47010

(with Weron, Aleksander) Dilations of Banach space operator valued functions. Ann. Polon. Math. 38 (1980), no. 3, 295-303. (Ju. I. Ljubič) 82b:47003 (47D05)

Mlček, J. Monotonic valuations and valuations of triads of higher types. Comment. Math. Univ. Carolin. 22 (1981), no. 2, 377-398. (P. Štěpánek) 82i:03064 03E70

Mlejnek, H.-P. (with Argyris, J. H.; Dunne, P. C.; Johnsen, Th. L.) A new iterative solution for structures and continua with very stiff or rigid parts. Comput. Methods Appl. Mech. Engrg. 24 (1980), no. 2, 215-248. (Authors' summary) 82k:73052 73K25 (65N30, 73K20)

Mlitz, Rainer (with Márki, L.) Free monoids and strict radicals. Studia Sci. Math. Hungar. 13 (1978), no. 1-2, 225-228 (1981). (J. K. Luedeman) 82j:20121 20M11 (20M05) Radicals and semisimple classes of Ω-groups. Proc. Edinburgh Math. Soc. (2) 23

 (1980), no. 1, 37-41. (R. Weigandt) 82e:17005 17A65 (16A21, 16A76)
 Mlynski, D. A. (with Engel, A. E.) Maximal partitioning of graphs. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 84-87, IEEE, New York, 1979. (See 82e:94002) 94C15

(with Dorn, T.) Multilayer layout planarization using Boolean algebra. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 462-465, IEEE, New 94C10 York, 1979. (See 82e:94002)

Mo, Shao Kui Notes on axiomatic set theory. (Chinese. English summary) J. Huazhong Inst. Tech. 7 (1979), no. 3, 1, 8-14. (Author's summary) 82f:03042 03E30 (03E70) (with Ye, Da Xing) On recursion schemas defining operators. (Chinese. English nary) J. Huazhong Inst. Tech. 7 (1979), no. 4, 7, 1-9. (Authors' sum 03D20 (68D99)

(with Gao, Heng Shan) The decidability of the No-validity of formulas in the monadic predicate calculus with enumerative quantifiers, and its applications. (Chinese)

Kexue Tongbao 24 (1979), no. 3, 101-102. (Authors' introduction) 825:03010 03B2: 03B25 (03B15, 03B50)

On the nature of higher-order functions and operators. (Chinese. English su Nanjing Daxue Xuebao 1980, no. 1, 1-10. (Editors) 82i:03016 03B15

Mo, Wen Chuan Countable homogeneous Markov processes with identical hitting

distributions. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 2, 245-254. (Author's summary) 82f:60166 60J25 al-Moajil, Abdullah H. See Al-Moajil, Abdullah H.

niel S. The q-gamma function for x<0. Aequationes Math. 21 (1980), no. 2-3, 179-191. (G. Gasper) 82j:33001 33A15 (33A70) The q-analogue of the Laguerre polynomials. J. Math. Anal. Appl. 81 (1981), no. 1,

33A65 20-47. (R. A. Askey) 82i:33018

ats, Richard K. (with Silverstone, Harris J.) Practical recursive solution of degenerate Rayleigh-Schrödinger perturbation theory and application to high-order calculations of the Zeeman effect in hydrogen. *Phys. Rev. A* (3) 23 (1981), no. 4, 1645–1654. (Authors' summary) 82e:81012 81C12 (81G45)

Mobbs, S. D. Some vorticity theorems and conservation laws for nonbarotropic fluids. J. Fluid Mech. 108 (1981), 475-483. (Author's summary) 82i:76021 76C05

canescu, Aurica Renewal theory application to the estimation of future requirements for replacing a system elements. Proceedings of the International Symposium on Applications of Mathematics in System Theory (Univ. Braşov, Braşov, 1978), II, pp. 29-36, Univ. Braşov, Braşov, 1979. (Marian Zalcman) 82h:60167 60K05 (90B25)

Mocanu, Gh. Fonctionnelles relativement multiplicatives et le spectre. Ann. Fac. Sci. Univ Nat. Zaïre (Kinshasa) Sect. Math.-Phys. 5 (1979), no. 1-2, 1-27. (I. Glicksberg) 82i:46077 46H30

m, Petru T. Starlikeness and convexity for nonanalytic functions in the unit disc. Mathematica (Chij) 22(45) (1980), no. 1, 77-83. (W. C. Royster) 82i:30016 (with Al-Amiri, Hassoon S.) Certain sufficient conditions for univalency of the class J. Math. Anal. Appl. 80 (1981), no. 2, 387-392. (Evelyn M. Silvia) 82g:30033 30C55

(with Al-Amiri, Hassoon S.) Spirallike nonanalytic functions. Proc. Amer. Math. 1: 82 (1981), no. 1, 61–65. (Olga Bereśniewicz-Rajca) 82j:30028 30C99 (30C45) Soc. 82 (1981), no. 1, 61-65. (Olga Bereśniewicz-Rajca) 82j:30028 (with Miller, Sanford S.) On classes of functions subordinate to the Koebe function Rev. Roumaine Math. Pures Appl. 26 (1981), no. 1, 95-99. (T. H. MacGregor) 82i:30033

30C80 (with Teodorescu, Ion D.) Sur les variétés différentiables à caractéristiques droites. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 7, 985-990. (Luis A. Cordero) 82k:53033 53B05

A mathematical model of human walking. Some mathematical question

biology (Toronto, Ont., 1981), pp. 193-214, Lectures Math. Life Sci., 14, Amer. Math. Soc., Providence, R.I., 1981. (See 82j-92002) 92A09 (76B99) ek, M. S. A topological degree for orbits connecting critical points of autonomous systems. J. Differential Equations 38 (1980), no. 2, 176-191. (J. Smoller) 82f:35126 systems. J. Di 35L67 (58C30)

Reaf, JiFi The completion of Prüfer rings. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 863–867, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (Melvin Henriksen) 82:13006 13F05 (13J10)

On o-ideals of groups of divisibility. With a loose Russian Math. J. 31(106) (1981), no. 3, 390-403. (Daniel D. Anderson) 82m:13002 (06F20, 13A18, 16A08)

(total), 13rt (s), 10rt (s), 10rt (s), 13rt (s

On Bayesian methods for seeking the extremal point. Stochastic programming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 287–299, Academic Press, London, 1980. (Lawrence D. Stone) 82c:90094 90C39 (65K99, 90B40)

Sufficient conditions for the convergence of one-dimensional Bayesian metho the global minimum of continuous functions (Russian. Lithuanian and English summaries) Teor. Optimal. Rešenii—Trudy Sem. Processy Optimal. Upravi Sekcija No. 6 (1980), 9–17, 151. (Ĭ. M. Stojanov) 82h:93057 93E99 (60J99, 93E99 (60J99, 90C15)

dak, Susanta (with Bhowmik, Kanti Bhusan; Bhattacharjee, Pramode Ranjan; Thakur, Ranajit Kishore) A simpler method for minimization of switching functions. Internat. J. u. Math. 10 (1981/82), no. 1, 77-89. (Authors' summary) 82m:94054 94C10

odi, G. C. Ratio of products of the generalized beta variates. (Spanish summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 72 (1978), no. 2, 241-247. (Author's mary) 824:62037 62E15

ller, Karl-Heinz (with Geise, Gerhard) Zusan nmenhang zwischen ebenen, sphärischen und räumlichen Koppelgetrieben. Wiss. Z. Tech. Univ. Dresden 29 (1980), no. 3-4, 843-848. (Authors' summary) 32g:70003 70B15 (51M15) dugno, Marco On the structure of classical kinematics. I. Absolute kinematics. Riv.

Mat. Univ. Parma (4) 5 (1979), part 1, 249-264 (1980). (J. D. Zund) 82m:70001a 70B05 (58A17, 70D05)

On the structure of classical kinematics. II. Frames of reference. Observed kinematics. Riv. Mat. Univ. Parma (4) 6 (1980), 135-149 (1981). (J. D. Zund) 82m:70001b 70B05 (53A17, 70D05) 82m:70001b

ek, G. *On martingales and recursive optimal state estimation. NLR TR, 80058. Nationaal Lucht- en Ruimtevaartlaboratorium, Amsterdam, 1980. 89 pp. (From the text) um, Amsterdam, 1980. 89 pp. (From the text) 60G35 (60G42, 93E11)

eller, Christopher (with Campbell, Paul J.) Secondary Fibonacci sequences. A collection

of manuscripts related to the Fibonacci sequence, pp. 1–16, Fibonacci Assoc., Santa Clara, Calif., 1980. (Neville Robbins) 82;10014 10A35 eschberger, M. L. (with David, Herbert Aron) *The theory of competing risks.

Griffin's Statistical Monograph Series, 39. Macmillan Co., New York; Charles Griffin & Co., Ltd., London, 1978. vii + 103 pp. ISBN 0-02-843690-3 (Bruce W. Turnbull) 82c:62134 62N05 (62P05)

van Moeseke, Paul (with LeBlanc, Gérald) Portfolios with reserve coefficient. nica 31 (1979), no. 1, 103-118. (Karl Shell) 82b:90087 90C20 (90A09) Stochastic portfolio programming: the game solution. Stochastic programming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 497–505, Academic Press, London, 1980. (Andrew P. Sage) 824:90018 90A09 r-Moéz, Ali R. See Amir-Moéz, Ali R. 90A09 (90C15)

Moffat, Alistair (with Takaoka, Tadao) An $O(n^2 \log n \log \log n)$ expected time algorithm for the all shortest distance problem. Mathematical foundations of computer science, 1980 (Proc. Ninth Sympos., Rydzyna, 1980), pp. 643-655, Lecture Notes in Comput. Sci., 88,

Springer, Berlin, 1980. (Authors' summary) 82a:68087 68C25 (68E10)

Moffat, D. (with Lal, M.) Picard's successive approximation for two-point boundary value problems. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics proteins. Frocedings of the Tellin Frantion Conference on Francisco and Computing, Vol. II (Winnipeg, Man., 1980). Congr. Numer. 31 (1981), 121–127. (From the introduction) 82mc65073 65L10

Moffat, J. W. (with Mann, R. B.) Gravitational synchrotron radiation in the metric of a new theory of gravitation. (French summary) Canad. J. Phys. 58 (1980), no. 11, 1595-1598. (Richard Pavelle) 824:83057 83E10 (83C30)

Theory of gauge supersymmetry in superspace. Lett. Math. Phys. 4 (1980), no. 4, 323-327. (W. Cox) 82d:83064 83E99 (83D05)

Experimental tests of a new theory of gravitation. Canad. J. Phys. 59 (1981), no. 2, 283-288. (Author's summary) 82h:83007 83B05 (83D05)

Erratum: "Experimental tests of a new theory of gravitation" [Canad. J. Phys. 59] (1981), no. 2, 283-288; MR 82b:83007]. Canad. J. Phys. 59 (1981), no. 9, 1289. (Editors)

83B05 (83D05) (with Mann, R. B.) Linear approximation in a new theory of gravity. J. Phys. A 14

(1981), no. 9, 2367-2376. (Authors' summary) 82h:83058 83D05 (with Taylor, John G.) Prevention of gravitational collapse. Phys. Lett. B 99 (1981), no. 5, 396–398. (Authors' summary) 82b:83062 83D05

Gauge invariance and string interactions in a generalized theory of gravitation. Phys.

Rev. D (3) 23 (1981), no. 12, 2870-2874. (Author's summary) 82f:83078 Moffatt, H. K. Some developments in the theory of turbulence. 25th anniversary issue: editorial reflections on the development of fluid mechanics. J. Fluid Mech. 106 (1981), 27–47. (See 82g:76002) 76F99 (58F14, 58F15). See also Special issue: Editorial reflections on the development of fluid mechanics,

gami, Isao Note on commutativity of rings. Proceedings of the 14th Symposium on Ring Theory (Matsumoto, 1981), pp. 109–115, Okayama Univ., Okayama, 1981. (From the 16A70

gha, Gyan V. Estimation du gain d'un filtre stationnaire de Kalman par l'intermédiaire du modèle ARMA associé. (English summary) Rev. CETHEDEC No. 63 (1980), 107–131. (Author's summary) 82a:93061 93E11 (62M20) ri-Moghadam, M. See Nouri-Moghadam, M.

ad Reza R. The Baer-invariant and the direct limit. Monatsh. Math.

90 (1980), no. 1, 37-43. (Carol Tretkoff) 82b:20043 20E10

Mogilevskii, M. G. Order relations on symmetric semigroups of transformations and on their homomorphic images. Semigroup Forum 19 (1980), no. 4, 283-305. (From the preface) 82k:06019 06F05 (20M20)

ewer, Sidney (with Dresher, Melvin) Statistical acceptance sampling in a competitive environment. Oper. Res. 28 (1980), no. 3, part 1, 503-511. (Andrew P. Sage) 82d:90048 90B05 (68C40)

Mogul'skii, A. A. (with Borovkov, A. A.) Probabilities of large deviations in topological spaces. II. (Russian) Sibirsk. Mat. Z. 21 (1980), no. 5, 12-26, 189. (S. A. Book) 60F10 (60D05)

Mogyoródi, J. Duality of the maximal inequality for nonnegative submartingales and of the Convexity inequality of Burkholder. The First Pannonian Symposium on Mathematical Statistics (Bad Tatzmanusdorf, 1979), pp. 165–173, Lecture Notes in Statist., 8, Springer, New York, 1981. (Allan Gut) 82h:60083 60G42 (60E15)

Moh, Shaw Kwei See Mo, Shao Kui Moh, T. T. On the concept of approximate roots for algebra. J. Algebra 65 (1980), no. 2, 347-360. (Michel Waldschmidt) 82b:13004 13B25 (13F20)

On the bound for the Defranchis-Severi theorem. Michigan Math. J. 28 (1981), no. 2, 153-155. (R. F. Lax) 82g:14030 14H05 (12F99)

On a certain group structure for polynomials. Proc. Amer. Math. Soc. 82 (1981), no. 2, 183–187. (W.-D. Geyer) 82e:12025 12D05 (12D10) 12D05 (12D10)

Mohamed, I. H. (with Fahmy, Moustafa M.) Comments on: "A new lower bound on the cost of optimal regulators" [IEEE Trans. Automat. Control 24 (1979), no. 2, 353-354; MR 80c:93084a] by G. Langholz. IEEE Trans. Automat. Control 25 (1980), no. 4, 857-858. (Authors' summary) 82a:49038 49D30

hamed, Saad (with Singh, Surject) Decomposition of σ-injective modules. Comm. Algebra 9 (1981), no. 6, 601-611. (S. A. Paramhans) 82h:16017 16A52 (18Ε40) and, Q. G. (with Aziz, Abdul) Growth of polynomials with zeros outside a circle.

Proc. Amer. Math. Soc. 81 (1981), no. 4, 549-553. (Z. Rubinstein) 82c:30005

ed, Leila el'-Saied The Sufficient book of al-Karaji. (Russian. English su History and methodology of the natural sciences, No. XX (Russian), pp. 111–121, Moskov.

Gos. Univ., Moscow, 1978. (E. M. Bruins) 82i:01012 01A30

Mohan, C. (with Bani Tahir, Muzahim) A least-square algorithm for nonlinear optimization

problems. Opsearch 17 (1980), no. 2-3, 81-92. (Authors' summary) 82e:90090 in, Kumar N. See Szpiro, L., 82d:14017

Mohan, Man (with Sharma, Bhu Dev) Exact variance of an MLE of "useful" information. (French and Italian summaries) Statistica (Bologna) 39 (1979), no. 4, 633-645. (S. Guiaşu) 82i:94011 94A17

Mohan, N. R. A criterion for connectedness in two-associate class PBIB designs. J. Statist. Plann. Inference 5 (1981), no. 2, 211–212. (Author's summary) 82h:62128 62K15

A note on the construction of certain BIB designs. Discrete Math. 29 (1980), no. 2, 209-211. (Sanpei Kageyama) 82a:05017 05B05 (05B20) A note: certain arrangement with a prime. Math. Ed. (Siwan) 15 (1981), no. 1, B4.

(Author's summary) 82k:05036a 05B30 See also Deshpande, M. N., 82k:05036b

Mohan, S. R. Degenerate complementary cones induced by a K_0 -matrix. Math. Programming 20 (1981), no. 1, 103-109. (Ikuyo Kaneko) 82a:90169

rama Mohana Rao, M. See Rama Mohana Rao, M. Mohandas, K. P. (with Mahalanabis, A. K.; Prasad, Surendra) A fast optimal deconvolution algorithm for real seismic data using Kalman predictor model. IEEE Trans. Geosci. Remote Sensing 19 (1981), no. 4, 216-221. (Authors' summary) 82j:86003 86A15 (94A05)

Mohanty, S. G. (with Handa, B. R.) On q-binomial coefficients and some statistical applications. SIAM J. Math. Anal. 11 (1980), no. 6, 1027-1035. (A. N. Philippou) 82d:60021 60C05 (62E99)

Mohanty, S. P. On the Diophantine equation $x^3+y+1-xyz=0$. Math. Student 45 (1977), 10B10 no. 4, 13-16 (1979). (Maurice Craig) 82c:10019

The number of primes is infinite. Bull. Math. Assoc. India 11 (1979), no. 1-2, 62-68. (Author's introduction) 82f:10001 10-01

A class of Diophantine equations. A collection of manuscripts related to the Fibonacci nce, pp. 186-189, Fibonacci Assoc., Santa Clara, Calif., 1980. (Takashi Agoh) 10B10 (12A40)

Integer solutions in arithmetic progression for $y^2 - k = x^3$. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 3-4, 261-265 (1981). (E. L. Cohen) 82f:10020 10B10

(with Rao, Daljit) A family of hypo-Hamiltonian generalized prisms. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1554-1560. (G. Chartrand) 82m:05068 05C45

(with Rao, Daljit) Different shortest permutation strings T(n) for n=3,4,5,6 and 7. J. Combin. Inform. System Sci. 5 (1980), no. 2, 80-87. (Wayne M. Dymacek) 82g:05004

(with Shukla, S. K.; Sridharan, M. R.) Stability of strongly regular graphs. Bull. Austral. Math. Soc. 23 (1981), no. 1, 139-142. (J. J. Seidel) 82m:05053 05C25

Mohanty, U. (with Berkean, E.; Cooper, L. N.) The Bethe ansatz, periodic boundary ditions and relations between various models. Phys. Lett. A 81 (1981), no. 2-3, 172-174. (Authors' summary) 82a:82010 82A15 (81E10)

Mohapatra, P. C. (with Das, Gokulananda) Necessary and sufficient conditions for absolute Nörlund summability of Fourier series. *Proc. London Math. Soc.* (3) 41 (1980), no. 2, 217-253. (H. P. Dikshit) 82e:42007 42A28 (40G05, 42A24)

apatra, Ram Narayan (with Sharma, Ambikeshwar) Convergence of discrete spline interpolants without mesh ratio restrictions. Indian J. Math. 20 (1978), no. 2, 161-171. (Philip W. Smith) 82i:41013 41A15 (41A25)

(with Johnson, P. D., Jr.) Inequalities involving infinite matrices with nonnegative entries. General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978) pp. 55-80, Birkhäuser, Basel, 1980. (G. M. Petersen) 82i:40012 40J05 (26D15,

46A45) (with Johnson, P. D., Jr.) Problems in the theory of infinite matrices. General alities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978), pp. 451-452, Birkhäuser, 1, 1980. (E. F. Beckenbach) 82i:40013 40J05 (15A45, 26D15) Basel, 1980. (E. F. Beckenbach) 82i:40013

Remarks on a generalization of the Schur-Hardy inequality. With a note by F. Fehér. General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978),

pp. 459-461, Birkhäuser, Basel, 1980. (L. Losonczi) 82d:26011

(with Johnson, P. D., Jr.) Inequalities involving lower-triangular matrices.

London Math. Soc. (3) 41 (1980), no. 1, 83-137. (G. M. Petersen) 82b:26021

- Mohar, B. (with Džonova-Jerman-Blažič, B.; Trinajstić, N.) Algorithms for symbolic computation in chemistry: computing the acyclic polynomial of molecular graph. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. III, pp. 395-403, Reidel, Dordrecht, 1980. (Authors' summary) 82m:92093 92A40 (05C99, 68C20)
- sharir, P. S. A note on a class of parity difference sets. J. Combin. Inform. System Sci. 5 (1980), no. 2, 88-90. (Vera Piess) 82g:94022 94B25 (05B10, 05B30) (with Varma, S. K.) A new class of orthonormal transforms. IEEE Trans. Acoust.

Speech Signal Process. 29 (1981), no. 3, part 1, 452-454. (Authors' summary) 82e:94017

skamp, R. (with Korsch, H. J.) A note on multidimensional WKB wavefunctions: local and global semiclassical approximations. Phys. Lett. A 67 (1978), no. 2, 110-112. (Authors' summary) 82b:81043 81C99

(with Korsch, H. J.; Laurent, H.) Milne's differential equation and numerical solutions of the Schrödinger equation. II. Complex energy resonance states. J. Phys. B 15 (1982), no. 1, 1-15. (Authors' summary) 82m:81020b 81C12 (65P05, 81C05, 81F05)

Mohler, Lee (with Campbell, William H.; Vaughan, Loy O.) A Cook-Ingram-type

characterization of indecomposability for tree-like continua. Proceedings of the 1977 Topology Conference (Louisiana State Univ., Baton Rouge, La., 1977), II. Topology Proc. 2 (1977), no. 2, 383-399 (1978). (From the text) 82i:54057 54F20

Mohler, Ronald R. (with Kolodziej, Wojciech J.) An overview of bilinear system theory and applications. IEEE Trans. Systems Man Cybernet. 10 (1980), no. 10, 683-688. (Authors' summary) 82g:93028 93C10 (92-02, 93B05, 93B30)

(with Kolodziej, Wojciech J.) An overview of stochastic bilinear control processes. IEEE Trans. Systems Man Cybernet. 10 (1980), no. 12, 913-918. (Authors' summary) 93E03 (92A15)

(with Kolodziej, Wojciech J.) Optimal control of a class of nonlinear stochastic systems. IEEE Trans. Automat. Control 26 (1981), no. 5, 1048-1054. (Authors' summary) 93E20

(with Hsu, Chin Shung) On the inverse of a special class of bilinear systems. Trans. ASME Ser. G J. Dynamic Systems Measurement Control 103 (1981), no. 2, 103-105. (Authors' summary) 82h:93017 93B15 (22E05, 92A07)

Mohon'ko, A. Z. Estimates of the growth of branches of algebroid functions and their Nevanlinna characteristics. (Russian) Teor. Funkcii Funkcional. Anal. i Priložen. No. 33 Nevaninna characteristics. (Kussian) Feor. Funkcii Funkcional. Anal. i Fritoken. 180. 50 (1980), 99–107, iii. (I. N. Baker) 82j:30041a 30035 (30101) A field of algebroidal functions and estimates of their Nevanlinna characteristics.

(Russian) Sibirsk. Mat. Ž. 22 (1981), no. 3, 214-218, 239. (V. P. Petrenko) 82m:30029

Estimates of the growth of branches of algebroid functions and their Nevanlinna characteristics. II. Applications. (Russian) Teor. Funkcii Funkcional. Anal. i Priložen. No. 35 (1981), 69-73, v. (I. N. Baker) 82j:30041b 30D35 (30D15)

Application of a result of Clunie and Hayman to first-order differential equation (Russian) Teor. Funkcii Funkcional. Anal. i Priložen. No. 35 (1981), 74-75, v. (Shlomo 34A20 (30D20) Strelitz) 82k:34007

Mohr, R. (with Haton, J. P.) Utilisation de la programmation dynamique en reconnaissance des formes et traitement d'images. Automatic pattern recognition and perception by a computer (IRIA Sem., Rocquencourt, 1978/1979) (French), pp. 147–157, INRIA, Rocquencourt, 1980. (Authors' introduction) 82h68117 68G10 (90C50)

Mohr, Ulrike Saturated multi-photon-absorption of a nonmonochromatic quantized field. (German summary) Ann. Physik (7) 38 (1981), no. 2, 143-165. (Author's summary)

Mohri, Akira (with Fukata, Satoru; Takata, Masaru) Determination of the feedback gains of sampled-data linear systems with integral control using time-weighted quadratic performance indices. *Internat. J. Control* 34 (1981), no. 4, 765-779. (Authors' summary) 93C05

Möhring, K. (with Smilansky, U.) Semiclassical evaluation of inclusive transition probabilities. J. Chem. Phys. 74 (1981), no. 8, 4509-4518. (Authors' summary) 82f:81028 81C35 (80A30)

Möhring, W. On flows with heat addition in Laval nozzles. Recent developments theoretical and experimental fluid mechanics, pp. 179-185, Springer, Berlin, 1979. (See 76N99 82c:76004)

en, A. On the eigenvalue problem of the Laplacian operator. Proceedings of the Ninth Manitoba Conference on Numerical Mathematics and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 315-322, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (Ranbir S. Sandhu) 82a:49051 49G10 (65N25)

le Moing, Patrick See Le Moing, Patrick nko, B. D. Geometric interpretation of neutral difference schemes. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 85, 23 pp. (Author's summary) 82b:76025 76D05 (65P05)

(with Levitan, Ju. L.; Priimak, V. G.; Roždestvenskii, B. L.; Sidorova, V. K.) Methods of numerical modeling of turbulent flow of a fluid in a channel (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 3, 737-747, 812. (Authors' summary) 82h:76026 76F99 (65P05, 76A60)

Moiseev, A. A. A class of functions with a given modulus of continuity. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1979, vyp. 1, 131-132, 136.

(Author's summary) 82:26003 26A15 (41A30)

Моіseev, N. N. ★Математика ставит эксперимент. (Russian) [Mathematics becomes an experiment] "Nauka", Moscow, 1979. 224 pp. (К. Jacobs) 82e:00039 00A69 (01A70) Human problems of systems analysis of large-scale ecology. (Russian) Vestnik Akad. Nauk SSSR 1980, no. 10, 78-83. (Author's introduction) 82m:92072 92A17 (00A69, 92A20)

(with Černous'ko, F. L.) Asymptotic methods in the theory of optimal control. IEEE Trans. Automat. Control 26 (1981), no. 5, 993-1000. (Authors' summary) 82k:49046 49D99

See also Current state of the theory of operations research, 82f:90002 eev, S. S. (with Karas', V. I.; Šuklin, A. P.) Universal nonequilibrium particle distributions in finite energy intervals. (Russian. English summary) Ukrain. Fiz. Z. 25 (1980), no. 5, 820-825, 875. (Authors' summary) 82b:82015 82A05

Moiseyev, Nimrod Virial theorem for bound and resonance states as a special case of the scattering virial theorem. Phys. Rev. A (3) 24 (1981), no. 5, 2824-2825. (Author's summary) 82m:81071 81F05

Moisil, Grigore Costantin *Opera matematica. Vol. II. (Romanian) [Mathematical works.

Vol. II] Edited and with a preface and introduction by Solomon Marcus. Editura Academiei Republicii Socialiste România, Bucharest, 1980. 359 pp. (W. Kecs) 82g-01089

See also Marcus, Solomon, 82d:01029 and Teodorescu, Nicolae Victor, 82g:01074

de Moivre, Abraham See Dupont, Pascal, 82f:91037
Moizuddin, Mohammed (with Rao, G. Teeka) Steady flow of micropolar incompressible fluid between two parallel porous plates. Defence Sci. J. 30 (1980), no. 3, 105-112. (Authors' summary) 82c:76007 76A05 (76S05)

Mojena, R. (with Wishart, D.) Stopping rules for Ward's clustering method. Computat 1980

(Proc. Fourth Sympos. Comput. Statist., Edinburgh, 1980), pp. 426-432, Physica, Vienna,

1980. (Authors' summary) 824:62107 62H30

Mokeičev, V. S. Partial differential equations with deviating arguments. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 5, 84–88. (Author's introduction) 824:35093

Mokin, Ju. I. An algorithm for calculation of emission current density in a beam focusing problem. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 3, 671-681, 813. (Author's summary) 82c:78024 78A50

Mokljačuk, M. P. On a problem of game theory and extrapolation of random processes with values in Hilbert space. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 24 (1981), 107–114, 154. (Author's summary) 82i:93068 93E05

On an antagonistic game and prediction of stationary random sec space. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 25 (1981), 99–106, 168. (Author's summary) 82j:90080 90D05

Mokrik, R. I. (with Pir'ev, Ju. O.) Some questions of the theory of coupled fields in continuum mechanics. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 3, 29-33, 93. (Authors' summary) 82i:73004 73B99

Mokriščev, K. K. (with Vorovič, I. I.; Efimov, N. V.; Korobeinik, Ju. F.; Levin, B. Ja.) Mihail Grigor evič Haplanov. (Russian) Uspehi Mat. Nauk 33 (1978), no. 4(202), 203-204. (Editors) 824:01032 01A70

Mokrjak, S. Ja. (with Musalimov, V. M.) Group properties of the equation of oscillation of plates (Russian) Problems in mechanics and applied mathematics (Russian), pp. 32-36, 87-88, Tomsk. Gos. Univ., Tomsk, 1979. (Authors' summary) 82h:73057 73K12

Mokross, F. (with Büttner, H.) Comments on the diatomic Toda lattice. Phys. Rev. A (3) 24 (1981), no. 5, 2826-2828. (Authors' summary) 82m:70026 70K99 (58F07) de Mol, Ch. (with Bertero, M.; Viano, G. A.) The stability of inverse problems. Inverse

scattering problems in optics, pp. 161-214, Topics Current Phys., 20, Springer, Berlin, 1980. (R. F. Millar) 82j:65068 65M30 (35R30, 78A45, 94A05)

(with Chadan, K.) Sufficient conditions for the existence of bound states in a potential without spherical symmetry. Ann. Physics 129 (1980), no. 2, 466-478. (Chindhu S. Warke) 82c:81122 81F05 (58G25)

Mol, W. J. A. Numerical solution of the Navier-Stokes equations by means of a multigrid method and Newton-iteration. Seventh International Conference on Numerical Methods in id Dynamics (Stanford Univ., Stanford, Calif.; NASA/Ames Res. Center, Moffett Field, Calif., 1980), pp. 285-291, Lecture Notes in Phys., 141, Springer, Berlin, 1981. (V. 65N20 (76D05) Girault) 82i:65079

(with Maltz, A.) Pair site occupation probability for one-dimensional array of dumbbells. J. Math. Phys. 22 (1981), no. 8, 1746-1748. (Authors' summary) 82j:82066

Molander, Per (with Willems, Jan C.) Synthesis of state feedback control laws with a specified gain and phase margin. IEEE Trans. Automat. Control 25 (1980), no. 5, 928-931. (Authors' summary) 82f:93019 93B25 (93D15)

Molčanov, I. M. (with Galba, E. F.) Generalized difference Green functions and elements of pseudoinverse matrices. (Russian) Questions on numerical mathematics, pp. 27-33, 40, Preprint 80, 41, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kieo, 1980. (Auth summary) 82m:65111 65N99 (65F20)

(with Galba, E. F.) Solution by the alternate-triangular method of a difference problem for a fourth-order equation. (Russian) Some numerical methods, pp. 6-10, 38, Preprint 80, 40, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (See 82:65002)

nov, S. A. (with Stepanov, A. K.) Excursions of a Gaussian field over a high level. (Russian) Dokl. Akad. Nauk SSSR 249 (1979), no. 2, 294-297. (D. A. Darling) 824:60098 60G60

The local structure of the spectrum of the one-dimensional Schrödinger operat . Math. Phys. 78 (1980/81), no. 3, 429-446. (Woodford W. Zachary) 82d:35076 35P20 (35J10, 58G25, 58G32, 82A42)

lestad, J. (with Stoltenberg-Hansen, Viggo; Tucker, J. V.) Finite algorith ocedures and inductive definability. Math. Scand. 46 (1980), no. 1, 62-76. (Gabriel Lolli) 82d:03077a 03D75 (03D70)

(with Stoltenberg-Hansen, Viggo; Tucker, J. V.) Finite algorithmic procedures and station theories. Math. Scand. 46 (1980), no. 1, 77-94. (Gabriel Lolli) 82d:03077b 03D75 (03D70)

baev, Dz. Three-dimensional Riemannian spaces with intransitive four-parameter groups of conformal transformations with a subgroup of homotheties. (Russian) Studies cometry and algebra (Russian), pp. 94-96, Kirgiz. Gos. Univ., Frunze, 1978. (S. S. Singh) 82f:53032 53B20

Holovan, Gr. L'évaluation de l'erreur de l'approximation d'une fonction continue par certains opérateurs linéaires positifs. *Mathematica (Chij)* 22(45) (1980), no. 1, 85–95. (Donald Kershaw) 82:41026 41A36 (41A17, 65D99)

oler, Cleve B. (with Forsythe, George E.; Malcolm, Michael A.) *Manus математических вычислений. (Russian) [Computer methods for mathematical computations] Translated from the English by H. D. Ikramov. "Mir", Moscow, 1980. 280 pp. (Editors) 82a:65001 65-01 (65-04)

Molina, A. (with Llosa, Josep; Marques, F.) Predictive extension of a singular Lagrangian system. Ann. Inst. H. Poincaré Sect. A (N.S.) 32 (1980), no. 4, 303-318. (Authors' 70D10 (49C10)

(with Iranzo, V.; Llosa, Josep; Marquès, F.) An exactly solvable model in predictive relativistic mechanics. I. Ann. Inst. H. Poincaré Sect. A (N.S.) 35 (1981), no. 1, 1–15. (Hans P. Künzle) 82me3003 83A05 (58F07, 58F35, 70G99, 81G99) nni Molina, C. Ser Gianni Molina, C. dines, J. M. (with Helal, M. A.) Nonlinear internal waves in shallow water. A theoretical and experimental study. (Russian summary) Tellus 33 (1981), no. 5, 488–504. (Authors' summary) 82k2-76011 76B15 ary) 82k:76011 76B15

Molino, P. Le problème d'équivalence pour les pseudogroupes de Lie: méthodes intrinsèques. (English summary) Bull. Soc. Math. France 108 (1980), no. 1, 95-111. (Thomas E. Duchamp) 82h:58057 58H05

Moll, K. R. Left context precedence grammars. Acta Inform. 14 (1980), no. 4, 317-335.

68F05 (03D05, 68F25)

Moll, Robert N. (with Krishnamurthy, Balakrishnan) On the num ber of affine families of Boolean functions. Inform. and Control 43 (1979), no. 3, 327-337. (E. Burlacu) 94C10 (05A17)

ther, Oristian Triumphs and limitations of Einstein's theory of relativity and gravitation.

Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein, Vol. I, II, pp. 473–492, Johnson, New York, 1979. (See 82b:83002) 83–03

See also Pihl, Mogens; et al., 82m:01065 ere, J. L. (with Bochi, S.; Brossier, G.; Celeux, Gilles; Charles, Christian; Chifflet, R.; Darcos, J.; Diday, E.; Diebolt, J.; Fevre, P.; Govaert, G.; Hanani, O.; Jacquet D.; Lechevallier, Yves; Lemaire, Jacques; Lemoine, Y.; Morisset, G.; Ok-Sakun, Y.; Rousseau, P.; Sankoff, D.; Schroeder, A.; Sidi, J.; Taleng, F.) *Optimisation en classification automatique. Tome 1, 2. (French) [Optimization in automatic classification. Vol. 1, 2] Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. vii +896 pp. ISBN 2-7261-0219-0 (A. Aiello) 821:62116 62H30

K. A. Subgroups of simple algebras and the zeta function. C. R. Math. Rep. Acad.
Sci. Canada 3 (1981), no. 3, 133–137. (Editors) 82f:12021 12A82
Cyclotomic division algebras. Canad. J. Math. 33 (1981), no. 5, 1074–1084. (B. Fein)

12A80 (16A39)

Correction to the paper: "Splitting fields and group characters" [J. Reine Angew. Math. 315 (1980), 107-114; MR 81b:12011]. J. Reine Angew. Math. 327 (1981), 219-220. (Editors) 82i:12011 12A57 (20C15)

ollov, Todor Ž. (with Načev, Nako A.) Some set-theoretic properties of the Baer radical of commutative rings with prime characteristic. (Bulgarian. Russian and English summaries) Plovdiv. Univ. Naučn. Trud. 15 (1977), no. 1, 13-22 (1979). (Authors'

summary) 82k:16007 16A21 (13M05) (with Načev, Nako A.) The Ulm-Kaplansky invariants of the group of normed units of a modular group ring of a primary abelian group. (Russian) Serdica 6 (1980), no. 3, 258–263. (S. M. Vovsi) 821:20020 20C07

(with Načev, Nako A.) Ulm-Kaplansky invariants of the group of normed units of the center of the group ring of an FC-p-group over a commutative ring of characteristic p. (Russian) Serdica 7 (1981), no. 1, 42-56. (Robert L. Snider) 82k:20015 20C07 (16A27)

Mollova, K. G. Periodic solutions of quasilinear autonomous second-order differential equations with retarded argument in the resonance case. (Bulgarian. Russian and English summaries) Godišnik Visš. Učebn. Zaved. Priložna Mat. 13 (1977), no. 3, 95-104 (1978). (From the summary) 82h:34098 34K15

(with Rjabov, Ju. A.) Periodic solutions of a quasilinear autor retarded argument in the resonance case. (Russian) Mat. Fiz. No. 29 (1981), 55-61, 125. (Pavol Marušiak) 82k:34082 34K15

Inir, J. On the packing of unit circles in a convex domain. Ann. Univ. Sci. Budapest. Eötvös Sect. Math. 22/23 (1979/80), 113-123. (H. T. Croft) 82e:52019

Molodcov, D. A. (with Kononenko, A. F.; Danil'čenko, T. N.; Ereško, F. I.) Informational theory of hierarchical systems. (Russian) Current state of the theory of operations research

(Russian), pp. 15–63, "Moscow, 1979. (See **821:90002**) 93A13 (with Fedorov, V. V.) Stability of optimality principles. (Russian) Current state of the theory of operations research (Russian), pp. 236–262, "Nauka", Moscow, 1979. (See 90-02

dodenskii, S. M. (with Chaichian, M.; Fischer, Jan; Nelipa, N. F.; Vrkoč, Ivo) A new expression for the high-energy upper bound on the scattering amplitude. J. Math. Phys. 22 (1981), no. 2, 380-384. (N. D. Sengupta) 82f:81070 81F20

Moloney, J. V. (with Faisal, F. H. M.) Time-dependent theory of non-Hermitian Schrödinger equation: application to mutiphoton-induced ionisation decay of atoms. J. Phys. B 14 (1981), no. 19, 3603-3620. (Authors' summary) 82;81673 81K05 (81C99)

w, Ju. L. (with Skobelev, B. Ju.) Subcritical auto-oscillations and nonlinear neutral curve for Poiseuille flow. Comput. Math. Appl. 6 (1980), no. 1, Special Issue, 123-133. (From the summary) 82h:76023 76E05

kov, I. A. (with Starkov, A. S.) Local resonance interaction of normal waves in a system containing connected waveguides. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 2, 327-331. (A. S. Alekseev) 824:78024 78A50 (35P99, 86A15)

(with Vakulenko, S. A.) Nonlinear longitudinal waves in inhomogeneous rods. (Russian. English summary) Interference waves in layered media, I. Zap. Naučn. Sem Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 99 (1980), 64-73, 158. (V. M. Babič) 82h:73021 73D35 (35L70, 35Q20)

Molotkov, L. A. Characteristic matrices of slightly bent elastic layers. (Russian. English summary) Interference waves in layered media, I. Zap. Naučn. Sem. Leningrad. Oidel. Mat. Inst. Steklov. (LOMI) 99 (1980), 74-84, 158. (Author's summary) 82e:73036

co, Roberto (with Orsi, Annamaria Palamara) Molecular gas-flow over convex bodies: a physico-mathematical model for heat transfer calculation. Appl. Math. Modelling 4 (1980), no. 5, 325-330. (Authors' summary) 82f:80003

co, Salvatore (with Isidori, Alberto; Krener, Arthur J.; Gori-Giorgi, Claudio) Nonlinear decoupling via feedback: a differential geometric approach. IEEE Trans. Automat. Control 26 (1981), no. 2, 331-345. (Authors' summary) 82e:93052 93C10

ghan, J. J. (with Nash, P. E.) A statistical theory for the disruption of four-body

systems. Monthly Notices Roy. Astronom. Soc. 192 (1980), no. 3, 809-820. (George Bozis) 824:70022 70F10

nahan, George E. Optimal stopping in a partially observable Markov process with costly information. Oper. Res. 28 (1980), no. 6, 1319-1334. (Author's summary) 82k:90117 90C40 (62L15)

Monahan, J. F. (with Kinderman, A. J.) New methods for generating Student's t and gamma variables. (German summary) Computing 25 (1980), no. 4, 369-377. (Authors' summary) 82e:65008 65C10 (65U05)

Monahov, A. A. (with Javorskaja, I. M.; Beljaev, Ju. N.; Astafeva, N. M.; Ščerbakov, S. A.; Vvedenskaja, N. D.) Stability, nonuniqueness and transition to turbulence in the flow between two rotating spheres. Theoretical and applied mechanics (Proc. 15th Internat. Congr., Univ. Toronto, Toronto, Ont., 1980), pp. 431-443, North-Holland, Amsterdam, 1980. (See 82&00008) 76F99

ov, O. G. Parametric description of structures of homogeneous computer systems. (Russian) Vyčisi. Sistem No. 80 Voprosy Teorii i Postroenija Vyčisi. Sistem (1979), 3–17, 121. (Z. Ras) 82e:68006 68A05 (05C35, 05C99) пайоч, V. N. (with Antoncev, S. N.) ★Краевые задачи некоторых вырождающихся

ий механики сплошной среды. Фильтрация несмешивающихся жидкостей. уравнений механики сплонной среды. Фильтрация несмецинающихся жилкостей. Часть III. (Russian) [Boundary value problems for certain degenerate equations of continuum mechanics. Filtration of immiscible fluids. Part III] Novosibirsk. Gos. Univ., Novosibirsk, 1978. 77 pp. (E. Ungureanu-David) 82f:76033 76S05 (35Q20, 70-01) (with Plotnikov, P. I.) Quasiconformal mappings and problems of hydrodynamics. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 5, 59-69, 204. (J. Lawrynowicz)

76-02 (30C60, 76G99)

See also Aksent'ev, L. A.; et al., 82m:35045

See also Subgroup structure of finite groups, 82j:20004
nahov, V. S. Product of a solvable and a cyclic group. (Russian) Sixth All-Union Symposium on Group Theory (Cerkassy, 1978) (Russian), pp. 188–195, 223, "Naukova Dumka", Kiev, 1980. (R. R. Struik) 82j:20051
See also Subgroup structure of finite groups, 82j:20004
nahova, E. A. Synthesis of optimal Diophantine structures. (Russian) Vyčisl. Sistemy

No. 80 Voprosy Teorii i Postroenija Vyčisl. Sistem (1979), 18-35, 121. (Author's summary)

nakhov, A. A. See Monahov, A. A.

Monari, Paola The geometric mean in a generalized theoretical scheme for variability. (Italian. English and French summaries) Statistica (Bologna) 41 (1981), no. 1, 115-127. (J. Tiago de Oliveira) 82h:62056 62F12

érez Monasor, Francisco See Pérez Monasor, Francisco

mastyrnyi, P. I. Connection of the isolation of solutions with the convergence of shooting methods. (Russian) Differencial'nye Uraonenija 16 (1980), no. 4, 732-740, 766-767. (Lubor Malina) 82c:65051 65L10 (34B10)

(with Fridljand, P. G.) Some questions of theory and practical application of shooting methods. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 3, 10-17, 139. (E. S. Čičkin) 82a:65058 65T 10

Monastyrskii, M. I. See Dyson, Freeman J., 82e:00035

Mönch, Harald Boundary value problems for nonlinear ordinary differential equations of second order in Banach spaces. Nonlin Deimling) 82c:34075 34G20 (47H10) Nonlinear Anal. 4 (1980), no. 5, 985-999. (Klaus

Münch, Wolfgang Schrittweitensteuerung bei der iterativen Verbesserung näherungsweise berechneter Lösungen linearer Ausgleichsprobleme. Rostock. Math. Kolloq. No. 13 (1980), 107-117. (James E. Gentle) 82g:65023 65F20 (65U05)

Moncrief, Vincent (with Fischer, Arthur E.; Marsden, Jerrold E.) The structure of the space of solutions of Einstein's equations. I. One Killing field. Ann. Inst. H. Poincaré Sect. A (N.S.) 33 (1980), no. 2, 147-194. (Murray Cantor) 82d:83007 83C05 (58D25) (with Arms, Judith M.; Marsden, Jerrold E.) Symmetry and bifurcations of

momentum mappings. Comm. Math. Phys. 78 (1980/81), no. 4, 455–478. (J. H. Rawnsley) 82m:58028 58F05 (70H99, 81E10. 83C40) Global existence of Maxwell-Klein-Gordon fields in (2+1)-dimensional spacetime. J. Math. Phys. 21 (1980), no. 8, 2291-2296. (Murray Cantor) 82c:81089 81E10

Infinite-dimensional family of vacuum cosmological models with Taub-NUT (Newman-Unti-Tamburino)-type extensions. *Phys. Rev. D* (3) **23** (1981), *no.* 2, 312–315. (Colin B. G. McIntosh) **82b:83024** 83C20 (53C80)

Survey of mathematical programming (Proc. Ninth Internat. Math. Programming Sympos., Budapest, 1976), Vol. 1, pp. 177–192, North-Holland, Amsterdam, 1979. (Szymon Dolecki) 49827 (90C30)

(with Craven, B. D.) A duality theorem for a nondifferentiable nonlinear fractional programming problem. Bull. Austral. Math. Soc. 20 (1979), no. 3, 397-406. (Authors' 90C32

(with Vasudevan, R.) On approximation by linear positive operators. J. Approx. Theory 30 (1980), no. 4, 334-336. (Sheldon Eisenberg) 82k:41014 41A36 (41A25) On algorithmic equivalence in linear fractional program ng. Math. Comp. 37 (1981), no. 155, 185-187. (Author's summary) 82m:90147 90C32

Mond, David On the cohomology associated to a complex linear differential operator. (Spanish) Rev. Colombiana Mat. 13 (1979), no. 3, 171-192. (Carlos A. Berenstein) 82a:30053 30E99

Monda, Minoru (with Yokoyama, Kan-ichi; Takeda, Minoru) Gauge covariance in nonabelian gauge theories. Progr. Theoret. Phys. 64 (1980), no. 4, 1412-1424. (Tuan W. Chen) 82h:81096 81E10 (81E15)

nden, Yoshimi (with Arimoto, Suguru) Generalized Rouche's theorem and its application to multivariate autoregressions. IEEE Trans. Acoust. Speech Signal Process. 28 (1980), no. 6, 733-738. (L. I. Ronkin) 82k:94015 94A99 (15A18, 30C15, 93E11, 94A99 (15A18, 30C15, 93E11,

(with Arimoto, Suguru) Fast algorithms for digital signal analysis. (Japan Systems and Control 25 (1981), no. 6, 336-344. (Editors) 82h:94010 94Al 94A12 (93E11) nga-Mondésir, Émire See Maga-Mondésir, Émire

egato, Giovanni Some new inequalities related to certain ultra-spherical polyn SIAM J. Math. Anal. 11 (1980), no. 4, 663-667. (B. R. Bhonsle) 82c:33014 On polynomials orthogonal with respect to particular variable-signed weight functions. (Italian summary) Z. Angew. Math. Phys. 31 (1980), no. 5, 549–555. (Author's summary) 82:65030 65D32 Money, A. H. (with Barr, G. D. I.; Affleck-Graves, J. F.; Hart, M. L.) L, norm estimation of the location parameter of a symmetric distribution. South African Statist. J. 15 (1981), no. 1, 85-96. (Authors' summary) 82h:62063 62F35

nfort, Alain (with Beguin, Jean-Marc; Gouriéroux, Christian) Identification of a mixed

autoregressive-moving average process: the corner method. Time series (Proc. Internat. Meeting, Univ. Nottingham, Nottingham, 1979), pp. 423-436, North-Holland, Amsterdam, 1980. (Ritei Shibata) 82e:62141 62M10

Processus aléatoires et économétrie: cas des anticipations rationn Centre Études Rech. Opér. 22 (1980), no. 3-4, 279-283. (G. Tintner) 82d:62168 62P20 (with Gouriéroux, Christian; Laffont, Jean-Jacques) Coherency conditions in

taneous linear equation models with endogenous switching regimes. Econometrica 48 (1980), no. 3, 675-695. (D. E. A. Giles) 82g:90029 90A19

nge, Gaspard See Bogoljubov, O. M., 82h:01036 nien, Burkhard Connections between the LBA problem and the knapsack problem. Begriffsschrift-Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 262-280, Friedrich-Schiller-Univ., Jena, 1979. (Author's summary) 82g:68051 68C40 (68C30, 90C08)

(with Urmetzer, N.; Vornberger, O.) A consideration of the travelling-salesman problem using the assignment problem. (German summary) Discrete structures and algorithms (Proc. Conf., Berlin, 1979), pp. 167–179, Hanser, Munich, 1980. (Authors' summary) 82e-90065 90C10 (05C38, 68C25)

(with Sudborough, Ivan Hal) Bounding the bandwidth of NP-complete problems. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 279-292, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Authors' summary) 821:68067 68C25 (03D15, 68E10)

nier, Louis Evaluation and comparison of two efficient probabilistic primality testing algorithms. Theoret. Comput. Sci. 12 (1980), no. 1, 97-108. (Selim G. Akl) 82a:68078 68C25 (10A25)

min, A. S. (with Mirabel', A. P.) Two-dimensional turbulence. (Russian. English mary) Adv. in Mech. 2 (1979), no. 3, 47-95. (J. S. Joel) 82i:76047 76F99 (35O10.

rdet, Bernard (with Bresson, D.) Quasi-ordres, intervalles, etc.: une bibliographie.

Math. Sci. Humaines No. 63 (1978), 83-92. 82e:00014 00A15 (06A10)
Relations à "éloignement minimum" de relations binaires. Note bibliographique. (English summary) Métriques et relations. Math. Sci. Humaines No. 67 (1979), 115-122, 127. (See 82e:92060) 92A27

(with Barthélémy, Jean-Pierre) Ajustement et résumé de données relationnelles: les relations centrales. (English summary) Data analysis and informatics (Proc. Second Internat. Sympos., Versailles, 1979), pp. 645-653, North-Holland, Amsterdam, 1980. (See R2f:62004) 90A06

Metrics on partially ordered sets—a survey. Discrete Math. 35 (1981), 173-184. (Author's summary) 82f:06004 06A10 (54E35, 54F05, 90A06, 92A27)

(with Batteau, Pierre; Blin, Jean-Marie) Stability of aggregation procedures ultrafilters, and simple games. Econometrica 49 (1981), no. 2, 527-534. (From the introduction) 82k:90020 90A08 (90D45)

nk, J. Donald (with van Douwen, Eric K.; Rubin, Matatyahu) Some questions abo Boolean algebras. Algebra Universalis 11 (1980), no. 2, 220-243. (P. Štěpánek) 82a:06024 06E05 (03E35, 03G05)

Monkewitz, Martin A. (with Monkewitz, Peter A.) The asymptotic solution of the Orr-Sommerfeld equation at large distance from a shear layer. J. Comput. Phys. 41 (1981), no. 2, 245-255. (Authors' summary) 82i:76042 76F10 (65P05, 76A60, 76D10)

witz, Peter A. (with Monkewitz, Martin A.) The asymptotic solution of the Orr-Sommerfeld equation at large distance from a shear layer. J. Comput. Phys. 41 (1981), no. 2, 245-255. (Authors' summary) 82i:76042 76F10 (65P05, 76A60, 76D10) nkhorst, Hendrik J. (with Harris, Frank E; Jeziorski, Bogumil) Contraction theorem

for the algebraic reduction of (anti)commutators involving operator strings. Phys. Rev. A

(3) 23 (1981), no. 4, 1632-1638. (Authors' summary) 824:81177 81H99 (81D05) (with Jeziorski, Bogumil; Harris, Frank E.) Recursive scheme for order-by-order many-body perturbation theory. Phys. Rev. A (3) 23 (1981), no. 4, 1639-1644. (Authors' summary) 82d:81178 81H99 (81C12)
(with Schwalm, William A.) Electrostatics for periodic films of atoms. Phys. Rev. B

(3) 23 (1981), no. 4, 1729-1742. (Authors' summary) 82i:78014

nlezun, Charles J. (with Speed, F. M.) The geometry of estimation and hypothesis testing in the constrained linear model—the full rank case. Special issue on analysis of variance with unbalanced data. Comm. Statist. A—Theory Methods 9 (1980), no. 2, 213-230. (From the summary) 82i:62094 62J05

(with Speed, F. M.) Recovering sums of squares between full and reduced linear models. Comm. Statist. A—Theory Methods 10 (1981), no. 9, 875-882. (Authors' summary) 82f:62138 62J10

ma, C. L. Sequencing with general precedence constraints. (1981), no. 2, 137–150. (Author's summary) 82:90061 9083 mna, A. F. Letter: "Eduard Helly, father of the Hahn-Banach theorem" by Hochstadt.

Math. Intelligencer 2 (1979/80), no. 4, 158. (J. Dieudonné) 82e:01090b (01A60, 46-03)

Un demi-siècle de vie mathématique. Symposium dedicated to A. F. Monna (French), pp. 58-74, Commun. Math. Inst. Rijksuniv. Utrecht, 12, Rijksuniv. Utrecht, Utrecht, 1980. (N. De Grande-De Kimpe) 82i-01056 01A70 (01A74)

See also Bertin, E. M. J.; et al., 82g-01041 and Bibliography: Monna, A. F.,

82g:01042

na, Gilbert (-)-connexions métriques adaptées à une structure de contact strict. (English summary) [Metric(-)-connexions adapted to a strict contact structure] C. R. Acad. Sci. Paris Sér. 1 Math. 293 (1981), no. 7, 365-367. (Author's summary) 82m:53030

er, Alexandre L'excitation des membranes par variations conjuguées de l'électroosmose et de la constante diélectrique. Une généralisation de l' "oscillateur" de Teorell. (English summary) [The excitation of membranes by conjugate variations of electroosmosis and the dielectric constant. A generalization of Teorell's "oscillator"] C. R. Acad. Sci. Paris Sér. III Sci. Vie 292 (1981), no. 23, 1195–1197. (Author's summary)

82m:92032 92A09

sroe, David K. Local transverse-traceless tensor operators in general relativity. J. Math. Phys. 22 (1981), no. 9, 1994-2000. (M. Carmeli) 82k:83038 83C99 (53B20, 83C05)

nroe, James L. Nonconcavity of the magnetization in Ising ferromagnets. J. Statist.

Phys. 23 (1980), no. 3, 315-319. (Author's summary) 82h:82078 82A67

mroe, R. J. (with Anderson, Richard L.; Nelson, L. A.) Gertrude M. Cox—a modern pioneer in statistics. Biometrics 35 (1979), no. 1, 3-7. (Editors) 82f:011680 01A70

nroy, A. (with Catalano, G.; Eilbeck, J. C.; Parisi, E.) A mathematical model for pattern formation in biological systems. Phys. D 3 (1981), no. 3, 439-456. (John J. Tyson) 82;92020 92A09 (80A20)

Mons, B. (with Leondes, Cornelius T.) Differential games with noise-corrupted measurements. J. Optim. Theory Appl. 28 (1979), no. 2, 233-251. (Authors' summary) 82k:90142 90D25

bd el-Monsel, M. E. See Abd El-Monsel, M. E.

Monsky, Paul On p-adic power series. Math. Ann. 255 (1981), no. 2, 217-227. (Reijo Ernvall) 82h:12018 12B99 (12A35)

Some invariants of Zd-extensions. Math. Ann. 255 (1981), no. 2, 229-233. (Reijo Ernvall) 82h:12007 12A35 (12A50)

(with Cuoco, Albert A.) Class numbers in Z₂⁴-extensions. Math. Ann. 255 (1981), 2, 235-258. (Reijo Ernvall) 82h:12010 12A50 (12A35) no. 2, 235-258. (Reijo Ernvall) 82h:12010

ez-Mont, Xavier See Gómez-Mont, Xavier

Montagna, Franco Interpretations of the first-order theory of diagonalizable algebras in Peano arithmetic. Studia Logica 39 (1980), no. 4, 347-354. (P. Štěpánek) 82i:03077a 03G25 (03F25, 03F30)

The undecidability of the first-order theory of diagonalizable algebras. Studia Logica 39 (1980), no. 4, 355-359. (P. Štěpánek) 82i:03077b 03G25 (03D35)
ntaldi, E. (with Girardello, L.; Zanon, D.) Local dynamic charges from asymptotic

nsions of partition functions. Phys. Lett. A 71 (1979), no. 1, 21-25. (From the text) 35137 35Q20 (58F07, 81C05)
The evaluation of Green's functions for cubic lattices, revisited. Lett. Nuovo Cin 82h-35137

(2) 30 (1981), no. 13, 403-409. (R. C. Varma) 82i:82064 82A67 (33A25)

ro, António Les éléments réguliers d'un N-lattice. An. Acad. Brasil. Ciênc. 52 (1980), no. 4, 653-656. (Author's summary) 82h:06013 06D99 (03G25)

nteiro, Luis An extension to Horn clause logic allowing the definition of concurrent processes. Formalization of programming concepts (Proc. Internat. Collog., Peñscola, 1981), pp. 401–407, Lecture Notes in Comput. Sci., 107, Springer, Berlin, 1981. (See 68B20

teiro, Luiz Algèbres de Hilbert n-valentes. Portugal. Math. 36 (1977), no. 3-4, 159-173

(1980). (Daniel Ponasse) 82a:03061 03G10 (03G20)

Morteiro Fernandes, Teresa Variété 1-microcaractéristique pour les €_x-modules cohérents. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 17, A787–A790. (Author's introduction) 82b:58084 58G07 (16A33)

nte Lima, I. (with Aldrovandi, R.) A matricial approach to cluster expansions. J. Phys. A 13 (1980), no. 12, 3685-3696. (Authors' summary) 82b:82002 82A05 (22E70

ntemayor, J. J. See Fahmy, Moustafa M.; et al., 82e:15012

Montemayor, Rafael (with Hojman, Sergio) S-equivalent Lagrangians for free particles and canonical quantization. Hadronic J. 3 (1979/80), no. 6, 1644-1657. (H. S. P. Grässer) 926-49052 49H05 (81E99)

bueso Montero, J. L. See Bueso Montero, J. L.

rodriguez Montes, Jaime See Rodriguez Montes, Jai

esinos, Angel On Finsler connections. Rev. Mat. Hisp.-Amer. (4) 39 (1979), no. 2-3, 99-110. (R. Miron) 82j:53111 53C60

Montesinos Santalucia, Vicente Compactness in sequence spaces. (Spanish) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 72 (1978), no. 3, 459-465. (Richard Becker)

AG-3008 46.45

On Smultan-type theorems in locally convex spaces.

(Spanish) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 72 (1978), no. 4, 599-604.

(Richard Becker) 82;46011

46A50

Inters y Gómez Daza, Alejandro on locally defined ideals and pseudocompact topologies.

(Spanish) An. Inst. Mat. Univ. Nac. Autónoma México 17 (1977), no. 2, 125-153. 82e:54019 54C99

Montfort, A. (with Gourieroux, Christian; Laffont, Jean-Jacques) On the backward-forward procedure. Econom. Lett. 5 (1980), no. 3, 215–217. (Authors' 90A16 (39A10) summary) 82i:90017

Phys. 43 (1980), no. 5, 547–619. (William C. Meecham) 82i:76046 76F99 (35Q99)

Montgomery, Deane (with Yang, Chung Tao) Dihedral group actions. I. General topology and modern analysis (Forc. Conf., Univ. California, Riverside, Calif., 1980), pp. 295–304,
Academic Press, New York, 1981. (Authors' introduction) 82g:57014 57S17 (57S25)

Montgomery, Douglas C. (with Weatherby, Ginner) Modeling and forecasting time series using transfer function and intervention methods. AIIE Trans. 12 (1980), no. 4, 289-307. (Authors' summary) 82g:90030 90A20

(with Askin, Ronald G.) Problems of nonnormality and multicollinearity for forecasting methods based on least squares. AIIE Trans. 13 (1981), no. 2, 102-115. (Authors' summary) 82i:62130 62M10

ntgomery, Hugh L. The zeta function and prime numbers. Proceedings of the Queen's Number Theory Conference, 1979 (Kingston, Ont., 1979), pp. 1-31, Queen's Papers in Pure and Appl. Math., 54, Queen's Univ., Kingston, Ont., 1980. (Preface) 82k:10047

An exponential polynomial formed with the Legendre symbol. Acta Arith. 37 (1980), 375-380. (A. I. Vinogradov) 82a:10041 10G10

See also Davenport, Harold, 82m:10001

omery, Susan (with Cohen, Miriam) Trace functions for finite automorphism groups of rings. Arch. Math. (Basel) 35 (1980), no. 6, 516-527 (1981). (Donald S. Passm 16A74

(with Small, Lance W.) Fixed rings of Noetherian rings. Bull. London Math. Soc. 13 (1981), no. 1, 33–38. (Donald S. Passman) 82a:16033 16A74

Prime ideals in fixed rings. Comm. Algebra 9 (1981), no. 4, 423-449. (Donald S. sman) 82c:16034 16A74 Passman) 82c:16034

X-inner automorphisms of filtered algebras. Proc. Amer. Math. Soc. 83 (1981), no. 2, 263-268. (J. C. Robson) 82j:16002 16A03 (17B40)

nery, W. Duane Generalized intensity self-imaging. J. Opt. Soc. Amer. 71 (1981),

- no. 12, 1529-1533. (Author's summary) 82m:78018 78A45
- no. 12, 1529-1533, (Author's summary) 82nc.78018 78A45
 mith, L. A. (with Rand, R. H.) An application of the Poincaré map to the stability of
 nonlinear normal modes. Traus. ASME Ser. E.J. Appl. Mech. 47 (1980), no. 3, 645-651.
 (François Aribaud) 82a:34047 34C15 (34D10, 58F14, 70K20)
 nth, Melvin Ser Nonlinear dynamics and the beam-beam interaction, 82g:78001
 ulte-Mönting, Jürgen Schulte-Mönting, Jürgen
 nting, Jürgen Schulte-Mönting, Jürgen
 nting, Jürgen Schulte-Mönting, Jürgen
 CARSTON OFFERS (1981), no. 3, 290-321. (Stanley N. Burris) 82j:08005 08A50

- (03F05, 06B20, 08B05)
- ort, Pierre Rém d ★Essay d'analyse sur les jeux de hazard. (French) [Essay on the analysis of games of chance Photographic reprint of the second edition. Chelsea Publishing Co., New York, 1980. xlii + 416 pp. ISBN 0-8284-0307-4 (E. Seneta) 82j:01078 01A75 (01A50, 60-03)
- ntonen, C. (with Kajantie, K.) Plasmons in classical nonabelian gauge theories. Phys. Scripta 22 (1980), no. 6, 555-559. (Authors' summary) 82b:81096 81E99 (35Q20,
- ntroll, Elliott W. On the dynamics of the Ising model of cooperative phenomena. Proc Nat. Acad. Sci. U.S.A. 78 (1981), no. 1, part 1, 36-40. (Author's summary) 82a:82048
 - (with Reiss, Howard) Phase transition versus disorder: a criterion derived from two-dimensional dynamic ferromagnetic model. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 5, part 1, 2659–2663. (Authors' summary) 82f:82066 82A68 (82A35, 82A42)
- (with Hughes, Barry D.; Shlesinger, Michael F.) Random walks with self-simila clusters. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 6, part 1, 3287-3291. (Authors' summary) 82m:60096 60J65 (82A05) atrone, M. (with Gautschi, Walter) Multistep methods with minimum global error
- coefficient. (Italian. English summary) Calcolo 17 (1980), no. 1, 67-75. (A. Coțiu) 651.05
- (with Mastroscrio, C.) A quadratic-convergence method for linear matrix equations. (Italian. English summary) Calcolo 18 (1981), no. 1, 87–96. (Authors' summary) 82m:65030 65F10
- et de Monvel, L. See Boutet de Monvel, L.
- tet de Monves, L. See Boutet de Prouves, L.

 ng, Gaspar See Monge, Gaspard

 nzingo, M. G. An observation concerning: "Binet's formula generalized" [Fibonacci

 Quart. 15 (1977), no. 1, 21, 24, 29; MR 54 #12624] by A. K. Whitford. A collection of

 manuscripts related to the Fibonacci sequence, pp. 93-94, Fibonacci Assoc., Santa Clara, Calif., 1980. (Editors) 82j:10020 10A35
 - On the distribution of quadratic residues. A collection of manuscripts related to the Fibonacci sequence, pp. 94-97, Fibonacci Assoc., Santa Clara, Calif., 1980. (C. Small)
- nzingo, R. A. Discrete linear recursive smoothing for systems with uncertain observations. *IEEE Trans. Automat. Control* 26 (1981), no. 3, 754-757. (Author's
- odie, T. Bryant (with Singh, Brij M.; Haddow, J. B.) Torsion by an annular disk of an infinite cyfinder embedded in an elastic half-space. *Utilitas Math.* 18 (1980), 97–113. (Roger D. Low) 82b:73011 73C35
 - (with Tait, R. J.; Haddow, J. B.) Wave propagation in a fluid-filled elastic tube.

 Acta Mech. 38 (1981), no. 1-2, 71-83. (Authors' summary) 82d:73037 73J06 (76Z05)

 (with Tait, R. J.) On a problem in the dynamic theory of cracks. Quart. Appl. Math. 73M05 39 (1981/82), no. 3, 419-423. (Authors' summary) 82k:73070
- nody, G. P. (with Osborn, Hugh) Approximate forms for SU(2) multi-instanton determinants. Nuclear Phys. B 173 (1980), no. 3, 422-428. (Authors' summary)
- 81E99 (53C05) ody, Michael Polymorphism with selection and genotype-dependent migration. J. Math.
- ody, Michael Polymorphism with selection and genotype-dependent migration. J. Math. Biol. 11 (1981), no. 3, 245–267. (Author's summary) 82d-92014 92A10 ody, Michael C. (with Ray, John R.) On the application of energy conditions and algebraic classification in general relativity. J. Math. Phys. 22 (1981), no. 8, 1727–1735. (Alan Barnes) 82j:83022 83C40 (83C55)
- Moog, C. Comment: "Decentralised controller with online interaction trajectory improvement" [Proc. IEE-D 127 (1980), no. 3, 142-148] by M. F. Hassan and M. G. Singh. With a reply by Hassan and Singh. Proc. IEE-D 128 (1981), no. 4, 162-163. (From the text) 82b:90139b 90D26
- m, J. W. On Horton's law for random channel networks. Combinatorics 79 (Proc.
- Colloq., Univ. Montréal, Montreal, Que., 1979), Part I. Ann. Discrete Math. 8 (1980), 117-121. (Edward A. Bender) 82:05030 05C05 (60J85) (with Meir, A.) Terminal path numbers for certain families of trees. J. Austral. Math. Soc. Ser. A 31 (1981), no. 4, 429-438. (G. R. Grimmett) 82m:05039 (05A15, 05C38)
- n, Parry (with Spencer, Domina Eberle) *The photic field. MIT Press, Cambridge, Mass.-London, 1981. x+257 pp. ISBN 0-262-13166-8 (I. Kay) 82h:78001
- onen, Boudewijn *Das Lefschetz-Riemann-Roch-Theorem für singuläre Varietäten.

 (German) [The Lefschetz-Riemann-Roch theorem for singular varieties] Dissertation, Rheinische Friedrich-Wilhelms-Universität Bonn, Bonn. Bonner Mathematische Schriften [Bonn Mathematical Publications], 106. Universität Bonn, Mathematisches Institut, Bonn, 1978. viii + 223 pp. (K. Lamotke) 82b:14015 14F12 (32C99, 57R20, 58G10)
- r Linienelementräume von skalarer Krümmung und mit rekurrenten ór, Arthur Üb Grundtensor. Tensor (N.S.) 35 (1981), no. 2, 125-135. (Makoto Matsumoto) 82i:53045
- ore, B. N. (with Skipping, C. R.; Oakes, M. E.) Theory of an iterative, two-mode transmission network. Internat. J. Circuit Theory Appl. 9 (1981), no. 2, 217-231. (From the summary) 824:94062 94C05
- ore, Bruce C. Principal component analysis in linear systems: controllability, observability, and model reduction. *IEEE Trans. Automat. Control* 26 (1981), no. 1, 17–32. (From the summary) 82m:93009 93B05 (94A05) ore, Calvin C. (with Schmidt, Klaus D.) Coboundaries and homomorphisms for
- nonsingular actions and a problem of H. Helson. Proc. London Math. Soc. (3) 40 (1980), no. 3, 443-475. (K. R. Parthasarathy) 82a:22007 22D40 (28D15)
- ore, Daniel J. (with Russell, Bruce) Axiomatic data type specifications: a first order ry of linear lists. Acta Inform. 15 (1981), no. 3, 193-207. (J. Paredaens) 82j:68007 68B10 (03B99)

- (with Leggett, E. W., Jr.) Optimization problems and the polynomial hierarchy. Theoret. Comput. Sci. 15 (1981), no. 3, 279–289. (Authors' summary) 82m:68085 68C25 (03D15, 90C08, 90C10)
- Moore, David S. (with Stubblebine, John B.) Chi-square tests for multivariate normality with application to common stock prices. Comm. Statist. A—Theory Methods 10 (1981), no. 8, 713-738. (Authors' summary) 82f:62100 62H15 (62G10)
 Moore, E. F. (with Baum, H. R.; Ciment, Melvyn; Davis, R. W.) Numerical solutions for a
- moving shear layer in a swirling axisymmetric flow. Seventh International Conference on moving sinear inject in a swining austyminetic flow, sevenin international conference on Numerical Methods in Fluid Dynamics (Stanford Univ., Stanford, Calif.; NASA/Ames Res. Center, Moffett Field, Calif., 1980), pp. 74–79, Lecture Notes in Phys., 141, Springer, Berlin, 1981. (From the introduction) 82k:76022 76D05 (65P05, 76A60, 76U05)

 Moore, E. J. (with Teo, K. L.; Boyd, I. E.; Olding, R.) Suboptimal decision making of a production firm. Opsearch 17 (1980), no. 4, 155–171. (Authors' summary) 82f:99012
- 90A05
- Moore, Gerald (with Spence, A.) The convergence of approximations to nonlinear ons at simple turning points. Bifurcation problems and their numerical solution Workshop, Univ. Dortmund, Dortmund, 1980), pp. 135-146, Internat. Ser. Numer. (Proc. Workshop, Univ. Dortn Math., 54, Birkhäuser, Basel, 1980. (F. Odeh) 82d:65051 65J15
- (with Spence, A.) A convergence analysis for turning points of nonlinear compact operator equations. Numerical treatment of integral equations (Workshop, Math. Res. Inst., Oberwolfach, 1979), pp. 203-212, Internat. Ser. Numer. Math., 53, Birkhäuser, Basel, 1980. (Authors' summary) 82e:65074 65J15 (47H15, 65R20)
- ore, Gregory H. Beyond first-order logic: the historical interplay between mathematical logic and axiomatic set theory. History and philosophy of logic, Vol. 1, pp. 95-137, Abacus, Tunbridge Wells, 1980. (E. Mendelson) 82j:01057 01A60 (03-03, 04-03)
- Moore, H. G. Generalized n-like rings and commutativity. Canad. Math. Bull. 23 (1980), no. 4, 449–452. (J. Luh) 824:16032 16A70 (16A38)
- Moore, John B. (with Ledwich, G.) Multivariable adaptative parameter and state estimators with convergence analysis. Analysis and control of systems (IRIA Sem., Rocquencourt, 1978), pp. 79-107, IRIA, Rocquencourt, 1978. (Authors' summary)
 - (with Weiss, Haim) Recursive prediction error algorithms without a stability test.
 - (with Anderson, Brian D. O.) Time-varying feedback laws for decentralized control. IEEE Trans. Automat. Control 26 (1981), no. 5, 1133-1139. (Authors' summary) 93C45
 - (with Anderson, Brian D. O.) Detectability and stabilizability of time-varying discrete-time linear systems. SIAM J. Control Optim. 19 (1981), no. 1, 20-32. (Authors'
- summary) 82f:93045 93C50 (93D15) summary) 82:93045 93C50 (93D15)
 ore, John C. (with Cohen, F. R.; Neisendorfer, Joseph A.) Note on higher torsion in the homotopy groups of single suspensions. Illinois J. Math. 24 (1980), no. 4, 619–623. (M. Mimura) 82e:55016 55Q05
 See also Husemoller, D., 82a:55010
- Moore, John Douglas On conformal immersions of space forms. Global differenti geometry and global analysis (Berlin, 1979), pp. 203-210, Lecture Notes in Math., 838, Springer, Berlin, 1981. (Katsuei Kenmotsu) 82k:53081 53C42 (53A07)
- re, Kenneth (with Marcus, Marvin) A determinant formulation of the Cauchy-Schwarz inequality. Linear Algebra Appl. 36 (1981), 111-127. (Chung Lie Wang) 82b:15012 15A45 (26D15)
- Moore, L. C., Jr. Approximately finite-dimensional Banach spaces. J. Funct. Anal. 42 (1981), no. 1, 1-11. (Stefan Heinrich) 82h:46035 46B25 (03H05)
- Moore, M. A. (with Wilson, Clive Alistair) A new approach to polymer solution theory. J. Phys. A 15 (with Wisson, City Alissan) A new approach to polymer solution theory. J. Phys. A 15 (1980), no. 11, 3501–3523. (A. K. Rajagopal) 82b-82052 82A42 (92A09) (with Bray, A. J.) Metastable states in the solvable spin glass model. J. Phys. A 14 (1981), no. 9, L377-L383. (Authors' summary) 82i:82056 82A57
- Moore, Marc Random sampling in pattern reconstruction. Austral. J. Statist. 22 (1980), no. 3, 336-340. (Author's summary) 82h:68120 68G10 (52A22, 62D05)
- Moore, Marion E. (with Gustafson, William H.; Reiner, Irving) Matrix completions over Dedekind rings. Linear and Multilinear Algebra 10 (1981), no. 2, 141-144. (Lawrence S. Levy) 82k:15013 15A33
 - natical heritage: algebra and applied n 82k-01002
- Moore, Marva Houston Derivatives of the annuity function assuming Makeham-Gompertz mortality; and the n-ages method. Comm. Statist. B-Simulation Comput. 10 (1981),
- no. 4, 359-367. (Nanak Chand) 82h:62177 62P05 Moore, Robert L. Normal direct summands of hyporeductive operators. Michigan Math. J. 25 (1978), no. 3, 345-350. (Klaus Kalb) 82a:47020 47A65 (47B15)
 - (with Rogers, Donald D.; Trent, Tavan T.) A note on intertwining M-hyponormal operators. Proc. Amer. Math. Soc. 83 (1981), no. 3, 514-516. (Mehdi Radjabalipour) 47B20
 - Contractive commutants and invariant subspaces. Proc. Amer. Math. Soc. 83 (1981), 4, 747-750. (John P. Daughtry) 82i:47007 47A15 no. 4, 747-750. (John P. Daughtry) 82j:47007
 - (with Hopenwasser, Alan; Paulsen, Vern I.) C*-extreme points. Trans. Amer. Math. Soc. 266 (1981), no. 1, 291-307. (Richard I. Loebl) 82f:46065 46L05 (47D20)
- Stochastic fields from stochastic mechanics. J. Math. Phys. 21 (1980), Moore, Steven M. no. 8, 2102-2110, (Francesco Guerra) 82f:82015 82A15 (03H10, 81C20)
- Nonstandard analysis and generalized functions. (Spanish summary) Rev Colombiana Mat. 14 (1980), no. 2, 73-94. (Robert M. Anderson) 82a:46041
- Semiclassical approximations at positive temperatures in stochastic physics. J. Math.
- Phys. 22 (1981), no. 4, 765–769. (Francesco Guerra) 82k:81021 81C20 See also Proceedings: Einstein Centennial Symposium on Fundamental R2h:81005
- Moore, T. E. Isomorphisms between groups of rational numbers. Math. Gaz. 64 (1980),
- no. 430, 286-287. (From the text) 82c:20001 20-01 (20K27)

 Moore, T. O. (with Hadlock, E. H.) The lattice points of a parabola. J. Natur. Sci. Math. 18 (1978), no. 1, 31-40. (E. Morgantini) 82c:10017 10B05
- ore Thorne, Betty Jeanne (with Mitra, Sujit Kumar) Linear estimation in general linear models. Essays in probability and statistics, pp. 189-201, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 82b:62083 62J05

Moori, Jamshid On certain groups associated with the smallest Fischer group. J. London Math. Soc. (2) 23 (1981), no. 1, 61-67. (Henry S. Leonard, Jr.) 82g:20041 (20C30)

urayana Moorthy, S. See Audinarayana Moorthy, S.
Ferdinando Exactness in the symmetrizations of a left exact category. (Italian immary) Riv. Mat. Univ. Parma (4) 6 (1980), 225-237 (1981). (K. Seitz) 82i:18013

Moraal, H. Statistical mechanics of Z(M) models on Cayley trees. Phys. A 105 (1981), no. 3, 472-492. (Author's summary) 82d:82087 82A67 (82A25)
de Moraes, Lafayette (with Dubikajtis, Lech) On single operator for Lewis S5 modal logic.

Rep. Math. Logic No. 11 (1981), 57-61. (S. K. Thomason) 82j:03019

Moraes, Luiza A. Envelopes for types of holomorphy. Functional analysis, holomorphy. approximation theory (Proc. Sem., Univ. Fed. Rio de Janeiro, Rio de Janeiro, 1978), pp. 488-499, Lecture Notes in Math., 843, Springer, Berlin, 1981. (Ph. Novertaz) 82f:46054 46G20 (32D10)

Holomorphic functions on strict inductive limits. Resultate Math. 4 (1981), no. 2, 201-212. (Jean-François Colombeau) 82m:46051 46G20 (32K99, 46A12) orales, Claudio On the fixed-point theory for local k-pseudocontractions. Proc. Amer.

Math. Soc. 81 (1981), no. 1, 71-74. (T. L. Hicks) 82c:47072 47H10

Morales, G. J. Effect of a dc electric field on the trapping dynamics of a cold electron beam.

Phys. Fluids 23 (1980), no. 12, 2472-2484. (B. Buti) 82b:78010 78A35

Morales, Juan-Antonio (with Drèze, Jacques H.) Bayesian full information analysis of simultaneous equations. Bayesian analysis in econometrics and statistics, pp. 299-309, Stud. Bayesian Econometrics, 1, North-Holland, Amsterdam, 1980. (See 82d:62170)

Morales, Pedro Regularity and extension of semigroup-valued Baire measures. Measure theory, Oberwolfach 1979 (Proc. Conf., Oberwolfach, 1979), pp. 317-323, Lecture Notes in Math., 794, Springer, Berlin, 1980. (Ivan Dobrakov) 82g:28018 28B10 (28C15)

Topological contraction principle. Fund. Math. 110 (1980), no. 2, 135-144. (Kok Keong Tan) 82h:54078 54H25

Mean value theorem for the Dobrakov integral. Measure theory and its applications (Proc. Conf., Northern Illinois Univ., De Kalb, Ill., 1980), pp. 235-242, Northern Illinois

Univ., DeKalb, Ill., 1981. (See 82g:28002) 28B05 Moran, Daniel A. Computations with spines. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 11-12, 647-649 (1981). (Jože Vrabec) 82k:57008

ran, P. A. P. Professor H. O. Lancaster, F.A.A. Austral. J. Statist. 21 (1979), no. 3, 187-192 (1 plate). (Editors) 82f:01125 01A70

Testing the largest of a set of correlation coefficients. Austral. J. Statist. 22 (1980), no. 3, 289-297. (Jacques Dauxois) 82k:62107 62H20

Calculation of the normal distribution function. Biometrika 67 (1980), no. 3, 675-676. (G. P. Bhattacharjee) 82d:62044 62E30

Numerical integration in the presence of singularities. Acta Math. Sci. 1 (1981), 65D30

no. 1, 83-85. (Author's summary) 82f:65021 See also Essays in statistical science, 82i:62004

Moran, Shlomo (with Ibarra, Oscar H.; Rosier, Louis E.) A note on the parallel complexity of computing the rank of order n matrices. Inform. Process. Lett. 11 (1980), no. 4-5, 162. (From the text) 82d:68033 68C25

(with Ibarra, Oscar H.; Leininger, Brian S.) On the complexity of simple arithmetic expressions. Automata, languages and programming (Akko, 1981), pp. 294–304, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (See 82i:68003) 68C25

(with Ibarra, Oscar H.; Rosier, Louis E.) Probabilistic algorithms and straight-line programs for some rank decision problems. *Inform. Process. Lett.* **12** (1981), no. 5, 227–232. (From the introduction) **82m:68068** 68C05 (15A54, 90C20)

(with Paz, A.) Nondeterministic polynomial optimization problems and their approximations. Theoret. Comput. Sci. 15 (1981), no. 3, 251-277. (Authors' summary)

68C25 ran, Siegfried Matrix representation for the braid group B₄. Arch. Math. (Basel) 34 (1980), no. 6, 496-501. (C. Maclachlan) 82b:20053 20F36

Covering groups and presentations of finite groups. I. Publ. Math. Debrecen 27

(1980), no. 1-2, 35-47. (U. Felgner) 82g:20061a 20F05 (20C99) Covering groups and presentations of finite groups. II. Publ. Math. Debrecen 27 (1980), no. 3-4, 207-217. (U. Felgner) 82g:20061b 20F05

90), no. 3-4, 207-217. (U. Friguer) bagazanta and the Alexander matrix of a knot. Arch. Math. (Basel) 36 (1981), no. 2, 125-132. gh Reynolds Morton) 82m:57001 57M25 (20F36, 57M05) (Hugh Reynolds Morton) 82m:57001

On a conjecture of Papakyriakopoulos. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 2, 189-191. (D. E. Cohen) 82b:57005 57M40 (20F05)

Morandi, G. (with Corbelli, G.) Rigorous results concerning a generalized mean-field theory of dilute disordered Ising magnets. Phys. D 3 (1981), no. 3, 590-604. (B. Derrida) 82m:82038 82A57 (82A05)

lleni-Morante, Aldo See Belleni-Morante, Aldo

Morari, Manfred (with Stephanopoulos, George; Aris, Rutherford) Finite stability regions for large-scale systems with stable and unstable subsystems. Internat. J. Control 26 (1977), no. 5, 805-815. (P. Fischer) 82d:93046a 93D05

(with Stephanopoulos, George; Aris, Rutherford) Errata: "Finite stability regions for large-scale systems with stable and unstable subsystems". Internat. J. Control 27 (1978), no. 4, 656. (Editors) 82d:93046b 93D05

See also Bitsoris, Georges, 82d:93046c
Morasso, P. (with Benati, M.; Gaglio, S.; Tagliasco, V.; Zaccaria, R.) Anthropomorphic robotics. I. Representing mechanical complexity. Biol. Cybernet. 38 (1980), no. 3,

125-140. (M. Junusov) 821:92004a 92A05 (70B99)
(with Benati, M.; Gaglio, S.; Tagliasco, V.; Zaccaria, R.) Anthropomorphic robotics. II. Analysis of manipulator dynamics and the output motor impedance. Biol.

92A05 (70B99) Cybernet. 38 (1980), no. 3, 141-150. (M. Junusov) 82f:92004b Morava, Jack The Weil group as automorphisms of the Lubin-Tate group. Journées de Géomètrie Algébrique de Rennes (Rennes, 1978), Vol. 1, pp. 169-177, Astérisque, 63, Soc.

Math. France, Paris, 1979. (Michiel Hazewinkel) 82g:12017 12B25 (14L05) Moravčík, Jozef A remark on the study of oscillatory properties of the solutions of linear differential systems. (Slovak) Sixth Scientific Conference of the College of Transport Engineering (College Transport Engrg., Žilina, 1979) (Slovak), pp. 51–58, College of Transport Engrg., Žilina, 1979. (F. Neuman) 82a:34009 34A30 (34C10) Morawetz, Cathleen Synge (with Kricgsmann, Gregory A.) Numerical methods for solving the wave equation with variable index of refraction. Boundary and interior layers—computational and asymptotic methods (Proc. Conf., Trinity College, Dublin, 1980), pp. 118-123, Boole, Dim Laoghaire, 1980. (G. K. Cambrell) 82f:78010

(with Kriegsmann, Gregory A.) Solving the Helmholtz equation for exterior problems with variable index of refraction. I. SIAM J. Sci. Statist. Comput. 1 (1980), A formulation for higher-dimensional inverse problems for the wave equi

Comput. Math. Appl. 7 (1981), no. 4, 319-331. (Gustavo Perla Menzala) 82g:35121 35R 30 (65P05)

(with Kriegsmann, Gregory A.) Computations with the nonlinear Helmholtz equation. J. Opt. Soc. Amer. 71 (1981), no. 8, 1015-1019. (Authors' summary) 82h:78006 78A25 (65P05)

alo, J. On differential inequality for nonlinear integro-differential equation with retardation. Comment. Math. Prace Mat. 22 (1980), no. 1, 111-123. (M. M. Konstantinov) 82d:45017 45J05

Morchio, G. (with Fröhlich, Jürg; Strocchi, F.) Higgs phenomenon without a symmetry breaking order parameter. Phys. Lett. B 97 (1980), no. 2, 249-252. (Authors' summary) 82a:81021 81E10 (58E20, 81D20)

(with Fröhlich, Jürg; Strocchi, F.) Higgs phenomenon without symmetry breaking order parameter. Nuclear Phys. B 190 (1981), no. 3, FS 3, 553-582. (Authors' summary) 82i:81081 81E10 (81D20)

Morcrette, M. (with Girault, C.) Syntactic analysis by specialized parallel operators.

Parallel computers—parallel mathematics (Munich, 1977), pp. 211–215, North-Holland, Amsterdam, 1977. (See 82k:68003) 68B20

Mordeson, John N. (with Deveney, James K.) Inseparable extensions and primary abelian groups. Arch. Math. (Basel) 33 (1979/80), no. 6, 538-545. (S. Yuan) 82a:12015

(with Deveney, James K.) Distinguished subfields. Trans. Amer. Math. Soc. 260

(1980), no. 1, 185-193. (S. Yuan) 82a:12016 12F15
Modular extensions and abelian groups. Arch. Math. (Basel) 36 (1981), no. 1, 13-20. (S. Yuan) 82j:12028 12F15 (20K99)

(with Deveney, James K.) Calculating invariants of inseparable field extensions.

Proc. Amer. Math. Soc. 81 (1981), no. 3, 373–376. (S. Yuan) 82e:12029 12F15

Morduhovič, B. S. (with Kruger, A. Ja.) Extremal points and the Euler equation in nonsmooth optimization problems. (Russian. English summary) Dokl. Akad. Nauk. BSSR 24 (1980), no. 8, 684–687, 763. (S. Rolewicz) 82b:90127 90C48 (49B27)

Metric approximations and necessary conditions for optimality for general classes of nonsmooth extremal problems. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1072-1076. (S. Rolewicz) 82h:90104 90C30 (49B10)

Penalty functions and necessary conditions for the extremum in nonsmooth and nonconver optimization problems. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 215-216. (V. F. Dem'janov) 82k:90101 90C30 (65K10)

More, S. V. Topologies of integral transforms. Ganita 29 (1978), 17-28. (R. S. Dahiya)

82g:44002

Moreau, Jean-Charles Un aspect algébrique des lemmes de Schwarz en plusieurs variables. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 6, A383-A386. (N. De Grande-De Kimpe) 82f:32037 32H15

Moreau de Saint-Martin, J. Distribution de distances dans la sphère euclidie Statist. Appl. 28 (1980), no. 4, 63-66. (W. J. Firey) 82c:60023 60D05 (53C65) Morefield, C. L. See Lehtomaki, Norman A., 82d:90130

Morel, A. (with Kluberg-Stern, H.; Napoly, O.; Petersson, B.) Spontaneous chiral symmetry breaking for a U(N) gauge theory on a lattice. Nuclear Phys. B 190 (1981), no. 3, FS 3, 504-518. (Authors' summary) 82:81105 81E25 (81D20, 82A25)

Morel, B. (with Thierry-Mieg, Jean) SU(1/2)-supergravity. Phys. Lett. B 101 (1981), no. 6, 393-395. (Authors' summary) 82e:83040 83E99 (81G20)

Supergravities as theories locally invariant under superalgebras. Phys. Lett. B 103 (1981), no. 4-5, 349-350. (Author's summary) 82h:83067 83E50

Morelli, A. (with Nicolò-Amati Gori, L.) The convergence of certain quadrature form (Italian. English summary) Riv. Mat. Univ. Parma (4) 6 (1980), 413-418 (1981). (D. D. Stancu) 82j:41031 41A55 (65D32)

Moreno, Carlos (with Coll, Bartolomé) Sur une classe d'observateurs synchronisés attachée au laplacien d'espace-temps. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 4, 303-306. (Authors' summary) 82b:83051 83C99 (53C80, 81D25) reno, Carlos Julio Harmonic tendencies in number theory. (Spanish) Bol. Mat. 12

(1978), no. 4-6, 162-187. (Editors) 82e:10002 10-02 (10D40)

Moreno, Oscar Symmetries of binary Goppa codes. IEEE Trans. Inform. Theory 25 (1979), no. 5, 609-612. (Author's summary) 82b:94030 94B60

Counting traces of powers over GF(2m). Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 673-679. (S. D. Cohen) 12C25 (14G15)

Moreno Bas, Elias A sufficient condition for the admissibility of φ-efficient estimates under quadratic loss. (Spanish) Contributions in probability and mathematical statistics, teaching of mathematics and analysis (Spanish), pp. 39-45, Grindley, Granada, 1979. (Barry C. Arnold) 82a:62020 62C15

reno-Diaz, R. (with Santana, O.; Méndez, J. A.) Normalized moments for processing visual data. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 75 (1981), no. 1, 287-289. (Authors' summary) 82m:92089 92A25 (68G10)

reno Gonzalez, Carlos Antonio (with Bermudez de Castro López, A.) Duality methods for solving variational inequalities. Comput. Math. Appl. 7 (1981), no. 1, 43-58. (A. I. 49A29 (47H05, 65K10)

Moresco, Roberto (with Artico, Giuliano; Le Donne, Attilio) Algebras of real-valued uniform maps. Rend. Sem. Mat. Univ. Padova 61 (1979), 405-418 (1980). (Melvin Henriksen) 82f:54023 54C40 (14A15, 46E25, 54E15)

(with Artico, Giuliano) Notes on the topologies and uniformities of hyperspace Rend. Sem. Mat. Univ. Padova 63 (1980), 51-60. (A. Császár) 82k:54041 54E

(with Artico, Giuliano) An answer to a question on hyperspaces. Rend. Sem. Mat.

Mort, Martia (with Kailath, Thomas; Ljung, Lennart) Generalized Krein-Levinson equations for efficient calculation of Fredholm resolvents of nondisplacement kernels Topics in functional analysis (essays dedicated to M. G. Krein on the occasion of his 70th birthday), pp. 169-184, Advances in Math., Suppl. Studies, 3, Academic Press, New York, 1978. (Authors' summary) 82m:45003 45B05 (94A05)

(with Delosme, I.-M.) Mixed and minimal representations for Toeplitz and related

systems. Fourteenth Asilomar Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 19-24, IEEE, New York, 1981. (See 824:93001) 94A05 (with Delosme, J.-M.; Genin, Yves V.; Van Dooren, Paul M.) \(\Sigma\)-contractive

eddings and interpretation of some algorithms for recursive estimation. Fourteenth embeddings and interpretation of some algorithms for recursive estimation. Fourteenth Assilomar Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 25-28, IEEE, New York, 1981. (See 82d-93001) 94A05 (with Lee, Daniel T. L.; Friedlander, Benjamin) Recursive least squares ladder estimation algorithms. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 3, part 3, 627-641. (Authors' summary) 82e-93100 93E10 (94A05) (with Lee, Daniel T. L.; Friedlander, Benjamin) Recursive least squares ladder estimation algorithms. IEEE Trans. Circuits and Systems 28 (1981), no. 6, 467-481. (From the summary) 82h-65104 65U05 (62M10) vrl, Rudolf H. (with Orszag, Steven A.; Meiron, Daniel L.; Frisch, Uriel; Meneguzzi, Maurice) Analytic structure of high Revynolds number flows. Seconth International

Maurice) Analytic structure of high Reynolds number flows. Seventh International Conference on Numerical Methods in Fluid Dynamics (Stanford Univ., Stanford, Calif.; NASA/Ames Res. Center, Moffett Field, Calif., 1980), pp. 292-298, Lecture Notes in

Phys., 141, Springer, Berlin, 1981. (Authors' introduction) 82;76049 76F05 (82A25) orfill, G. E. (with Volk, H. J.; Jones, F. C.; Rôser, S.) Collisions between grains in a turbulent gas. Astronom. and Astrophys. 85 (1980), no. 3, 316–325. (F. C. Auluck) 82h;85090 85A30 (76F05)

82h:85009 85A30 (76F05)

rgado, È. R. Characterization of the commutativity of the kernel group of automorphisms of a finite abelian p-group. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1900, no. 23 Automorfizmy Konečnyh Abelevyh i Metabelevyh p-Grupp, 6-11. (V. V. Kabanov) 82f:20045 20D45 (20D15)

Degree of nilpotency of the kernel group of automorphisms of a finite abelian p-group. Description of the upper central series. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1900, no. 23 Automorfizmy Konečnyh Abelevyh i Metabelevyh p-Grupp, 12-28. (V. V. Kabanov) 82f:20046 20D45 (20D15)

12-28. (V. V. Kabanov) 821:20046 20D45 (20D15)
On the group of automorphisms of a finite abelian p-group. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 5, 617-622. (V. M. Busarkin) 82b:20029 20D10

de Morgan, Augustus See De Morgan, Augustus

Morgan, Chris (with Booth, Peter; Heath, Philip R.; Piccinini, Renzo) Remarks on the otopy type of groups of gauge transformations. C. R. Math. Rep. Acad. Sci. Canada 181), no. 1, 3-6. (From the text) 82c:55019 55R99 (81E10)

Morgan, D. J. (with Dixon, L. C. W.; Harrison, David) On singular cases arising from Galerkin's method. Mathematics of limits advances of more descriptions. Galerkin's method. Mathematics of finite elements and applications, III (Proc. Third MAFELAP Conf., Brunel Univ., Uxbridge, 1978), pp. 217–225, Academic Press, London, 1979. (K. Najzar) 82k:65061 65N30 (76A60, 76D05)

rgan, Dennis R. Analysis of digital random numbers generated from serial samples of correlated Gaussian noise. IEEE Trans. Inform. Theory 27 (1981), no. 2, 235-239.

(Author's summary) 82i:94007 94A12

rgan, Frank A smooth curve in R³ bounding a continuum of minimal manifolds. Arch.

1080 (81) no. 2 193-197. (R. Osserman) 82b:53013 53A10

rgan, Jacqueline See Morgan-Sciarrino, Jacqueline rgan, John D., III (with Ashbaugh, Mark S.) Remarks on Turschner's eigenvalue rula. J. Phys. A 14 (1981), no. 4, 809-819. (Authors' summary) 82d:81036 81C15

(with Simon, Barry) The calculation of molecular resonances by complex scaling. J. 8. B 14 (1981), no. 5, L167-L171. (Authors' summary) 82d:81172 81G55 (47A55, Phys. B 14 (1981), no. 5, L167-L171. (Authors' summary) 82d:81172

(with Ahlrichs, Reinhart: Hoffmann-Ostenhof, Maria: Hoffmann-Ostenhof, Thomas) Bounds on the decay of electron densities with screening. Phys. Rev. A (3) 23 (1981), no. 5, 2106-2117. (Authors' summary) 82j:81064 81G45 (81G55)

Morgan, John W. (with Griffiths, Phillip A.) ★Rational homotopy theory and differential forms. Progress in Mathematics, 16. Birkhäuser, Boston, Mass., 1981. xi+242 pp. ISBN 3-7643-3041-4 (Editors) 82m:55014 55P62 (14G30, 32G99, 58A12)

Morgan, K. (with Lewis, R. W.; Thomas, H. R.) Finite element modelling of cooling stresses in cast metal and drying stresses in timber. Modelling and simulation in practice, 2 (Proc. Second Annual Polymodel Conf., Teesside Polytech., Middlesbrough, 1979), pp. 51-76, Emjoc, Northallerton, 1980. (See 82c:65001) 65N See also Numerical methods in thermal problems, 82g:80001 65N30 (80A20)

Morgan, T. A. (with Campbell, W. B.; Joseph, D. W.) Errata: "Unique specification of Yang-Mills solutions" [Phys. Lett. B 96 (1980), no. 3-4, 352-354; MR 81j:81040]. Phys. Lett. B 99 (1981), no. 6, 507. (Editors) 82e:81029 81E10

ciarrino, Jacqueline Sur un procédé mixte d'approximation de problèmes de point de selle avec contraintes utilisant simultanément les méthodes de pénalisation interne de discrétisation. Ricerche Mat. 28 (1979), no. 2, 399-415. (C. A. Botsaris) 82e:49056 49D45 (90C25)

rgenstern, D. Berechnung des maximalen Signifikanzniveaus des Testes "Lehne H_0 ab, wenn k unter n gegebenen Tests zur Ablehnung führen". (English summary) Metrika 27 (1980), no. 4, 285–286. (I. A. Melamed) 82i:62038 62F03

(1790), no. 1, 263-260. (i. A. Michandu) account of the different of the summary) 82h:82038 82A:

merically exact solvable random-bond Ising model. Z. Phys. B 41 (1981), no. 2,

Morgenstern, Oskar Seve Shubik, Martin, 82c:01054
Morgenthal, Klaus (with Kozakiewicz, Erwin) Über die final positiven Lösungen einer Differentialgleichung zweiter Ordnung mit Nachwirkung. Beiträge Anal. No. 14 (1979), 133–139. (M. K. Grammatikopoulos) 82e:34081
34K15 (34K25)
Mori, Hazime (with Fujisaka, H.) A simplified theory of intermittent fully-developed trabulance. Battern Geometica New Johannic systems and Battern precomition (Proc. Internat.

rmation by dynamic systems and pattern recognition (Proc. Internat.

Sympos. Symerget., Garmisch-Partenkirchen, 1979), pp. 82–89, Springer Ser. Symergetics, 5, Springer, Berlin, 1979. (See 82k:00028) 76F05 (58F13)

(with Morita, Terumitsu; Mashiyama, Kazuko T.) Contraction of state variables in quilibrium open systems. I. Progr. Theoret. Phys. 63 (1980), no. 6, 1865-1884. 82A35 (From the summary) 82b:82043a

(with Morita, Terumitsu; Mashiyama, Kazuko T.) Contraction of state variables in quilibrium open systems. II. *Progr. Theoret. Phys.* **64** (1980), *no.* 2, 500–521. hors' summary) **82b:82043b** 82A35 (Authors' summary) 82b:82043b

Anomalous diffusion of vorticity in fully-developed turbulence. Progr. Theoret. Phys. pl. No. 69 (1980), 111–121 (1981). (Author's summary) 82j:76050 76F05

Mori, Hiroshi Remarks on mean-value inequalities on m-dimensional submanifolds of Sⁿ. Kodai Math. J. 2 (1979), no. 2, 243-253. (V. T. Fomenko) 82h:53073 53C40 Minimal surfaces of revolution in H3 and their global stability. Indiana Univ. Math.

J. 30 (1981), no. 5, 787-794. (M. do Carmo) 82k:53082 53C42 (49F10, 53A10) Mori, Hisashi On the stability of minimal surfaces. (Japanese) Sugaku 32 (1980), no. 2, 156-159. (M. Okumura) 82i:53050 53C45 (49F10, 53A10, 53C42)

Mori, Kazuhide (with Saitoh, Toshikazu; Itoh, Reikichi) Approximate methods for the coupled two oscillators in the stationary state. Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 91 (1980), 122–134. (K. Kumar) 82h:81146 81G55

to (with Kowada, Masasi) Dynamical system with contin relative free energy. Tokyo J. Math. 4 (1981), no. 1, 177-191. (Robert Kertz) 82j:60184

60K35 (60J25, 82A05) (with Kowada, Masasi) Relative free energy and its application to speed cha model. Tsukuba J. Math. 5 (1981), no. 1, 1-14. (Hans-Otto Georgii) 82k:60212 60K35 (82A05)

Mori, Masaaki (with Taniguchi, Kenichi; Kasami, Tadao; Fujii, Mamoru) Formal werification of a class of concurrent programs. Systems-Comput.-Controls 10 (1979), no. 4, 11–20 (1981). (Authors' summary) 82m:68027 68B10 (03D35)

Mori, Masatake See Numerical integration and related topics, 82c:65002

Mori, Naganori A monotonicity property of the power function of the modified likelihood

ratio test of the equality of two covariance matrices. II. Res. Bull. Fac. Ed. Oita Univ. 5, no. 6, 5-6 (1981). (Nariaki Sugiura) 82k:62101 62H15

Mori, Shigefumi On Tate conjecture concerning endomorphisms of abelian varieties. Proceedings of the International Symposium on Algebraic Geometry (Kyoto Univ., Kyoto, 1977), pp. 219–230, Kinokuniya Book Store, Tokyo, 1978. (William C. Waterhouse) 14K15 (10D35, 14G10)

Mori, Shinsaku (with Kouda, Akihiro) Analysis of a ring of mutually coupled van der Pol oscillators with coupling delay. IEEE Trans. Circuits and Systems 28 (1981), no. 3,

247-253. (Authors' summary) 82a:58039 58F13 (34C15)
Mori, Sonoko Axiomatization of S4 type modal logics based on finite linear intermediate logics. Comment. Math. Univ. St. Paul. 29 (1980), no. 1, 29-43. (Robert P. McArthur) 82b:03046 03B45 (03B55)

Mori, Takehiro (with Kuwahara, Michiyoshi) Comments on Šiljak's conjecture. IEEE Trans Auto at. Control 26 (1981), no. 2, 609-611. (Authors' summary) 82i:93004 93A15 (93D05)

(with Fukuma, Norio; Kuwahara, Michiyoshi) Simple stability criteria for single and composite linear systems with time delays. Internat. J. Control 34 (1981), no. 6 1175–1184. (Authors' summary) 82m:93078 93D99

is F. On the rate of convergence in the martingale central limit theorem. Studia Sci. Math. Hungar. 12 (1977), no. 3-4, 413-417 (1980). (G. K. Eagleson) 82e:60040 60F05 (60G42)

On a Hoeffding-type problem. The First Pannonian Symposium on Mathematical Statistics (Bad Tatzmannsdorf, 1979), pp. 174–181, Lecture Notes in Statist., 8, Springer, New York, 1981. (W. Hoeffding) 82h:60045 60F05 (62E20)

On the asymptotic network delay in a model of packet switching. Comput. Math. Appl. 7 (1981), no. 2, 167–172. (Author's summary) 82e:94070 94C10 (94A05)

Mori, Tuyoshi The social history of mathematics in modern Japan. Translated from the Japanese and with notes by J. Fang. *Philos. Math.* **15/16** (1978/79), 88-105 (1981). (Gordon Fisher) **82j:01084** 01A80 (01A27)

Mori, Yasuchika (with Shimemura, Etsujiro) On a shift of eigenvalues of a matrix by using a solution of an algebraic Riccati equation. Internat. J. Control 32 (1980), no. 1, 73-80. (Valeriu Prepeliță) 82b:15004 15A18 (93D15)

Morice, V. (with Nakache, J.-P.; Golmard, J. L.) Discrimination sur variables binaires basée sur l'estimation des distributions de probabilité par groupe. (English summary)
Data analysis and informatics (Proc. Second Internat. Sympos., Versailles, 1979),
pp. 305-316, North-Holland, Amsterdam, 1980. (See 821:62004) 62H30 (62G05)

Móricz, F. On the convergence in a restricted sense of multiple series. (Russian summary)

Anal. Math. 5 (1979), no. 2, 135-147. (Author's summary) 82i:40003 40B05 (40A05) On the growth order of the rectangular partial sums of multiple nonorthogonal series. nmary) Anal. Math. 6 (1980), no. 4, 327-341. (A. Olevskii) 82g:42022

A note on the central limit theorem for orthogonal series. Z. Wahrsch. Verw. Gebiete 54 (1980), no. 1, 41-46. (Adhir K. Basu) 82e:60041 60F05 (42C15)

The Kronecker lemmas for multiple series and some applications. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 1-3, 39-50. (B. Kuttner) 82f:40007 40B05 (40A05)

On the square and the spherical partial sums of multiple orthogonal series. Act Math. Acad. Sci. Hungar. 37 (1981), no. 1-3, 255–261. (N. B. Pogosjan) 82;42017 42C05

Lebesgue functions and multiple function series. I. Acta Math. Acad. Sci. Hungar. 37 (1981). no. 4, 481-496. (J. J. Price) 82h:42032 42C10

On Walsh series with coefficients tending monotonically to zero. Acta Math. Acad. Sci. Hungar. 38 (1981), no. 1-4, 183-189. (J. J. Price) 82m:42019

rikawa, Hisasi On differential invariants of holomorphic projective curves. Nagoya Math. J. 77 (1980), 75–87. (Takeshi Sasaki) 82a:14012 14H99 (30F99, 53A55) Some analytic and geometric applications of the invariant theoretic method. Nagoya

Math. J. 80 (1980), 1-47. (A. L. Oniščik) 82f:30049 30F35 (14D25, 15A72, 47E05, 53A20)

Morikawa, Osamu A counterexample to a conjecture of Whitehead. Math. Sem. Notes Kobe Univ. 8 (1980), no. 2, 295–298. (Mitsuyuki Ochiai) 82h:57011 57M40

Morikawa, Tetsuo (with l'Haya, Y. J.) Construction of orthonormal vector sets for atoms

and molecules by means of recursive variation. J. Math. Phys. 22 (1981), no. 6,

1186-1189. (Authors' summary) 82h:81153 81G55 (65F15)
Morimoto, A. See Manifolds and Lie groups, 82m:53001
Morimoto, H. (with Ghosh, J. K.; Yamada, Sakutarō) Neyman factorization an minimality of pairwise sufficient subfields. Ann. Statist. 9 (1981), no. 3, 514-530. (Dieter Mussmann) 82k:62010 62B05

aki The dual space of the space BMO for a stochastic point process. Tõhoku Math. J. (2) 31 (1979), no. 4, 519-524. (Mou-Hsiung Chang) 82f:60112 60G46 (60G55)

The space BMO and optimal exponential martingales. Math. Rep. Toya (1981), 135-162. (Mou-Hsiung Chang) 82;60078 60G46 (46E99, 49A60, 93E20)

rimoto, Hiroshi Realization of Chern classes by subvarieties with certain singularities

Nagoya Math. J. 80 (1980), 49-74. (Marcus Wright) 82b:32045 32L05 (14M17) noto, Mitsuo (with Yoshino, Kunio) Some examples of analytic functionals with

carrier at infinity. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 8, 357-361. (M. 46F15 (32A45) Hasumi) 82c:46051

An extension of e^x to [-∞, ∞]. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 10, 450–454. (Carlos A. Berenstein) 82d:46066 46F15

Analytic functionals on the Lie sphere. Tokyo J. Math. 3 (1980), no. 1, 1–35. (Vazgain Avanissian) 82c:32006 32A40 (32M10)

o, S. (with Kurata, Y.) A note on codivisible and weakly codivisible modules.

Tsukuba J. Math. 5 (1981), no. 1, 25-31. (M. Teply) 82k:16035 16A63 (16A53)

Morimoto, Tohru Sur le problème d'équivalence des structures géométriques. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 63-66. (Author's summary) 82b:53037 53C10 (58H05)

Morimune, Kimio (with Sawa, Takamitsu) Decision rules for the choice of structural equations. J. Econometrics 14 (1980), no. 3, 329-347. (D. E. A. Giles) 82c:62149

Asymptotic expansions of the distribution of an improved limited information maximum likelihood estimator. J. Amer. Statist. Assoc. 76 (1981), no. 374, 476-478. (Author's summary) 82j:62017 62F10 (62B10)

rin, Bernard Équations du retournement de la sphère. (English summary) C. R. Acad. Sci. Paris Sèr. A-B 287 (1978), no. 13, A879-A882. (Author's summary) 821:57022

(with Francis, George K.) Arnold Shapiro's eversion of the sphere. Math Intelligencer 2 (1979/80), no. 4, 200–203. (A. Černavskii) 82j:57013 57N37

Morin, Richard L. (with Raeside, David E.) A reappraisal of distance-weighted k-nearest neighbor classification for pattern recognition with missing data. IEEE Trans. Systems Man Cybernet. 11 (1981), no. 3, 241-243. (Authors' summary) 82f:68094 68G10

Morino, Luigi (with Smolka, Scott A.: Broderick, John) Recent developments in the Green's function method for aerodynamics. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., aljerenia equation, 71 (7), pp. 100–107, IMACS, New Brunswick, N.J., 1977. (Authors' summary) 82c:76070 76G99

rioka, N. (with Shimizu, Toshihiro) Transition between turbulent and periodic states in the Lorenz model. Phys. Lett. A 66 (1978), no. 6, 447-449. (Authors' summary)

58F13 (76F99, 86A10)

(with Shimizu, Toshihiro) Transient behavior in periodic regions of the Lorenz model. Phys. Lett. A 69 (1978/79), no. 3, 148-150. (From the text) 82e:58069 (86A10)

(with Shimizu, Toshihiro) On the bifurcation of a symmetric limit cycle to an metric one in a simple model. Phys. Lett. A 76 (1980), no. 3-4, 201-204. (Joseph Ford) 82c:58043 58F13 (34C05)

Morishima, Michio See Simonovits, András, 82k:90046

Morisset, G. (with Bochi, S.; Brossier, G.; Celeux, Gilles; Charles, Christian; Chifflet, R.; Darcos, J.; Diday, E.; Diebolt, J.; Fevre, P.; Govaert, G.; Hanani, O.; Jacquet, D.; Lechevallier, Yves; Lemaire, Jacques; Lemoine, Y.; Molliere, J. L.; Ok-Sakun, Y.; Rousseau, P.; Sankoff, D.; Schroeder, A.; Sidi, J.; Taleng, F.) *Optimisation en classification automatique. Tome 1, 2. (French) [Optimization in automatic classification. Vol. 1, 2] Institut National de Recherche en Informatique et en Automatique Rocquencourt, 1980. vii +896 pp. ISBN 2-7261-0219-0 (A. Aiello) 82k:62116 que (INRIA), (92A05)

risugi, Kaoru On some elements in MSp₄, which are related to the image of J-homomorphism. J. Math. Kyoto Univ. 21 (1981), no. 1, 125-131. (Shichirô Oka)

824-55012 55O50 (55P42)

Morita, Akio (with Watanabe, Hiroshi) Use of continued fractions for the calculation of higher-order terms in a perturbation system. Chem. Phys. Lett. 77 (1981), no. 1, 158-162.

(Authors' summary) 82h:81026 81C12

Morita, Jun Tits' systems in Chevalley groups over Laurent polynomial rings. Tsukuba J. Math. 3 (1979), no. 2, 41–51. (James F. Hurley) 82a:20050 20G10 (17B20)

la Gauge theories over quaternions and Weinberg-Salam theory. Progr ret. Phys. 65 (1981), no. 6, 2071-2074. (Author's summary) 82h:81134 (81E99)

Morita, Nagayoshi (with Kumagai, Nobuaki) The expansion of cylindrical fiber modes in a spherical coordinate. J. Math. Phys. 22 (1981), no. 6, 1311-1316. (Authors' summary) 78A50 (78A10) 82h:78024

Morita, Shigeyuki (with Tsuboi, Takashi) The Godbillon-Vey class of codimension one foliations without holonomy. Topology 19 (1980), no. 1, 43-49. (From the text) 82d:57015 57R30

Morita, Terumitsu (with Mori, Hazime: Mashiyama, Kazuko T.) Contraction of state variables in nonequilibrium open systems. I. Progr. Theoret. Phys. 63 (1980), no. 6,

1865-1884 (From the summary) 82k-82043a 82A35
(with Mori, Hazime; Mashiyama, Kazuko T.) Contraction of state variables in nonequilibrium open systems. II. Progr. Theoret. Phys. 64 (1980), no. 2, 500-521.

(with Keyes, T.; Mercer, John) Further development of the approach of Peralta and Zwanzig. I. The drag on a sphere at high bath densities. J. Chem. Phys. 74 (1981), no. 9,

281–5286. (Authors' summary) 82e:76007 76A99
On the interpretation of multiplicative white noise. Phys. Lett. A 82 (1981), no. 5, 215–217. (Author's summary) 82e:82016 82A05 (60H10)

Morita, Tohru (with Horiguchi, Tsuyoshi) Upper and lower bounds to a correlation function for an Ising model with random interactions. Phys. Lett. A 74 (1979), no. 5, 340-342. (Authors' summary) 82c:82095 82A67 (82A42)

(with Horiguchi, Tsuyoshi) Upper bound to the specific heat for the random-bond Ising model on Nishimori's line. Phys. Lett. A 76 (1980), no. 5-6, 424-426. (Authors' nary) 82c:82099 82A67 (82A42)

Divergence of the higher-order susceptibilities of the random-site Ising model on the Cayley tree. Phys. Lett. A 79 (1980), no. 1, 104-106. (Author's summary) 82c:82098 82A67 (82A42)

(with Horiguchi, Tsuyoshi) Upper bounds to the correlation functions of the with Honguan, 1 suyosan Opper Grands with Competing interactions. J. Phys. A 14 (1), no. 10, 2715–2731. (Authors' summary) 82j:82048 82A42 (1981), no. 10, 2715-2731. (Authors' summary) 82j:82048

Variational principle for regular and random Ising models on the cactus tree or on the usual lattice in the "cactus approximation". *Phys. A* **105** (1981), *no.* 3, 620–630. (Author's summary) **82e:82023** 82A67 (82A42) (Author's summary) 82e:82023

(Author's summary) 82er8023 82A01 (82A42)

Morita, Yasuo Classification of a family of abelian varieties parametrized by reduction modulo 8 of a Shimura curve. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 7, 338-341. (Thomas Zink) 82c:10036 10D25 (14K22)

336-341. (Inomas Zink) accitation 10D23 (14k.22)

Morita, Yolj (with Sunahara, Yoshifumi) An approximate method for nonlinear filtering problems via maximal likelihood principle. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. II, pp. 431-442, Reidel, Dordrecht, 1980. (Authors' summary) 821:93077 93E11

(with Sugiyama, Hiroshi) Moment behavior of solution processes for strongly near stochastic differential equations. Tech. Rep. Osaka Univ. 30 (1980),

no. 1517-1550, 21-28. (Toshio Yamada) 821:60138 60H10

Morjaria, Mahesh (with Mukherjee, Subrata) A boundary element formulation for planar time-dependent inelastic deformation of plates with cutouts. Internat. J. Solids and ctures 17 (1981), no. 1, 115-126. (Authors' summary) 82e:73075a

(with Mukherjee, Subrata) Numerical analysis of planar, time-dependent inelastic deformation of plates with cracks by the boundary element method. Internat. J. Solids and Structures 17 (1981), no. 1, 127-143. (Authors' summary) 82e:730756 (65N30, 73F99)

Mork, K. J. (with Razi Naqvi, K.; Waldenstrøm, S.) Unification of the methods of Onsager and Monchick for calculating the probabilities of various fates in diffusion-controlled reactions, with applications to diffusion in space and in a plane. J. Chem. Phys. 71 (1979), no. 1, 73-80. (Authors' summary) 82c:82117 82A99 (80A30)

Morkvėnas, R. On weak compactness of the sets of multiparameter stochastic processes. Stochastic differential systems (Proc. IFIP-WG7/1 Working Conf., Vilnius, 1978), pp. 311-319, Lecture Notes in Control and Information Sci., 25, Springer, Berlin, 1980. (Rolando Rebolledo) 82;60013 60B10 (60F17, 60G17) 60B10 (60F17, 60G17)

On the Riesz-Rao decomposition for quasimartingales on the plane. (Russian. Lithuanian and English summaries) Litousk. Mat. Sb. 20 (1980), no. 1, 113–117, 218. (L. Cuculescu) 32;60085 60G48

Morley, Larry J. (with Perkel, Manley) The nilpotency class of extensions of certain p-groups. Comm. Algebra 8 (1980), no. 11, 1053-1069. (S. E. Stonehewer) 82d:20024 20D15 (22E25)

ro, Giorgio (with Freed, Jack H.) Calculation of ESR spectra and related Fokker-Planck forms by the use of the Lanczos algorithm. J. Chem. Phys. 74 (1981), no. 7, 3757-3773. (Authors' summary) 824:81173 81G55

oroianu, Mihnea Un critère de contractibilité algébrique. (Italian sum Ferrara Sez. VII (N.S.) 26 (1980), 11-14 (1981). (Luciana Picco Botta) 82h:14013 14E05 (14E15)

The Zorn-Bourbaki theorems and their applications. (Romanian. English summary) Bul. Inst. Politehn. Bucureşti Ser. Chim.-Metal. 42 (1980), no. 3, 9-14. (Duro Kurepa)

82:04004 04A25
roşanu, Gheorghe Regularity of solutions of variational inequalities in Hilbert spaces.
Variational inequalities and optimization problems (Proc. Summer School, Constanța 1979), pp. 125-130, Minist. Ed. Învățămiîntului, Constanța, 1979. (M. Biroli) 82a:47059 47H15 (34G20, 35R20, 49A29)

Existence for nonlinear differential systems of hyperbolic type. An. Ştiinţ. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.) 26 (1980), no. 2, 345-352. (Howard A. Levine) 82f;35122 35L60 (35F30)

(with Barbu, Viorel) Existence for a nonlinear hyperbolic system. Nonlinear Anal. 5 35L60

(1981), no. 4, 341-353. (Sadakazu Aizawa) 82k35115 35L60 roz, A. I. Synthesis of time-optimal control laws for linear nonstationary systems. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1980, no. 4, 33-38, 70.

(Author's summary) 82j:49001 49A10

woz, B. Z. (with Carmeli, M.) Classification of gauge fields and group representations.

Differential geometrical methods in mathematical physics (Proc. Conf., Aix-en-Provence (Salamanca, 1979), pp. 313-317, Lecture Notes in Math., 836, Springer, Berlin, 1980. (Authors' summary) 82c81678 81E10 (22E70, 53C10)
On the convolution of Hecke L-functions. Mathematika 27 (1980), no. 2, 312-320

(1981). (A. I. Vinogradov) 82f:12020 12A70 (10D24)

roz, Irene M. (with Gibbon, John; James, I. N.) The sine-Gordon equation as a model for a rapidly rotating baroclinic fluid. Special issue on solitons in physics. Phys. Scripta 20 (1979), no. 3-4, 402-408. (Authors' summary) 82h:76018 76C15 (35Q20, 78A10,

(with Brindley, J.) Aperiodic behaviour of baroclinic wave packets. Phys. Lett. A 83 (1981), no. 6, 259-262. (Authors' summary) 82g:86003 86A10 (58F13)

(with Brindley, J.) Evolution of baroclinic wave packets in a flow with continuous shear and stratification. Proc. Roy. Soc. London Ser. A 377 (1981), no. 1771, 379-404. 76V05 (86A10) (Authors' summary) 82j:76087

rozan, T. On the convergence of some random processes related to stochastic approximation. Rev. Roumaine Math. Pures Appl. 24 (1979), no. 8, 1229–1236. (G. Simboan) 82e:60055 60F17 (62L20)

Dynamic programming for some discrete-time control systems with random perturbations. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 7, 1065–1083. (P. Rutkauskas) 82b:49040 49C20 (93E20)

vozov, A. D. (with Fedorov, E. L.) On auto-oscillations in two-dimens

rosov, A. G. On the stability of an inhomogeneous disk of stars. Astronom. Z. 57 (1980), no. 4, 681–686 (Russian); translated as Soviet Astronom. 24 (1980), no. 4, 391–394 (1981). (Author's summary) 82=85002 85A05

mit distribution of virtual and real waiting time in an M/G/1 system with feedback. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1990, no. 3, 55-60, 141. (Adam Wolisz) 82d:60186 60K25

rezev, N. F. (with Maz'ja, V. G.; Plamenevskii, B. A.) Nonlinear bending of a plate with a crack. (Russian) Differential and integral equations. Boundary value problems (Russian), pp. 145–163, Tbilis. Gos. Univ., Tbilisi, 1979. (R. Kodnár) 82b:35963

rozov, S. F. (with Smirnov, I. P.) Principles of minimum in problems of optimal control of random processes. Prikl. Mat. Meh. 42 (1978), no. 2, 233–244 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 2, 243–255 (1979). (Authors' summary) 82h:93088

renew, V. A. (with Klykov, V. E.; Kulagin, V. L.) The Stefan-type problem occurring in the investigation of salt dissolution and transport process in soil. Prikl. Mat. Meh. 44 (1981), no. 1, 104–112 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 1, 70–75 (1981). (From the text) 82f:35095 35K55 (65N10, 76S05, 80A20)

rozov, V. G. Asymptotic behavior of Green and correlation functions in the statistical

reator, V. G. Asymptotic beneavor of circen and correlation functions in the statistical theory of nonequilibrium processes (Russian. English summary) Teoret. Mat. Fiz. 47 (1981), no. 3, 407-418. (Author's summary) 82882034 82A35 reaction, V. V. (with Krasnoščekov, P. S.; Fedorov, V. V.) Planning of technological systems of multipurpose assignment. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 4, 5-10, 218 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 4, 1-6 (1980). (Editors) 82a:90156 90C31 (93A13)

(with Krasnoščekov, P. S.; Fedorov, V. V.) Sequential clustering in internal design blems of engineering systems. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 5, 5-12, 219 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 5, 1-7 (1980). (Authors' summary) 82c:73662 73K40 (49C20)

(with Fedorov, V. V.) Construction of a vector test for a binary preference relation (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 3, 630-639, 812. (Andrzej Wieczorek) 90A06

rozova, E. A. (with Čencov, N. N.) Algebra of bounded harmonic functions of a countable Markov chain (noncommutative theory). (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1981, no. 1, 28 pp. (Authors' summary) 821:46072

rrell, J. S. (with Bzoch, R.) Concerning the existence of the double Stieltjes mean o-integral. Portugal. Math. 37 (1978), no. 3-4, 307-316 (1981). (S. N. Mukhopadhyay) 26A42 (26B30)

rris, A. O. (with al-Aamily, E.; Peel, M. H.) The representations of the Weyl groups of type B_n. J. Algebra 68 (1981), no. 2, 298-305. (Jürgen Tappe) 82f:20029a

Morris, Hedley C. (with Dodd, Roger K.) A two-connection and operator bundle for the Ernst equation for axially symmetric gravitational fields. *Phys. Lett. A* **75** (1979/80), no. 1-2, 20-22. (J. S. Joel) **82b:83025** 83C20 (58A20, 58F07)

(with Dodd, Roger K.) Geometric structures and inverse scattering problems for levé transcendents. Phys. Lett. A 75 (1979/80), no. 4, 249-253. (Hélène Airault) 82k-58008 58A17 (35Q20, 83C15)

(with Dodd, Roger K.; Eagleton, J.) Perturbation theory for the nearly integrable ear equations associated with a modified Zakharov-Shabat scattering problem. J. Phys. A 13 (1980), no. 4, 1455-1465. (Authors' summary) 82c:35070 58F07, 76X05, 81F99)

yrris, J. L. (with Gourlay, A. R.) The extrapolation of first order methods for parabolic partial differential equations. II. SIAM J. Numer. Anal. 17 (1980), no. 5, 641-655. (M.

K. Kadalbajoo) **824:65080** 65P05

Morris, J. R. Sourceless static Yang-Mills systems. *Phys. Rev. D* (3) **23** (1981), *no.* 2, 556–557. (Author's summary) **824:81086** 81E10 (81D20)

stris, James G. Convergence of the Weiszfeld algorithm for Weber problems using a generalized "distance" function. *Oper. Res.* 29 (1981), no. 1, 37–48. (Author's summary)

Morris, Joel M. Some results on robust detection for known signals and additive

unknown-mean amplitude-bounded noise. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 479-482, IEEE, New

York, 1979. (N. C. Mohanty) 82c:94002 94A05 (90D05)
On single-sample robust detection of known signals with additive unknown-mean amplitude-bounded random interference. II. The randomized decision rule solution. IEEE Trans. Inform. Theory 27 (1981), no. 1, 132-136. (From the introduction) 94A12 (90D15) 824:94018

Morris, Joseph E., Jr. (with Ainsworth, O. R.) A property of quasi-orthogonal polynomials. Fibonacci Quart. 18 (1980), no. 2, 163–165. (B. D. Agrawal) 824:33018 33A65

graves-Morris, P. R. See Graves-Morris, P. R. Morris, Peter D. Chebyshev subspaces of L^1 with linear metric projection. J. Approx. Theory 29 (1980), no. 3, 231-234. (Bl. Sendov) 82h:41038 41A65 (46E30) (with Fisher, S. D.; Wulbert, D. E.) Unique minimality of Fourier projections. Trans. Amer. Math. Soc. 265 (1981), no. 1, 235-246. (Colin Bennett) 82e:46038

46E15 (41A35, 42A05) us endomorphisms in the umbral calculus. Stud. Appl. Math. 62 (1980), no. 1, 85-92. (William R. Allaway) 82g:05005 05A10 (33A65)

(with Wang, Stuart Sui Sheng) A Jacobian criterion for smoothness. J. Algebra 69 (1981), no. 2, 483-486. (S. Greco) 82j:14004

Morris, Robert J. T. Optimization with nonadditive set functions. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 445-450, IEEE, New York, 1979. (Editors) 82g:49020

мтіs, Sidney A. ★Двойственность Понтрягина и строение локально компактных абелевых групп. (Russian) [Pontrjagin duality and the structure of locally compact abelian groups] Translated from the English by A. L. Oniščik. "Mir", Mascow, 1980.

104 pp. (Editors) 82c-22007 22B05
On somewhat divisible groups. Bull. Inst. Math. Acad. Sinica 9 (1981), no. 1, 35–38.
(M. Rajagopalan) 82m:22008 22C05

Morris, T. F. Dynamical self-confinement of charged scalar fields. Phys. Lett. B 100 (1981), no. 1, 57-60. (Author's summary) 82d:81106

rison, David R. A Stolarsky array of Wythoff pairs. A collection of manuscripts related to the Fibonacci sequence, pp. 134–136, Fibonacci Assoc., Santa Clara, Calif., 1980. (J. Chidambaraswamy) 82j:05030 05B15 (10A35)

Semistable degenerations of Enriques' and hyperelliptic surfaces. Duke Math. J. 48 (1981), no. 1, 197-249. (Miles Reid) 82m:14020 14J15 (14E30)

rrison, Kent The scheme of finite-dimensional representations of an algebra. Pacific J. Math. 91 (1980), no. 1, 199-218. (Daniel Simson) 82f:16034

etric equivalence relations on modules. J. Pure Appl. Algebra 22 (1981), no. 2, 165-177. (Gerhard Pfister) 82k:14007 14C25 (16A64)

rrison, L. V. On the analysis of megalithic lunar sightlines in Scotland.

y No. 2 suppl. J. Hist. Astronom. 11 (1980), S65-S77. (C. R. Fletcher) 82e:01007 01A10

Morrison, M. A. See Backstrom, Robert P., 82b:10009

rrison, Philip J. The Maxwell-Vlasov equations as a continuous Hamiltonian system. Phys. Lett. A 80 (1980), no. 5-6, 383-386. (M. Drāganu) 82e:76082 76X05 (70H99

Morriss, G. P. (with Cummings, P. T.; Wright, C. C.) Analytic solution of the RISM equation for symmetric diatomics with Yukawa closure. Molecular Phys. 43 (1981), no. 6, 1299-1309. (Authors' summary) 82h:81151 81G55

Morro, Angelo From microscopic to macroscopic reversibility. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 6, 540-547. (From the introduction) 82f:73008 73B30 (80A99, 82A35)

Quasilinear systems and waves in thermoviscous fluid dynamics. (Italian sum Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 5, 340-346 76A05 (73U05) (1980). (From the introduction) 82h:76003

Shocks and waves in thermoviscous MFD with hidden variables. Acta Phys. Acad. Sci. Hungar. 48 (1980), no. 4, 369-382. (Author's summary) 82h:76043 Acceleration waves in thermoviscous fluids. Rend. Sem. Mat. Univ. Padova 63

(1980), 169-184. (Author's summary) 82h:76007 76A99 (35O10, 73B30) Oblique interaction of waves with shocks. (German summary) Acta Mech. 38 (1981), no. 3-4, 241-248. (Rishi Ram Sharma) 82k:76048 76L05 (35L67)

(with Bampi, Franco) Nonstationary thermodynamics and wave propagation in heat conducting viscous fluids. J. Phys. A 14 (1981), no. 3, 631-638. (Authors' summary)

with Bampi, Franco) Mixture approach to a model for sediment transport. Phys. ids 24 (1981), no. 2, 209–213. (Authors' summary) 82b:76059 76T05 (35L65)

Fluids 24 (1981), no. 2, 209-213. (Authors' summary) 82b:76059 Mors, Michael A new result on the problem of Zarankiewicz. J. Combin. Theory Ser. A 31

(1981), no. 2, 126-130. (Richard K. Guy) 82k:05069 05C35 (05C50)

Morse, A. S. See Katti, S. K., 82i:93008

Morse, J. N. (with Lieb, E. B.) Flexibility and rigidity in multicriterion linear programming. Multiple criteria decision making theory and application (Proc. Third Conf., Hagen/Königswinter, 1979), pp. 238-251, Lecture Notes in Econom. and Math. Systems, 177, Springer, Berlin, 1980. (Roman Słowiński) 82c:90089 90C31 (90A09, 90A10) forse, Marston See Bott, Raoul, 82b:01037

Mortell, Michael P. (with Seymour, Brian R.) A finite-rate theory of quadratic resonance in a closed tube. J. Fluid Mech. 112 (1981), 411-431. (Authors' summary) 82m:76056

en, Chris Every quotient algebra for C, is trivial. Notre Dame J. Formal Logic 21 (1980), no. 4, 694-700. (N. C. A. da Costa) 82b:03057 03B60 (03G25)

Morton, J. B. (with Wood, Houston G.) Onsager's pancake approximation for the fluid namics of a gas centrifuge. J. Fluid Mech. 101 (1980), no. 1, 1-31. (Authors' summary) 76N99 (76U05, 80A20)

Morton, K. W. (with Barrett, J. W.) Optimal finite element methods for

diffusion-convection problems. Boundary and interior layers-compu asymptotic methods (Proc. Conf., Trinity College, Dublin, 1980), pp. 134-148, Boole, Dún Laoghaire, 1980. (K. K. Sen) 82g:80014 80A20 (65N30)

Stability of finite difference approximations to a diffusion-convection equation. Internat. J. Numer. Methods Engrg. 15 (1980), no. 5, 677-683. (From the introduction) 76R99 (65M10, 76A60)

(with Barrett, J. W.) Optimal Petrov-Galerkin methods through approximate metrization. IMA J. Numer. Anal. 1 (1981), no. 4, 439-468. (Authors' summary) 82m:65088 65M60

Morton, R. (with Gani, J.) The degree of vertices on a randomly growing tree.

Contributions to probability, pp. 151–156, Academic Press, New York, 1981. (Mauro Cerasoli) 82h:60156 60180 (05C99, 60C05)

Optimal estimating equations with applications to insect development times. Austral. J. Statist. 23 (1981), no. 2, 204-213. (Author's summary) 82k:62196 Efficiency of estimating equations and the use of pivots. Biometrika 68 (1981), no. 1, 227-233. (D. A. Sprott) 82ic62049 62F10
Estimating equations for an ultrastructural relationship. Biometrika 68 (1981), no. 3,

735-737. (Author's summary) 82k:62136 62J05

Morton, Vernon Charles See Meyler, Dorothy S., 82e:01097

Morusca, I. (with Cotiu, A.; Potra, T.) Mathematical modeling by complex spline functions of filtering phenomena through porous media. (Romanian. French summary) Bul. Ştiinţ. Inst. Politehn. Chij-Napoca Ser. Mat.-Fiz.-Mec. Apl. 21 (1978), 26-33. (Authors' summary) 82j:76077 76S05

Morvan, Jean-Marie Some topological properties of the Lipschitz-Killing curvature. Korean Math. Soc. 17 (1980/81), no. 2, 169-173. (Sheila Carter) 82d:53036 53C42

Topology of a submanifold and external curvatures. (Italian summary) Rend. Mat. (6) 13 (1980), no. 1, 1-20. (P. J. Ryan) 82c:53037 53C40

Classe de Maslov d'une immersion lagrangienne et minimalité. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 13, 633-636. (Author's summary) 58G15 (53C40)

osca, Edoardo Innovations informational equivalence in the independent Gaussian case. Recent developments in variable structure systems, economics and biology (Proc. US-Italy Sem., Tacrimina, 1977), pp. 232–251, Lecture Notes in Economics and motorgy (Froc. US-Hal) Springer, Berlin, 1978. (B. Picinbono) 82c:60069 60G15 (60G25)

Moscatelli, Vincenzo B. Représentations des espaces complètement bornologiques et des espaces nucléaires. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 4, A279-A282. (M. Valdivia) 82d:46006 46A09

Moščenskli, V. A. A decreasing sequence of propositional calculi with deduction of increased complexity. Begriffsschrift—Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 281-283, Friedrich-Schiller-Univ., Jena, 1979. (Wieslaw Dziobiak) 82f:03023 03B99

Turing a-computations and essential complexity of a-inversions of binary words. sssian) Metody Diskret. Analiz. No. 35 (1980), 83-92, 105. (Andreas Brandstädt) (Russian) Metody 68C25 (03D10, 68C40)

68023 68C25 (03D10, 68C40)
Special completeness of some languages of k-valued logics. (Russian) Metody

10 44 (Author's summary) 82mc03035 03B50 Diskret. Analiz. No. 36 (1981), 39-45, 94. (Author's summary) 82m:03035

sschetti, Gaetano Homothetic solutions of Einstein's equations and shock waves.

Math. Phys. 22 (1981), no. 4, 830-834. (K. Wódkiewicz) 82f:83057 83C55 (58C) 58D25, 83C40)

schovakis, Yiannis N. *Descriptive set theory. Studies in Logic and the Foundations of Mathematics, 100. North-Holland Publishing Co., Amsterdam-New York, 1980. xii + 637 pp. ISBN 0-444-85305-7 (Peter G. Hinman) 82e:03002 03-02 (03D55, 03E15, 04A15, 28A05, 54H05)

(with Becker, Howard S.) Measurable cardinals in playful models. Cabal Seminar 77-79 (Proc. Caltech-UCLA Logic Sem., 1977-79), pp. 203-214, Lecture Notes in Math., 839, Springer, Berlin, 1981. (J. M. Henle) 82e:03052 03E60 (03E15, 03E55) See also Seminar: Cabal. 82c:03002

Moschytz, G. S. (with Hökenek, E.) Analysis of general switched-capacitor networks using indefinite admittance matrix. Proc. IEE-G 127 (1980), no. 1, 21-33. (Authors' summary) 82a:94095 94C05

Moščinskii, B. V. (with Rodrigues, K.; Fedjanin, V. K.) The generating function and a functional analogue of the Bogoljubov variational method. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 2, 251-260. (A. K. Vidybida) 82k:82020 (81C35, 82A15, 82A77)

Moscowitz, Albert (with Brockman, M. W.) Macroscopic sum rules in natural optical activity. Molecular Phys. 43 (1981), no. 6, 1385-1393. (Authors' summary) 82h:81161 81K05

Moscucci, Manuela (with Bernardi, Claudio) Investigating some geometrical features of 4-space. Math. Gaz. 64 (1980), no. 428, 90-99. (S. R. Mandan) 82e:51032

Moseenkov, V. B. (with Samoilenko, A. M.) Iteration methods for solving nonlinear partial differential equations that are nearly linear. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 10, 44 pp. (Rémi Vaillancourt) 82c:35010 35D05 (35G20, 47H17, 65P05)

Uniform invertibility of a linear differential operator. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 1, 81-87. (Ja. A. Roitberg) 82e:35026 35G05

Moser, Ján Proof of E. C. Titchmarsh's conjecture in the theory of the Riemann zeta function. (Russian) Acta Arith. 36 (1980), no. 2, 147-156. (H. Iwaniec) 82f:10053

ser, Jürgen K. Hidden symmetries in dynamical systems. Amer. Sci. 67 (1979), no. 6,

689-695. (Editors) 82k:58047 58F07 (35Q20, 58F35, 76B25, 81E99)
Geometry of quadrics and spectral theory. The Chern Symposium 1979 (Proc. Internat. Sympos., Berkeley, Calif., 1979), pp. 147-188, Springer, New York, 1980. (Robert L. Devaney) 82j:58064 58F07 (35Q20, 70H99)

An example of a Schroedinger equation with almost periodic potential and nowhere dense spectrum. Comment. Math. Helv. 56 (1981), no. 2, 198-224. (H. Hochstadt) 34B30 (58F07, 58F19, 81C05)

Moser, William O. J. (with Coxeter, Harold Scott MacDonald) ★Порождающие элементы и определяющие соотношения дискретных групп. (Russian) [Generators and relations for discrete groups] Translated from the third English edition by V. A. Čurkin. With a supplement by Ju. I. Merzljakov. "Nauka", Moscow, 1980. 240 pp. (Editors) 82c:20002

(with Pollack, Richard) A new identity and some applications. Canad. Math. Bull. 23 (1980), no. 3, 281-290. (S. Zaks) 82b:05022 05A19

ses, Harry E. Exact solutions for the three-dimensional Schrödinger equation with quasilocal potentials obtained from a three-dimensional Gel'fand-Levitan equation. Examples of totally reflectionless scattering. Mathematical methods and applications of scattering theory (Proc. Conf., Catholic Univ., Washington, D.C., 1979), pp. 260-267, Lecture Notes in Phys., 130, Springer, Berlin, 1980. (See 82h:81117) 35P25 (35J10,

(with Abraham, P. B.) Changes in potentials due to changes in the point spectrum: anharmonic oscillators with exact solutions. Phys. Rev. A (3) 22 (1980), no. 4,

1333–1340. (From the summary and introduction) 82:81099a 81C05 (34B25)

Erratum: "A kernel of Gel'fand-Levitan type for the three-dimensional Schrödinger equation" [J. Math. Phys. 21 (1980), no. 1, 83-89; MR 81a:81023]. J. Math. Phys. 22 (1981), no. 12, 3010. (Editors) 82m:81014 81C05

(with Abraham, P. B.) Erratum: "Changes in potentials due to changes in the point spectrum: anharmonic oscillators with exact solutions". Phys. Rev. A (3) 23 (1981), no. 4, 2088. (Editors) 82f:81009b 81C05 (34B25)

(with Abraham, P. B.; DeFacio, B.) Two distinct local potentials with no bound states can have the same scattering operator: a nonuniqueness in inverse spectral transformations. Phys. Rev. Lett. 46 (1981), no. 26, 1657-1659. (Authors' summary)

Mosesjan, K. M. (with Gjulumjan, S. M.) Graphs that are critical with respect to coloring. (Russian. Armenian summary) Trudy Vyčisl. Centra Akad. Nauk Armjan. SSR i Ereva Gos. Univ. Mat. Voprosy Kibernet. i Vyčisl. Tehn. No. 9 Teorija Grafov (1979), 9-12. (G. N. Kopylov) 82i:05033 05C15

k-basable graphs. (Russian. Armenian summary) Trudy Vyčisl. Centra Akad. Nauk Armjan. SSR i Erevan. Gos. Univ. Mat. Voprosy Kibernet. i Vyčisl. Tehn. No. 9 Teorija Grafov (1979), 26–36. (H.-J. Voss) 821:05047 05C20 (05C38)

Properties of some orientations of graphs. (Russian. Armenian summary) Trudy Vyčisl. Centra Akad. Nauk Armjan. SSR i Erevan. Gos. Unio. Mat. Voprosy Kibernet. i Vyčisl. Tehn. No. 9 Teorija Grafov (1979), 37-44. (J. Bosák) 82j:05066

(with Karejan, Z. A.) The Hamiltonian completion number of a digraph. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 3, 129–132. (M. M. Syslo) 82:e05067 05C45 (05C20, 05C38) 05C45 (05C20, 05C38)

Moshinsky, M. (with Flores, J.; Henestroza, E.; Mello, P. A.) Decay of a compound particle and the Einstein-Podolsky-Rosen argument. Amer. J. Phys. 49 (1981), no. 1,

59-63. (Authors' summary) 82a:81005 81B05 (81D05) (with Chacon, E.; Vanagas, V. V.) Confrontation of macroscopic and microscopic nuclear collective models. J. Math. Phys. 22 (1981), no. 3, 605-622. (J.-P. Antoine) 82j:81059 81G30 (81H10)

61036 (e) 611107 (with Seligman, Thomas H.) On the structure of phase space. J. Math. Phys. 22 81), no. 7, 1338–1344. (William H. Klink) 82]:70013 70G35 (20H99, 30C35, (1981), no. 7, 1338-1344. (William H. Klink) 82j:70013

(with Seligman, Thomas H.) Canonical transformations relating the oscillator and Coulomb problems and their relevance for collective motions. J. Math. Phys. 22 (1981), no. 8, 1526-1535. (Kurt Bernardo Wolf) 82k:81098 81H10 (81G30)

osimann, James E. (with James, Ian R.) A new characterization of the Dirichlet distribution through neutrality. Ann. Statist. 8 (1980), no. 1, 183-189. (Authors' 62E10 summary) 82b:62015

Mošinskii, A. V. The method of auxiliary basis functions in waveguide problems of scattering. (Russian) Differencial'nye Uravnenija 16 (1980), no. 9, 1623-1634, 1726. (V. M. Babič) 82a:78019 78A50 (35J05)

Solution of a boundary value problem on the scattering of a wave of type H_{10} by a cylindrical inhomogeneity of elliptic profile in a rectangular waveguide. (Russian) Differencial'nye Uravnenija 16 (1980), no. 12, 2190-2204, 2302. (A. S. Silbergleit)

(with Kravčenko, V. F.) The interdependence of fundamental solutions of the Helmholtz equations in superposed elliptic and cylindrical coordinates. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 15–19, 103. (P. Szeptycki) 82b:35041 35J05 (78A25)

Moskalenko, A. I. Continuation of products on a mixed abelian group of countable rank. (Russian) Mat. Zametki 29 (1981), no. 3, 375-379, 478. (Alexander Soifer) 82g:20081

See also Dynamics of ecological-economic systems, 82f:92002

Moskalenko, Z. L. On automorphism groups of compact totally disconnected nilpotent groups. (Russian) Ukrain. Mat. Z. 32 (1980), no. 1, 46-52, 142. (Adrian C. Albu) 22A05

Moskal'kov, M. N. (with Makarenko, A. S.) A means of counteracting oscillations. (Russian. English summary) Vyčisl. Prikl. Mat. (Kiev) 1980, no. 41, 65-71, 158. (I. M. Sheffer) 82b:65086 65M10

Moskovkin, V. M. (with Alekseev, A. D.; Kolosnicyn, N. I.) Nonlinear algorithm for processing data of gravitation wave measurements. (Russian) Problemy Teor. Gravitacii i Èlement. Častic No. 11 (1980), 152-164. (Ilija Lukačević) 82k:83018

Moskowitz, M. (with Greenleaf, Frederick P.: Rothschild, Linda Preiss) A unipotent group associated with certain linear groups. Colloq. Math. 43 (1980), no. 1, 41-45 (1981). (J. L. Brenner) 82k:20076 20G99

Moskvitin, V. N. An inverse problem for the wave equation. (Russian) Inverse problems for differential equations of mathematical physics (Russian), pp. 55-64, 157, Akad. Nauk SSSR Sibirsk. Otdel., Vyčisl. Centr., Novosibirsk, 1978. (A. S. Alekseev) 82e:76041 76J99 (35L05, 35R30)

Mosolov, B. G. Integral theorems of polyvector analysis. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 2, 30-36, 90. (E. Pavlov) 82a:53012 (26B12)

Mosolov, P. P. On certain mathematical questions of the theory of incompressible viscoplastic media. *Prikl. Mat. Meh.* 42 (1978), no. 4, 737–746 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 4, 787-799 (1979). (Author's summary) 82j:73035

solova, M. V. Functions of noncommutative operators generating a graded Lie algebra. (Russian) Mat. Zametki 29 (1981), no. 1, 35-44, 154. (W. T. van Est) 82f:17013 17B70 (46H99 81C05)

Moss, Franklin H. (with Markowsky, George) An evaluation of local path ID swapping in computer networks. IEEE Trans. Comm. 29 (1981), no. 3, 329-336. (Authors' summary) 82a-68010 68A05 (90B10 94C99)

Moss, Kenneth N. Homology of SL(n, Z[1/p]). Duke Math. J. 47 (1980), no. 4, 803-818. 20G10 (10E25, 22E10, 55P99) (Ross Staffeldt) 82h:20061

Moss, P. B. (with Lenagan, T. H.) K-symmetric rings. J. London Math. Soc. (2) 21 (1980), no. 1, 45-52. (A. G. Heinicke) 82a:16019 16A33 (16A18, 16A55)

Moss, William F. (with Christensen, Mark J.) Scattering and heat transfer by Integral Equations 2 (1980), no. 4, 299-317. (P. M. Gupta) 82b:45007 45E10 (65R20. 80A20) Fundamental solutions of degenerate or singular elliptic equations. J. Math. Anal.

Appl. 78 (1980), no. 2, 574-587. (Gianfranco Bottaro) 82c:35031 35J70 Mossaheb, S. A Nyquist type stability criterion for linear multivariable delayed systems.

Internat. J. Control 32 (1980), no. 5, 821–847. (Richard M. Lewis) 824:93048 93D1

Hardy spaces of analytic functions and feedback stability of scalar convolution systems. SIAM J. Control Optim. 18 (1980), no. 5, 498-510. (V. M. Popov) 82d:93051

ssige, Svein Algorithms for computing the h-range of the postage stamp problem. Math. Comp. 36 (1981), no. 154, 575-582. (R. G. Stanton) 82e:10095 10L05 (10-04) Mossotti, O. F. See Ljubimov, Ju. A., 82d:80001

Mosteller, Frederick (with Dempster, A. P.) In memoriam: William Gemmell Cochran, 1909–1980. Amer. Statist. 35 (1981), no. 1, 38. (Editors) 82b:01041 01A70

Mostepanenko, A. M. See Quantum mechanics and the theory of relativity, 82g:81003

Mostepanenko, V. M. (with Frolov, V. M.; Grib, A. A.) Conformal symmetry breaking and quantization in curved space-time. Phys. Lett. A 65 (1978), no. 4, 282-284. (Authors' summary) 82b:81160 81M05 (83F05)

Analogies of theories of vacuum quar um effects in gravitational and electromagnetic fields. Phys. Lett. A 75 (1979/80), no. 1-2, 11-13. (Bernard S. Kav) 82c:81183 Particle creation and vacuum polarization by a nonstationary electric field. (Russian.

- ary) Teoret. Mat. Fiz. 45 (1980), no. 2, 210-223. (Author's summary) English summary) 7 82e:81054 81G10
- rskoi, A. P. s-convex sets in a Riemannian space. (Russian) Modern geometry Russian), pp. 77-83, Leningrad. Gos. Ped. Inst., Leningrad, 1978. (J. Szenthe) 82g:53046 53C20 (53C40)
- stow, G. D. (with Siu, Yum Tong) A compact Kähler surface of negative curvature not covered by the ball. Ann. of Math. (2) 112 (1980), no. 2, 321-360. (Robert E. Greene) 53C55 (32C10, 32M05)

On a remarkable class of polyhedra in complex hyperbolic space. *Pacific J. Math.* 86 (1980), no. 1, 171–276. (E. Vinberg) 82æ22011 22E40 (30F35, 51M10)

- ski, Andrzej Thoughts of the theme of a course in the history of math m. Mat. (2) 22, no. 1, 65-75 (1979). (Stanisław J. Surma) 82h:01056 (Polish) Wiado 01A70

 - An excerpt from notes to a course in the history of mathematics. (Polish) Wiadom.

 Mat. (2) 22, no. 1, 76-77 (1979). (Stanisław J. Surma) 82h-01057 01A70 (03-03)

 An excerpt from the book Mathematical logic. (Polish) Wiadom. Mat. (2) 22, no. 1, 77-78 (1979). (Editors) 82c-01043 01A65 (03-01)
- ee also Los, Jerzy, 82k01053; Grzegorczyk, A.; et al., 82k01054 and Krajewski, Stanislaw; et al., 82h:01055
- wa, T. P. Periodic modes of systems of differential equations with jolts. (Russian) Differencial'nye Uravnenija (Ryazan) No. 15 (1980), 77-89. (V. G. Zadorožnii) 82k:34055 34C35 (34C25)
- Moszner, Zenon Solution générale de l'équation de translation sur un demi-groupe. Wyż. Szkoła Ped. Krakow. Rocznik Nauk.-Dydakt. Prace Mat. No. 9 (1979), 97-104. (Jözef Tabor) 82c:39010 39B70
 - Sur l'équation f(x)f(y)f(-x-y) = g(x)g(y)g(-x-y). Aequationes Math. 21 (1980), no. 1, 20–32. (Jözef Tabor) 82a:39003 39B30 (62E10)
- no. 1, 20-32. (Jozef Tabor) 82a:39003 39830 (c2E10)

 Sur les groupes de fonctions. Ann. Polon. Math. 37 (1980), no. 2, 175-178. (Patrice Assouad) 82h:20006 20B99 (26B40)

 Iotoc, Ioan New informational indices for interactions in biological systems. Match No. 11 (1981), 169-183. (Author's summary) 82h:92014 92A07 (92A09)

 Iotohashi, Yoichi Le crible de Selberg. Analytic number theory (Proc. Sympos., Tokyo, 1980) (French), pp. 3-28, Monograph. Sci. Maison Franco-Japon., 3, Maison Franco-Japon., Tokyo, 1981. (See 82h:10004) 10H30
- o (with Yasui, Kazumi; Nakagawa, Toshio; Sawa, Yoshiya) Reliability
- analysis of an inspection policy and its application to a computer system. (Japanese. English summary) J. Oper. Res. Soc. Japan 23 (1980), no. 3, 273-286. (From the ary) 82a:90066 90B25 (68A05)
- tornyi, V. P. Approximation in the mean of functions by Fourier-Legendre sums. (Russian) Dokl. Akad. Nauk SSSR 259 (1981), no. 1, 39-42. (Hans-Jürgen Albrand) 42A10 (42C10)
 - (with Velikin, V. L.; Žensykbaev, A. A.; Nikol'skii, S. M.; Ruban, V. I.) Nikolai Pavlovič Korneičuk (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 209-213. (Editors) 82e:01105 01A70
- se, Kaoru On the nilpotency index of the radical of a group algebra. II. Math. Okayama Univ. 22 (1980), no. 2, 141-143 (Donald S. Passman) 82c:20011
 - (with Ninomiya, Yasushi) On the commutativity of the radical of the group algeb of a finite group. Osaka J. Math. 17 (1980), no. 1, 23-26. (Robert L. Snider) 82g:20015a 20C05 (16A26)
 - On problems of Ninomiya and of Tsushima. Proceedings of the 13th Sympos Ring Theory (Okayama Univ., Okayama, 1980), pp. 80-82, Okayama Univ., Okayama, 1981. (From the text) 82i:20007 20C05 (16A26)
- m, Ben R. (with Bohr, Aage) Solutions for particle-rotor and cranking models for single j configuration. Phys. Scripta 22 (1980), no. 5, 461-467. (Authors' summary) 81G35
 - (with Bohr, Aage) Features of nuclear deformations produced by the alignment of individual particles or pairs. Phys. Scripta 22 (1980), no. 5, 468-474. (Authors' summary) 82c:81155 81G35
- Mottl, J. Description of a program for nonlinear programm ing: special problem of bivalent ear programming. Comput. J. 23 (1980), no. 4, 360-368. (Author's introduction) 82a:90145 90C30
- Mottola, E. (with Hasslacher, Brosl) Asymptotically free quantum gravity and black holes
- Phys. Lett. 8 99 (1981), no. 3, 221–224. (Derek Raine) 82c68035 83C45 (81E99)

 de Mottoni, Piero (with Hadeler, K. P.; Schumacher, Konrad) Dynamic models for animal orientation. J. Math. Biol. 10 (1980), no. 4, 307-332. (T. Poggio) 82m:92024 92A09 (34H05, 90D26)
 - (with Tesei, Alberto) A singular perturbation approach for a reaction diffusion system arising in nuclear reactor theory. Math. Methods Appl. Sci. 2 (1980), no. 1, 91-107. (Claude-Michel Brauner) 824:35021 35B25 (35K60, 82A75)
 - (with Tesei, Alberto) A comparative analysis of some semilinear parabolic systems modelling the dynamics of fast nuclear reactors. (German and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 11, 615-622. (V. Mastrangelo) 82g:82062 82A75 (35K99)
 - (with Schiaffino, Andrea) Bifurcation of periodic solutions for some systems with periodic coefficients. Nonlinear differential equations (Proc. Internat. Conf., Trento, 1980), pp. 327-338, Academic Press, New York, 1981. (Yiannis Sficas) 82f:34045
 - (with Schiaffino, Andrea) Competition systems with periodic coefficients: a netric approach. J. Math. Biol. 11 (1981), no. 3, 319-335. (Hal Leslie Smith)
 - (with Schiaffino, Andrea) Bifurcation results for a class of periodic quasilinear parabolic equations. Math. Methods Appl. Sci. 3 (1981), no. 1, 11-20. (Hans Kaper) 35B32 (35K60)
 - (with Talenti, Giorgio) Stabilization and error bounds for the inverse
 - Laplace transform. Numer. Funct. Anal. Optim. 3 (1981), no. 3, 265-283. (Authors' summary) 82h:65093 65R10 (44A10)
 - See also Nonlinear differential equati is, 82d:34003
- Moulin, H. Voting with proportional veto power. Econometrica 50 (1982), no. 1, 145-162.
 (Author's summary) 82m:90017 90A08

- Moulin, Th. (with Mairlot, Fernand E.; Godart, Odon; Le Guyader, H.; Vallet, Cl.; Ferré, M.) Symposium: Notion de Temps et Cybernétique. Cybernética 24 (1981), no. 2, 89–120. (Editors) 82h:93002 93A10 glines, Carlos-Ulises (with Balzer, Wolfgang) On theoreticity. Synthese 44 (1980), no. 3,
- 467-494. (Evandro Agazzi) 82a:00015 00A69
 - Intertheoretic approximation: the Kepler-Newton case. Synthese 45 (1980), no. 3, 387–412. (From the introduction) 82a:03008 03A05 (00A69, 01A45)
 - antics of theories. (Spanish) Teorema 10 (1980), no. 1, 25-42. (F. Speranza) 82h:03018 03A05 (00A69)
 - An example of a theory-frame: equilibrium thermodynamics. Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science (Second Internat. Conf., Pisa, 1978), Vol. II, pp. 211–238, Synthese Library, 146, Reidel, Dordrecht, 1981. (Lawrence 00A69 (80A10)
 - See also North, John D., 82j:01005
- x-Moulis, Nicole See Desolneux-Moulis, Nicole
- Mouloud, Noël Quelques hypothèses sur la porte des notions opératoires dans les langues relles et techniques. Publ. Dép. Math. (Lyon) 16 (1979), no. 3-4, 1-11. (J. P. Seldin) 03B65 (03B40, 68F99)
 - La logique des possibles et les objets de connaissance. Problèmes et débats concernant le sens, l'inférence, la référence, la production des pensables. Rev. Internat
 - Philos. 33 (1979), no. 4, 811-847. (J. F. A. K. van Benthem) 82d:03011 (00A25, 03B45)
 - La science et sa logique: les garanties du vrai et la réalisation des possibles. Philosophy of science: contemporary issues. Rev. Internat. Philos. 34 (1980), no. 1-2, 155-178. (See 82e:00034) 03A05
- Moura, Arnaldo A note on grammatical covers. Inform. Process. Lett. 11 (1980), no. 3, 127-129. (A. V. Anisimov) 82d:68047 68F05
- Moura, Carlos A. (with Raupp, Marco A.; Feijóo, Raúl A.) Analysis of a mathematical model for the motion of a pile thrust into the soil. Seminar on Numerical Analysis and its Applications to Continuum Physics (Rio de Janeiro, 1980), pp. 125-134, Soc. Brasil. Mat., Rio de Janeiro, 1980. (R. D. Bhargava) 82d:73028 73F99 (49A29, 73Q05)
- buritsen, O. G. (with Hansen, E. Kjaersgaard; Knak Jensen, S. J.) General correlation function series: phase diagram of the anisotropic Heisenberg antiferromagnet in a field. Phys. Rev. B (3) 22 (1980), no. 7, 3256-3270. (From the summary) 82i:82027a (82A77)
 - (with Knak Jensen, S. J.) Phase diagram of a uniaxially stressed cubic
 - antiferromagnet. Phys. Rev. B (3) 22 (1980), no. 7, 3271-3276. (Authors' summary) 82A25 (82A77) 82i:82027b
- Mourre, Eric Link between the geometrical and the spectral transformation approaches in scattering theory. Comm. Math. Phys. 68 (1979), no. 1, 91-94. (From the text) 82d:81127 81F10 (35P25)
- Absence of singular continuous spectrum for certain selfadjoint operators. Comm Math. Phys. 78 (1980/81), no. 3, 391-408. (A. V. Buhvalov) 82c:47030 47B25 (35P05, 47F05)
- (with Jullien, R.; Uzelac, K.; Pfeuty, Pierre) The Yang-Lee edge singularity studied by a four-level quantum renormalization-group blocking method. (French summary) J. Physique 42 (1981), no. 8, 1075-1080. (Authors' summary) 82i:82024 82A25
- ssiaux, A. (with Tombal, P.; Demaret, Jacques) Exact solution for vacuum Bianchi type III model with a cosmological constant. J. Phys. A 14 (1981), no. 8, L277-L280. (Authors' summary) 82e:83012 83C15 assouris, J. P. The chromatic evaluation of strand networks. Advances in twistor theory,
- pp. 308-312, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81B05
 - Vector coupling coefficients and spin networks. Advances in twistor theory, pp. 313-317, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 81C40 82e:83002)
- su, R. Sur l'existence d'intégrales premières. Sem inar on Hyperbolic and Holom Partial Differential Equations, 1979-1980 (French), Exp. No. 4, 9 pp., Univ. Paris VI, Paris, 1980. (Editors) 82d:58004 58A15 See also Ramis, Jean-Pierre, 82b:58004
- stakides, George (with Bedrosian, Samuel D.) Finding the graph with the maximum number of spanning trees. J. Franklin Inst. 310 (1980), no. 6, 343-348. (A. K. Kelmans) 82k:05070 05C35 (05C05, 90B25)
- ulos, Evanghélos A. Continuité et discontinuité en histoire. Eleutheria 1979, no. 2, 214-217. (Livia Giacardi) 82k:00022 00A25 (01A05)
- Mouvart, A. F. Carrès siamois. (English summary). Combinatorics 79 (Proc. Collog., Univ. fontréal, Montreal, Que., 1979), Part I. Ann. Discrete Math. 8 (1980), 243-246. (Mikhail Deva) 82h-05033 05B15 (05B30)
- Mova, V. V. Priority queueing in production systems. (Russian) Behavior of systems in random media (Russian), pp. 84–88, 95, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev. 1979. (Dietrich Stoyan) 82e:90046 90B22 (60K25)
- Movčan, L. T. Stable nonlinear sampled-data systems with constantly acting perturbations (Russian) Kibernet. i Vyčisl. Tehn. No. 49 (1980), 57-59, 99. (A. A. Pervozvanskii) 93C10 (34D05, 93C57)
 - Exponential stability of discrete control systems. Automatika 1980, no. 3, 80-82, 95 (Russian); translated as Soviet Automat. Control 13 (1980), no. 3, 71-73 (1981). (Author's summary) 82e:93078 93D05
- Movsisjan, L. A. (with Bagdoev, A. G.) The modulation equations in nonlinear dispersive media and their application to waves in thin bodies. (Russian. Armenian and English maries) Izv. Akad. Nauk Armjan. SSR Ser. Meh. 33 (1980), no. 3, 29-40, 78. (V. M. Babič) 82e:73034 73D99 (35L99, 73L99)
- Mow, Van C. (with Eisenfeld, Jerome) Asymptotic properties of a nonlinear diffusion process arising in articular cartilage. Appl. Math. Comput. 5 (1979), no. 3, 187–198. (Authors' summary) 82k:35059 35K55 (92A09)
- Mowshowitz, Abbe (with Criscuolo, Giovanni; Kwok, Chung Mo; Tortora, Roberto) The group and the minimal polynomial of a graph. J. Combin. Theory Ser. B 29 (1980), no. 3, -302. (C. Y. Chao) 824:05066 05C25 (05C50, 20B25)
- Moyer, Theodore D. Transformation from proper time on earth to coordinate time in solar system barycentric space-time frame of reference. I, II. Celestial Mech. 23 (1981), no. 1,

33-56, 57-68. (Author's summary) 82e:70024 70M05

Moylan, Peter J. (with Hill, David J.) Connections between finite-gain and asymptotic stability. IEEE Trans. Automat. Control 25 (1980), no. 5, 931-936. (P. L. Falb) 93D25

A relaxed dissipativeness test for the stability of large-scale systems. IEEE Trans. tomat. Control 26 (1981), no. 2, 545-547. (Author's summary) 821:93066 93D99

ynihan, Richard Conjugate transforms and limit theorems for τ_T semigroups. Studi Math. 69 (1980/81), no. 1, 1–18. (H. Sherwood) 82e:60027 60E10 (43A32, 60B10) Mozalevskaja, G. V. (with Harlamova, E. I.) A paper of Ampère. (Russian. English

summary) History and methodology of the natural sciences, No. XX (Russian pp. 196-204, Moskov. Gos. Univ., Moscow, 1978. (E. Stipanić) 82d:01014

Možars'kii, V. V. Investigation of the behavior of a surface in the neighborhood of a cuspidal edge of the first kind. (Ukrainian. English and Russian summaries) Visnik Kiiv. Univ. Ser. Mat. Meh. No. 22 (1980), 77-85, 150. (Vladislav Goldberg) 82k:53005 53A05

Mozer, Ján See Moser, Ján

Mozolevskii, I. E. The problem of conjugation for quasielliptic equations. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 5, 14-21, 139. (E. V. Tjurikov) 82i:35079 35J99 (35K99)

The conjugation problem for degenerate elliptic and quasielliptic equations. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 6, 18-24, 140. (É. M. Saak) 82j:35074 35J70

Mozrzymas, Jan Sur la structure des représentations de vibrations d'un réseau cristallin. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, B71-B72. (Author's summary) 82b:82064 82A60 (20H15)

(with Michel, Louis) Weak equivalence of irreducible representations of little space groups. Proceedings of the Conference on Kristallographische Gruppen (Univ. Bielefeld, Bielefeld, 1979), Part II. Match No. 10 (1981), 223-225. (Editors) 82g:22015 (20C35)

Mozzochi, C. J. A comment on Goldbach's conjecture. Kyungpook Math. J. 19 (1979), no. 2, 237-239. (H. L. Montgomery) 82a:10057 10J15

An analytic sufficiency condition for Goldbach's conjecture with minimal redundancy. Kyungpook Math. J. 20 (1980), no. 1, 1-9. (R. C. Baker) 82b:10068

An analytic sufficiency condition for Goldbach's conjecture with minimal redundancy. II. Kyungpook Math. J. 21 (1981), no. 1, 5-8. (R. C. Baker) 82j:10080 10J15 (10J10)

Mrabet, Kamel (with Ta Phuoc Loc) Étude du décollement instationnaire dans un canal à symétrie de révolution par une méthode hermitienne compacte. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 12, B275-B278. (Authors' summary) 82c:76048

Mróz, Zenon On optimal force action and reaction on structures. Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 523-544, North-Holland, Amsterdam, 1980. (See 82g:93003) 73C99 73C99

(with Mironov, A.) Optimal design for global mechanical constraints. (Polish and Russian summaries) Arch. Mech. (Arch. Mech. Stos.) 32 (1980), no. 4, 505-516. (Authors' summary) 82j:73058 73K40

(with Gierliński, J.) Optimal design of elastic plates and beams taking large deflections and shear forces into account. Acta Mech. 39 (1981), no. 1-2, 77-92. (Authors' summary) 82g:73039 73K40 (49B22, 73K10)

Mrkerić, Mila Local compactness in bitopological hyperspaces. Mat. Vesnik 3(16)(31) (1979), no. 1, 41–52. (Ivan L. Reilly) 82a:54017 54B20 (54E55)

On bitopological local compactness. Mat. Vesnik 3(16)(31) (1979), no. 2, 187-196. an L. Reilly) 821:54049 54E55 (54D45)

(Ivan L. Reilly) 82f:54049 On connectivity properties of hyperspaces of R₀ spaces. *Mat.* (1979), no. 4, 451–458. (Ivan L. Reilly) **82d:54007** 54B20 (54D05)

On connectivity properties of bitopological hyperspaces. *Mat. Vesnik* 4(17)(32) (1980), no. 1, 33–44. (Ivan L. Reilly) 82d:54008 54B20 (54E55)

ibn Mu'ādh al-Jayyānī, Abū 'Abd 'Allāh Muhammad See Ibn Mu'ādh al-Jayyānī, Abū 'Abd 'Allah Muhammad

Mucci, R. (with Galambos, Janos) Inequalities for linear combinations of binomial ents. Publ. Math. Debrecen 27 (1980), no. 3-4, 263-268. (Stratis Kounias) 82k:60036 60E15 (26D15, 60C05)

Muchnick, Steven S. (with Jones, Neil D.) Flow analysis and optimization of LISP-like structures. Conference Record of the Sixth Annual ACM Symposium on Principles of Programming Languages (San Antonio, Tex., 1979), pp. 244–256, ACM, New York, 1979. (From the introduction) 82a:68012 68B05 (68E10)

Mücket, J. P. (with Bleyer, U.) On theories of gravitation in which the dynamical equations do not follow from the field equations and the Birkhoff theorem. (German su Astronom. Nachr. 301 (1980), no. 6, 285-295. (Authors' summary) 82b:83057

Mučník, A. A. (with Ermolaeva, N. M.) Functionally closed 4-valued extensions of Boolean algebra and corresponding logics. (Russian) Studies in nonclassical logics and set theory: (Russian), pp. 298–315, "Nauka", Moscow, 1979. (I. G. Rosenberg) 82k:03025 03B50 (03G20, 06E05, 08A05)

nčník, V. L. (with Alimov, Ju. I.) Inequalities and countable-dimensional probability spaces in von Mises' "nonensemble" queueing theory. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 31 Obobščen. Funkcii i Vektor. Mery (1979). 75-89, 92. (O. K. Zakusilo) 82a:60135 60K25 (68C15)

udholkar, Govind S. (with Krishnaiah, P. R.; Subbaiah, Perla) Simultaneous test procedures for mean vectors and covariance matrices. Analysis of variance, pp. 631-671, Handbook of Statistics, 1, North-Holland, Amsterdam, 1980. (See 82f:62102) ubbaiah, Perla) A review of step-down procedures for multivariate analysis of variance. Multivariate statistical analysis (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1979), pp. 161-178, North-Holland, Amsterdam, 1980. (M. S. Srivastava) 82j:62039

(with Lin, Ching Chuong) A simple test for normality against asymmetric alternatives. Biometrika 67 (1980), no. 2, 455-461. (Authors' summary) 82k:62035

(with George, E. Olusegun) A characterization of the logistic distribution by a ole median. Ann. Inst. Statist. Math. 33 (1981), no. 1, 125-129. (S. G. Maloševskii)

(with Trivedi, Madhusudan C.) A Gaussian approximation to the distribution of the sample variance for nonnormal populations. J. Amer. Statist. Assoc. 76 (1981), no. 374, 479-485. (Authors' summary) 82h:62034 62E20

Mudrinski, Vojislav K-théorie réelle des espaces projectifs complexes. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 14, 683-684. (Author's summary) 82e:55003 55N15

zur Mushlen, Peter Monopolistic competition and sequential search. J. Econ Dynamics Control 2 (1980), no. 3, 257-281. (M. Ali Khan) 824:90031 90A14 (90I (with Tinsley, P. A.) A maximum probability approach to short-run policy. Econometric modeling and policy design at the Federal Reserve, Part II. J. Econometrics

15 (1981), no. 1, 31–48. (See 82c-90003b) 90A16 (62P20)

Mueller, Carl A unification of Strassen's law and Lévy's modulus of continuity. 2

Wahrsch. Verw. Gebiete 56 (1981), no. 2, 163–179. (Anthony G. Pakes) 82f:60180 60J65 (60F15, 60G17)

Mueller, G. S. See Holè, K. E.; et al., 82i:93058

Mueller, Laurence D. (with Ayala, Francisco J.) Dynamics of single-species population growth: experimental and statistical analysis. Theoret. Population Biol. 20 (1981), no. 1,

101-117. (Authors' summary) 82i:92028 92A15 (62P10)

Mues, E. (with Steinmetz, Norbert) The theorem of Tumura-Clunie for meromorphic functions. J. London Math. Soc. (2) 23 (1981), no. 1, 113-122. (Chung-Chun Yang)

82b:30021 30D05 (30D35)

Muet, Pierre-Alain (with Artus, Patrick) Un retour sur la comparaison des hypothèses
"putty-putty" et "putty-clay" dans l'estimation des demandes effectives d'investissement. and Spanish summaries) Production functions and factor demand functions. Ann. I.N.S. É. É. No. 38-39 (1980), 193-206. (See 82e:90019) n. I. N. S. É. No. 38-39 (1980), 193-206. (See 82e:90019) 90A11 (with Villa, Pierre; Boutillier, Michel) Une estimation simultanée des demandes

d'investissement et de travail. (English and Spanish summaries) Production functions and factor demand functions. Ann. I.N.S. É. É. No. 38-39 (1980), 237-258. (See 90A99

Muftahova, F. I. Construction of representations of permutation groups on the basis of vector-coupled functions. (Russian. English summary) Ukrain. Fiz. Z. 26 (1981), no. 3, 461-467, 526. (Author's summary) 82g:81115 81G40 (20C35, 81C40)

Mufteev, V. G. Two-dimensional curve construction by the envelope method. Izv. Vysš. Učebn. Zaved. Aviacion. Tehn. 23 (1980), no. 4, 43-47 (Russian); translated as Soviet Aeronaut. 23 (1980), no. 4, 33-36. (From the text) 82k:53015 53A17

Mugibayashi, N. See Tanabe, Hiroki, 82g:47032

Mugnai, Massimo Leibniz on the structure of relations. Italian studies in the philosophy of science, pp. 389-409, Boston Studies Philos. Sci., 47, Reidel, Dordrecht, 1981. (Eberhard Knobloch) 82j:01035 01A45 (03-03)

ngur-Schächter, Mioara Le concept nouveau de fonctionnelle d'opacité d'une statistique. Étude des relations entre la loi des grands nombres, l'entropie informationnelle Pentropie statistique. Ann. Inst. H. Poincaré Sect. A (N.S.) 32 (1980), no. 1, 33-71.
(Tomáš Havránek) 82a:60012 60A99 (62B10, 82A30, 94A17)

amadiev, E. M. (with Krasnosel'skii, M. A.; Pokrovskii, A. V.) Bifurcation values of parameters in variational problems. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 2, 282-286. (P. P. Zabreiko) 82b:58029 58E07 (47H15)

Muhamed, Muhamed Ibragim Complex representation of a class of smooth solutions of the Laplace equation. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1977, no. 4, 98-105. (Rudolf Švarc) 82b:35042 35J05 (35C05)

nedgaliev, A. F. (with Aidarhanov, M. B.) Existence of correct algorithms in extensions of a model of pattern recognition algorithms. (Russian. Kazakh summary) Vestnik Akad. Nauk Kazah. SSR 1979, no. 2, 49-53. (N. Varnovskii (RŽMat 1979:8 68G10

hamedhanova, R. Asymptotic behavior of the distribution of the statistical estimate of entropy. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 4, 3-4. (I. A. Melamed) 62F12

Muhamedov, A. M. Maximally moving gravitational fields with respect to almost projective motions that preserve the quadratic complex of geodesics. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 11 (1979), 64-69. (J. D. Zund) 82g:53022 53B10 (83C40)

(with Aminova, A. V.) Groups of almost projective motions in a de Sitter space. Gravitacija i Teor. Otnositel'nosti No. 16 (1980), 3-8. (I. P. Egorov) 82f:83039 (53B50)

(with Aminova, A. V.) Groups of almost projective motions of n-dimensional (pseudo) Euclidean spaces. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 11, 5-11. (I. P. Egorov) 82k:53035 53B20

Almost projective mappings of gravitational fields. (Russian) Mat. Zametki 28 (1980), no. 1, 131-137, 170. (Author's summary) 82f:83013 83C10 (53B10)

(1980), no. 1, 131–137, 170. (Author's summary) 82:38003
83:Ul (33810) hametzjanov, I. A. (with Erugin, N. P.; Šestakov, A. A.; Demin, V. G.; Veretennikov, V. G.; Muharljamov, R. G.) Abdel'hak Safiullovič Galiullin (on the occasion of his sixtieth birthday). (Russian) Differencial'nye Uravnenija 16 (1980), no. 5, 950-954. (Editors) 82i:01049 01A70

hammadiev, K. (with Popovič, A. Ju.; Filippov, I. G.) Propagation of viscoelastic waves in two-component media. (Russian) Mathematical methods in mechanics. Mat. Issled.

No. 57 (1980), 91-97, 136. (Authors' summary) 82c.73633 73F99 (73D99) hammadiev, M. (with Guscinov, E. G.) A singular integral along a smooth curve in spaces. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1979, no. 6, 10-15. (S. G. Samko) 82c:30062 30E20 (45E99)

sharaf al-din muzaffar ibn Muh d at-Tüsi See Sharāf al-Din Muzaffār ibn Muham at-Tusi

abu-Muhanna, Yusuf See Abu-Muhanna, Yusuf Muharljamov, R. G. (with Erugin, N. P.; Šestakov, A. A.; Demin, V. G.; Veretennikov, V. G.; Muhametzjanov, I. A.) Abdel'hak Safiullovič Galiullin (on the occasion of his sixtieth birthday). (Russian) Differencial'nye Uravnenija 16 (1980), no. 5, 950-954. 01A70 (Editors) 82i:01049

Muhiddinov. S. R. A theorem on the uniqueness of the solution of a multidimensional inverse kinematic problem with account taken of anisotropy. (Russian) Inverse proble for differential equations of mathematical physics (Russian), pp. 65-68, 157, Akad. Nauk

w, N. M. Solution of a boundary value problem for a system of second-order ordinary vector-differential equations. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 3, 15–16. (Nicolae Luca) 82a:34012 34B05

Solution of a special two-dimensional vector boundary value problem of filtration. (Russian) Dokl. Akad. Nauk UzSSR 1961, no. 5, 15-17. (E. Ungureanu-David) 76S05 (30E20)

- Muhin, A. B. (with Vo An' Zung; To An' Zung) Certain local limit theorems for independent integer-valued random variables. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 5, 9-15, 99. (S. A. Book) 82d:60046 60F05
- Muhin, Ju. N. Lattice isomorphisms of prosolvable groups. (Russian) Sixth All-Union Symposium on Group Theory (Čerkassy, 1978) (Russian), pp. 103-111, 221, "Naukova Duwka", Kire, 1980. (B. Hartley) 82h;20036 20E15 (22A30, 22D99)
 Non-zero-dimensional groups all of whose nonnilpotent subgroups are invariant. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 1, 17-22. (K. A. Ross) 82f;22004 22D05

- n, V. S. (with Usenko, V. V.) Some matrix relations and their application in the solution of structural problems. (Russian) Trudy Moskoo. Orden. Lenin. Energet. Inst. No. 482 (1980), 19-23, 133. (Authors' summary) 82g-93011 93B15 hitdinov, T. M. A method for investigating random processes in nonlinear oscillating
- systems. (Russian) Dokl. Akad. Nauk UzSSR 1979, no. 5, 12-14. (V. G. Kolomiec) 82c:60105 60H10 (34F05)
- ach, G. An algorithmic approach to finite linear interpolation. Approximation theory, III (Proc. Conf., Unio. Texas, Austin, Tex., 1980), pp. 655–660, Academic Press, New York, 1980. (M. Brannigan) 82e-41009 41A05 (65D05)

 Mühlbacher, Jörg R. (with Steinparz, Franz-X.) Canonical F-factors of graphs. (German
- summary) Discrete structures and algorithms (Proc. Conf., Berlin, 1979), pp. 93–104, Hanser, Munich, 1980. (W. Dörfler) 82h-05086 05C35 (05C70) Muhleis, Wiltrud (with Wittwer, Gisela) Minimum-Kontrast-Schätzungen für stochastische Processe. (English and Russian summaries) Math. Operationsforsch. Statist. Ser. Statist. 11 (1980), no. 2, 219-226. (Steffen Lauritzen) 82f:62160 62M09 (62F12)
- hlisov, F. G. Imbedding theorems for certain weight classes. I. (Russian) 12v. Vysš. Učebn. Zaved. Matematika 1980, no. 8, 52-62. (Hans-Jürgen Glaeske) 82e:46050a
- Imbedding theorems for certain weight classes. II. (Russian) Izv. Vyx3. Učebn. Zaved. Matematika 1900, no. 10, 36–48. (Hans-Jürgen Glaeske) 82e:46050b 46E35 Muhly, Paul S. Isometries of ergodic Hardy spaces. Israel J. Math. 36 (1980), no. 1, 50-74.
- (László Zsidó) 824:28018 28D10 (46E30, 46J15) (with Jørgensen, Palle E. T.) Selfadjoint extens ons satisfying the Weyl operator nutation relations. J. Analyse Math. 37 (1980), 46-99. (S. Kantorovitz) 82k:47058 47D05 (17B65, 47B25, 81D05)
- tov, R. G. On a problem of reconstructing Riemannian metrics. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 3, 119-135, 237. (Alan West) 82m:53071 53C21, 58D17, 86A15)
- Muhtarov, H. Š. (with Guseinov, A. I.) ★Введение в теорию нелинейных синтулярных витегральных уравнений. (Russian) [Introduction to the theory of nonlinear singula integral equations] "Nauka", Moscow, 1980. 415 pp. (Т. A. Ebanoidze) 82g:45013 45G05 (45-02, 46E99, 47G05)
- Muir, A. (with Warner, M. W.) The decomposition of tolerance automata. Kybernetes 9 (1980), no. 4, 265-273. (P. Dömösi) 82a:68105 68D30 (68D37)
 - Fuzzy sets and probability. Kybernetes 10 (1981), no. 3, 197-200. (Hung Trung Nguyen) 82j:03071 03E72 (03B48, 60A05)
- Muirhead, Robb J. The effects of elliptical distributions on some standard procedures involving correlation coefficients: a review. Multivariate statistical analysis (Proc. Conf., usie Univ., Halifax, N.S., 1979), pp. 143-159, North-Holland, Amsterdam, 1980.
- (Yasuko Chikuse) 82:e52086 62H20

 Mujica, Jorge (with Colombeau, Jean-François) The Levi problem in nuclear Silva spaces.

 Ark. Mat. 18 (1980), no. 1, 117–123. (Martin Schottenloher) 82g:46085 46G20 (32D05, 32F15)
 - Domains of holomorphy in (DFC)-spaces. Functional analysis, holomorphy, and reximation theory (Proc. Sem., Univ. Fed. Rio de Janeiro, Rio de Janeiro, 1978), pp. 500-533, Lecture Notes in Math., 843, Springer, Berlin, 1981. (Ph. Noverraz) 821:46055 46G20 (32D10)
 - (with Colombeau, Jean-François) Existence of holomorphic mappings with prescribed asymptotic expansions at a given set of points in infinite dimensions. Nonlinear Anal. 5 (1981), no. 2, 149-156. (Martin Schottenloher) 82m:46049 (32A10, 58C10)
- ha (with Palaiya, R. M.) Shear wave interaction with a pair of interface J. Maulana Azad College Tech. 12 (1979), 91-99. (J. Miklowitz) 82h:73029 73D25 (45F10, 73M99)
- ai, H. Parallel algorithms for solving systems of nonlinear equations. Comput. Math. Appl. 7 (1981), no. 3, 235-250. (C. Ilioi) 82k:65030 65H10 (68C05, 90C30)
- Mukai, Shigeru Duality between D(X) and $D(\hat{X})$ with its application to Picard sheaves. Nagoya Math. J. 81 (1981), 153-175. (Allen B. Altman) 82f:14036 14K05 (14H40) no, Masao Application of B-ternary logic to hazards in combinational switching
- Systems-Comput.-Controls 9 (1978), no. 5, 23-29 (1980). (László T. Kóczy) 94C10 (03B50) 82e:94071
- Mukamel, D. (with Pytte, E.; Imry, Y.) Lower critical dimension and the roughening transition of the random-field Ising model. Phys. Rev. Lett. 46 (1981), no. 18, 1173-1177. (Authors' summary) 82d:82034 82A25 (82A42, 82A67, 82A68)
- Mukerjee, Rahul On a theorem of Bush on orthogonal arrays. Calcutta Statist. Assoc. Bull. 28 (1979), no. 109-112, 169-170. (From the text) 82a-05022 05B15 (62K10)
 Inference on confidential characters from survey data. Calcutta Statist. Assoc. Bull.
 30 (1981), no. 117-118, 77-88. (Author's summary) 82k:62023 62D05
- erjea, A. (with Clark, W. E.) Comments on a functional equation. Real Anal. Exchange 6 (1980/81), no. 2, 192-199. (R. A. Rosenbaum) 82k:39003 39B05 (with Chaudhuri, Rita) Idempotent Boolean matrices. Semigroup Forum 21 (1980), no. 2-3, 273-282. (Eugene M. Norris) 82g/04001 04A05 (05B20, 06A10, 15A21)

 Mukherjee, Amiya Embedding complex projective spaces in Euclidean space. Bull. London Math. Soc. 13 (1981), no. 4, 323-324. (From the text) 82m:57015 57R40

- Mukherjee, M. K. A note on completeness of bounded lattices postulated in son axiomatics of the mathematical foundations of quantum theory. Indian J. Pure Appl. Math. 12 (1981), no. 6, 677-680. (Author's summary) 82k:81008 81B10 (03G12,
- Mukherjee, Rathindra Nath A note on subnormal operators. Mat. Vesnik 3(16)(31) (1979), no. 3, 313-314. (Mary R. Embry-Wardrop) 82c:47027 47B20 no. 3, 313-314. (Mary R. Embry-Wardrop) 82c:47027
 - (with Bose, Ramendra Krishna) Stability of fixed point sets and com points of families of mappings. Indian J. Pure Appl. Math. 11 (1980), no. 9, 1130-1138. (Chi-Song Wong) 82e:54050 54H25
 - (with Bose, Ramendra Krishna) Approximating fixed points of some mappings. Proc. Amer. Math. Soc. 82 (1981), no. 4, 603-606. (William G. Dotson, Jr.) 82m:47038 47H10
- Mukherjee, S. P. Mixed strategies in chance-constrained programming. J. Oper. Res. Soc. 31 (1980), no. 11, 1045–1047. (From the introduction) 82d:90092 90C15
- kherjee, Subrata (with Morjaria, Mahesh) A boundary element formulation for planar time-dependent inelastic deformation of plates with cutouts. Internat. J. Solids and Structures 17 (1981), no. 1, 115–126. (Authors' summary) 82e:73075a 73M05 (65N30, 73K25)
 - (with Morjaria, Mahesh) Numerical analysis of planar, time-dependent inelastic deformation of plates with cracks by the boundary element method. Internat. J. Solids and Structures 17 (1981), no. 1, 127-143. (Authors' summary) 82e:73075b (65N30, 73F99)
- Mukherjee, Suprokash The homogeneous and inhomogeneous equations of scattering. Phys. Lett. A 81 (1981), no. 4, 207-210. (Author's summary) 82h:81108
- erjee, T. K. (with Cochran, Allan C.) Unique topologies in duality. Bull. Calcutta Math. Soc. 69 (1977), no. 6, 367-372. (From the summary) 82g:46013 46A20 (with Madison, Bernard L.; Sen, M. K.) Periodic properties of groupbound semigroups. Semigroup Forum 22 (1981), no. 3, 225-234. (M. Friedberg) 82g:20091 20M10
- Mukherjee, Tarun Kumar (with Sarkar, Mira) On a class of almost discrete spaces. Mat. Vesnik 3(16)(31) (1979), no. 4, 459-474. (Anne K. Steiner) 82j:54047
- Mukherji, Anjan A stable price adjustment process. General equilibrium, growth, and trade pp. 43-50, Academic Press, New York, 1979. (A. Aganbegjan) 82m:90032 90A1. (58C15, 90A14)
- kherji, T. K. See Mukherjee, Tarun Kumar khopadhyay, A. C. On the property P_t and balanced asymmetrical factorial plans. Ars Combin. 10 (1980), 165–177. (E. Seiden) 82d:05042 05B25 (62K15) Mukhop
- khopadhyay, A. K. Stability and the transient analysis of the repulsi Kronian method of approach. Matrix Tensor Quart. 31 (1980/81), no. 2, 31–36. (Author's summary) 82e:94066 94C05 (93D05, 94A40)
- Mukhopadhyay, Nitis (with Ghosh, Malay) Sequential point estimation of the difference of two normal means. Ann. Statist. 8 (1980), no. 1, 221-225. (Authors' summary) 82b:62102 62L12
- A consistent and asymptotically efficient two-stage procedure to construct fixed width confidence intervals for the mean. Metrika 27 (1980), no. 4, 281-284. (Ryszard 62L12 (62F25) Zieliński) 82j:62061
- Mukhopadhyay, Parimal On estimation of some confidential characters from survey data. Calcutta Statist. Assoc. Bull. 29 (1980), no. 115-116, 133-141 (1981). (Kenneth R. W. Brewer) 82g:62142 62P25 (62D05)
- Mukhopadhyay, S. N. (with Layek, A. K.) Intersection of sectorial cluster sets and directional essential cluster sets. Fund. Math. 108 (1980), no. 2, 99-107. (A. M. Bruckner) 82c:26017 26B99 (54C99)
- Mukunda, N. (with Sharma, J. K.; Mehta, C. L.; Sudarshan, E. C. G.) Representation and properties of para-Bose oscillator operators. II. Coherent states and the minimum uncertainty states. J. Math. Phys. 22 (1981), no. 1, 78-90. (F. R. Halpern) 82g:81043 81D30 (17A70, 81C40)
- dan, Rangaswamy (with Kashyap, Rangasami L.) Algorithms for determining (with Kasayapi, Kangasani L.) Algorithms for determining equilibrium points in N-stage voting games. Internat. J. Systems Sci. 12 (1981), no. 1, 1–25. (Authors' summary) 824:90013 90A08 (90D45)
- Mulase, M. Instantons and line geometry. Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 288-290, Lecture Notes in Phys., 116, Springer, Berlin, 1980. (M. Schneider) 82f:14016 14F05 (53C05, 81E10)
- Mulawka, J. J. Switched capacitor analogue delays comprising unity gain buffer. Electron.

 Lett. 17 (1981), no. 7, 276–277. (Author's summary) 824:94077 94C10

 Mulder, H. M. ★The interval function of a graph. Mathematical Centre Tracts, 132.
- hematisch Centrum, Amsterdum, 1980. iii + 191 pp. ISBN 90-6196-208-0 (M. E. Watkins) 82h:05045 05C99 (05C65, 06B99)
- Mulder, Henk L. See Schlick, Moritz, 82b:03021 and Kraft, Victor, 82i:01071
- Muldoon, M. E. (with Ahmed, Shafique) On the zeros of confluent hypergeometric functions. III. Characterization by means of nonlinear equations. Lett. Nuovo Cimento (2) 29 (1980), no. 11, 353-358. (James M. Horner) 82g:33002 33A30
- Muldowney, James S. On invertibility of linear ordinary differential boundary value problems. SIAM J. Math. Anal. 12 (1981), no. 3, 368-384. (Tassilo Küpper) 82g:34018
- Mulholland, Robert J. (with Gowdy, Carolyne M.) Sampling and transfer rate identification for tracer-kinetic systems. Proceedings of the First International Conference on Mathematical Modeling (St. Louis, Mo., 1977), Vol. II, pp. 1043–1052, Univ.
- Missouri-Rolla, Rolla, Mo., 1977. (Authors' summary) 82g:92018 (with Hart, Carolyne M.) Structural identifiability of compartmental systems with respect to data obtained from constant-infusion tracer experiments. Math. Biosci. 50 (1980), no. 3-4, 195-205. (Authors' summary) 82m:92025 92A09 (93B30) See also Barnett, Stephen, 82e:15011
- Muljarčík, V. V. On solution of some observation problems in hereditary systems Functional differential systems and related topics (Proc. First Internat. Conf., Błażejewko, 1979), pp. 223-231, Higher College Engrg., Zielona Góra, 1980. (Thomas S. Angell) 93B07 (34K99)
- Muljukov, R. M. Oscillations of a thin-walled cylindrical shell due to the action of an inertial moving load. (Russian) Issled. Teor. Plastin i Oboloček No. 13 (1978), 167-174. (N. Cristescu) 82b:73045 73L20
- Mulla, F. S. Disjoint stable sets in a graph. (Arabic summary) J. Univ. Kuwait Sci. 7

(1980), 25-31. (J. Sheehan) 82i:05066 05C99 (05C35)

(with Al-Assa'ad, A. M.) T-graphs. (Arabic summary) J. Univ. Kuwait Sci. 7 (1980),

33-51. (J. Sheehan) 82:05063 05C99 (05C35)
llen, Gary L. Equivalence classes of sets of functions over a finite field. Acta Arith. 36 (1980), no. 4, 323-329. (Winfried Müller) 82b:12021 12C05 (12C99)

(with Weber, Robert E.) Latin cubes of order <5. Discrete Math. 32 (1980), no. 3, 291-297. (Jean M. Turgeon) 82b:05034 05B15

Local permutation polynomials in three variables over Z_p. (1980), no. 3, 208–214. (J. B. Kelly) **82c:05006** 05A05 (05B15) Fibonacci Quart. 18

(with Brawley, J. V.) A note of equivalence classes of matrices over a finite field. Internat. J. Math. Math. Sci. 4 (1981), no. 2, 279-287. (D. Klucký) 82h:15023 15A3;

Permutation matrices and matrix equivalence over a finite field. Internat. J. Math. Math. Sci. 4 (1981), no. 3, 503-512. (S. D. Cohen) 82i:15016 15A33

Müller, A. M. K. Variational procedure yielding upper and lower bounds to eigenvalues of Hermitian operators. Phys. Lett. A 65 (1978), no. 4, 273-275. (Erich Miersemann) 82a:49050 49G05 (81C12)

General outline of the projector variation method. Phys. Lett. A 73 (1979), no. 3, 149-152. (Author's summary) 82f:81018 81C12 (49G05)

Müller, Bernd Strict topologies and the continuous convergence structures. Convergence structures and applications to analysis (Proc. Internat. Summer School, Frankfurt a.d. Oder, 1978), pp. 147-156, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1979, 4, Akademie-Verlag, Berlin, 1980. (H. Jarchow) 82g:46002 46A05 (46A32, 46B20)

Müller, Bruno Numerische Lösung von Warteschlangennetzwerken durch Kombination von Iterations- und Aggregierungsverfahren. [Numerical solution of queueing networks by combining iteration- and aggregation-procedures] Measurement, modeling and evaluation of computing systems (Jülich, 1981), pp. 118-132, Informatik-Fachber., 41, Springer, Berlin, 1981. (Author's summary) 82i:65084 65U05

Müller, C. Harald (with Heise, Ulrich) Numerical calculation of eigenvalues of integral

operators for plane elastostatic boundary value problems. Comput. Methods Appl. Mech. Engrg. 21 (1980), no. 1, 17-43. (P. S. Theocaris) 82c:73017 73C99 (65R20) Engrg. 21 (1980), no. 1, 17-43. (P. S. Theocaris) 82c:73017

Müller, Claus Neue Verfahren zur Lösung der elliptischen Randwertprobleme der Mathematischen Physik. With discussion. Vorträge der Rheinisch-Westfälischen Akademie der Wissenschaften, No. 288 (German), pp. 27-68, Westdeutscher Verlag, Opladen, 1979. (G. Wildenhain) 82x:65072 65N05 (35J25)

(with Freeden, Willi) Multidimensional Euler and Poisson summation formulas. Resultate Math. 3 (1980), no. 1, 33-63. (P. Szüsz) 824:10071 10J10 (33A40, 40E05, 42A38)

Muller, David E. (with Kirsch, W.) On the synthesis problem for orbits of Lie groups in R". Ark. Mat. 18 (1980), no. 2, 145-155. (V. F. Osipov) 82f:43006 43A45

(with Schupp, Paul E.) Context-free languages, groups, the theory of ends, second-order logic, tiling problems, cellular automata, and vector addition systems. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 3, 331-334. (From the text) 82m:03051 (05C99, 20F10, 68F05)

Müller, Felix *Führer durch die mathematische Literatur. (German) [Guide to mathematical literature] Mit besonderer Berücksichtigung der historisch wichtigen Schriften. [With special consideration of historically important works] Reprint of the 1909 edition. Kraus Reprint, Nendeln, 1979. x+252 pp. ISBN 3-262-01421-4 (Editors) 82f:01184 01A75 (00A15, 00A20)

Müller, Gerhard Otto (with Trautner, Rolf) Fatou-Riesz theorems in general sequence Proc. Edinburgh Math. Soc. (2) 23 (1980), no. 2, 199-205. (Hubert Tietz)

40D99 (30D35, 46A45)

Müller, Günter F. (with Crott, Helmut W.) Der Einfluß der Verhandlungspraxis in gemischt erfahrenen Gruppen. (English summary) Decision in small groups (Workshop, Jungholz, 1977) (German), pp. 137-151, Math. Systems in Econom., 45, Hain, Königstein/Ts., 1979. (See 82e:90130) 90A07

Müller, Hans Robert Erweiterung des Satzes von Holditch für geschlossene Raumkurven. Abh. Braunschweig. Wiss. Ges. 31 (1980), 129-135. (H. Brauner) 82d:53003 53A04

Müller, Heinrich Oriented hypergraphs, stability numbers and chromatic numbers. Discrete Math. 34 (1981), no. 3, 319–320. (Biswa Tosh Datta) 82i:05056 05C65 (05C15, 05C20, 05C35)

(with Miller, Zevi) Chromatic numbers of hypergraphs and coverings of graphs. J. Graph Theory 5 (1981), no. 3, 299-305. (O. V. Borodin) 82m:05046 05C15 (05C65, 05C15 (05C65,

Müller, Heinz (with Eckmann, Beno) Poincaré duality groups of dimension two. Comment. Math. Helv. 55 (1980), no. 4, 510–520. (R. M. F. Moss) 82f:57002 57M20 (57P10) Decomposition theorems for group pairs. Math. Z. 176 (1981), no. 2, 223–246. (M. J. Dunwoody) 82e:20062 20J05

Muller, J. (with Esling, C.; Bunge, H. J.) An inversion formula expressing the texture function in terms of angular distribution functions. J. Physique 42 (1981), no. 2, 161–165. (Authors' summary) 82f:82044 82A42

Muller, M. A. Joint spectral sets. Quaestiones Math. 4 (1980/81), no. 2, 109-120. (A. T. Dash) 82j:47011 47A25

Müller, Manfred W. An extension of the Freud-Popov lemma. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 661-665, Academic Press, New York,

1980. (Jean Tzimbalario) 82c:41012 41A15 (41A28)
Müller, Norbert Functions on life-trees for explaining social phenomena, with special reference to political socialization. *Internat. J. Policy Anal. Inform. Systems* 4 (1980),

no. 4, 317-330. (Author's summary) 82e:92052 92A20 (05C05)

Müller, Peter C. (with Schiehlen, Werner O.) ★Forced linear vibrations. CISM Courses and Lectures, 172. Springer-Verlag, Vienna, 1977. 146 pp. ISBN 3-211-81487-6 (Vimal

Singh) 82e:70026 70Jxx (70-02)

Müller, R. (with Müller-Kirsten, H. J. W.) Explicit perturbative solution of multichannel wave equations. Phys. Rev. D (3) 20 (1979), no. 10, 2541-2549. (Authors' summary) 82a:81041 81F10 (81C12)

Iler, Thomas Beispiel einer periodischen instabilen holomorphen Strömung. Enseign. Math. (2) 25 (1979), no. 3-4, 309-312 (1980). (Elmar Vogt) 82b:58069 58F18 (57R30, Müller, Thomas 58F22)

Müller, U. See Recent developments in theoretical and experimental fluid mecha 82c:76004

Müller, W. Cristoph Simplified analysis of linear fluid-structure interaction. Internat. J. Numer. Methods Engrg. 17 (1981), no. 1, 113-121. (Author's summary) 82e:73043

(with Kaul, Raj K.; Shaw, R. P.) Torsional waves in an axially homogeneous bimetallic cylinder. Internat. J. Solids and Structures 17 (1981), no. 4, 379-394. (Authors' summary) 82d:73019 73D99 (73K20)

Müller, Werner Classification of instantons over S⁴ (according to Drinfeld and Manin). Proceedings of the Summer School on Yang-Mills Equations (Kagel, 1979), pp. 180-193, Seminarberichte, 25, Humboldt Univ., Berlin, 1980. (See 82j:53062)

Müller, Winfried B. (with Eigenthaler, Günther) A remark on polynomial functions over finite commutative rings with identity. Bol. Soc. Brasil. Mat. 10 (1979), no. 1, 83-86. (H.

(with Kautschitsch, Hermann) Ideale in Kompositionsringen formaler Potenzreihen mit nilpotenten Anfangskoeffizienten. Arch. Math. (Basel) 34 (1980), no. 6, 517-525. (T. de W. Jooste) 82m:13018 13J05 (13C99)

Müller, Wolfgang *Darstellungstheorie von endlichen Gruppen. (German) [Representation of the Company of the Com theory of finite groups] Teubner-Studienbücher: Mathematik. [Teubner textbooks: Mathematics] B. G. Teubner, Stuttgart, 1980. ix+211 pp. ISBN 3-519-02060-2 (Michael

Klemm) 82f:20001 20-02 (20Cxx)

Müller-Holssen, Folkert Determinism in space-time. Internat. J. Theoret. Phys. 20 (1981), no. 6, 443-450. (Author's summary) 82i:83054 83C99 (58D25)

Müller-Kirsten, H. J. W. Multidimensional perturbation theory for nonseparable wave

Phys. Lett. A 70 (1979), no. 5-6, 383-386. (Iraj Hormozdiari) 82b:35023 35C20 (35L05, 81C05, 81C15)

(with Müller, R.) Explicit perturbative solution of multichannel wave equation Phys. Rev. D (3) 20 (1979), no. 10, 2541-2549. (Authors' summary) 82a:81041 (81C12)

Multidimensional perturbation theory, the field theory limit and vacuum tunnelling. (Italian and Russian summaries) Nuovo Cimento A (11) 63 (1981), no. 1, 1-45. (Author's mary) 82i:81033 81C12 (81E99)

(with Mansour, H. M. M.) Matching of WKB solutions to other solutions. Phys. Rev. D (3) 24 (1981), no. 4, 1033-1035. (Authors' summary) 82h:81037

Müller-Pfeiffer, Erich Oscillation criteria of Nehari type for the Schrödinger equation. Math. Nachr. 96 (1980), 185-194. (K. Kreith) 821:35007 35B05 (35J10)

Ein Oszillationssatz für elliptische Differentialgleichungen höherer Ordnung. Math.

Nachr. 97 (1980), 197-202. (K. Kreith) 82f:35008 35B05 (35J30) (with Staude, J.) Integral theorems for eigenfunctions of second-order elliptic differential operators. Math. Nachr. 98 (1980), 37-47. (M. M. Skriganov) 82h:35082

★Spectral theory of ordinary differential operators. Translated from the German by the author. Translation edited by M. S. P. Eastham. Ellis Horwood Series in Mathematics and its Applications. Ellis Horwood Ltd., Chichester; Halsted Press [John Wiley & Sons, Inc.], New York, 1981. 247 pp. ISBN 0-85312-189-3 (R. C. Gilbert) 82f:34027

Existence of conjugate points for second and fourth order differential equations Proc. Roy. Soc. Edinburgh Sect. A 89 (1981), no. 3-4, 281-291. (J. S. Bradley) 82m:34029 34C10 (34B10)

Müller-Preussker, M. (with Ilgenfritz, E. M.; Kazakov, D. I.) Is there really a phase transition for the Yang-Mills instanton gas? Jadernaja Fiz. 31 (1980), no. 4, 1107-1120 (Russian); translated as Soviet J. Nuclear Phys. 31 (1980), no. 4, 571-577 (1981). (José M. Cerveró) 82i:81115 81E99

Müller zum Hagen, Henning (with Christodoulou, Demetrios) Problème de valeur initiale caractéristique pour des systèmes quasi linéaires du second ordre. (English summary) [Characteristic initial value problem for quasilinear systems of second order] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 1, 39-42. (Authors' summary) 82i:35118

Mullikin, T. W. (with Siewert, C. E.) Radiative transfer in inhomogeneous atmosp New frontiers in transport theory (Tucson, Ariz., 1979). Ann. Nuclear Energy 7 (1980), no. 4-5, 205-211. (L. F. Oster) 82;85007 85A25 (45F15)

(with Kelley, C. T.) Collocation methods for some singular integral equations in linear transport theory. J. Integral Equations 4 (1982), no. 1, 77-88. (Authors' summary) 65R20 (82A70)

Mullin, Albert A. Applications of functional analysis to Diophantine optimization-theory. Final Proceedings of the Sixteenth Annual U.S. Army Operations Research Symposium (Fort Lee, Va., 1977), Vol. I, II, pp. 876–885, U. S. Goot. Printing Office, Washington, D. C., 1977. (Ja. I. Al'ber) 82k-90085 90C10 (47H10)

Mullin, R. C. (with Stinson, D. R.; Wallis, Walter D.) Concerning the spectrum of skew Room squares. Ars Combin. 6 (1978), 277–291. (G. H. J. Van Rees) 82k-05023

On an extension of the Moore-Sade construction for combinatorial configurations Proceedings of the Tenth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1979), pp. 87-102, Congress ner., XXIII-XXIV, Utilitas Math., Winnipeg, Man., 1979. (Charles C. Lindner) 82d:05034 05B15 (20N05)

(with Stanton, R. G.) Some new results on the covering numbers N(t, k, v). Combinatorial mathematics, VII (Proc. Seventh Australian Conf., Univ. Newcastle Newcastle, 1979), pp. 51-58, Lecture Notes in Math., 829, Springer, Berlin, 1980. (A. Florian) 82g:05022 05B05 (05B40)

(with Wallis, Walter D.) An exceptional case in the classification of finite linear spaces. Proceedings of the West Coast Conference on Combinatorics, Graph Theory and Computing (Humboldt State Univ., Arcata, Calif., 1979), pp. 229-279, Congress. Nun XXVI, Utilitas Math., Winnipeg, Man., 1980. (Jim Totten) 82f:05020

A generalization of the singular direct product with applications to skew Room ares. J. Combin. Theory Ser. A 29 (1980), no. 3, 306-318. (Katherine Heinrich) 05B15

(with Schellenberg, P. J.; Van Rees, G. H. J.; Vanstone, S. A.) On the construction of perpendicular arrays. Utilitas Math. 18 (1980), 141-160. (T. G. Ostrom) 82a:05024

(with Anderson, B. A.; Stinson, D. R.) More skew Room squares. Utilitas Math. 18

Bin, T. (with Benjamin, T. Brooke) Anomalous modes in the Taylor experiment. Proc. Roy. Soc. London Ser. A 377 (1981), no. 1770, 221-249. (From the summary) 82i:76039

ev, S. (with Sanginov, A.) A system of equations of composite type in spa (Russian) Differential and integral equations, Dushanbe, 1980. (See 82m:34002) 35M05 ns, No. 3, pp. 77-83, Tadžik. Gos. Univ.,

ert P. Copernicus and Bacon as renovators of science. Science and history, . 489-499, Studia Copernicana, XVI, Ossolineum, Wrocław, 1978. (See 82e:01003) pp. 489 01A40

Mülthei, Heinrich N. (with Schorr, B.) Error analysis for a special X-spline. (German ary) Computing 25 (1980), no. 3, 253-267. (Authors' summ 65D07 (41A15)

Numerische Lösung gewöhnlicher Differentialgleichungen mit Splinefunktionen ary) Computing 25 (1980), no. 4, 317-335. (Author's summary) 82e:65090

merischen Lösung gewöhnlicher Differentialgleichungen mit Splines in einem ary) Math. Methods Appl. Sci. 2 (1980), no. 4, 419-428. (W. C. Rheinboldt) 82e:65000 65L05 (65D07)

Splineapproximationen von beliebigem Defekt zur numerischen Lösung gewöhnlicher Differentialgleichungen. III. (English summary) Numer. Math. 34 (1980), no. 2, 143–154. Differentialgleichungen III. (English summary) Numer. Math. 34 (1980), no. 2, 143–154.

(B. I. Kvasov) 821:68079 65L05

Ney, Christopher J. Representations of rings and modules. Applications of sheaves (Proc. Res. Sympos. Appl. Sheaf Theory to Logic, Algebra and Anal., Univ. Durham, Durham, 1977), pp. 542-585, Lecture Notes in Math., 753, Springer, Berlin, 1979. (S. 16A89 (16A64)

10A89 (16A04)
(with Banaschewski, B.) Stone-Čech compactification of locales. I. Houston J. Math.
6 (1980), no. 3, 301-312. (H. A. Priestley) 82k:06010
06D20 (18A40, 54D35)
A noncommutative Gel'fand-Naimark theorem.
88 (1980), no. 3, 425-428. (Ş. Strătilă) 82m:46062
46L05 (46K05)

Mulvey, J. M. Testing of a network relaxation method for 0-1 set partitioning and set covering. Survey of mathematical programming (Proc. Ninth Internat. Math

Programming Sympos., Budapest, 1976), Vol. 2, pp. 365-378, North-Holland, Amsterdam, 1979. (Csaba Fabian) 82x90091 90C09

mford, David The work of C. P. Ramanujam in algebraic geometry. C. P.
 Ramanujam—a tribute, pp. 8-10, Tata Inst. Fund. Res. Studies in Math., 8, Springer, Berlin, 1978. (S. L. Kleiman) 82i:01059 01A70 (14-03)
 See also Kunz, Ernst, 82c:14001 and Contributions to algebraic geometry, 82g:14003

Munakata, Yasuo Generators of the Poincaré group for the Dirac and the Proca fields in terms of normal coordinates. Mem. Fac. Sci. Shimane Univ. 14 (1980), 73-83. (Anthony

J. Bracken) 82g:81039 81D25 (22E70, 81E99) neaster, R. G. Saint-Venant's problem in nonlinear elasticity: a study of cross sections. Nonlinear analysis and mechanics: Heriot-Watt Symposium, Vol. IV, pp. 17-75, Res. Notes in Math., 39, Pitman, San Francisco, Calif., 1979. (Cornelius O. Horgan) 82e:73024

73C50 (35J60) ndici, Daniele An algebraic result about soft model theoretical equivalence relations with

an application to H. Friedman's fourth problem. J. Symbolic Logic 46 (1981), no. 3, 523-530. (John Cowles) 82k:03056 03C95 (03C40)

Ergodic undefinability in set theory and recursion theory. Proc. Amer. Math. Soc. 82 (1981) no. 1 (1971) 11 (John F. Janya) 23h:04057 03F47 (03F15 27P40 28D05) 03E47 (03E15, 22D40, 28D05) (1981), no. 1, 107-111. (John E. Jayne) 82h:03057 Robinson's consistency theorem in soft model theory. Trans. Amer. Math. Soc. 263

(1981), no. 1, 231-241. (Jouko Väänänen) 82d:03063 03C95 (03C80) Applications of many-sorted Robinson consistency theorem. Z. Math. Logik lag. Math. 27 (1981), no. 2, 181-188. (Jouko Väänänen) 82k:03057

nford, A. G. A control chart based on cumulative scores. J. Roy. Statist. Soc. Ser. C 29 (1980), no. 3, 252-258. (Katsuji Uosaki) 82i:62146 62N10

(with Gardner, M. J.) The combined effect of two factors on disease in a case-control study. J. Roy. Statist. Soc. Ser. C 29 (1980), no. 3, 276-281. (John M. Karon) 82d:62161 62P10 (62F10)

(with Lewis, S. M.) A note on gambler's ruin against an infinitely rich adversary. ernat. J. Math. Ed. Sci. Tech. 12 (1981), no. 2, 165-168. (Authors' summary) 82f:60093 60G40 (60J80)

A first passage problem in a random walk with a quality control application. J. Roy. tist. Soc. Ser. B 43 (1981), no. 2, 142–146. (Author's summary) 82hc62176 62N10 Statist. Soc. Ser. B 43 (1981), no. 2, 142-146. (Author's summer states and states and states are states as a state of the states are states are states as a state of the states are states are states are states (60J15)

mi, Gluseppe (with Mininni, Michele) A degree theory with respect to a pseudo-inner product in a locally convex vector space. Ricerche Mat. 28 (1979), no. 2, 365-374. (A. J. product in a locally co B. Potter) 82b:47085 47H99 (58C30)

Functions of © almost periodic with respect to a homeomorphic group. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 17 (1980), no. 1, 232–243. (C. Corduneanu) 54H15 (43A60) 82a:54073

ier, A. (with Burgan, J. R.; Feix, M. R.; Fijalkow, E.) Asymptotic solutions for a variable mass two-body problem. Astronom. and Astrophys. 94 (1981), no. 2, 373–376. (Authors' summary) 82b:70011 70P05 (70F15) (with Burgan, J. R.; Feix, M. R.; Fijalkow, E.) Schrödinger equation with

dary conditions. J. Math. Phys. 22 (1981), no. 6, 1219-1223. time-dependent bour (Authors' summary) 82h:81023 81C05 (35J10, 81C15)

(with Burgan, J. R.; Gutierrez, J.; Fijalkow, E.; Feix, M. R.) Group transformations and the nonlinear heat diffusion equation. SIAM J. Appl. Math. 40 (1981), no. 2, 191-207. (Howard A. Levine) 82g:35054 35K55 (35A30, 80A20)

diaz-Munio, Rafael F. See Diaz-Munio, Rafael F. nk, Max M. My early aerodynamic research—thoughts and memories. Annual review of fluid mechanics, Vol. 13, pp. 1-7, Annual Reviews, Palo Alto, Calif., 1981. (See 82f:76001) 01A70

skholm, Hans J. A chain level transfer homomorphism for PL fibrations. Math. Z. 166 (1979), no. 2, 183-186. (Norman Levitt) 82g:55020 55R60 (57Q99)

(with Haagerup, Uffe) Simplices of maximal volume in hyperbolic n-space. Acta

Math. 147 (1981), no. 1-2, 1-11. (Troels Jørgensen) 82j:53116 53C65 (53A35)
Transfer on algebraic K-theory and Whitehead torsion for PL fibrations. J
Appl. Algebra 20 (1981), no. 2, 195-225. (A. A. Ranicki) 82d:18014 18F25 (5 18F25 (55R99.

57010) nn, W. D. Ideals of free inverse semigroups. J. Austral. Math. Soc. Ser. A 30 (1980/81),

no. 2, 157-167. (Eckehart Hotzel) 82f:20092 20M12 An embedding theorem for free inverse semigroups. Glasgow Math. J. 22 (1981), no. 2, 217-222. (S. Sribala) 82k:20096 20M05

Bisimple rings. Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 126, 181-191. (K. R. Goodearl) 82f:16012 16A30

Munot, P. C. (with Padmanabham, P. A.) On Lauricella's n-variable function $F_n^{(n)}$. J. Indian Inst. Sci. 62 (1980), no. 2, 17-23. (C. M. Joshi) 82a:33007

(with Mathur, Renu) On nonlinear oscillation problem. J. Indian Inst. Sci. 62 (1980), no. 10, 167-171. (H. E. Fettis) 82c:34042 34C15 (33A30, 70B05)

(with Padmanabham, P. A.) Integrals involving the generalized Lauricella function in J. Pure Appl. Math. 12 (1981), no. 3, 388-392. (C. L. Koul) 82c:33005

ibarrola Muñoz, Maria del Pilar See Ibarrola Muñoz, Maria del Pilar Muno, J. Ian (with Dobkin, David P.) Optimal time minimal space selection algorithms. J. Assoc. Comput. Mach. 28 (1981), no. 3, 454–461. (Authors' summary) 82h:68046 68C05 (68C25)

(with Gonnet, Gaston H.; Suwanda, Hendra) Exegesis of self-organizing linear search. SIAM J. Comput. 10 (1981), no. 3, 613-637. (Authors' summary) 82k:68031 68E05 (68C25)

mro, N. (with Bell, D. J.; Bryant, G. F.; Cook, P. A.; Crossley, T. R.; Denham, M. J.; Fallside, F.; Luntz, R.; MacFarlane, Alistair G. J.; Mayne, D. Q.; Owens, D. H.; Rosenbrock, H. H.; Storey, Colin) ★Modern approaches to control system design. IEE Control Engineering Series, 9. Peter Peregrinus, Ltd., Stevenage; on behalf of the Institution of Electrical Engineers (IEE), London, 1979. xviii + 413 pp.

ISBN 0-906048-06-0 (Publishers' description) 82f:93060 93D15 (15A99, 34H05)
nson, David C., Jr. (with Liu, Bede) Floating point roundoff error in the prime factor FFT. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 4, 877-882. (Authors' summary) 82f:65132 65R10 (94A05)

Accessibility of zero-input limit cycles. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 5, 1027–1032. (Author's summary) 82j:94026 94C05 (with Liu, Bede) Narrow-band recursive filters with error spectrum shaping. IEEE

ss. Circuits and Systems 28 (1981), no. 2, 160-163. (Authors' summary) 82a:94023 94A12

Münster, Gernot (with Lüscher, M.; Weisz, Peter) How thick are chromo-electric flux es? Nuclear Phys. B 180 (1981), no. 1, FS 2, 1-12. (Authors' summary) 82a:81047 81G05

(with Weisz, Peter) On the roughening transition in abelian lattice gauge theories. Nuclear Phys. B 180 (1981), no. 1, FS 2, 13-22. (Authors' summary) 82a:81048 81G05 (82A67)

High-temperature expansions for the free energy of vortices and the string tension in lattice gauge theories. Nuclear Phys. B 180 (1981), no. 1, FS 2, 23-60. (From the introduction) 82e:81042 81E99

(with Weisz, Peter) On the roughening transition in nonabelian lattice gauge theories. Nuclear Phys. B 180 (1981), no. 2, FS 2, 330-340. (Authors' summary) 82e:81043

nster, M. (with Wuidar, J.) Majoration de type analytique pour une intégrale particulière. (English summary) Bull. Soc. Roy. Sci. Liège 49 (1980), no. 1-2, 38-43. (Angelo Favini) 82e:46057 46F10 (35S05)

n, Ioan On the mean Cesàro integral. (Romanian) Gaz. Mat. (Bucharest) 85 (1980),

no. 12, 483-484. (P. P. Teodorescu) 82m:44009 44A99

The spectrum of the Cesàro operator. Mathematica (Cluj) 22(45) (1980), no. 1, 97-105. (J. J. Buoni) 82g:47003 47A10 (47B38)

Sur l'associativité de la convolution des fonctions presque-périodiques. (Romanian summary) Studia Univ. Babes-Bolyai Math. 25 (1980), no. 2, 45-51. (S. N. Mukhopadhyay) 82g:42009 42A75 (44A35) Mukhopadhyay) 82g:42009

(with Cobzas, Stefan) Condensation of singularities and divergence results in approximation theory. J. Approx. Theory 31 (1981), no. 2, 138–153. (M. Valdivia) 82k:46004 46A07 (41A65, 47A05)

de Munter-Kuyl, Lucie See De Munter-Kuyl, Lucie

Munz, Harry Uniform expansions for a class of finite difference schemes for elliptic boundary value problems. *Math. Comp.* 36 (1981), no. 153, 155–170. (L. Fox) 82b:65098

mer, Hans Friedrich Isoparametrische Hyperflächen in Sphären. Math. Ann. 251 (1980), no. 1, 57-71. (Th. Friedrich) 82a:53058 53.C40
Isoparametrische Hyperflächen in Sphären. II. Über die Zerlegung der Sphäre in Ballbündel. Math. Ann. 256 (1981), no. 2, 215-232. (Th. Friedrich) 82m:53053

ová, Marie (with Demel, J.; Koubek, Václav) On subdirectly irreducible automata. (French summary) RAIRO Inform. Théor. 15 (1981), no. 1, 23-46. (Authors' summary) 82d:68041 68D37

Muradjan, R. M. Discrete subgroups of three-dimensional rotation groups. (Russian. ry) Teoret. Mat. Fiz. 46 (1981), no. 3, 335-347. (V. S. Varadarajan) 22E40 (20C35, 20H15, 51F15, 81C40) 82i:22009

Muradov, R. I. (with Gasanov, M. G.) Generalized solution of a degenerating integro-differential equation of hyperbolic type. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 6, 37-43. (Sergiu Aizicovici) 82h:45012 45K05

Murai, Takafumi The value-distribution of lacunary series and a conjecture of Paley.

(French summary) Ann. Inst. Fourier (Grenoble) 31 (1981), no. 1, vii, 135-156. (A. Edrei) 82k:30002 30B10 (30D35)

Murakami, Haruo (with Yeh, Cheh Chih) Correction to: "Fixed point theorems in complete metric spaces" [Math. Japon. 23 (1978/79), no. 1, 77–83; MR 58 #12982]. Math. Japon. 24 (1979/80), no. 6, 665. (Editors) 824c54075 54H25
Murakami, Shingo See Manifolds and Lie groups, 82m:53001
Murakawa, Hide (with Atluri, Satya N.) Finite element solutions of finite-strain

elastic-plastic problems, based on a complementary rate principle. Advances in computer

methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 53-60, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82c:73058 73K25 (73E25)

(with Reed, K. W.; Atluri, Satya N.; Rubenstein, R.) Stability analysis of structures via a new complementary energy method. Comput. & Structures 13 (1981), no. 1-3, 11-18. (Authors' summary) 82j;73055 73K25 (73H99)

Murali, V. A note on inductive limits of uniform spaces. Math. Notae 27 (1979/80), 31-33. (Svetlana Búzási) 82h:54040 54E15

Muralidharan, Ramal (with Ho, Yu Chi; Luh, Peter B.) Information structure, Stackelberg games, and incentive controllability. *IEEE Trans. Automat. Control* 26 (1981), no. 2, 454-460. (Authors' summary) 82e:93098 93E05 (90D05)

ramatsu, Rintaro (with Tabe, Tsutomu) A structural analysis of the in-shop time and the in-process inventory in a production ordering system for a two-stage assembly type production process. (Japanese. English summary) Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 91 (1980), 31-50. (From the summary) 82b:90061

Murirescu, Gh. Connexions de Cartan conjuguées. An. Univ. Craiova Mat. Fiz.-Chim. 7 (1979), 73-76. (Efstathios Vassiliou) 82h:53046 53C05

Murari, K. (with Agrawal, Ravindra Kumar) Explicit results in heterogeneous queues with general distribution. Cahiers Centre Études Rech. Opér. 23 (1981), no. 1, 57-72. (Stig I. Rosenlund) 82;60175 60K25 (90B22)

(with Parkash, K.) A queue with correlated interarrival time distributions. Cahiers Centre Études Rech. Opér. 23 (1981), no. 1, 73-80. (Stig I. Rosenlund) 82j:60176 60K25 (90B22)

Murase, Atsushi Sur l'uniformité de la distribution de G_Q dans G_A . Analytic number theory (Proc. Sympos., Tokyo, 1980) (French), pp. 55–66, Monograph. Sci. Maison Franco-Japon., 3, Maison Franco-Japon., Tokyo, 1981. (See 82h:10004)

Murase, Ichiro (with Tominaga, Hisao) A study on Artinian rings. Math. J. Okayama

Unio. 21 (1979), no. 2, 115-123. (Lawrence S. Levy) 82c:16016 16A35
 Muraskin, M. Aesthetic field theory—extended particles in four-dimensional space-time. J. Math. Phys. 22 (1981), no. 3, 569-571. (Author's summary) 82f:83088 83E99

Murasugi, Kunio On symmetry of knots. Tsukuba J. Math. 4 (1980), no. 2, 331–347. (Hale F. Trotter) 82h:57010 57M25

Murat, François (with Mignot, Fulbert; Puel, Jean-Pierre) Variation d'un point de retournement par rapport au domaine. (English summary) Comm. Partial Differential Equations 4 (1979), no. 11, 1263–1297. (G. Geymonat) 82f:35075 35J60

Compacité par compensation: condition nécessaire et suffisante de continuité faible sous une hypothèse de rang constant. Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4) 8 (1981),

no. 1, 69-102. (John M. Ball) 82h:46051 46E35 (35B99)

Murata, H. Exact nonlinear helical oscillations in magnetohydrodynamics. J. Fluid Mech.

100 (1980), no. 1, 31-34. (Magdi M. Shoucri) 82a:76091 76W05

Murata, Kentaro A note on lattice theoretical divisor theory of a noncommutative semigroup. Proceedings of the 4th Symposium on Semigroups (Yamaguchi Univ., Yamaguchi, 1980), pp. 48-54, Yamaguchi Univ., Yamaguchi, 1980. (See 821:20008) 12A80 (06B99, 20M10)

See also Proceedings: Symposium on Semigroups, 821:20008

Murata, Leo An average type result on the number of primes satisfying generalized Wieferich condition. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 8, 430-432.

(H.-E. Richert) 82m:10071 10H32 Murata, Minoru Characterizations of the ranges of wave operators for symmetric systems nd an application. Tokyo J. Math. 4 (1981), no. 1, 113-132. (Gunther A. Uhlmann)

35P25 (47F05) Murata, Susumu (with Miyake, Yutaka; Inaba, Takehiko; Ogawa, Hiroshi) Laminar flow in a helically coiled pipe. Bull. JSME 24 (1981), no. 188, 355–362. (Authors' summary)

Murata, Tadao (with Koh, J. Y.) Reduction and expansion of live and safe marked graphs

1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 841-843, IEEE, New York, 1979. (See 82e:94002) 94C15 Synthesis of decision-free concurrent systems for prescribed resources and

performance. IEEE Trans. Software Engrg. 6 (1980), no. 6, 525-530. (Rüdiger Valk) 68B10 (68B20) Murata, Tamotsu Wallis' Arithmetica infinitorum and Takebe's Tetsujutsu sankei: wh

underlies their similarities and dissimilarities? Historia Sci. No. 19 (1980), 77-100. (D. W. Bressler) 82e:01043 01A45 (01A27) Muratbekov, M. B. Coercive estimates for a higher-order differential operator. (Russian)

Differencial nye Urannenija 17 (1981), no. 5, 893-901, 957. (Author's summary)
82m:35013 35B45 (35G15)
Smoothness of solutions of a class of nonuniformly degenerate elliptic equations.

(Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 5, 71-73, 83. (Author's nary) 82m:35058 35J70

Summary) 6.ms.3030

Muratov, G. N. See Phase transitions and nonequilibrium processes, 82ms82003

Muravickii, A. Ju. Finite approximability of the calculus 1² and the nonmodelability of the calculus 1³ and the nonmodelability 1³ and 1³ an some of its extensions. (Russian) Mat. Zametki 29 (1981), no. 6, 907-916, 957. (Wieslaw Dziobiak) 82m:03018 03B45 (03B60)

Murawski, Roman Some remarks on the structure of expansions. Z. Math. Logik Grundlag. Math. 26 (1980), no. 6, 537-546. (A. J. Wilkie) 82e:03052 03C62 (03F35)

Murayana, Mitutaka S-duality in r-cohomology theories. Publ. Res. Inst. Math. Sci. 16 (1980), no. 3, 669–692. (Czes Kosniowski) 82e:55009 55N25 (55P99)

Murayama, Reiji (with Suzuki, Takashi) A uniqueness theorem in an identification problem for coefficients of parabolic equations. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 6, 259-263. (J. R. Cannon) 82c:35080 35R30 (35K10)

Utility versus truth: at least one reflection on the importa philosophy of science for the history of science. Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science (Second Internat. Conf., Pisa, 1978), Vol. 11, pp. 311-319, Synthese Library, 146, Reidel, Dordrecht, 1981. (A. G. Molland) 82j:01086 01A99 (00A25)

Murdoch, P. Comment on: "Minimal-order observers for linear multivariable systems with unmeasurable disturbances" [Internat. J. Control 28 (1978), no. 5, 743-751] by O'Reilly. With a reply by O'Reilly. Internat. J. Control 30 (1979), no. 4, 717-720. (Editors) 93B07

Muresan, L. V. (with Pednault, E. P. D.; Zucker, S. W.) On the independence as underlying subjective Bayesian updating. Artificial Intelligence 16 (1981), no. 2, 213–222.

(Authors' summary) 82h:68126 68G20 (62F15, 62H30, 92A25)

Murgan, A. T. The Viterbi algorithm for information transmission. (Romanian. English

summary) Numerical transmission, data processing and computerized process control (Romanian), pp. 77-92, Probleme de Automat., 11, Ed. Acad. R.S. România, Bucharest, 1979. (Author's summary) 824:94043 94B10 at., 11, Ed. Acad. R.S. România, Bucharest,

rio, Diego A. Numerical methods for inverse transient heat conduction problems. Rev. Un. Mat. Argentina 30 (1981), no. 1, 25-46. (Author's summary) 82k:80003 80A20

le Muris, Joh es See L'Huillier, Ghislaine, 82e:01027

Murli, A. Solving elliptic boundary value problems by double sweep method. Calcolo 17 (1980), no. 3, 235–255 (1981). (Author's summary) 82m:65097 65N20

Murmazina, T. A. (with Gabbasov, N. Z.) Improvement of an estimate of a reduction theorem of Rabin. (Russian) Algorithms and automata (Russian), pp. 7-10, Kazan. Gos. Univ., Kazan, 1978. (R. G. Buharaev) 82e:68055 68D25

Muro, Masakazu On prehomogeneous vector spaces related to binary cubic forms. II. The holonomy diagrams and the Fourier transforms. Mem. Fac. Sci. Köchi Univ. Ser. A Math. 2 (1981), 75–99. (V. L. Popov) 824:58098 58G30 (32M10, 58G07)

Murota, Kazuo Test for normality based on the empirical characteristic function. Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs. 28 (1981), no. 1, 1-17. (Author's summary) 82k-62089 62G10

Murphy, C. P. (with Evans, David J.) Chebyshev series solution of the two-dimensional heat equation. Math. Comput. Simulation 23 (1981), no. 2, 157-162. (Authors' summary) 82i:65063 65M99

Murphy, G. E. (with James, G. D.) The determinant of the Gram matrix for a Specht module. J. Algebra 59 (1979), no. 1, 222-235. (From the introduction) 82;20025 20C30 (15A15)

A new construction of Young's seminormal representation of the symmetric groups. J. Algebra 69 (1981), no. 2, 287-297. (A. O. Morris) 82h:20014 20C30

Murphy, Gerard J. The cortex and the approximate zero divisors of an algebra. Proc. Roy. Continuity of the spectrum and spectral radius. Proc. Amer. Math. Soc. 82 (1981), no. 4, 619-621. (Jaroslav Zemánek) 82h:46066 46H20 (47A10, 47A12) rphy, Lea F. (with Gurtin Mente.) Irish Acad. Sect. A 80 (1980), no. 1, 63-68. (W. Żelazko) 82a:46048

Murphy, Lea F. (with Gurtin, Morton E.) On the optimal harvesting of age-structured populations. Differential equations and applications in ecology, epidemics, and population problems (Claremont, Calif., 1981), pp. 115–129, Academic Press, New York, 1981. (See 82m:92003) 92A15 (49B34, 90A30)

(with Gurtin, Morton E.) On the optimal harvesting of age-structured populations: some simple models. Math. Biosci. \$5 (1981), no. 1-2, 115-136. (R. C. MacCamy) 92A15 (34K35, 49B10)

Murphy, R. See Petrova, S. S., 82c:01030

Murphy, Richard A. (with Bryant, John L.) Uptime of systems subject to repairable and nonrepairable failures. AIIE Trans. 12 (1980), no. 3, 226-232. (Authors' summary) 82i:90051 90B25

(with Sweeney, Dennis J.) Branch and bound methods for multi-item scheduling Oper. Res. 29 (1981), no. 5, 853-864. (Authors' summary) 82i:90065 90B35 (90C05) Murray, B. T. (with Knight, D. D.) Theoretical investigation of interaction and coalescence

of large scale structures in the turbulent mixing layer. The role of coherent structures in modelling turbulence and mixing (Proc. Internat. Conf., Madrid, 1980), pp. 62-92, Lecture Notes in Phys., 136, Springer, Berlin, 1981. (See 82c:76062) Murray, Daniel M. (with Yakowitz, Sidney J.) The application of optimal control

methodology to nonlinear programming problems. Math. Programming 21 (1981), no. 3, 331-347. (Authors' summary) 82j:90065 90C30 (90C39)

Murray, G. D. (with Titterington, D. M.; Murray, L. S.; Spiegelhalter, D. J.; Skene, A. M.; Habbema, J. D. F.; Gelpke, G. J.) Comparison of discrimination techniques applied to a complex data set of head injured patients. With discussion J. Roy. Statist. Soc. Ser. A

compiex data set of head injured patients. With discussion. J. Roy. Statist. Soc. Ser. A 144 (1981), no. 2, 145–175. (Authors' summary) 82hc62182 62P10 (62H30)

Murray, Ian W. (with Hathaway, Neville J.; Rickard, John A.) The stability of Bishop's warfare strategy. J. Austral. Math. Soc. Ser. B 21 (1979/80), no. 4, 418–432. (Authors' summary) 82hc90132 90D05 (90A14)

A pre-pattern formation mechanism for animal coat markings. J. Theo Biol. 88 (1981), no. 1, 161–199. (Author's summary) 82h:92016 92A09 (35K55)

Murray, John (with Hunt, L. R.; Strauss, M. J.) Liouville's theorem for first-order partial

differential operators. Collog. Math. 41 (1979), no. 1, 117-121. (J. Kajiwara) 82f:35028 35B60 (32F20)

Lumped-distributed networks and differential-delay systems. Algebraic and geometric methods in linear systems theory (AMS-NASA-NATO Summer Sem., Harvard Univ., Cambridge, Mass., 1979), pp. 299-310, Lectures in Appl. Math., 18, Amer. Math. Soc., Providence, R. I., 1980. (Author's introduction) 82h:93018 93B15 (34K05,

(with Desoer, Charles A.; Liu, Ruey Wen; Saeks, Richard) Feedback system design: the fractional representation approach to analysis and synthesis. IEEE Trans. Autom. Control 25 (1980), no. 3, 399-412. (Sahjendra N. Singh) 82b;93023 93C35

Murray, L. S. (with Titterington, D. M.; Murray, G. D.; Spiegelhalter, D. J.; Skene, A. M.; Habbema, J. D. F.; Gelpke, G. J.) Comparison of discrimination techniques applied to a complex data set of head injured patients. With discussion. J. Roy. Statist. Soc. Ser. A 144 (1981), no. 2, 145-175. (Authors' summary) \$2h:62182 (62H30)

Murray, Walter (with Gill, Philip E.; Saunders, Michael A.; Wright, Margaret H.) rray, Walter (with Gill, Philip E.; Satanura, Sasanara, Sasanara, Methods for large-scale nonlinear optimization. Electric power problems: the mathematical challenge (Proc. Conf., Seattle, Wash., 1980), pp. 352–377, SIAM, Philadelphia, Pa., 1980. (Authors' summary) 82c:90079 90C30 (90–02, 90C06) (with Overton, Michael L.) A projected Lagrangian algorithm for nonli ptimization. SIAM J. Sci. Statist. Comput. 1 (1980), no. 3, 345-370. (J. Mockus)

82c:90082 90C30 (with Gill, Philip E.; Saunders, Michael A.; Wright, Margaret H.) Aspects of mathematical modelling related to optimization. *Appl. Math. Modelling* 5 (1981), no. 2, 71–83. (Authors' summary) 82e:90116 90C99 (00A69)

Murray-Smith, D. J. (with Bache, R. A.; Gray, W. M.) Time-domain system identification

applied to noninvasive estimation of cardiopulmonary quantities. Proc. IEE-D 128 (1981), no. 2, 56-64. (Authors' summary) 82e:92003 92A07

rre, Jacob P. (with Conte, A.) The Hodge conjecture for Fano complete intersections of

dimension four. Journées de Géometrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers, 1979, pp. 129-141, Sijthoff & Noordhoff, Alphen aan den Rijn, 1980. 14C05 (14M10, 14N05)

kao Fujita) 828:14003 14CUS (140810, 14003) Algebraic curves. (Dutch) Nieuw Tijdschr. Wisk. 68 (1980/81), no. 4, 166–187. (A. atar (Gutwirth)) 82:14002 14–01 Evvatar (Gutwirth)) 82i:14002

(with Collino, Alberto; Welters, Gerard E.) On the family of conics lying on a quartic threefold. Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 1, 151-181. (Werner Kleinert) 82h:14022 14J25 (14M07, 14N10)

Algebraic cycles on certain types of Fano threefolds. Symposia Mathematica, Vol. XXIV (Sympos., INDAM, Rome, 1979), pp. 97-110, Academic Press, London, 1981. (From the text) 82z:14011 14C15

rell, J. N. (with Farantos, S. C.) On the transition from quasiperiodic to stochastic classical motion on real polyatomic potential energy surfaces. Chem. Phys. 55 (1981), no. 2, 205–214. (Joseph Ford) 82:58060 58F13 (81G55) le Murs, Jean See de Muris, Johannes

en Infinite matrices and general boundedness. (Turkish summary) Comm. Fac. Sci. Univ. Ankara Sér. A, Math. 27 (1978), no. 6, 53-60 (1979). (Author's summary)

40C05 (46A45)

On strongly F₈-summable sequences. (Turkish summary) Comm. Fac. Sci. Univ. Ankara Sér. A₁ Math. 28 (1979), no. 3, 13-21 (1980). (M. S. Rangachari) 82i:40006 40F05 (46A45)

is and some matrix transformations. Tamkang J. Math. 10 (1979), no. 2, 183-188. (E. Jürimäe) 82a:40010 40H05 (46B99)
(with Ahmad, Z. U.; Saraswat, S. K.) Invariant means and multiplicative matrices.

(Turkish summary) Comm. Fac. Sci. Univ. Ankara Sér. A₁ Math. **29** (1980), no. 7, 55-61 (1981). (R. A. Raimi) **82**i:**40004** 40C05 (43A07)

rsepp, P. V. See Steklov, V. A.; et al., 82j:01073

Murtazin, H. H. (with Sultanaev, Ja. T.) On formulas for distribution of eigenvalues of a nonsemibounded Sturm-Liouville operator. (Russian) Mat. Zametki 28 (1980), no. 4, 545-553, 635. (M. Otelbaev) 82d:34033 34B25 (47E05)

Asymptotic estimates of the resolvent and of solutions of elliptic equations. (Russian) Differencial'nye Uravnenija 17 (1981), no. 5, 902-912, 958. (Stefan Balint) 82i:34069

rthy, D. N. P. Observability in discrete time system with faulty sensor. Auton IFAC 16 (1980), no. 6, 709-710. (Editors) 82b:93011 93B07

(with Nguyen, D. G.) A note on the repair limit replacement policy. J. Oper. Res. Soc. 31 (1980), no. 12, 1103-1104. (From the text) 82h:90058 90B25

(with Hollis, P.) Controllability of two-input, discrete time bilinear systems Internat. J. Systems Sci. 12 (1981), no. 4, 485-494. (Authors' summary) 82d:93011

93B05 (with McGiffin, P. B.) Parameter estimation for autoregressive systems with missing observations. II. Internat. J. Systems Sci. 12 (1981), no. 6, 657-663. (Authors' summary)

(with Nguyen, D. G.) Optimal repair limit replacement policies with imperfect repair. J. Oper. Res. Soc. 32 (1981), no. 5, 409-416. (Authors' summary) 82d:90062

(with Day, J. D.; Webb, I. R.) A note on the stability of CSDT methods for solving parabolic equations. Math. Comput. Simulation 23 (1981), no. 2, 107-110. (From the introduction) 82m:65093 65M99

(with Webb, I. R.) Higher order Runge-Kutta type CSDT methods for solving parabolic equations. Math. Comput. Simulation 23 (1981), no. 3, 235-244. (From the introduction) 82m:65094 65M99

urthy, H. S. K. (with Oliva, Terence A.; Peters, Michael H.) A preliminary empirical test of a cusp catastrophe model in the social sciences. Behavioral Sci. 26 (1981), no. 2, 153-162. (Authors' summary) 824:90047 90A30 (58C28)

arthy, K. N. See Murty, K. Narasim

Murthy, K. V. V. (with Ramachandran, Venkat) On the ranks of certain matrices. Matrix Tensor Quart. 31 (1980/81), no. 3, 67-69. (Donald W. Robinson) 82k:15008 15A15 (with Ramachandran, Venkat) Bounds of the ranks of the real and imaginary parts of a Hermitian matrix. Matrix Tensor Quart. 31 (1980/81), no. 4, 100-101. (Authors' ary) 82m:15023 15A57

Murthy, M. Pavaman (with Gupta, Surender K.) ★Sustin's work on linear groups over polynomial rings and Serre problem. ISI Lecture Notes, 8. Macmillan Co. of India, Ltd., New Delhi, 1980. v+113 pp. (Chr. U. Jensen) 82j:13009 13C10 (14F05, 20G35)

Murthy, M. V. N. (with Ran nachandran, G.) A new representation for the density matrix. Nuclear Phys. A 323 (1979), no. 2-3, 403-412. (Authors' summary) 82f:81030 (82A05)

ntyanarayana Murthy, P. V. See Satyanarayana Murthy, P. V. furthy, Vrudhula K. (with Haywood, L. Julian) New method for estimating survival curves ulations. Appl. Math. Comput. 7 (1980), no. 3, 259-266. (Lutz Edler) 82b:62130 62N05

Murti, A. Sita Rama A generalization of x-ideals. Math. Sem. Notes Kobe Univ. 8 (1980), no. 2, 269–280. (O. Frink) 82k:08004a 08A99 (20M12, 54299)
A generalization of x-ideals. II. Math. Sem. Notes Kobe Univ. 8 (1980), no. 3,

469-490. (O. Frink) 82k:08004b 08A99 (20M12, 54C99)

Murti, G. Suryanarayana (with Swamy, U. Maddana) Lattices with sufficiently large central elements. Math. Sem. Notes Kobe Univ. 7 (1979), no. 3, 457–475. (From the introduction) 82k:06006 06B15

oduction) 82k:06006 06B15
(with Swamy, U. Maddana) Boolean centre of a semigroup. Pure Appl. Math. Sci.

1 Medicon 82a:20105 20M30 (06E20)

13 (1981), no. 1-2, 5-6. (Bernard L. Madison) 82g:20105 20M30 (06E20)

Murty, G. Sri Rama Chandra (with Ahmad, Z. U.; Siddiqui, Z. U.; Sitaramachandra, Rao
R.) The number of M-void divisors of an integer. Indian J. Pure Appl. Math. 11 (1980),

no. 6, 749-757. (G. J. Rieger) 82g:10010 10A20 (10H25) (with Sitaramachandra Rao, R.) On M-void integers. Indian J. Pure Appl. Math. 12 (1981), no. 1, 31-40. (T. M. Apostol) 82i:10061 10H25 (10A20)

rty, K. Narasimha On boundary value problems. Indian J. Math. 19 (1977), no. 2, 73-78. (Tassilo Küpper) 82b:34020 34B05

(with Rao, D. R. K. S.; Rao, A. S.) Three-point boundary value problems associated with third order differential equations. Nonlinear Anal. 5 (1981), no. 6, 669-673. (Brian D. Sleeman) 82f:34016 34B10 krishna Murty, M. See Krishna Murty, M.

Murty, M. Ram (with Kung, Joseph P. S.; Rota, Gian-Carlo) On the Rédei zeta function. Number Theory 12 (1980), no. 3, 421-436. (Louis Solomon) 82c:06018 (10H10)

Murzin, F. A. Elementary equivalence of rings of continuous functions. (Russian) Theory of models and its applications (Russian), pp. 73–74, Kazah. Gos. Univ., Alma-Ata, 1980. (M. A. Talclin) 82c:03049 03C60 (46E25)

Musaeljan, R. C. Isometric immersions in E^3 of certain noncompact domains in metrics of negative curvature. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 4, 193-197. (V. I. Oliker) 82b:53080 53C42

Musaev, B. I. Approximation of periodic functions of two variables by Fourier sums and interpolation polynomials. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1979, no. 4, 8-14. (È. O. Zeel') 82e:41010 41A05 (42A10)

(with Abdullaeva, G. G.) Regularization of a singular integral along an open contour. (Russian) Questions of mathematical cybernetics and applied mathem (Russian), pp. 3–13, "Elm", Baku, 1980. (Martin Costabel) 82j:45005 451 45L05, 65R20)

On the convergence of a cubature process for a multidimensional singular integral. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 6, 48-57. (Author's summary) 82k:41020 41A55 (65D32)

Musaev, D. K. Construction of the extension βX of the arbitrary topological space X by ns of ends. (Russian) Dokl. Akad. Nauk UzSSR 1981, no. 4, 10-11. (Roman Frič) 82i:54039 54D35

Musaev, K. M. Approximation in the mean of generalized analytic functions. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 8, 10-15. (I. A. Volynec) 82e:30070 30G20 (30D60, 30E10)

Musaev, N. D. (with Abbasov, A. A.; Gasanov, S. A.; Ismailov, A. P.) Solution of a problem of underground hydrodynamics in the case of nonisothermal filtration. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1978, no. 1, 13-21. (L. I. Rubinstein) 82e:76061 76505

Musalimov, V. M. (with Salygin, I. I.) Invariant solutions of an equation of deflection of an orthotropic plate. (Russian) Problems in mechanics and applied mathematics (Russian), pp. 27-31, 87, Tomsk. Gos. Univ., Tomsk, 1979. (Authors' summary) 82h:73054 73K10

(with Mokrjak, S. Ja.) Group properties of the equation of oscillation of plates. (Russian) Problems in mechanics and applied mathematics (Russian), pp. 32-36, 87-88, Tomsk. Gos. Univ., Tomsk, 1979. (Authors' summary) 82h:73057 73K12 (53B50) (with Alesina, S. A.) Group analysis of a plane model of an elastic medium.

(Russian) Problems in mechanics and applied mathematics (Russian), pp. 37-48, 88, Tomsk. Gos. Univ., Tomsk, 1979. (Authors' summary) 82h:73026 73C99 (53B50, 58G35)

See also Problems in mechanics and applied math -Musatov, K. D. See Klem-Musatov, K. D. See also Prol

Mušer, S. L. On numerical solution of kinetic equations for plasma waves. J. Comput. Phys. 43 (1981), no. 2, 250-259. (Author's summary) 82k:65050 65M05

Musgrave, Alan How to avoid incommensurability. The logic and epistemology of scientific change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn. 30 (1978), no. 2-4, 336-346 (1979). (See 82i:00024) 00A25 (03A05)

Musgrave, M. J. P. (with Payton, Robert G.) Head wave contributions to elastic wave fields in a transversely isotropic half-space. Quart. J. Mech. Appl. Math. 34 (1981), no. 2, 235-250. (Authors' summary) 82g:73017 73D25

Mushelišvili, N. I. See Džorbenadze, S. M., 82a:01030 and Bibliography: Mushelišvili, N. I., 82h:01069

Musher, S. L. See Mušer, S. L.

Mushtaq, Qaiser (with Yusuf, S. M.) On locally associative LA-semigroups. J. Natur. Sci. Math. 19 (1979), no. 1, 57–62. (M. Friedberg) 82a:20081 20N05

Musial, Kazimierz Projective limits of perfect measure spaces. Fund. Math. 110 (1980), no. 3, 163–189. (Jan Pachl) 82i:28006 28A12 (28A35, 54C50)

Musiela, Marek (with Le Breton, Alain) Moments et filtrage linéaire d'un système Math. 292 (1981), no. 1, 83–86. (Authors' summary) 82e:60104 60H10 (60G10,

siełak, Julian (with Jędryka, T. M.) On a modular equation. II. Problemy Mat. No. 1 (1977), 3-12. (From the text) 82i:47094 47H15

Some problems concerning modular spaces of analytic functions. Fasc. Math. No. 11 (1979), 17-24. (A. C. Zaanen) 82f:46025 46E10 (30H05)

(with Hudzik, H.; Urbański, Ryszard) Some extensions of the Riesz-Thorin theorem to generalized Orlicz spaces $L_M^*(T)$. Comment. Math. Prace Mat. 22 (1980), no. 1, 43-61. (J. Diestel) 82 \pm 46646 46E30 (46E40, 46M35)

skihin, S. G. (with Mihailov, G. A.) Algorithms for calculations of a complex reactor cell by the Monte Carlo method. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 2, 432–440, 526. (Authors' summary) 82h:82056 82A75 (65C05)

Musselman, K. (with Talavage, Joseph) A tradeoff cut approach to multiple objective optimization. Oper. Res. 28 (1980), no. 6, 1424-1435. (Authors' summary) 82b:90112

on, I. M. Injective modules for group rings of polycyclic groups. I, II. Quart. J. Math. Oxford Ser. (2) 31 (1980), no. 124, 429-448, 449-466. (Donald S. Passman) 82g:16019 16A27 (16A52)

Mustafaev, E. H. Adaptive Robbins-Monro procedure in the case of continuous time. Aviomat. i Telemeh. 1980, no. 6, 80-84 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 6, part 1, 802-806. (Author's summary) 62L20

Mustafaev, L. G. (with Feïzullaev, R. B.) Semiheaps and semigroups of linear continuous mappings. (Russian) Uspehi Mat. Nauk 34 (1979), no. 6(210), 170–174. (Kazimierz Głazek) 82b:20108 20N10 (22A30, 47D30)

Semigroups of linear continuous transformations. I, II. (Russian) Special questions of

algebra and topology (Russian), pp. 56-60, 61-65, "Elm", Baku, 1980. (Jaroslav Zemánek) 82c:47046 47D05 (46B20, 46H99)
Semigroups of linear continuous transforms of locally convex spaces. (Russian.

Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 5, 3-6. (Bella Tsirulnikov) 82e:46018 46A99 (20M20, 47D05)

Mustafa-zade, N. M. On universality for GEU unitary rings. (Russian) Uspehi Mat. Nauk 18F25 (20H25) 35 (1980), no. 5(215), 233-234. (K. Vogtmann) 82e:18017

Epimorphic stability of the unitary K2-functor. (Russian) Uspehi Mat. Nauk 35 (1980), no. 6(216), 165-166. (L. N. Vaserstein) 82j:18020 18F25

stafin, Dž. S. On the solution of a conjecture of P. Erdős. (Russian) Studies in geometry and algebra (Russian), pp. 97-107, Kirgiz. Gos. Univ., Frunze, 1978. (T. C. Brown) 10L15

Mustafin, R. M. Bound for an entire function in terms of bounds for the function and its derivatives on a curve. (Russian) Mat. Zametki 25 (1979), no. 3, 351-366, 476. (A. V. 30D15 Bratiščev) 82e:30051a

Bound for an entire function in terms of bounds for the function and its derivatives on a closed strip. (Russian) Mat. Zametki 25 (1979), no. 4, 537-549, 636. (A. V. Bratiščev) 82g:30051b 30D15

Mustafin, T. G. Theories with a two-cardinal formula. (Russian) Algebra i Logika 19 (1980), no. 6, 676-682, 746. (A. T. Nurtazin) 82k:03045 03C55

(with Bekenov, M. I.) Properties of nonsplit types in stable theories. (Russian Sibirsk. Mat. Z. 22 (1981), no. 1, 27-34, 228. (Duro Kurepa) 82i:03041 03C45 (03C50)

Principles of normalization of formulas. (Russian) Sibirsk. Mat. Ž. 22 (1981), no. 2, 158-169, 237. (W. Hodges) 82e:03034 03C45

Mustari, D. H. Spaces in which criteria of the Bochner and Levy type are satisfied. (Russian) Constructive theory of functions and functional analysis, No. 2 (Russian), pp. 69-82, Kazan. Gos. Univ., Kazan, 1979. (W. A. Woyczyński) 82c:60011 (28C20, 46G12)

Cylindrical probabilities, criteria for countable additivity and carriers. (Russian) Issled. Prikl. Mat. No. 6 (1979), 46-59. (A. Badrikian) 82c:60012

Spaces of cotype p ($0 \le p \le 2$). (Russian. French summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 1, 105–118. (W. A. Woyczyński) 82d:46029 46B20 (60B11) A remark on necessary and sufficient topologies. (Russian. French summary) Teor.

Verojatnost. i Primenen. 25 (1980), no. 3, 601-602. (A. Badrikian) 82d:60015 Mustăța, Costică On the best approximation in metric spaces. Rev. Anal. Numér. Théor. Approx. 4 (1975), no. 1, 45-50. (TITLE) 82c:41034 41A65

(with Cobzas, Ştefan) Norm-preserving extension of convex Lipschitz functions. J. Approx. Theory 24 (1978), no. 3, 236-244. (Authors' review (Zbl 405:41023)) 82j:41034 41A65 (26A16)

The extension of starshaped bounded Lipschitz functions. Anal. Numér. Théor.

Approx. 9 (1980), no. 1, 93-99. (S. Cobzaș) 82g:46052 46B99 (46G99)

Mustoe, Leslie R. (with Bajpai, Avinash Chandra; Walker, Dennis) ★Specialist techniques in engineering mathematics. John Wiley & Sons, Ltd., Chichester, 1980. ix+401 pp. ISBN 0-471-27907-2 (G. V. Hmelevskaja-Plotnikova) 82j:00020 93-01)

Muszyński, Jerzy On a nonlinear integral equation. With a loose Russian summary. Czechoslovak Math. J. 31(106) (1981), no. 3, 413-420. (V. Lakshmikantham) 82j:45014 45N05 (45D05)

Muta, Yôichi (with Eguchi, Masaaki; Kumahara, Keisaku) A subspace of Schwartz space on motion groups. Hiroshima Math. J. 10 (1980), no. 3, 691-698. (P. C. Trombi) 22E30 (22E45, 43A75)

On the spherical functions with one-dimensional K-types and the Paley-Wiener type theorem on some simple Lie groups. Rep. Fac. Sci. Engrg. Saga Univ. Math. No. 9 (1981), 31-59. (Mogens Flensted-Jensen) 82i:43009 43A90 (22E30)

★La structure vectorielle. (French) [Vector structure] Thèmes Vuibert Université Mathématiques, [Vuibert Series on University Mathematics] Librairie Vuibert, Paris, 1979. 155 pp. ISBN 2-7117-2155-8 (R. C. Thompson) 82a:15001

thukumar, S. (with Rao, Geetha S.) A note on the semicontinuity properties of the farthest point map. Indian J. Pure Appl. Math. 11 (1980), no. 10, 1293–1296. (O. P. Kapoor) 82b:46023 46B99

al-Mutib, Ahmed See Al-Mutib, Ahmed

Mutio, N. J. Central automorphisms of a split metacyclic group. Simon Stevin 52 (1978), no. 4, 145-155. (Seymour Bachmuth) 82a:20046 20F28

Mutô, Hideo The first eigenvalue of the Laplacian on even-dimensional spheres. Tôhoku Math. J. (2) 32 (1980), no. 3, 427-432. (Harold Donnelly) 82a:58052 The value distribution of meromorphic functions in an angular domain. II. J.

London Math. Soc. (2) 23 (1981), no. 2, 287-294. (L. R. Sons) 82i:30047 Muto, Yosio Deformation of a submanifold in a Euclidean space with fixed Gauss image. Geom. Dedicata 11 (1981), no. 1, 1-18. (S. S. Pujar) 82k:53076 53C40

Isometric imbedding of a compact orientable flat Riemannian manifold into Euclidean space. Hokkaido Math. J. 10 (1981), no. 1, 83-92. (Alan West) 82m:53057 53C42

Muttoo, Sunil Kumar (with Dass, Bal Kishan) A note on Reed-Muller codes. Discrete Appl. Math. 2 (1980), no. 4, 345-348. (Manohar Lal Kaushik) 82d:94040 (with Dass, Bal Kishan) Correction of random and burst errors. Proc. IEE-E 127

(1980), no. 6, 249-252. (Authors' summary) 82b:94026 94B20 (with Dass, Bal Kishan) Comments on "Error-locating codes control" [IEEE Trans. Inform. Theory 9 (1963), 113-117; MR 29 #4623] by J. K. Wolf and B. Elspas. IEEE Trans. Inform. Theory 27 (1981), no. 1, 136. (Editors) 94B99

82k:94020 Mutzbauer, O. (with Burkhardt, R.) Decompositions of torsion free abelian groups of rank 3. Arch. Math. (Basel) 35 (1980), no. 6, 501-504 (1981). (Khalid Benabdallah) 20K15

Mutze, U. (with Castrigiano, D. P. L.) On the irreducible representations of groups containing a subgroup of finite index. J. Math. Phys. 21 (1980), no. 5, 955-960. (Authors' summary) 82j:22006 22D12 (20C35, 20G45, 22D30, 81C40)

Muzafarova, H. R. Basic planimetry concepts of Euclid's Elements as presented by Qutb al-Din al Shīrāzī, Ibn Sīnā and their contemporaries. (Russian. Tajiki summary) Special issue on the millennium of the birth of Ibn Sīnā. Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk 1980, no. 3(77), 16-23. (E. S. Kennedy) 82h:01017 01A30

aräf al-din Muzaffär ibn Muhammed at-Tüsi See Sharäf al-Din Muzaffär ibn Muha

Muzychuk, O. V. See Muzyčuk, O. V.

Muzyka, Ju. A. See Chadan, K.; et al., 82c:81121 Muzykuk, O. V. (with Medvedev, S. Ju.) Effect of nonlinear damping on the probability characteristics of stochastic systems. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 701-706 (Russian. English summary); translated as Radiophys. and Quantum Electronics
 (1980), no. 6, 469-473 (1981). (Authors' summary)
 92b:93041
 93E11

(with Malahov, A. N.) Probability characteristics of dynamic systems subjected to -delta-correlated random forces. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 8, 968-981 (Russian); translated as Radiophys. and Quantum Electronics 23 (1980), no. 8, 651-661 (1981). (Authors' summary) 82f:93067 93E03 (82A05)

rungi, John (with Jeffrey, Alan) On the breaking of water waves in a channel of arbitrarily varying depth and width. (French summary) Z. Angew. Math. Phys. 31 (1980), arbitrarity varying depth and width. (French summary) Z. Angew. Math. Phys. 31 (1980), no. 6, 758-761. (Alberto Valii) 382.39070 351.30 (76815)

Mycielski, Jan (with Fickett, James) A problem of invariance for Lebesgue measure.

Colloq. Math. 42 (1979), 123-125. (J. E. Huneycutt, Jr.) 82a:28009 28A75

Finitely additive invariant measures. I. Collog. Math. 42 (1979), 309–318. (L. Thomas Ramsey) 82g-43603a 43A07 (28A60, 28A75)

Problems on finitely additive invariant measures. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 431-436, Academic Press, New York, 1981. (B. Rodriguez-Salinas) 82g:28019 28C10

(with Perlmutter, Paul) Model completeness of some metric completions of absolutely free algebras. Algebra Universalis 12 (1981), no. 2, 137-144. (M. A. Taĭclin)

82k:00037 03C35 (08B20)

Myers, Basil R. Regular separable graphs of minimum order with given diameter. Discrete Math. 33 (1981), no. 3, 289-311. (L. Caccetta) 82h:09031 05C35 (05C05, 05C38)
Enumeration of tours in Hamiltonian rectangular lattice graphs. Math. Mag. 54 (1981), no. 1, 19-23. (Ralph Faudree) 82g:05052 05C30 (05C45)

Myers, Dale (with Lampe, William A.) Elementary properties of free extensio Universalis 11 (1980), no. 3, 269-284 (1981). (M. A. Taiclin) 82j:03033

(03B25, 03C60, 20A15)

Myers, Donald E. (with Bhattacharya, P. K.; Dietrich, J. Kimball; Heckerman, Donald G.) Variable wages and prices and the demand for capital with discrete and continuadjustments. Internat. Econom. Rev. 22 (1981), no. 2, 295-307. (Anjan Mukberji)

Myers, Robert (with Khuri, A. I.) Design related robustness of tests in regression models. Comm. Statist. A—Theory Methods 10 (1981), no. 3, 223-235. (Authors' summary) 821:62126 62J05 (62F35)

Free involutions on lens spaces. Topology 20 (1981), no. 3, 313-318. (Allan

Edmonds) 82g:57015 57825 (57817)

Myerson, Roger B. Incentive compatibility and the bargaining problem. Econometrica 47 (1979), no. 1, 61-73. (Author's summary) 82g:90009 90A07 (90D10)

Utilitarianism, egalitarianism, and the timing effect in social choice problems Econometrica 49 (1981), no. 4, 883-897. (Anjan Mukherji) 82m:90018 90A08 (90A07) Optimal auction design. Math. Oper. Res. 6 (1981), no. 1, 58-73. (Author's 90D40 (90A99) mmary) 82m:90191

An algorithm for computing equilibria in a linear monetary economy. Math. Programming 21 (1981), no. 2, 182–189. (Author's summary) 82m:90041 90A14

Myjak, Józef (with De Blasi, F. S.) On the minimum distance theorem to a closed convex set in a Banach space. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 29 (1981), no. 7-8, 373-376. (D. E. Wulbert) 82m:41627 41A52 (46B20, 54B20)

Mykytyn, Stephen W. (with Santner, Thomas J.) Maximum likelihood estimation of the survival function based on censored data under hazard rate assumptions. Comm. Statist. A-Theory Methods 10 (1981), no. 14, 1369-1387. (Bruce W. Turnbull) 82k:62187 62N05 (62G05)

Mylopoulos, John (with Peacocke, Richard) A region-based formalism for picture processing. Pattern Recognition 13 (1981), no. 6, 399–416. (Authors' summary) 82m:68095 68C99 (68G10)

Mymrin, V. F. (with Lun'kin, Ju. P.) Derivation of the equations of a gas suspension on the basis of kinetic theory. (Russian) Aerodynamics of rarefied gares, No. 10 (Russian), pp. 103-111, 233, Leningrad. Univ., Leningrad, 1980. (Authors' summary) 82d:76672 76P05 (82A40)

Mynbaev, K. T. Sufficient conditions for the discreteness of a spectrum of a three-dimensional Dirac operator. (Russian) Vestnik Akad. Nauk Kazah. SSR 1981, no. 1, 62-64. (Jan Bochenek) 82i:35135 35P05 (81C10)

Myoken, H. Adaptive dual control approach to Markovian decision processes and its applications. Recent developments in Markov decision processes (Proc. Internat. Conf., Univ. Manchester, Manchester, 1978), p. 225, Academic Press, London, 1980. (See 90C40 (93C40)

Myrzaliev, Dž. Quasiperiodic solutions of a system of differential equations in the case of bifurcation. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1980, no. 5, 72-73, 88. (Author's summary) 82h:34057 34C28

Myshkin, V. G. See Myškin, V. G. Myshkis, A. D. See Myškis, A. D.

Mysior, A. On two problems of Mrówka. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 873-875, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (H. P. Tan) 82c:54023 54D60 (54F45)

A regular space which is not completely regular. Proc. Amer. Math. Soc. 81 (1981), 54D10 (54D15) no. 4, 652-653. (S. P. Arya) 82j:54026

Myskin, V. G. (with Gosin, G. G.; Kravčenko, G. G.) Scattering of planar electromagnetic waves by a radially conducting bicone reflector. Radiotehn. i Elektron. 25 (1980), 232-240 (Russian); translated as Radio Engrg. Electron. Phys. 25 (1980), no. 2, 5-12 (1981). (Authors' summary) 82]:78007 78A45

Myškis, A. D. (with Babskii, V. G.; Kopačevs'kii, N. D.; Slobožanin, L. A.; Tjupcov, A. D.) On some unsolved problems of zero-gravity hydromechanics. Nonlinear Anal. 4 (1980), no. 3, 607-621. (From the introduction) 82a:76001 76-02 (76D99) Mysovskik, I. P. The n Netody Vyčisí. No. 11 (1978), 84-91, 189. (F. Schipp) 824:42021 42C05

The approximation of multiple integrals by using interpolatory cubature formulae.

Quantitative approximation (Proc. Internat. Sympox., Bonn, 1979), pp. 217–243, Academic Press, New York, 1980. (H. M. Möller) 82b:41031 41A55 (65D32)

ung, Hyo Chul Current developments of Lie-admissible algebras. Bull. Korean Math.

Soc. 16 (1979/80), no. 2, 85–97. (J. Löhmus) 82b:17002 17A30 (17A20, 81C99)

(with Okubo, Susumu) Commutativity of adjoint operator algebras in simple Lie algebras. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part A. Hadronic J. 4 (1980/81), no. 2, 199-215. (M. L. Tomber) 82±17009 17B10

(with Ko, Young So; Kang, Byung Lyun) On Lie-admissible of vector matrix ebras. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. assachusetts, Boston, Mass., 1980), Part A. Hadronic J. 4 (1980/81), no. 2, 530-549. (Nigel B. Backhouse) 82j:17026 17D25

(with Okubo, Susumu) Adjoint operators in Lie algebras and the classification of simple flexible Lie-admissible algebras. Trans. Amer. Math. Soc. 264 (1981), no. 2, nber) 82g:17004 17B10 (17A20, 81C40) 459-472. (M. L. Tor

Myznikova, B. I. (with Tarunin, E. L.) Boundary conditions for the velocity vortex in problems of the dynamics of a viscous fluid. (Russian) Convective flows and hydrodynamic stability (Russian), pp. 90-101, 136-137, Akad. Nauk SSSR, Ural. Naučn. Centr, Sverdlovsk, 1979. (Authors' summary) 82i:76034 76D99 (65M05, 76A60)

- N -

- Na, Tsung Yen *Computational methods in engineering boundary value problems Mathematics in Science and Engineering, 145. Academic Press | Harcourt Brace Jocanouich, Publishers |, New York-London-Toronto, Ont., 1979. x + 309 pp. ISBN 0-12-512650-6 (From the preface) 82gc65001 65-01 (65L10) (with Aziz, Abdul) New approach to the solution of Falkner-Skan equation. AIAA J. 19 (1981), no. 9, 1242-1244. (From the text) 82g:76030 76D10
- en, Marjatta (with Hag, Kari) On the outer coefficient of quasiconformality of a cylindrical map of a convex dihedral wedge. Ann. Acad. Sci. Fenn. Ser. A I Math. 5 (1980), no. 1, 125-130. (P. Caraman) 82b:30014 30C60
- na, Ichirô Notes on the analytical results in flow shop scheduling. VI, VII. Rep. Univ. Electro-Comm. 29 (1978/79), no. 1, 21-25, 27-31. (Jacek Błażewicz) 82d:90065
 - Notes on the analytical results in flow shop scheduling. VIII. Rep. Univ. 90B35
 - Electro-Comm. 29 (1978/79), no. 2, 179-186. (Jacek Blażewicz) 824:90065b Notes on the analytical results in flow shop scheduling. IX. Rep. Univ.
 - Electro-Comm. 30 (1979/80), no. 1, 51-54. (Jacek Blażewicz) 82d:90 Notes on the analytical results in flow shop scheduling. X. Rep. Univ
 - Electro-Comm. 30 (1979/80), no. 2, 189-196. (Jacek Blażewicz) 82d:90065d 90R35
- Notes on the analytical results in flow shop scheduling. XI. Rep. Unio.

 Electro-Comm. 31 (1980/81), no. 1, 53-64. (Jacek Błażewicz) 824:90065e 90B35

 oko, S. N. Functional model of perturbation theory and its applications to scattering theory. (Russian) Boundary value problems of mathematical physics, 10. Trudy Mat. Inst. Steklov. 147 (1980), 86-114, 203. (H. Baumgärtel) 82d:47012
- Načev, Nako A. (with Mollov, Todor Ž.) Some set-theoretic properties of the Baer radical of commutative rings with prime characteristic. (Bulgarian. Russian and English summaries) Ploudiv. Univ. Naučn. Trud. 15 (1977), no. 1, 13-22 (1979). (Authors' summary) 82k:16007 16A21 (13M05)
 - The Ulm-Kaplansky invariants of the group of normed units of group algebras of abelian p-groups over a commutative ring in which p is invertible. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 12, 1585–1587. (Editors) 82f:20019 20C07
 - (with Mollov, Todor Ž.) The Ulm-Kaplansky invariants of the group of normed units of a modular group ring of a primary abelian group. (Russian) Serdica 6 (1980), no. 3, 258-263. (S. M. Vovsi) 82f:20020 20C07
- (with Mollov, Todor Ž.) Ulm-Kaplansky invariants of the group of normed units of the center of the group ring of an FC-p-group over a commutative ring of characteristic p. (Russian) Serdica 7 (1981), no. 1, 42-56. (Robert L. Snider) 82k:20015 20C07 (16A27)
- hane, D. M. Applications of control theory to input-output planning models. Proceedings of the First World Conference on Mathematics at the Service of Man (Barcelona, 1977), Vol. II, pp. 73-95, Univ. Politec., Barcelona, 1980. (From the introduction) 82e:90029 90A16
- Nachbar, Pauline See Mann-Nachbar, Pau
- Nachbin, Leopoldo Analogies entre l'holomorphie et la linéarité. Séminaire Paul Krée, 4e année: 1977-1978. Équations aux dérivées partielles en dimension infinie, Exp. No. 1, 10 pp., Secrétariat Math., Paris, 1979. (P. D. F. Ion) 82e:46064 46G20 (32A10) Why holomorphy in infinite dimensions? Enseign. Math. (2) 26 (1980), no. 3-4,
 - 257-269 (1981). (Editors) 82i:46066 46G20 (32-01) ★Introduction to functional analysis: Banach spaces and differential calculus.

 Translated from the Portuguese by Richard M. Aron. Monographs and Textbooks in Pure and Applied Math., 60. Marcel Dekker, Inc., New York, 1981. ix + 166 pp.
 - ISBN 0-8247-6984-8 (J. Danes) 821:58002 58-01 (26E15, 46-01, 58C20) See also Mathematical analysis and applications, 82i:00014
- an, Louis J. (with McMahon, Douglas C.) An intrinsic characterization for PI flows. Pacific J. Math. 89 (1980), no. 2, 391-403. (M. Eisenberg) 82d:54048
- no. 2, 173-198. (Author's summary) 82e:70007 70F05 nts. Celestial Mech. 23 (1981),
 - (with Kwok, Johnny H.) Time elements in rectangular coordinates. Celestial Mech. 24 (1981), no. 3, 269–287. (Authors' summary) 82i:70030 70M05 (65N30)

- Nad, Ž. See Nagy, Zs. Nada, Itzhak (with Klein, Abraham A.; Bell, Howard E.) Some commutativity results for rings. Bull. Austral. Math. Soc. 22 (1980), no. 2, 285-289. (A. Yaqub) 82h:16038 16A70
- Nadal, R. (with Lebeuf, A.; Brunet, J.-P.) Un observatoire paléo-astronomique à St.-Lizier. (English summary) Archaeoastronomy No. 3 suppl. J. Hist Astronom. 12 (1981), S38-S50. (Authors' summary) 82f:01003 01A10 (01A35)
- Nadaraja, É. A. On maximal deviation of the kernel type nonparametric density estimates in some degenerate cases. Math. Operationsforsch. Statist. Ser. Statist. 11 (1980), no. 4, 483-497. (Margaret P. Gessaman) 82e:62059 62G05

 On a test for independence due to Rosenblatt. (Russian. Georgian and English
 - naries) Soobšč. Akad. Nauk Gruzin. SSR 98 (1980), no. 1, 33-36. (Dana Vorličková)
 - On some tests based on "kernel"-type estimates of a probability density. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 99 (1980), no. 1, 37-40. (G. Manija) 82f:62073 62G05
- Octorigan and English summaries) Socose. Arda. Natak Gridin. SSR 99 (1960), no. 1, 37-40. (G. Manija) 821:62073 62G05 ddef, D. (with Pulleyblank, W. R.) Matchings in regular graphs. Discrete Math. 34 (1981), no. 3, 283-291. (David P. Sumner) 82j:05087 05C70 deau, Raymond (with Theodorescu, Radu) Restricted Bayes strategies for programs with
- simple recourse. Oper. Res. 28 (1980), no. 3, part 2, 777-784. (I. M. Stancu-Minasian)
- 82e:90071 90C15 (90D05)

 Nadel, Mark E. On a problem of MacDowell and Specker. J. Symbolic Logic 45 (1980), no. 3, 612-622. (Klaus Potthoff) 82d:03056 03C62 (20A15)
- An arbitrary equivalence relation as elementary equivalence in an abstract logic. Z. Math. Logik Grundlag. Math. 26 (1980), no. 2, 103-109. (Jouko Väänänen) 82g:03070
- Nadenik, Zbyněk Eine isoperimetrische Ungleichung für die Paare der Raumkurven. (Czech summary) With a loose Russian summary. Časopis Pēst. Mat. 105 (1980), no. 4, 363–367, 409. (Catherine Bandle) 821:52012 52A40 (49G05)
 - Eine geometrische Anwendung eines Seitenstückes zur Ungleichung von Wirtinger. (Czech summary) With a loose Russian summary. Časopis Pěst. Mat. 106 (1981), no. 1, 42-47, 101. (G. D. Chakerian) 82k:52019 52A40 (49G05, 52A15)
- Nadežin, A. D. Eigenvalues and wave functions of the two-center problem in quantum mechanics. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 3, 721–730, 812. (Author's summary) 82h:81120 81F10 (65N25)
- Soobšě. Akad. Nauk Gruzin. SSR 97 (1980), no. 2, 301–303. (P. S. Landweber (Zbl
 - 439:55003)) 82h:55007 55N22 (57R77) Involutions on Stong manifolds and cobordisms of self-conjugate manifolds.
 - (Russian. English summary) Collection of articles on geometry, II. Trudy Tbiliss. Mat. Inst. Razmadze Akad. Nauk Gruzin. SSR 64 (1980), 72-81. (P. S. Landweber) 82a:57031 57R77 (55N22)
- Involutions on Stong manifolds and their application in cobordism theory. (Russ International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 206-209. (P. S. Landweber) 82a:57032 57R77 (55N22)
- irov, N. K. (with Anisimov, B. F.) Solution of the heat coagulation equation. (Russian. Kazakh summary) Vestnik Akad. Nauk Kazah. SSR 1979, no. 2, 43-48. (From the text) 82h:80001 80A20 (86A99)
- liu, Gh. S. Note on formal com stative Moufang loops. (Romanian. French summary) Stud. Cerc. Mat. 32 (1980), no. 2, 193-207. (N. I. Sandu) 82c:20120 20N05 (14L99, 18B99)
- Nadj, Djerdji F. On curvatures of the Weyl-Otsuki spaces. Publ. Math. Debrecen 28 (1981), no. 1-2, 59-73. (A. Kawaguchi) 82m:53019 53B05 (53B20)
- Nadjakov, E. See Nadžakov, E.
- Nadkarni, M. G. (with Ramachandran, D.) On a question of D. Maharam concerning tail fields. Sankhyā Ser. A 40 (1978), no. 4, 313-318. (J. D. Knowles) 82d:28004 On spectra of nonsingular transformations and flows. Sankhyā Ser. A 41 (1979), no. 1-2, 59-66. (Radu Nicolae Gologan) 82j:47015 47A35 (47A10)
- er, Sam B., Jr. (with Martin, John R.) A note on fixed point sets and wedges. Canad.
- Math. Bull. 23 (1980), no. 4, 453–455. (L. E. Ward, Jr.)
 82a:54088
 54H25 (54F20)

 Continua whose hyperspace is a product. Fund. Math. 108 (1980), no. 1, 49–66.

 (Roman Duda)
 82c:54008
 54B20
- Whitney-reversible properties. Fund. Math. 109 (1980), no. 3, 235-248. (Leonard R. Rubin) 82b:54044 54F20 Universal mappings and weakly confluent mappings. Fund. Math. 110 (1980), no. 3,
- 221-235. [G. R. Gordh, Jr.] 82h:54087 54F20 (54C10) (with Eberhart, Carl) Irreducible Whitney levels. Houston J. Math. 6 (1980), no. 3,
- 355-363. (Anne Dilks) 82c:54007 54B20 (54F15)
- (with Eberhart, Carl; Nowell, William O., Jr.) Spaces of order arcs in hyperspaces. Fund. Math. 112 (1981), no. 2, 111-120. (Józef Krasinkiewicz) 82k:54011
- Examples of fixed point free maps from cells onto larger cells and spares. Rocky Mountain J. Math. 11 (1981), no. 2, 319–325. (E. Fadell) 821:54077 54H25 (54C99,
- Nadolinnyi, V. A. Investigation of a reduced equation of a surface. (Russian) Prikl. Geom. i Inžener. Grafika No. 30 (1980), 26-28, 132. (K. Burian) 82b:51031 51N35
- Nadžakov, E. Quantum system lifetimes and measurement perturbations. (Russian summary) Bulgar. J. Phys. 7 (1980), no. 1, 3-16. (Author's summary) 82a:81008
- Nacini, A. See Ema i-Naeini, A.
- Naerlović-Veljković, Natalija (with Plavšić, M.) Thermodiffusion in dipolar elastic materials. (Serbo-Croatian. English summary) Acad. Serbe Sci. Arts Glas 311 (1979), no. 44, 29–38. (I. Aganović) 82e:73006 73B05
- anam, A. (with Aggarwal, M. L.) The distribution of record values and the problem of exceedences. J. Math. Sci. 9 (1974), 23-28 (1976). (Authors' summary) 62G30
- Nagaev, A. V. Local theorems for sums of ladder epochs. (Russian) Limit theorems, ran processes and their applications (Russian), pp. 162-171, 235, "Fan", Tashkent, 1979. (Werner Wolf) 82d:60144 60J55 (60F05)
- Nagaev, S. V. (with Han, L. V.) Limit theorems for a critical Galton-Watson branching process with migration. (Russian. English summary) Teor. Verojatnost. i Primenen. 25

(1980), no. 3, 523-534. (I. Rahimov) 82e:60142 60J80 (60F05)
On the asymptotic behavior of probabilities of one-sided large deviations. (Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 2, 369–372. (G. I. Ivčenko) 82he60652

Nagahara, Takasi A note on separable polynomials in skew polynomial rings of automorphism type. Math. J. Okayama Univ. 22 (1980), no. 1, 73-76. (From the text) 16A05

 Nagahata, Hidekazu Tests against order restrictions in binomial populations. Mem. Fac.
 Sci. Kyushu Univ. Ser. A 34 (1980), no. 2, 369-378. (T. Robertson) 82e:62033 62F03
 Nagai, Hideo On an impulsive control of additive processes. Z. Wahrsch. Verw. Gebiete 53 Nagai, Hideo On an impulsive control of additive pr (1980), no. 1, 1-16. (I. M. Stojanov) 82a:93074

93E20 (60J25)

Nagai, Shigeo (with Okubo, Tokuyaki) On the logic of a priori modalities. Ann. Japan Assoc. Philos. Sci. 5, no. 5, 213–223 (1980). (Peter Köhler) 82h:03058 03B60 (03B45) Nagai, Takeaki A discrimination for time series based on FFT data. (Japanese. English summary) Rep. Fac. Engrg. Oita Univ. No. 7 (1981), 65-68. (Author's summary) 82k-62174 62M10

Nagainik, A. F. Absolute summability of sequences by double methods. (Kussian)

Mat. Ž. 33 (1981), no. 2, 199-207. (M. R. Parameswaran) 82h:40009 40F05 (40D09)

Nagami, Keiö The equality of dimensions. Fund. Math. 106 (1980), no. 3, 239-246. (Y.

Nagamine, Hirosige (with Ohmatsu, Shigeru; Soeda, Takashi) Optimal filter for a discrete-time distributed parameter system and its application to environmental data processing. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. III, pp. 69-79, Reidel, Dordrecht, 1980. (Authors' summary) 82e:93110 93E11

Nagano, Tadashi (with Smyth, Brian) Minimal surfaces in tori by Weyl groups. II. Minimal nifolds and geodesics (Proc. Japan-United States Sem., Tokyo, 1977), pp. 117-120,

North-Holland, Amsterdam, 1979. (Authors' introduction) 82g:53063 53C40 (53A10)
Nagano, Yoshihiko Some remarks on going-between rings. (Japanese summary) Rep. Fac.
Engrg. Kanagawa Univ. No. 18 (1980), 7–8. (Stephen McAdam) 82i:13009 13B99 Nagao, Hisao On stopping times of sequential estimations of the mean of a log-normal

distribution. Ann. Inst. Statist. Math. 32 (1980), no. 3, 369-375. (Dennis D. Wackerly) 62L05

Note on the limiting distribution of stopping time. J. Japan Statist. Soc. 10 (1980), no. 2, 145-147. (M. Hušková) 82e:62127 62L12

Nagaoka, Kazuaki (with Hirose, Ken; Umezu, Mariko) Many-valued logic with truth es from finite lattices. Mem. School Sci. Engrg. Waseda Univ. No. 43 (1979), 147-162 (1980). (Henry Africk) 82d:03033 03B50 (03F05, 06B99)

Nagapetjan, R. S. See König, Dieter; et al., 82k:60192

Nagar, S. K. (with Nagaraja, T.) A modified parameter identification algorithm in state pace. Comput. Electr. Engrg. 8 (1981), no. 2, 103-107. (From the introduction) 82i-93028 93B30

Nagaraj, Muppinalya Ricci classification of axially symmetric nonstatic Einstein-Rosen space-times. Vignana Bharathi 5 (1979), no. 1-2, 23-35. (K. L. Duggal) 82i:83021 83C20 (53C50)

(with Srinivasa, B. R.) Geodesic in a de Sitter space-time. Vignana Bharathi 6 (1980), no. 1, 37-44. (Authors' summary) 82g:83002 83C10 (53B50, 83C15)

On the expected values of record values. Austral. J. Statist. 20 (1978), no. 2, 176-182. (Author's summary) 82b:62017 62F15

Some finite sample results for the selection differential. Ann. Inst. Statist. Math. 33 (1981), no. 3, 437-448. (From the introduction) 82k:62024 62D05 (62G30)

Nagaraja, T. (with Nagar, S. K.) A modified parameter identification algorithm in state space. Comput. Electr. Engrg. 8 (1981), no. 2, 103-107. (From the introduction) 93B30

Nagarsenker, B. N. (with Pillai, K. C. S.) Distribution of the likelihood ratio statistic for testing sphericity structure for a normal covariance matrix and its percentage points. Sankhyā Ser. B 41 (1979), no. 3-4, 154-169. (Authors' summary) 82k:62096 62H10 Noncentral distributions of the likelihood ratio criterion for the equality of

eigenvalues of a spectral matrix. South African Statist. J. 14 (1980), no. 2, 87-101. (Raúl

Pedro Mentz) 82f:62092 62H10 Nagasawa, Kiyoshi (with Imamura, Tsutomu; Taniuti, Tosiya) A Gaussian solution for drift wave turbulence and for Rossby wave turbulence. J. Phys. Soc. Japan 48 (1980),

no. 6, 2119-2124. (Authors' summary) 82a:76045 76F99 (76C20, 76X05, 78A20) Nagasawa, Masao Basic models of branching processes. (French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 2. With discussion. Bull. Inst. Internat. Statist. 47 (1977), no. 2, 423-445, 446-448. (J. D. Biggins) 82h:60160 60J80 (60J25)

(with Maruyama, Takeo) An application of time reversal of Markov processes to a problem of population genetics. Adv. in Appl. Probab. 11 (1979), no. 3, 457–478. (Authors' summary) 82g:92027 92A10 (60J70)

Segregation model and its applications. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 93-97, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (From the text) 82g:92037 92A15

Nagata, Masstasgu (with Kono, Akira) Homology of (KSC), over the Dyer-Lashof algebra.

Japan. J. Math. (N.S.) 6 (1980), no. 1, 45-60. (R. E. Stong) 82e:55031 55S12 (55R40, 57T25)

On the uniqueness of Dyer-Lashof operations on the Bott periodicity spaces. Publ. Res. Inst. Math. Sci. 16 (1980), no. 2, 499-511. (Stewart B. Priddy) 82e:55032 Nagata, Masayoshi Commutativity of elements in an amalgamated product. Japan. J.

Math. (N.S.) 6 (1980), no. 1, 173-178. (S. Andreadakis) 82f:20050 20E06 (20E07) der (with Stein, Elias M.) *Lectures on pseudodifferential operators:

regularity theorems and applications to nonelliptic problems. Mathematical Notes, 24. Princeton University Press, Princeton, N.J.; University of Tokyo Press, Tokyo, 1979. 159 pp. ISBN 0-691-08247-2 (V. S. Rabinovič) 82f:47059 47G05 (32-02, 35805,

(with Wainger, Stephen) Limits of bounded holomorphic functions along curves. Recent developments in several complex variables (Proc. Conf., Princeton Univ., Princeton, N. J., 1979), pp. 327-344, Ann. of Math. Studies, 100, Princeton Univ. Press, Princeton, N.J., 1981. (Guy Laville) 82j:32018 32A40
(with Stein, Elias M.; Wainger, Stephen) Boundary behavior of functions

holomorphic in domains of finite type. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 11, part 1, 6596-6599. (From the text) 82k:32027 32A40 (31B20, 32E35, 42B25)

Nagel, Ernest Relativity and twentieth-century intellectual life. Some strangeness in the

proportion (Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 38-45, Addison-Wesley, Reading, Mass., 1980. (See 824:83002) 01A80 (00A69)
Nagel, Harry L. Combining fictitious play with the method of determinants. J. Inform. pp. 38-45, Addison-Wesley, Reading, Mass., 1980. (See 824:83002) 01A80 (00A69)

Optim. Sci. 2 (1981), no. 1, 39-44. (Author's introduction) 82m:90165

Nagel, Jonathan Allen (with Rogovin, D.; Scully, Marlan O.) Quantum theory of the do Josephson effect: current-biased eigenstates and excitation spectrum. Phys. Rev. B (3) 23 (1981), no. 3, 1156–1170. (Authors' summary) 82c:81171 81J05

Nagel, Josef Asymptotic properties of powers of Bern3tein operators. J. Approx. Theory 29 (1980), no. 4, 323-335. (Charles K. Chui) 825-41014 41A10 (41A60)
Nagel, Ju. A. A model and kinetic equations for a charged mixture of gases in the presence of phase transitions. Izv. Akad. Nauk SSSR Meh. Židk. Gaza 1990, no. 3, 118-127 (Russian); translated as Fluid Dynamics 15 (1980), no. 3, 419-425. (From the summary) 82A40 (82A70)

Nagel, Jürgen Verallgemeinerte Slobodezki-Räume auf der Halbachse. Beiträge Anal. No. 15 (1980), 61-70 (1981). (Richard Bagby) 82h:46052 46E35

Nagel, Werner (with Mecke, Joseph) Stationare raumliche Faserprozesse und ihre Schnittzahlrosen. (English and Russian summaries) Elektron. Informationsverarb. Kybernet. 16 (1980), no. 8-9, 475-483. (Pamela J. Dichomides) 82j:60016 (60G55)

Nagel', Yu. A. See Nagel', Ju. A.

aut, Robert V. (with Thompson, Gerald L.) A cost operator approach to multistage location-allocation. European J. Oper. Res. 6 (1981), no. 2, 149-161. (Authors' summary) 82h:90037 90B05

Nagelkerke, N. J. D. (with Hart, A. A. M.; Strackoe, J.) Sample sizes in sequential survival clinical trials. Biometrical J. 23 (1981), no. 7, 709–711. (Authors' summary) 82m:62184 62L05 (62P10)

Naghdi, A. K. Closed form eigenfunctions of Laplace's equation in multiply connected regions and applications. Proceedings of the 16th Midwestern Mechanics Conference (Kansas State Univ., Manhattan, Kan., 1979), pp. 131-135, Develop. in Mech., 10, Kansas St. Univ., Manhattan, Kan., 1979. (B. Hellwig) 82b:33043 35105 (35P10, 73C99,

Naghdi, P. M. (with Casey, J.) An invariant infinitesimal theory of motions superposed on a given motion. Arch. Rational Mech. Anal. 76 (1981), no. 4, 355-391. (Gérard A. Maugin) 822:73005 73B05 (73C50, 73C99)

(with Rubin, M. B.) On inviscid flow in a waterfall. J. Fluid Mech. 103 (1981), 375–387. (Authors' summary) 824:76915 76B15

Naghieh, M. (with Hayek, Sabih I.) Diffraction of a point source by two impedance covered half-planes. J. Acoust. Soc. Amer. 69 (1981), no. 3, 629-637. (Authors' summary) 82b:76051 76005

Nagisa, Masaru (with Tomiyama, Jun) Completely positive maps in the tensor products of von Neumann algebras. J. Math. Soc. Japan 33 (1981), no. 3, 539-550. (Man-Duen Choi) 82i:46092 46L10

Nagl, Manfred A tutorial and bibliographical survey on graph grammars. Graph-grammars and their application to computer science and biology (Internat. Workshop, Bad Honnef, 1978), pp. 70-126, Lecture Notes in Comput. Sci., 73, Springer, Berlin, 1979. (Karel Čulik) 82e:68073b 68F05 (18B99, 68-02, 68E10)

GRAPL—a programming language for handling dynamic problems on graphs. Discrete structures and algorithms (Proc. Conf., Berlin, 1979), pp. 25–45, Hanser, Munich, 1980. (Author's summary) 82a:68127 68E10

Nagle, Kent See Nagle, P. Kent Nagle, Michael C. The decidability of normal K5 logics. J. Symbolic Logic 46 (1981), no. 2,

319-328. (Steve Kuhn) 82k:03019 03B45 (03B25)
Nagle, R. Kent Monotonicity and alternative methods. Nonlinear equations in abstract spaces (Proc. Internat. Sympos., Univ. Texas, Arlington, Tex., 1977), pp. 405-415, Academic Press, New York, 1978. (D. Pascali) 82e:47082 47H15

(with Singkofer, Karen) Nonlinear ordinary differential equations at resonance with slowly varying nonlinearities. Applicable Anal. 11 (1980), no. 2, 137-149. (John R. Graef) 34B15 (34C25)

Nagler, Harry Napier and Babbage. Ann. Hist. Comput. 2 (1980), no. 2, 186-187. (Editors) 82e:01044 01A45

Nagnibeda, E. A. (with Rydalevskaja, M. A.) Equations of a nonequilibrium mixture of viscous dissociable gases. (Russian) Aerodynamics of rarefied gases, No. 10 (Russian), pp. 80-93, 232, Leningrad. Univ., Leningrad, 1980. (Authors' summary) 82&76074 76P05 (80A32, 82A40)

ida, M. I. (with Gorgula, V. I.) The completeness of a system in the space of functions analytic in an annulus. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 7, 17-20, 96. (B. Korenblum) 82f:30006 30B60 (46E10)

(with Berezovs'kii, M. I.) Solutions of an operator equation in the space of functions analytic in a disc. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 5-9, 103. (V. V. Peller) 82k:47023 47A62

(with Linčuk, S. S.) Remarks on bases in some spaces of analytic functions.

(Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk. 1980, no. 2, 16-19, 108-109. (Z. Čanturija) 82b:46025 46E10

On the question of the description of the commutants of an integration operator in analytic spaces. (Russian) Sibirak. Mat. Ž. 22 (1981), no. 5, 127–131, 223. (Author's summary) 82k:47048 47B38 (30C45)

Nagore, C. Sri Hari On groups of central type. Math. Sem. Notes Kobe Univ. 8 (1980), no. 2, 281–286. (W. J. Wong) 82b:20014 20C15

Nagornyi, A. M. (with Salahitdinov, M. S.) On a boundary value problem for a third-order equation of parabolic-hyperbolic type. (Russian) Boundary value problems for equations of mathematical physics (Russian), pp. 3-13, 167, "Fan", Tathkent, 1980. (V. V. Kovižkin) 82i:35131 35M05

The Cauchy problem for some classes of even-order degenerate hyperbolic equations. Russian) Boundary value problems for equations of mathematical physics (Russian), pp. 13–18, 167, "Fan", Tashkent, 1980. (Author's summary) 82k:35068 351.80

Boundary value problems for a degenerate equation of hyperbolic-parabolic type. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1981, no. 2, 32–36, 98. (Author's

mary) 82m:35109 35M05

Nagy, Attila The least separative congruence on a completely symmetrical semigroup. Notes on semigroups, VI, pp. 13-17, DM 80, 4, Karl Marx Univ. Econom., Budapest, 1980.
 From the text) 82he20076 20M10
 Nagy, B. S-spectral capacities and closed operators. Studia Sci. Math. Hungar. 12 (1977), no. 3-4, 399-406 (1980). (F.-H. Vasilescu) 82he47045 47B40

Operators with the spectral decomposition property are decomposable. Studia Sci. ngar. 13 (1978), no. 3-4, 429-432 (1981). (B. L. Wadhwa) 82h:47032 Closed S-decomposable operators. Ann. Univ. Sci. Budapest. Eōtvōs Sect. Math. 22/23 (1979/80), 143-149. (F.-H. Vasilescu) 82b:47038 47B40

Local spectral theory. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 4, 433–443. (R. G. Bartle) 82h:47033 47B40 (47B25)

sz.-Nagy, Béla See Sz.-Nagy, Béla

Nagy, Eva V. The optimization of an infinite-dimensional linear control differential

equation system. Ann. Univ. Sci. Budapest. Eōtvōs Sect. Math. 22/23 (1979/80), 247-256. (T. Giec) 820:49007 49A27

Nagy, Victor See Lovass-Nagy, Victor

Nagy, Zs. (with Gerlits, J.) On a-left orderings. Topology, Vol. I (Proc. Fourth Colloq., Budapest, 1978), pp. 501–520, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (A. I. Baškirov) 82e:54037a 54F05

(with Gerlits, J.) a-left and a-extended spaces. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 162-168. (A. I. Baškirov) 82e:54037b 54F05

Nagyaé Szilvási, Márta On the curvature of a quarter-symmetric connection. (Hungaria Russian summary) Mat. Lapok 28 (1980), no. 1-3, 141-146. (George Virsik) 82e:53067 metric connection. (Hungarian. 53C20 (53C05)

Nahapet'jan, B. S. The central limit theorem for random fields with mixing property. Multicomponent random systems, pp. 531-547, Advances in Probability and Rele 6, Dekker, New York, 1980. (Såndor Csörgő) 824:60099 60G60 (60F05)

(with Ambarcumjan, R. V.) The Palm distribution and limit theorems for random point processes. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 71 80), no. 2, 87-90. (M. Zahle) 82c:60093 60G55 (60F05)
On a weak dependence criterion. (Russian. English summary) Teor. Verojatnost. i

Primenen. 25 (1980), no. 2, 374-381. (M. I. Jadrenko) 82h:60067

Nahusev, A. M. Criterion for the uniqueness of the solution of the Darboux problem for a degenerate hyperbolic equation of moisture transfer. (Russian) Differencial nye Uravnenija 16 (1980), no. 9, 1643-1649, 1726. (V. Ďurikovič) 82c:35045 (35L25)

Validity of an a priori estimate. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 1, 45-47. (G. Wildenhain) 82f:35025 35B45 (35J15)

ova, Milka S. Exact sequences of uniform coho omology. (Bulgarian. Russian and English summaries) *Ploodiv. Univ. Naučn. Trud.* **16** (1978), *no.* 1, 477–484 (1980). (From the summary) **821:55010** 55N45 (55U25)

Naidu, D. S. (with Rajagopalan, P. K.) Singular perturbation method for a closed-loop timal control problem. Proc. IEE-D 127 (1980), no. 1, 1-6. (Asen L. Dončev) 824-49030 49D30 (34E05)

(with Rajagopalan, P. K.) Singular-perturbation analysis of a closed-loop

nt optimal-control problem. Proc. IEE-D 127 (1980), no. 5, 194-203. (V. L. Bakke) 824:49024 49D05 (34E15)

(with Rao, A. Kailasa) Singularly perturbed boundary value problems in discrete ems. Internat. J. Control 34 (1981), no. 6, 1163-1173. (Authors' summary) 82m-93065 93055

(with Rajagopalan, P. K.) Singular-perturbation method for discrete models of continuous systems in optimal control. *Proc. IEE-D* 128 (1981), no. 4, 142-148. (P. Sannuti) 82n:49044 49D25

Naik, K. Viswanatha Fixed point theorems for operators on Banach spaces. Indian J. Pure Appl. Math. 12 (1981), no. 3, 312–316. (S. L. Singh) 82i:47092 47H10

Remarks on two theorems of Petryshyn and Williamson. Indian J. Pure Appl. Math. 12 (1981), no. 3, 317. (Author's summary) 82d:47059 47H10
Naik, N. (with Swamy, B. L. N.; Misra, S. S.) Lattice-ordered commutative loops. Math.

Sem. Notes Kobe Univ. 8 (1980), no. 1, 57-71. (D. A. Robinson) 82a:06033 (20N05)

(with Swamy, B. L. N.) Ideal theory in lattice ordered commutative Moufang loops. Math. Sem. Notes Kobe Univ. 8 (1980), no. 3, 443-453. (Orin Chein) 82h:20087

(with Swamy, B. L. N.; Misra, S. S.) Ideals in a representable dually residuated lattice-ordered semigroup. Bull. Inst. Math. Acad. Sinica 9 (1981), no. 1, 101-110. (Marlow Anderson) 82i:06021 06F05

Naik, Ranjan N. (with Bhat-Nyak, Vasanti N.; Kocay, W. L.) Forcibly 2-variegated degree sequences. Utilitas Math. 18 (1980), 83-89. (From the text) 82a:05074 05C99

simpally, A. (with Jordanides, T. J.; Santina, M.; Nguyen, L.) Feedforward control of emical reactors. Fourteenth Asilomar Conference on Circuits, Systems and Con-(Pacific Grove, Calif., 1980), pp. 149-152, IEEE, New York, 1981. (See 82d:93001)

(with Naimpally, Saiprasad V.) State-space approach to Legendre series solutions for linear systems. Indust. Math. 31 (1981), no. 1, 21-25. (Authors' summary) 82h:93038

nally, Saiprasad V. (with Naimpally, A.) State-space approach to Legendre series ns for linear systems. Indust. Math. 31 (1981), no. 1, 21-25. (Authors' summary) 93C05

anov, A. Central limit theorem for the hierarchical Dyson model for small β . (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 219-220. (Nicolae Angelescu) 824:82012 82A05 (60K35)

vi-Naini, Reza See Safavi-Naini, Reza

Nair. C. Ram ankutty A note on the construction of optimal repeated measurements designs Sankhyā Ser. B 41 (1979), no. 3-4, 277-281. (Author's summary) 82m:62169a 62K05

Corrigendum: "A note on the construction of optimal repeated measurements

designs". Sankhyā Ser. B 42 (1980), no. 1-2, 128. (Author's summary) 82m:62169b 62K05 (05B15)

A note on: "Optimal control of a class of unconstrained bilinear systems" [Internat. J. Systems Sci. 7 (1976), no. 12, 1349-1354; MR 55 #10108] by D. Tabak and E. Zager. Internat. J. Systems Sci. 12 (1981), no. 2, 261-262. (From the text) 49A10 (49D30)

Nair, K. Aiyappan Asymptotic distribution and moments of normal extremes. Ann. Probab. 9 (1981), no. 1, 150-153. (W. Hoeffding) 82d:60042 60F05 (62E15)

Nair, K. P. K. (with Aggarwal, Vijaykumar; Aneja, Y. P.) Ratio rewards in networks. (French summary) RAIRO Rech. Opér. 15 (1981), no. 2, 129-138. (Authors' summary) 82k-90127 90C40 (90B10)

Nair. Mohan (with Shiu. P.) On some results of Erdős and Mirsky. J. London Math. Soc. (2) 22 (1980), no. 2, 197-203. (Stanley J. Benkoski) 82b:10060 10H25 (10A20)

A new method in the elementary theory of primes. Seminar on Number Theory, 1980-1981 (Talence, 1980-1981), Exp. No. 27, 7 pp., Univ. Bordeaux I, Talence, 1981. 10H15

Nair, V. N. Plots and tests for goodness of fit with randomly censored data. Biometrika 68 (1981), no. 1, 99-103. (A. P. Basu) 82h:62172 62N05 (60G10)
Naito, Manabu (with Kusano, Takaŝi) Comparison theorems for functional-differential

equations with deviating arguments. J. Math. Soc. Japan 33 (1981), no. 3, 509-532. (Wadi Mahfoud) 82i:34085 34K15

(with Kusano, Takaŝi) Oscillation criteria for general linear ordinary differential equations. Pacific J. Math. 92 (1981), no. 2, 345-355. (K. Kreith) 82g:34038 (with Kusano, Takaŝi; Tanaka, Kyoko) Oscillatory and asymptotic behaviour of solutions of a class of linear ordinary differential equations. Proc. Roy. Soc. Edinburgh Sect. A 90 (1981), no. 1-2, 25-40. (R. Grimmer) 82k:34040 34C11 (34C10)

Naito, Toshiki Fundamental matrices of linear auto omous retarded equations with infinite delay. Tôhoku Math. J. (2) 32 (1980), no. 4, 539-556. (J. K. Hale) 82f:34084 (44A10)

Naitza, Dorotea Lorentz manifolds with a pair of isotropic quasiconcircular fields. (Italian. French summary) Atti Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur. 56 (1978), 55-58 (1980). (George S. Whiston) 82d:53040 53C50

Najman, B. Trace class perturbations and scattering theory for the equations of Klein-Gordon type. (Serbo-Croatian summary) Glas. Mat. Ser. III 15(35) (1980), no. 1, 79-86 (J. Weidmann) 82b:35122 35P25 (34B25, 47A40)

Spectral properties of the operators of Klein-Gordon type. (Serbo-Croatian Mat. Ser. III 15(35) (1980), no. 1, 97-112. (J. Weidmann) 82b:47042 47B50 (35P05, 47A10, 81C10)

Perturbation theory for selfadjoint operators in Pontrjagin spaces. I. (Serbo-Croatian summary) Glas. Mat. Ser. III 15(35) (1980), no. 2, 351-371. (J. Bognár) 82e:47048 47B50 (47A55)

Naka, Reiko See Miyaoka, Reiko

Naka, Sigefumi (with Goto, Tetsuo; Kamimura, Kiyoshi) On the bi-local model and string model. Theory of elementary particles extended in space-time. Progr. Theoret. Phys. Suppl. No. 67 (1979), 69-114 (1980). (John McEwan) 82f:81075 81G05 (81G99)

Nakach, R. (with Gell, Y.) Stochastic heating of plasmas in inhomogeneous magnetic fields. Intrinsic stochasticity in plasmas (Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 221-237, École Polytech., Palaiseau, 1979. (J. S. Joel) 82d:76097 (58F13)

Nakache, J.-P. (with Morice, V.; Golmard, J. L.) Discrimination sur variables binaires basée sur l'estimation des distributions de probabilité par groupe. (English summary) Data analysis and informatics (Proc. Second Internat. Sympos., Versailles, 1979), pp. 305-316, North-Holland, Amsterdam, 1980. (See 821:62004) 62H30 (6 62H30 (62G05)

da, Hitoshi On the invariant measures and the entropies for continued fraction transformations. Keio Math. Sem. Rep. No. 5 (1980), 37-44. (Richard T. Bumby) 10K10 (28D20) 82b:10074

Nakagami, Junichi (with Kurano, Masami; Yasuda, Masami) Multivariate stopping problem with a majority rule. (Japanese summary) J. Oper. Res. Soc. Japan 23 (1980), no. 3, 205-223. (Bert Fristedt) 82b:90132 90D10 (90D20)

(with Yasuda, Masami) A saddle point of an inventory problem. J. Inform. Optim.

Sci. 2 (1981), no. 2, 181-191. (Authors' summary) 82d:90052 90B05 (90D45)
Nakagami, Ketko Integration and differentiation of 8-function. I. Math. Japon. 26 (1981), no. 3, 207-317 (8-1). no. 3, 297-317. (S. N. Mukhopadhyay) 82i:46068 46G99 (28A15, 46F10)

Nakagami, Yoshiomi (with Sutherland, Colin) Takesaki's duality for regular extensions of von Neumann algebras. Pacific J. Math. 83 (1979), no. 1, 221-229. (E. T. Kehlet) 82e:46080 46L10

Nakagawa, Hisao On a certain minimal immersion of a Riemannian manifold into a sphere. Kodai Math. J. 3 (1980), no. 3, 321-340. (M. Barros) 82k:53077 53C40 (53C42) Global study of Riemannian manifolds. The achievements of Katsuhiro Shiohama.

the recipient of the 8th Iyanaga Prize of the Mathematical Society of Japan. (Japanese) Sûgaku 33 (1981), no. 1, 66-78. (Editors) 82i:01057 01A70 (53-03, 53C40) Nakagawa, Ryosuke Separation axioms and classes of morphisms in TOP. Structure of

topological categories (Proc. Conf., Univ. Bremen, Bremen, 1978), pp. 173-180, -Arbeitspapiere, 18, Univ. Bremen, Bremen, 1979. (D. Pumplun) 82b:54031 54D10 (18B30, 54B30)

Nakapawa, Toshio (with Yasui, Kazumi: Motoori, Mitsuo: Sawa, Yoshiya) Reliability analysis of an inspection policy and its application to a computer system. (Japanese. English summary) J. Oper. Res. Soc. Japan 23 (1980), no. 3, 273-286. (From the summary) 82a:90066 90B25 (68A05)

Nakagomi, Teruaki (with Hasegawa, Hiroshi; Mabuchi, M.; Kondo, Kazuo) Nonequilibrium thermodynamics of lasing and bistable optical system 23 (1980), no. 3, 281-313. (I. O. Bohachevsky) 82a:82022 82A35 (60K35, 62E15, 80A35, 81K05)

(with Hasegawa, Hiroshi) On the characterization of the stationary state of a class of dynamical semigroups. J. Statist. Phys. 23 (1980), no. 5, 639-652. (Authors' summary) 824:82018 82A15 (46L60, 49G99)

Nakai, Mitsuru (with Sario, Leo) Existence relations between harmonic and biharmonic Green's functions. (Italian summary) Rend. Istit. Mat. Univ. Trieste 9 (1977), no. 1-2, 6-20 (1978). (M. Brelot) 82f:30047 30F15 (31B30)

(with Sario, Leo) Duffin's function and Hadamard's conjecture. Pacific J. Math. 75

(1978), no. 1, 227-242. (O. I. Maisaia) 82d:31002 31A30 (35J40)

The range of Picard dimensions. Proc. Japan Acad. Ser. A Math. Sci. 55 (1979), no. 10, 379–383. (N. Suita) 82e:31006 31A35

Nakai, Shigeyuki (with Kawahara, Iwao) An algorithm for locating facilities at the theoretical steps of layout planning. (Japanese. English summary) Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 91 (1980), 75-79. (From the summary) 82d:90050

Nakai, Teruhisa Search problem with time-dependent detection probabilities. Math. Japon. 26 (1981), no. 5, 499-505. (Author's summary) 82j:90037 90B40

Nakai, Toru Sequential stochastic assignment problem with rejection. J. Inform. Optim.

Sci. 2 (1981), no. 2, 169–180. (Author's summary) 824:90074 90B99

Nakajima, Atsushi Coseparable coalgebras and coextensions of coderivations. Math. J. Okayama Univ. 22 (1980), no. 2, 145–149. (Richard K. Molnar) 82g:16015 16A24 (16A61, 16A72)

Nakajima, Haruhisa Invariants of finite groups generated by pseudoreflections in positive characteristic. Tsukuba J. Math. 3 (1979), no. 1, 109-122. (From the introduction) 20H15

Modular representations of p-groups with regular rings of invariants. Proc. Jap Acad. Ser. A Math. Sci. 56 (1980), no. 10, 469-473. (From the text) 82a:20016 20C

Invariants of finite abelian groups generated by transvections. *Tokyo J. Math.* 3 (1980), no. 2, 201–214. (V. L. Popov) 82e:14058 14L30 (13C10, 15A72, 20K01)

On some invariant subrings of polynomial rings in positive characteristics. Proceedings of the 13th Symposium on Ring Theory (Okayama Univ., Okayama, 1980), pp. 91-107, Okayama Univ., Okayama, 1981. (R. M. Fossum) 82h:13012 (14B05, 14D25, 20K99)

Nakamori, Setichi (with Hataji, Akira) New design of linear least-squares fixed-interval smoother using covariance information. Automatica-J. IFAC 17 (1981), no. 4, 661-664.

(Authors' summary) 82k-93083 93E14
(with Hataji, Akira) Derivation of linear optimal fixed-interval smoothing algorithm using covariance information. I, II. Rep. Fac. Engrg. Oita Univ. No. 7 (1981), 25-32,

33-40. (Authors' summary) 82m:93097 93E14 (94A05) Nakamori, Yoshiteru (with Miyamoto, Sadaaki; Ikeda, Saburo; Sawaragi, Yoshikazu) Measurement optimization with sensitivity criteria for distributed parameter system IEEE Trans. Automat. Control 25 (1980), no. 5, 889-901. (Authors' summary) 82f:49046

Nakamoto, Ritsuo (with Fujii, Masatoshi) Antinormal operators and theorems of Izumino Math. Japon. 24 (1979/80), no. 1, 41-44. (Mehdi Radjabalipour) 82a:47004 (47A10)

Nakamula, Ken Class number calculation and elliptic unit. I. Cubic case. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 1, 56-59. (Kurt Girstmair) 82k:12007a 12A50

Class number calculation and elliptic unit. II. Quartic case. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 2, 117-120. (Kurt Girstmair) 82k:12007b 12A50 (12A30,

Class number calculation and elliptic unit. III. Sextic case. Proc. Japan Acad. Ser. Math. Sci. 57 (1981), no. 7, 363-366. (Kurt Girstmair) 82k:12007c 12A50 (12A5) 12A50 (12A35,

ura, Akira (with Ono, Hiroakira) Decidability results on a query language for data bases with incomplete information. Mathematical foundations of computer science, 1980 (Proc. Ninth Sympos., Rydzyna, 1980), pp. 452-459, Lecture Notes in Comput. Sci., 88, Springer, Berlin, 1980. (Authors' introduction) 82e:68102 68H05 (03B15, 03B25, 68B15)

(with Hirota, Ryogo) Second modified KdV equation and its exact multisoliton solution. J. Phys. Soc. Japan 48 (1980), no. 5, 1755-1762. (G. L. Lamb, Jr.) 82c:35074 35Q20 (76B25)

(with Chen, Hsing Hen) Multisoliton solutions of a derivative nonlinear Schrödinger equation. J. Phys. Soc. Japan 49 (1980), no. 2, 813-816. (J. S. Joel) 82f:35170 (81C05)

Exact multisoliton solution of the modified sine-Gordon equation. J. Phys. Soc Japan 49 (1980), no. 3, 1167-1170. (J. S. Joel) 82f:35171 35Q20

Bäcklund transformation of the cylindrical KdV equation. J. Phys. Soc. Japan 49 (1980), no. 6, 2380-2386. (F. A. E. Pirani) 82f:35172 35Q20 (76B25)

(with Ono, Hiroakira) On the size of refutation Kripke models for some linear modal and tense logics. Studia Logica 39 (1980), no. 4, 325-333. (R. Parikh) 82i:03030

(with Watanabe, Toshimasa; Ae, Tadashi) On the removal of forbidden graphs by edge-deletion or by edge-contraction. Discrete Appl. Math. 3 (1981), no. 2, 151–153. (D. 05C99 (68C25)

(with Chen, Hsing Hen) Soliton solutions of the cylindrical KdV equation. J. Phys. Japan 50 (1981), no. 2, 711-718. (Elan Moritz) 82e:35071 35Q20 (76B25) Simple similarity-type multiple-decay-mode solution of the two-dimensional Soc. Japan 50 (1981), no. 2, 711-718. (Elan Moritz) 82e:35071

Korteweg-de Vries equation: Phys. Rev. Lett. 46 (1981), no. 12, 751-753. (Author's summary) 82b:35144 35Q20

Nakamura, Gen (with Uryu, Hitoshi) Parametrix of certain weakly hyperbolic operators. nm. Partial Differential Equations 5 (1980), no. 8, 837-896. (J. Kisyński) 82a:35061 35L30 (35S10)

akamura, Hiroshi (with Asako, Yutaka) Heat transfer in a parallelogram shaped enclosure. I. Heat transfer by free convection. Bull. JSME 23 (1980), no. 185,

1827-1834. (Authors' summary) 82g-76036 76R10
Nakamura, Iku Inoue-Hirzebruch surfaces and a duality of hyperbolic unimodular singularities. I. Math. Ann. 252 (1980), no. 3, 221-235. (G. van der Geer) 82g:14007 14B05 (10D21, 14B07, 14J17)

ura, Kenjiro (with Ishikawa, Shin) Representation of characteristic function games by social choice functions. Internat. J. Game Theory 9 (1980), no. 4, 191–199. (Authors' introduction) 82m:90171 90D12 (90A08)

ura, Kirio Charakteristische Untergruppen von Quasinormalteilern.

(Basel) 32 (1979), no. 6, 513–515. (From the text) 82i:20055 20E28 (20D99)

Charakteristische Untergruppen von Quasinormalteilern. Proceedings of the 4th
Symposium on Semigroups (Yamaguchi Univ., Yamaguchi, 1980), pp. 55–56, Yamaguchi
Univ., Yamaguchi, 1980. (See 82i:20008) 20D99

ra, Masahiro (with Kainuma, Daisuke) Around Jensen's inequality. Math. Japon.

25 (1980), no. 5, 585-588. (V. Lakshmikantham) 824:46091 46L50 (47B15) kamura, Tadashi (with Kariya, Taichi) The maximum likelihood estimates based on the incomplete quantal response data. J. Japan Statist. Soc. 8 (1978), no. 1, 21-28. (Authors' summary) 82b:62142 62P10 (62F10)

ura, Takashi (with Ohsumi, Noboru) Some properties of monotone hierarchical dendrogram in numerical classification. (Japanese. English summary) Proc. Inst. Statist. Math. 28 (1981), no. 1, 117-133. (C. Hayashi) 82m:62135 62H30

Nakamura, Tohgo On the additive factorization of homogeneous polynomial matrices. IEEE Trans. Circuits and Systems 28 (1981), no. 4, 337-339. (N. K. Bose) 82c:15015 15A23 (15A57)

Nakamura, Tsayoshi On the moment of positively truncated normal distribution. J. Japa Statist. Soc. 10 (1980), no. 2, 139-144. (B. Raja Rao) 824:62038 62E15

Regularity and firing sequences of computation graphs. J. Comput. System Sci. 22 (1981), no. 1, 9-28. (Author's summary) 82f:68070 68E10 (05C99)

Nakane, Shizuo P-convexity with respect to differential operators which act on linear subspaces. Proc. Japan Acad. Ser. A Math. Sci. 55 (1979), no. 9, 343-347. (Bent E. Petersen) 82b:35027 35E10

Nakane, Toshiyuki (with Hasegawa, Izumi) On Sasakian manifolds with vanishing contact Bochner curvature tensor. Hokkaido Math. J. 9 (1980), no. 2, 184-189. (R. Rosca) 82h:53062 53C25

(with Hasegawa, Izumi) Remarks on Kaehlerian manifolds with vanishing Bochner curvature tensor. J. Hokkaido Univ. Ed. Sect. II A 31 (1980/81), no. 1, 1-4. (Samuel I. Goldberg) 82g:53072 53C55

Nakanishi, Hisao (with Stanley, H. Eugene) Erratum: "Scaling studies of percolation phenomena in systems of dimensionality two to seven: cluster numbers" [Phys. Rev. B (3) 22 (1980), no. 5, 2466-2488; MR 81g:82045]. Phys. Rev. B (3) 23 (1981), no. 3, 1489. (Editors) 82c:82072 82A42

Nakanishi, Noboru Indefinite-metric quantum field theory of general relativity. II. Prog. Theoret. Phys. 60 (1978), no. 4, 1190-1203. (Author's summary) 82k:83027b (81E20)

Indefinite-metric quantum field theory of general relativity. Progr. Theoret. Phys. 59 (1978), no. 3, 972-985. (Author's summary) 82k:83027a 83C45 (81E20)

Indefinite-metric quantum field theory of general relativity. V. Vierbein formalism Progr. Theoret. Phys. 62 (1979), no. 3, 770-792. (Author's summary) 82k:83028a

Indefinite-metric quantum field theory of general relativity. VI. Comm relations in the vierbein formalism. Progr. Theoret. Phys. 62 (1979), no. 4, 1101-1111. (Author's summary) 82k:83028b 83C45 (81E20)

Indefinite-metric quantum field theory of general relativity. VII. Supplementary remarks. Progr. Theoret. Phys. 62 (1979), no. 5, 1385-1395. (Author's summary) 83C45 (81E20)

Indefinite-metric quantum field theory of general relativity. VIII. Commutation involving b_p. Progr. Theoret. Phys. 63 (1980), no. 2, 656-667. (Author's summary) 83C45 (81E20) 82k:83028d

Indefinite-metric quantum field theory of general relativity. IX. "Choral" of symmetries. Progr. Theoret. Phys. 63 (1980), no. 6, 2078-2094. (Author's summary)

82k:83029a 83C45 (81E20) Indefinite-metric quantum field theory of general relativity. X. Sixteen-dimensional superspace. *Progr. Theoret. Phys.* 64 (1980), no. 2, 639–650. (Author's summary)

83C45 (81E20, 83E50)

(with Ojima, Izumi) Superalgebras of nonabelian gauge theories in the manifestly-covariant canonical formalism. Z. Phys. C 6 (1980), no. 2, 155-160. (W. Cox) 81G20 (22E65, 49C05, 81E99, 83E50)

(with Ojima, Izumi) Indefinite-metric quantum field theory of general relativity. XI. Structure of spontaneous breakdown of the superalgebra. Progr. Theoret. Phys. 65 (1981), no. 2, 728-739. (Authors' summary) 82k:83029e 83C45 (81E20, 83E50)

(with Ojima, Izumi) Indefinite-metric quantum field theory of general relativity. XII. Extended superalgebra and its spontaneous breakdown. Progr. Theoret. Phys. 65 (1981), no. 3, 1041-1051. (Authors' summary) 82k:83029d 83C45 (81E20, 83E50)

(with Ojima, Izumi) Errata: "Superalgebras of nonabelian gauge theories in the manifestly-covariant canonical formalism". Z. Phys. C 8 (1981), no. 1, 94. (Editors) 82i:81147b 81G20

Nakanishi, Shizu Main spaces in distribution theory treated as ranked spaces and Borel sets. Math. Japon. 26 (1981), no. 2, 179-201. (R. Anantharaman) 82k:46057 46F05 (46A15)

Nakanishi, Yasutaka A surgical view of Alexander invariants of links. Math. Sem. Notes

 Kobe Univ. 8 (1980), no. 1, 199–218. (Louis H. Kauffman)
 82j:57004
 57M25

 Prime links, concordance and Alexander invariants.
 Math. Sem. Notes Kobe Univ. 8

 (1980), no. 3, 561–568. (Masayuki Yamasaki)
 82f:57004
 57M25

Nakanishi, Yoshiro (with Kawaguchi, Tsuyoshi; Nakano, Hideo) A solution for the weighted mean flow time scheduling problem. Systems-Comput.-Controls 10 (1979), no. 3, 35-43 (1981). (Authors' summary) 82i:90060 90B35

kano, Bumpei (with Takahara, Yasuhiko; Kijima, Kyoichi) A unified theory of decisi principles. Internat. J. Systems Sci. 11 (1980), no. 11, 1295-1314. (J. H. Blau) 82k:90008

(with Takahara, Yasuhiko) A characterization of interactions. Internat. J. Gen. Systems 7 (1981), no. 2, 109-122. (Authors' summary) 82j:93005 93A15

(with Takahara, Yasuhiko; Kijima, Kyoichi) A structure of rational decision principles. Internat. J. Gen. Systems 7 (1981), no. 3, 175-188. (Authors' summary)

kano, Hidegoro Double integral theorem of Haar measures. Hokkaido Math. J. 10 (1981), no. 2, 183-208. (M. P. Heble) 82k:28015 28C10 (22A10)

Nakano, Hideo (with Kawaguchi, Tsuyoshi; Nakanishi, Yoshiro) A solution for the weighted mean flow time scheduling problem. Systems-Comput.-Controls 10 (1979), no. 3, 35-43 (1981). (Authors' summary) 82i:90060 90B35

Nakano, Huzio (with Honda, Katsuya) New approach to the theory of spin-glasses—principle of minimum free energy and internal field parameter. Progr. Theoret. Phys. 65 (1981), no. 1, 83-94. (Authors' summary) 824:82055a 82A42 (with Honda, Katsuya) Phenomenological theory of spin-glasses-static nonlinear

- and dynamical linear susceptibilities. Progr. Theoret. Phys. 65 (1981), no. 1, 95-104. (Authors' summary) 82682655b 82A42
- ci, Toshizumi; Homma, Shigeo) Collective modes in the quantum onal XY model. I. Progr. Theoret. Phys. 66 (1981), no. 3, 861–878.
- (Authors' summary) 82ke8209 82A68 (8105, 82A50)

 sano, Shigeo See Demailly, Jean-Pierre; et al., 82k-32028

 sano, Toshio The knotted cord of the Ami of Taiwan. (Japanese) Sügakushi Kenkyü No. 88 (1981), 1-8. (K. Masuda) 82j:01007 01A10
- Nakano, Yoshimasa Hamiltonian formalism for systems including Grassm canonical quantization by Feynman path-integral with constraints. Progr. Theoret. Phys. 63 (1980), no. 2, 599-615. (M. E. Mayer) 82&70038 70H99 (81C35)
- Nakao, Mitsuhiro Existence of classical periodic solutions of some nonlinear in one space dimension. Math. Rep. Kyushu Univ. 12 (1979/80), no. 2, 77-91. (Wolf von Wahl) 82h:35005 35B10 (35L70)
- Bi-algebraic groups. J. Algebra 57 (1979), no. 1, 1-9. (Mitsuhiro Takeuchi)
 14L25 (14L17) 82j:14038
 - d group laws. Amer. Math. Monthly 87 (1980), no. 9, 735-736. (Andy R. Magid) 82h:14030a 14L17 (20G15)
 - Polynomial group laws. II. Proc. Amer. Math. Soc. 80 (1980), no. 2, 196-200. (Andy R. Magid) 82k:14630b 14L17 (20G15)
- ru Coincidence Lefschetz n aber for a pair of fibre preserving maps. J.
- Math. Soc. Japan 32 (1980), no. 4, 751-779. (A. Dold) 82c:55003 55M20
 Nakatsu, Narao (with Kambayashi, Yahiko; Yajima, Shuzo) Hierarchical pattern matching algorithms for strings. Systems-Comput.-Controls 10 (1979), no. 3, 20-26 (1981).
- algorithms for strings. Systems-Comput.-Controls 10 (1979), no. 3, 20-20 (1981).

 (Authors' summary) 82a:68129 68H05 (68B15, 68E05)

 Nakatsu, Yasuhiko Saito's factorizations of hyponormal operators. (Japanese summary)

 Mem. Osaka Kyoiku Unio. III Natur. Sci. Appl. Sci. 29 (1980), no. 1, 9-11. (Mehdi
- Radjabalipour) 82j:47034 47B20
- akatsuka, Toshinao Nonexistence of estimates which minimize x'V-1x in an exponential type of stationary time series. Ann. Inst. Statist. Math. 31 (1979), no. 2, 319-320. (From the introduction) 82mc62214 62M15
 Nakawaki, Yuji Restoration of well-defined charge and chiral charge and correct
- Lorentz-transformation property in the Thirring and pre-Schwinger models. Progr. Theoret. Phys. 66 (1981), no. 4, 1458-1465. (Author's summary) 82m:81054 81E10
- Nakayama, Hirotaka Subjective programming in multicriterion decision making. Multiple criteria decision making theory and application (Proc. Third Conf., Hagen/Königswinter, 1979), pp. 252–265, Lecture Notes in Econom. and Math. Systems, 177, Springer, Berlin, 1980. (K. D. Glazebrook) 82b:90113 90C31 (90A06, 90A07)
 - (with Tanino, Tetsuzoh; Sawaragi, Yoshikazu) Domination structures and their parametrization in group decision making. (Japanese: English summary) Systems and Control 24 (1980), no. 12, 807-815. (Authors' summary) 82m:90009 90A07
- Nakayama, J. (with Ogura, H.; Sakata, Hajime) Scattering of a scalar wave from a slightly random surface. J. Math. Phys. 22 (1981), no. 3, 471-477. (Andrzej Zardecki) 82g:78017
- Layama, Shigeru Two academic traditions in comparison: Western and Chinese. Historia Sci. No. 19 (1980), 47–75. (Joong Fang) 82g:01005 01A25 (01A80)
- Nakazato, Hajime On odd two-dimensional icosahedral Galois representations with squa free conductor. Kodai Math. J. 3 (1980), no. 3, 380–384. (Stephen Gelbart) 82j:12013 onal icosahedral Galois representations with square 12A55 (10D45)
- Nakazawa, Hiroshi Sample structure of forced Burgers turbulence. Progr. Theoret. Phys. 65 (1981), no. 5, 1565-1583. (Author's summary) 82i:76048 76F99 (35Q20, 60H10,
- Nakazi, Takahiko Quasimaximal ideals and quasiprimary ideals of weak-*Dirichlet algebras. J. Math. Soc. Japan 31 (1979), no. 4, 677-685. (Shinzō Kawamura) 82a-46054 46J15 Extended weak-*Dirichlet algebras. Pacific J. Math. 81 (1979), no. 2, 493-513. (Shinzō Kawamura) 82a:46055 46315
 - (with Takahashi, Katsutoshi) Prediction n units of time ahead. Proc. Amer. Math. 80 (1980), no. 4, 658-659. (S. V. Hruščev) 82b:60041 60G25 (30D55)
- A note on the factorization of operator-valued functions. Proc. Amer. Math. Soc. 81 (1981), no. 4, 591-594. (Nicholas P. Jewell) 82e:47019 47A68 (30H05, 46E40) da, N. B. (with Gray, J. O.) Prediction of limit cycles in multivariable nonlinear
- systems. Proc. IEE-D 128 (1981), no. 5 Nonlinear Systems, 233-241. (Authors' summary) 82k-93037 93C10
- Näkki, Raimo (with Palka, Bruce) Quasiconformal circles and Lipschitz classes. Comment. Math. Helv. 55 (1980), no. 3, 485-498. (Donald K. Blevins) 82a:30029 (with Minda, Carl David) Invariant metrics on Riemann surfaces. J. Analyse Math. 39 (1981), 25-44. (Jane Gilman) 82k:30049 30F99 (30D40)
- ii, A. N. Time and size of the jump beyond a zero level for a process with
- independent increments and a reflecting screen. (Ukrainian. English and Russian summaries) Visnik Kiiv. Univ. Ser. Mat. Meh. No. 21 (1979), 100-105, 165. (M. V. 60J30 (60F05) Estimation of the rate of convergence of linear combinations of distribution
- functions. (Russian) Mathematical methods in operations research and reliability theory (Russian), pp. 3-7, 88, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (W. Dziubdziela) 82d:60179 60K15 (60F99)
- Nakonečnii, O. G. Minimax estimations of parameters. (Russian. English summary) Vyčisl. Prikl. Mat. (Kiev) No. 39 (1979), 17–24, 171. (Author's summary) 82a:34079 34H05
- tonečníi, V. V. (with Fuščič, V. I.) Algebra-theoretic analysis of the Lamé equation. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 2, 267-272, 287. (R. G. Aïrapetjan) 82h:58056 58G35 (35Q20)

- Nakonečnýi, A. G. See Nakonečnii, O. G. Nakonečnyi, A. N. See Nakonečnii, A. N. Nakonečnyi, V. V. See Nakonečnii, V. V.
- Nakorjakov, V. E. (with Gasenko, V. G.; Sreiber, I. R.) Enhancement of a shock wave in a liquid with gas bubbles. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 6, 1330-1332. (From the text) 82b:76039 76L05
 - (with Borisov, A. A.; Vahgel't, A. F.) Propagation of long-wave perturbations of finite amplitude in aerosol media. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 5, 33–38, 203. (N. N. Janenko) 82e:76068 76T05 (76Q05)

- coulima, Ousseynou Sur un système d'inéquations quasi variationnelles bilatérales associé à un problème de jeu stochastique à somme non nulle. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 3, 187–189. (Author's summary) 82b:93034
- lbach-Leniewska, A. (with Kowalczyk, T.; Matuszewski, A.; Pleszczyńska, E.) On res of bivariate stochastic dependence. concepts and mea pp. 189-195, Banach Center Publ., 6, PWN, Warsaw, 1980. (C. A. Robertson) 82c:62085 62H20
- sso, G. F. (with Stella, Attilio) Magnetic field diffusion through infinite conducting media. J. Franklin Inst. 311 (1981), no. 2, 67-92. (Authors' summary) 82c:78006
- Nalimov, V. V. *In the labyrinths of language: a mathematician's journey. Translated mov, v. v. x in the labyranus of language: a maintenancian's journey. I fransiared from the Russian. With an introduction by Robert G. Colodny. ISI Press, Philadelphia, Pa., 1981. xix + 246 pp. ISBN 0-89495-007-X (B. Brainerd) 82;00016 00A25 (01A70)
- llet, C. (with Rohr, René R. J.; King, David A.) Éloge: Louis Janin. J. Hist. Arabic Sci. 3 (1979), no. 1, 85–87. (Editors) 824:01030 01A70
- zie, M. A. (with Das, Ashok) Quadratic gauge fixing in Yang-Mills theories. Phys. Lett. B 99 (1981), no. 6, 463-466. (Authors' summary) 82b:81085 81E99
- azov, G. K. (with Kuliev, M. A.) Determination of the right-hand side of a nonlinear hyperbolic equation. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1979, no. 4, 15-19. (Alexander Doktor) 82e:35081 35R30 (35L20)
- aba, Makoto *Families of meromorphic functions on compact Riemann surfaces. Lecture Notes in Mathematics, 767. Springer-Verlag, Berlin-New York, 1979. xii + 284 pp. ISBN 3-540-09722-8 (R. F. Lax) 82i:32046 32G05 (14H15)
- aba, Toshiyuki Asymptotic behaviour of solutions of the diffusive Lotka-Volterra equations. J. Math. Biol. 10 (1980), no. 3, 295-303. (F. Rothe) 82a:92030 92A15 (35K99, 39A12)
- (with Mimura, Masayasu) Spatial distribution of competing populations. J. Theoret.
- Biol. 87 (1980), no. 4, 795-814. (Authors' summary) 82f-92035 92A15

 Namboodiri, K. K. (with Elston, R. C.) Family studies of schizophrenia. (French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 1. With discussion. Bull. Inst. Internat. Statist. 47 (1977), no. 1, 683-697, 712-717. (Authors' summary) 82h:92024 92A10 (92A15)
- booripad, K. S. Subramonian Structure of regular semigroups. Proceedings of a nposium on Regular Semigroups (Northern Illinois Univ., De Kalb, Ill., 1979), 101–117, Northern Illinois Univ., DeKalb, Ill., 1979. (See 82j:20120) 2 20M10
- The natural partial order on a regular semigroup. *Proc. Edinburgh Math. Soc.* (2) 23 (1980), no. 3, 249–260. (R. McFadden) 82g;20092 20M10 (06F05)
- awa, Toshihiko (with Hirasawa, Shigeichi; Kasahara, Masao; Sugiyama, Yasuo) Certain generalizations of concatenated codes-exponential error bounds and decoding complexity. IEEE Trans. Inform. Theory 26 (1980), no. 5, 527-534. (Authors' summary)
 - (with Hirasawa, Shigeichi; Kasahara, Masao; Sugiyama, Yasuo) An improve of error exponents at low rates for the generalized version of concatenated codes. *IEEE Trans. Inform. Theory* 27 (1981), no. 3, 350–352. (Authors' summary) 82e:94040 94A24 (94A40, 94B05)
- Namias, Victor Fractionalization of Hankel transforms. J. Inst. Math. Appl. 26 (1980), no. 2, 187-197. (A. Schwartz) 82g:44006 44A15
- nikawa, Yukihiko *Toroidal compactification of Siegel spaces. Lecture Notes in Mathematics, 812. Springer-Verlag, Berlin-New York, 1980. viii + 162 pp. ISBN 3-540-10021-0 (M. Ishida) 82a:32034 32I05 (14K10, 32M99, 32N15)
- oka, I. Intersection numbers and spaces of measures. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 437-440, Academic Press, New York, 1981. (B. K. Lahiri) 82m:28027 28C15
- Namsrai, H. Nonlocal stochastic model for the free scalar field theory. Internat. J. Theoret. Phys. 20 (1981), no. 5, 365-375. (Author's summary) 82j:81024 81C20 (60G60, 81F10)
 - A stochastic model for the motion of two relativistic particles. J. Phys. A 14 (1981). 6, 1307-1311. (Author's summary) 82f:81022 81C20 (70D99)
 - The hypothesis of stochastic space and the general connection of stochastic theory. Phys. Lett. A 82 (1981), no. 3, 103-106. (Author's summary) 82b:81010
- mori (with Ebihara, Yukiyoshi) On the global solution of some nonlinear parabolic equation. II. Funkcial. Ekvac. 20 (1977), no. 3, 273-286. (From the introduction) 82e:35051 35K55
 - (with Ebihara, Yukiyoshi) Global classical solutions to $u_i \Delta(u^{2m+1}) + \lambda u =$ Differential Equations 38 (1980), no. 2, 260-277. (E. Schechter) 82c:35039
- rd E. The time and state relationships in simulation modeling. Comm. ACM 24 (1981), no. 4, 173-179. (Author's summary) 82d:68062 68J10 (00A69)
- Nanda, Sribatsa (with Nanda, Sudarsan) A nonlinear complementarity problem in Banach space. Bull. Austral. Math. Soc. 21 (1980), no. 3, 351-356. (J. Parida) 82a:90170 90C33 (47H15)
 - A note on the universe of a category of fractions. Canad. Math. Bull. 23 (1980), no. 4, 425-427. (Harold Hastings) 82g:55011 55P60 (18A99)
- Nanda, Sudarsan (with Nanda, Sribatsa) A nonlinear complementarity problem in Banach Bull. Austral. Math. Soc. 21 (1980), no. 3, 351-356. (J. Parida) 82a:90170 90C33 (47H15)
 - On Banach sequence spaces. Tamkang J. Math. 11 (1980), no. 1, 53-58. (Robert DeVos) 82g:46023 46A45 (46B15)
 - (with Srivastava, P. D.; Nayak, K. C.) Certain subspaces of a Fréchet space. Indian J. Pure Appl. Math. 12 (1981), no. 8, 971-976. (V. K. Srinivasan) 82h:46040 (30H05)
- Nanda, V. C. (with Lal, Sunder) On coprime symmetric matrix pairs over algebraic number fields. Abh. Math. Sem. Univ. Hamburg 51 (1981), 38–49. (Daniel B. Shapiro) 82i:10080 10M20 (10D20, 15A36)
- Nandan, Krishna (with Juneja, O. P.) On the growth of analytic functions represented by Dirichlet series. Portugal. Math. 37 (1978), no. 1-2, 125-133 (1981). (Shlomo Strelitz) 30B50 (30D15)
 - (with Juneja, O. P.; Kapoor, G. P.) On the (p,q)-type and lower (p,q)-type of an

- entire Dirichlet series. Tamkang J. Math. 11 (1980), no. 1, 67-76. (M. E. Noble) 30D10 (30B50)
- ndi, S. B. Distribution of product of independent generalised gamma variables. J. Math. Sci. 11 (1976), 56-59 (1979). (From the text) 82f:60043 60E05

The exact null distribution of Bartlett's criterion. Austral. J. Statist. 23 (1981), no. 1, 45-51. (Author's summary) 82h:62030 62E15 (62G10)

Nandy, D. (with Krori, K. D.) Birkhoff's theorem and Dunn theory of gravitation. Nuovo Cimento (2) 27 (1980), no. 5, 152-155. (Authors' summary) 82c:83056

ia, Luciana (with Gallo, Angela) A unilateral connection problem for the supported beam. (Italian. English summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 1, 114-121. (Ll. G. Chambers) 82h:49013 49A29 (73C50, 73K05)

Hith, K. Some limit theorems on Galton-Watson type branching process. Gujarat Statist. Rev. 7 (1980), no. 1, 1–16. (Douglas P. Kennedy) 82e:60150 60180

oum, Adil G. Connected sums of 3-connected manifolds with sphere bundles over spheres. (Arabic summary) Iraqi J. Sci. 22 (1981), no. 1, 100–107. (Author's summary)

SR2;57024 57R99 (55RZ)

oum, R. S. Analysis of finite element method to the solution of pollution problem. Numerical methods in thermal problems (Proc. First Internal. Conf., Unic. College, Swansea, 1979), pp. 1051–1058, Pineridge, Swansea, 1979. (See 82g:80001) 76R99

Napalkov, V. V. Discrete sufficient sets in some spaces of entire functions. (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 4, 809-812. (N. I. Skiba) 82b:46026 46E10

See Nagler, Harry, 82e:01044

Napiórkowski, K. (with Pusz, W.) On averaging of time evolution of quantum spin lattice systems. Lett. Math. Phys. 4 (1980), no. 5, 413-416. (Gérard G. Emch) 82e:82023 82A15 (46L60, 82A35)

piórkowski, M. (with Hemmer, P. C.) Correlated percolation on a quadratic lattice. Phys. Lett. A 76 (1980), no. 5-6, 359-361. (Authors' summary) 82b:82053 82A4. 82A42

Napoly, O. (with Kluberg-Stern, H.; Morel, A.; Petersson, B.) Spontaneous chiral symmetry breaking for a U(N) gauge theory on a lattice. Nuclear Phys. B 190 (1981), no. 3, FS 3, 504-518. (Authors' summary) 821:81105 81E25 (81D20, 82A25)

Nappi, Luigi (with Tranchiese, Susanna) On the nonlinear Dirichlet problem in a angle. (Italian. English summary) Rend. Accad. Sci. Fis. Mat. Napoli (4) 47 (1980), 231-251 (1981). (M. Biroli) 82g:35042 35J65 (35B65)

vidal-Naquet, Guy See Vidal-Naquet, Guy

razi Naqvi, K. See Razi Naqvi, K.

Nara, Chiè On sufficient conditions for a graph to be Hamiltonian. Natur. Sci. Rep. Ochanomizu Univ. 31 (1980), no. 2, 75–80. (Carsten Thomassen) 82i:05069 05C45

Narain, K. S. Path-integral quantization of a Dirac string Lagrangian in the $A^0 = 0$ gauge Phys. Rev. D (3) 20 (1979), no. 10, 2555-2565. (Author's summary) 82a:81015 (81G10)

Construction of exact multimonopole solutions in the Yang-Mills-Higgs system. Phys. Rev. D (3) 24 (1981), no. 8, 2211-2216. (R. S. Ward) 82m:81055 81E10

Narang, T. D. Generalisations of different types of convexities to metric spaces. Bull.

Calcutta Math. Soc. 72 (1980), no. 2, 75-78. (Robert E. Jamison) 82i:52005 52A07 (46A55, 54E35)

Unicity theorem and strict convexity of metric linear spaces. Tamkang J. Math. 11 (1980), no. 1, 49-51. (S. Cobzas) 82g:46012 46A15 (41A52)

(with Sharma, Ashok K.; Dass, Bal Kishan) A remark on a paper of W. V. (with Sharma, Ashox K.; Dass, Bar Kallani) A tennish on a paper of A. F. Petryshyn and T. E. Williamson, Jr.: "Strong and weak convergence of the sequence of successive approximations for quasinonexpansive mappings" [J. Math. Anal. Appl. 43 (1973), 459–497; MR 48 #4854]. Math. Ed. (Siwan) 15 (1981), no. 1, A8. (Editors) 82i-47089 47H09

On simultaneous furthest points. Math. Sem. Notes Kobe Univ. 9 (1981), no. 1, 109-112. (From the introduction) 82k:41029 41A65 (54E99)

109-112. (From the introduction) 82x340x9 41Ao5 (34E99)
asimhan, Carolyn (with Batterson, Steve; Handel, Michael) Orientation reversing
Morse-Smale diffeomorphisms of S². Invent. Math. 64 (1981), no. 2, 345-356. (S. Ju. Piljugin) 82k:58053 58F09

n, M. S. (with Nori, Madhav V.) Polarisations on an abelian variety. Geom and analysis, pp. 125-128, Indian Acad. Sci., Bangalore, 1980. (Tsutomu Sekiguchi) 82c:14033 14K10 (14K99)

Narasimha Prasad, N. G. (with Srivenkataramana, T.) A modification to the Horvitz-Thompson estimator under the Midzuno sampling scheme. Biometrika 67 (1980), no. 3, 709-711. (David Bellhouse) 82a:62026 62D05

ha Sastry, N. S. On minimal non-PN-groups. J. Algebra 65 (1980), no. 1, 104-109. (Gary L. Walls) 82a:20038 20E28

Narasimbulu, Y. C. (with Sastry, M. P.) Problem of optimization in theory of dams.

Proceedings of the Conference on Probability, Stochastic Processes and Statistical Mechanics (Mysore, 1979), pp. 12-21, Matscience Rep., 97, Inst. Math. Sci., Madras, 1979. (Authors' summary) 82a:60146 60K30

Narayan, Prakash (with Daley, D. J.) Series expansions of probability generating functions nd bounds for the extinction probability of branching process. J. Appl. Probab. 17 (1980), no. 4, 939-947. (Jozef L. Teugels) 82e:60139 60J80

On bounds for probability generating functions. Austral. J. Statist. 23 (1981), no. 1, 80-90. (Alan Agresti) 82i:62028 62E10

(with Snyder, Donald L.) The two-user cutoff rate for an asynchronous and a synchronous multiple-access channel are the same. IEEE Trans. Inform. Theory 27 (1981), no. 4, 414-419. (Authors' summary) 82m:94035

The least positive root of the characteristic equation z = K(z). J. Inform. Optim. Sci. 2 (1981), no. 1, 34-38. (Author's summary) 82i:60164 60K25

esh (with Komesaroff, M. M.; Nityananda, Rajaram) The maximum entropy method of image restoration-properties and limitations. Astronom. and Astrophys. 93 (1981), no. 1-2, 269-281. (From the summary) 82a:94040 94A17 (78A55) (with Nityananda, Rajaram) Validity of the quasistatic approximation in the theory

of black hole evaporation. Phys. Lett. A 82 (1981), no. 1, 1-3. (Authors' summary) 82h:83029 83C25

Narayana Rao, M. L. (with Kuppuswamy Rao, K.) Full collineation group of Foulser's flag transitive plane of order 25. Houston J. Math. 7 (1981), no. 1, 115–120. (T. G. Ostrom) 82m:51010 51A40

See also Satyanarayana, K.; et al., 82c:05032

Narayanaswami, P. P. (with Saxon, Stephen A.) Metrizable (LF)-spaces, (db)-spaces, and the separable quotient problem. Bull. Austral. Math. Soc. 23 (1981), no. 1, 65-80. (P. Pérez Carreras) 82g:46007 46A12

Narazaki, Takashi On the time global solutions of perturbed beam equations. Proc. Fac. Sci. Tokai Univ. 16 (1981), 51-71. (John M. Ball) 82k:35013 35B40 (35020, 73H10. 35B40 (35O20, 73H10,

cowich, Francis J. (with Ward, Joseph D.) A Toeplitz-Hausdorff theorem for matrix ranges. J. Operator Theory 6 (1981), no. 1, 87-101. (J. W. Bunce) 82m:47004

Nardelli, Giuliana (with Tancredi, Alessandro) Holomorphically convex compact subsets of an analytic space. (Italian. English summary) Ann. Univ. Ferrara Sez. VII (N.S.) 25 (1979), 99-108. (Gerd Fischer) 82c:32014 32E05 (32E15)

dini, Franco On a class of singular quasielliptic differential operators. (Italian) Atti Sem. Mat. Fis. Univ. Modena 28 (1979), no. 2, 387-404 (1980). (H. Triebel) 82c:46041 46E35 (35J70)

rdone, Steven C. (with Aidala, Vincent J.) Observability criteria for bearings-only target motion analysis. IEEE Trans. Aerospace Electron. Systems 17 (1981), no. 2, 162-166. (Authors' summary) 82e:93018 93B07

ryll-Nardzewski, Czesław See Ryll-Nardzewski, Czesław

Narendra, Kumpati S. (with Lakshmivarahan, S.) Learning algorithms for two-person zero-sum stochastic games with incomplete information. Math. Oper. Res. 6 (1981), no. 3, 379-386. (Authors' summary) 82k:93060 93E05

Narens, Louis A general theory of ratio scalability with remarks about the

measurement-theoretic concept of meaningfulness. Theory and Decision 13 (1981), no. 1, 1-70. (Fred W. Roush) 82e:06014 06F05 (20M20, 90A10, 92A27)

Nariai, Hidekazu (with Azuma, Takahiro) On the definition of a positive frequency part for a quantized scalar field in several Robertson-Walker universes. Progr. Theoret. Phys. 64 (1980), no. 4, 1280-1293. (S. G. Mamaev) 82m:81075 81F20 (34A30, 81M05, 83C47)
Narici, Lawrence (with Beckenstein, Edward) Extending non-Archimedean norms on

algebras. Functional analysis, holomorphy, and approximation theory (Proc. Sem., Un Fed. Rio de Janeiro, Rio de Janeiro, 1978), pp. 33-40, Lecture Notes in Math., 843, Springer, Berlin, 1981. (Alain Escassut) 82m:46077 46P05 (32E27, 46H05, 46J05)

Narita, Kiyomasa Remarks on explosions and moment estimates of solutions of stochastic differential equations. (Japanese summary) Rep. Fac. Engrg. Kanagawa Univ. No. 18 (1980), 9-13. (Mark Pinsky) 82m:60067 60H10

On explosion and growth order of inhomogeneous diffusion processes. Math. J. 28 (1980), no. 1-2, 45-57. (K. B. Erickson) 82i:60128 60J60 (60H05)

On explosion of solutions of stochastic differential equations. Rep. Fac. Engrg. Kanagawa Univ. No. 19 (1981), 1-4. (Halim Doss) 82j:60108 60H10 Narkiewicz, W. The work of C. F. Gauss in algebra and number theory.

Tagung aus Anlaß des 200. Geburtstages von Carl Friedrich Gauß (Berlin, 1977), pp. 75-82, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1978, 3, Akademie-Verlag, Berlin, 1978. (Bruce C. Berndt) 82i:10002 10-03 (01A55)

(with Hartman, Stanislaw; Ryll-Nardzewski, Czesław) Scientific work of Edward Marczewski. Collog. Math. 42 (1979), 5-17. (Henryk Fast) 82b:01047 01A70

Normal order for a function associated with factorization into irreducibles. Acta Arith. 37 (1980), 77-84. (J. Kubilius) 82h:10060 10H25 (12A45)

A note on a paper of H. Gupta concerning powers of two and three: "Powers of 2 and sums of distinct powers of 3" [Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 602-633 (1978), 151-158 (1979); MR 81g:10016]. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 173-174 (1981). (John T. Hardy) 82m:10015 10A30 (10L10)

Euler's function and the sum of divisors. J. Reine Angew. Math. 323 (1981),

200-212 (L. Kuipers) 82g:10077 10K05 (10H35)
Narkun, Z. M. The Green function of the Dirichlet problem for the Laplace equation in a strip with N elliptic cuts. (Russian) Differencial'nye Uravnenija 16 (1980), no. 9, 1635-1642, 1726. (Author's summary) 82b:35044 35J05

Narlikar, Jayant V. ★Lectures on general relativity and cosmology. Macmillan Co. of India, Ltd., New Delhi, 1979. ix+279 pp. (1 foldout). ISBN 0-333-24153-3 (Sotirios Persides) 2h:83001 83-01 (83F05)
Inertia and cosmology in Einstein's relativity (an attempt at a synthesis of Newton,

Mach, and Einstein). Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein, Vol. I, II, pp. 493-522, Johnson, New York, 1979. (See 82b:83002) 83Cxx

Cosmology in the post-Einstein era. Gravitation, quanta and the universe (Proc. Einstein Centenary Sympos., Ahmedabad, 1979), pp. 93-109, Wiley, New York, 1980. (See 83F05 (85A40)

(with Padmanabhan, T.) Quantum fluctuations in the conformally flat and the Schwarzschild space-times. Gen. Relativity Gravitation 13 (1981), no. 7, 669-679. (Authors' summary) 82j:83027 83C45

(with Padmanabhan, T.) Stationary states in a quantum gravity model. Phys. Lett. A 84 (1981), no. 7, 361-363. (Authors' summary) 82h:83034

See also Gravitation, quanta and the universe, 82±83005

Narlikar, M. J. (with Ramachandra, K.) Contributions to the Erdős-Szemerédi theory of

sieved integers. Acta Arith. 38 (1980/81), no. 2, 157-165. (H.-E. Richert) 82m:10072

mbofer, Heide Another definition for time delay. Phys. Rev. D (3) 22 (1980), no. 10, 2387-2390. (M. Combescure) 82c:81135 81F20 (81F15)

(with Sewell, Geoffrey L.) Vlasov hydrodynamics of a quantum mechanical model. m. Math. Phys. 79 (1981), no. 1, 9-24. (Authors' summary) 82i:82021 82A15

(with Thirring, W.) Canonical scattering transformation in classical mechanics Phys. Rev. A (3) 23 (1981), no. 4, 1688-1697. (R. G. Newton) 82c:70018 (81F05)

itsky, V. (with Gudder, Stanley P.) Finite-dimensional quantum mechanics. Inter J. Theoret. Phys. 20 (1981), no. 8, 619-643. (F. R. Halpern) 82m:81006 (81D05)

Naruki, Isao Works of C. Fefferman. II. (Japanese) Special issue: International Congress of aticians (Helsinki, 1978). Sûgaku 31 (1979), no. 1, 39-43. (Editors) 82a:01043 01A70

(with Sekiguchi, Jirō) A modification of Cayley's family of cubic surfaces and onal action of W(E₆) over it. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 3, 25. (I. Dolgachev) 82j:14032a 14J25 (14E07, 14J10) 122-125. (I. Dolgachev) 82j:14032a

Cross ratios as moduli of cubic surfaces. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 3, 126-129. (I. Dolgachev) 82j:14032b 14J25 (14E07, 14J10)

Cross ratios as moduli of del Pezzo surfaces of degree one. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 7, 328-331. (Henry C. Pinkham) 82f:14029 14J10 (14J17) ons of k-spaces. Topology Appl. 12 (1981), warte, J. A. (with Guthrie, J. A.) Expan no. 1, 75-81. (S. P. Franklin) 82a:54048

e, M. S. See El Naschie, M. S.

sekin, V. Ja. An approach to the allocation of machines to tasks. (Russian) Auton systems for control of enterprises (Russian), pp. 39-49, 101, Akad. Nauk Ukrain. SSR, Inst. Ribernet., Kiee, 1979. (Author's summary) 82f:90049 90B35

Nash, P. E. (with Monaghan, J. J.) A statistical theory for the disruption of four-body systems. Monthly Notices Roy. Astronom. Soc. 192 (1980), no. 3, 809-820. (George Bozis)

cture of the classical observables x^{α} , p_{α} Phys. 22 (1981), no. 5, 983–987. (Marcos D. Mais) 82j:81029 81C40 (20C35, 22E70)

Nash, Peter A generalized bandit problem. J. Roy. Statist. Soc. Ser. B 42 (1980), no. 2, 165–169. (John C. Gittins) 82b:62098 62L05 (90B35)

See also Systems modelling and optimization, 82m:90002

ed, M. Z. (with Anselone, P. M.) Perturbations of outer inverses. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 163-168, Academic Press, New York, 1980. (Charles W. Groetsch) 82c:47016 47A55 (41A60, 47A05)

Best approximation problems ansing from generalized inverse operator theory. roximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 667-673, demic Press, New York, 1980. (Charles W. Groetsch) 82c:47017 47A55 (41A50, 47A05)

h-Williams, C. St. J. A. A note on some of Professor Tutte's mathematical work. Graph theory and related topics (Proc. Conf., Univ. Waterloo, Waterloo, Ont., 1977), and professor New York, 1979 (Editors) 39-01079 (11465) Nash-Willia pp. xxv-xxviii, Aca mic Press, New York, 1979. (Editors) 82e:01079 01A65 (05-03, 05B35, 05Cxx)

ibov, V. G. (with Amenzade, R. Ju.) Waves in an inhomogeneous viscoelastic tube with a flowing liquid. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 8, 16–19. (Authors' summary) 82c:76021 76B99 (73J06)

Nasim, C. On K-transform. Internat. J. Math. Math. Sci. 4 (1981), no. 3, 493-501. (K. M. Saksena) 82k:44006 44A20

sirov, S. N. Representations of semigroups in Boolean algebras. (Russian) Taškent. Gos. Univ. Sb. Naučn. Trudov No. 623 Mat. Analiz i Geometrija (1980), 56-61, 94. (Št. 20M30 (06E99)

Nasirova, T. I. (with Ahmedova, G. M.) Distribution of functionals of a class of jump processes. (Russian) Questions of mathematical cybernetics and applied mathematics, No. 4 (Russian), pp. 70-74, "Elm", Baku, 1980. (M. A. Šašiašvili) 82k:60162 60J75

(with Skorohod, A. V.) Asymptotic behavior of the processes in a scheme of (with Skorohod, A. V.) Asymptotic behavior of the processes in a scheme of inventory control. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 23 (1980), 130–136, 150. (Authors' summary) 82m:9066 90B05 (60K20)

Jän, P. On an integro-differential equation. (Romanian. English summary) Bul. Ştiinţ. Tehn. Inst. Politehn. "Traian Vuia" Timişoara 24(38) (1979), no. 1, 29–33. (C. Corduneanu) 82k:45010 45J05 (45L05)

Näshund, Bertil (with Aubin, Jean-Pierre) An exterior branching algorithm. Formal methods in policy formulation, pp. 148–157, Interdisciplinary Systems Res., 49, Birkhäuser, Basel, 1978. (See 82k:90009) 90C31

conov, N. N. On the theory of elastic scattering of fast charged particles on an atomic chain. (Russian. English summary) *Ukrain. Fiz. Ž.* **26** (1981), *no.* 2, 205–211, 347. (Author's summary) **82d:81140** 81F20

Nasr Ibragim, Ahmed Helmi Muhammed (with Bunjatov, M. R.) Homotopy axiom in the Aleksandrov-Čech homotopy theory of distributive lattices. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1978, no. 3, 78-86. (From the text) 82e:55010 55N40 (06D99) The Hurewicz theorem for homotopy groups of distributive lattices. (Russia

Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 9, 15-18. (R. S. Pierce) 82k:06013 06D05

ev, N. N. (with Guseinov, T. R.) A method for solving the problem of the identification of nonlinear static objects. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 2 (1981), no. 3, 106-110.

(Authors' summary) 82m:90098 90B40 (93E12) sar, Elsayed Abdel-Ati M. (with Nayfeh, Adnan H.) Mathematical simulation of singularities for isoparametric elements of arbitrary orders. Internat. J. Numer. Methods Engrg. 17 (1981), no. 3, 465-470. (Authors' summary) 82d:73053 73K25 (73M05) See Nemat-Nasser, S.

Nassif, M. (with Adepoju, J. A.) A polynomial set related to Gončarov polynomials. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1665-1672. (M. E. Cohen) 82;05015 05A15 (33A70)

Nassif, Nabil R. (with Pini, Fabrice) Semidiscrete and fully discrete finite-element methods with penalty for the numerical solution of the waterhammer problem. SIAM J. Numer. Anal. 18 (1981), no. 1, 111-128. (Authors' summary) 82a:76019 76B99 (65N30)

Nassimi, David (with Sahni, Sartaj) Finding connected components and connected ones on a mesh-connected parallel computer. SIAM J. Comput. 9 (1980), no. 4, 744-757. (Danny Doley) 82e:68069 68E10 (68A05, 68B20, 68C05)

(with Sahni, Sartaj) A self-routing Benes network and parallel permutation algorithms. IEEE Trans. Comput. 30 (1981), no. 5, 332–340. (Authors' summary)

68A05 (68C25) scu, Constantin Théorème de Hopkins pour les catégories de Grothendieck. Ring theory, Antwerp 1980 (Proc. Conf., Univ. Antwerp, Antwerp, 1980), pp. 88-93, Lecture Notes in Math., 825, Springer, Berlin, 1980. (J. C. Robson) 82a:16020 16A35 (18E99) Modules injectifs de type fini par rapport à une topologie additive. Comm. Algebra 9 (1981), no. 1, 67-79. (J. Zelmanowitz) 82e:16002 16A08 (16A80)

Anneaux de quotients et modules $\Sigma(\Delta)$ -injectifs. Comm. Algebra 9 (1981), no. 4,

Nastūlus See King, David A., 82f-91016
Natale, Elvira Medial idempotent commutative n-quasigroups. (Italian. English summary)
Rend. Accad. Sci. Fis. Mat. Napoli (4) 46 (1979), 221-229 (1980). (M. Stefănescu) 20N15 (20N05)

son, I. P. *Theorie der Funktionen einer reellen Veränderlichen. (German) [Theory of functions of a real variable] Translated from the 1957 Russian edition. Edited by Karl Bögel. Fifth edition. Mathematische Lehrbücher und Monographien, I. Abteilung: Mathematische Lehrbücher [Mathematical Textbooks and Monographs, Part 1: Mathematical Textbooks], VI. Akademie-Verlag, Berlin, 1981. xii+590 pp. (Editors)

28-01 (26-01)

Natanzon, S. M. The order of a finite group of homeomorphisms of a surface onto itself, and the number of real forms of a complex algebraic curve. (Russian) Dokl. Akad. Nauk SSSR 242 (1978), no. 4, 765-768. (V. M. Harlamov) 82b:14019 14H45 (14H99) Automorphisms of the Riemann surface of an M-curve. (Russian) Funkcional. Anal.

i Priložen. 12 (1978), no. 3, 82-83. (V. M. Harlamov) 82h:14020 14H99 (14H45) Spaces of moduli of real curves. (Russian) Trudy Moskov. Mat. Obič. 37 (1978), 219–253, 270. (V. M. Harlamov) 82d:14018 14H10 (14G30)

Supplement: "Lobačevskii geometry and automorphisms of complex M-curves" [Geometric methods in problems of analysis and algebra (Russian), pp. 130-151, Jaroslav. Gos. Univ., Yaroslavl', 1978; MR 81m:30042]. (Russian) Geometric methods in problems of algebra and analysis, No. 2 (Russian), pp. 156-158, Jaroslav. Gos. Univ., Yaroslavl', 1980. (Editors) 82e:30014 30C35 (14H99)

Total number of ovals of the real forms of a complex algebraic curve. (Russian) Uspehi Mat. Nauk 35 (1980), no. 1(211), 207-208. (P. E. Newstead) 82e:14037

Natarajan, P. N. On a scale of summation processes in the p-adic field. Bull. Soc. Math. Belg. Sér. B 31 (1979), no. 1, 67-73. (V. K. Srinivasan) 82b:40007 40J05

m, R. (with Subramanian, Ramachandran) Two-unit system with imperfect switch. J. Math. Phys. Sci. 14 (1980), no. 3, 205-224. (Authors' summary) 82k:62190

(with Subramanian, Ramachandran) A 2-unit system with "imperfect" repair. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 11 (1980), no. 4, 617–622. (Authors' summary) 82k:60175 60K10 (90B25)

Nath, Prem (with Madaan, V. D.) On some extension theorems concerning generalized Cauchy functional equations. (Turkish summary) İstanbul Üniv. Fen Fak. Mecm. Ser. A 41 (1976), 39-52 (1981). (K. Lajkó) 82h:39006 39B50

(with Kaur, Man Mohan) On characterizing the Shannon entropy without assuming symmetry. Inform. and Control 47 (1980), no. 3, 213-219. (J. Aczél) 82h:94016 94A17

Nathan, Gad (with Pfeffermann, Dan) Regression analysis of data from complex samples. (French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 3. With discussion. Bull. Inst. Internat. Statist. 47 (1977), no. 3, 21-42, 58-64. (V. P. Godambe) 82m:62017 62D05

(with Holt, David) The effect of survey design on regression analysis. J. Roy. Statist. 62D05 (62J05) Soc. Ser. B 42 (1980), no. 3, 377-386. (Jagbir Singh) 82d:62029

n, Melvyn B. Classification problems in K-categories. Fund. Math. 105 (1979/80), no. 3, 187-197. (V. Dlab) 82h:16033 16A64 (16A90) Arithmetic progressions contained in sequences with bounded gaps. Canad. Math.

Bull. 23 (1980), no. 4, 491-493. (John R. Rabung) 82c:10067 10L20 (with Erdős, Paul) Lagrange's theorem and thin subsequences of squares

Contributions to probability, pp. 3-9, Academic Press, New York, 1981, (András Sárközi) 82k:10062 10J05 (10K99)

Nather, Wolfgang (with Boltze, Lothar) Some remarks on experimental design for estimating the expectation of a stationary random process. Math. Operationsforsch. Statist. Ser. Statist. 11 (1980), no. 4, 475-481. (Albert M. Liebetrau) 82m:62193

(with Pilz, J.) Estimation and experimental design in a linear regression model using prior information. (Polish summary) Zastos. Mat. 16 (1980), no. 4, 565-577. (B. C. Gupta) 82e:62100 62J05 (62K05)

Nation, J. B. (with Gaskill, H. S.) Join-prime elements in semidistributive lattices. Algebra Universalis 12 (1981), no. 3, 352-359. (T. S. Blyth) 82j:06015 06B15

Natke, H. G. Angenäherte Fehlerermittlung für Modalsynthese-Ergebnisse innerhalb der Systemanalyse und Systemidentifikation. (English and Russian summaries) Z. Angew Math. Mech. 61 (1981), no. 1, 41-53, (Author's summary) 82f:70010 70199 (73K20)

Natori, Makoto (with Kawarada, Hideo) An application of the integrated penalty method to free boundary problems of Laplace equation. Numer. Funct. Anal. Optim. 3 (1981), no. 1, 1-17. (Ekkehard W. Sachs) 82h:49023 49D30 (35J85, 65N99)

Natrošvili, D. G. Solution of dynamic problems for the sphere. (Russian. Georgian and English summaries) Some problems of the theory of elasticity (Russian), pp. 72-88, Tbilis. 73D10 (35L20) Gos. Univ., Inst. Prikl. Mat., Tbilisi, 1980. (N. Cristescu) 82j:73018 (with Džagmaidze, A. Ja.) Solution of fundamental dynamical problems of the moment theory of elasticity for the sphere and the spherical layer. (Russian. Georgian and English summaries) Some problems of the theory of elasticity (Russian), pp. 89-104, Tbilis. Gas. Univ., Inst. Prikl. Mat., Tbilisi, 1980. (V. Gheorghità) 82g:73011 73C35 73C35

Naudé, G. (with Nolte, C.) Linear systems: introductory remarks and a duality theory for systems over rings. Algebra Symposium (Potchefstroom Univ., Potchefstroom, 1979), pp. 77-92, Potchefstroom Univ. for Christian Higher Ed., Potchefstroom, 1980. (See 68D30 (16A99)

dts, J. Gaussian states on the algebra of the infinite classical system. J. Math. Phys. 22

(1981), no. 2, 221-225. (Author's summary) 82g:82010 82A05 (46L60, 82A50) nenberg, Michael (with Brower, Richard C.) Group integration for lattice gauge theory penberg, Michael (with Brower, Richard C.) Group integration for lattice gauge incory at large N and at small coupling. Nuclear Phys. B 180 (1981), no. 2, FS 2, 221–247. (Authors' summary) 82g81103 81G05 (81E25) (with Crutchfield, J.; Rudnick, J.) Scaling for external noise at the onset of chaos. Phys. Rev. Lett. 46 (1981), no. 14, 933–935. (Authors' summary) 82f:58059 58F13

gler, D. R. (with Hartzman, C. S.) Separatrices, nonisolated invariant sets and the Seifert conjecture. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 224–245, Lecture Notes in Math., 819, Springer, Berlin,

1980. (F. W. Wilson, Jr.) 82g:58075 58F22 (34C28)

aman, Syed Khalid On construction of radicals by using rings with torsion free additive groups. Karachi Math. Assoc. Riazi (Souvenir) 3 (1980), 1-4. (R. Weigandt) 82g:16008 16A21

menko, K. I. (with Larin, V. B.) Control of a walking apparatus with almost weightless legs. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 22, 39 pp.

(Authors' summary) 82d:70004 70B15 (92A05)

mov, V. A. (with Bašarin, G. P.; Kokotuškin, V. A.) The method of equivalent substitutions for calculating fragments of communication networks for a digital computer. I. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 6, 92-99, 220 (Russian); lated as Engrg. Cybernetics 17 (1979), no. 6, 66-73 (1980). (D. C. McNickle) 60160 60K25 (68C15, 90B15) 82c:60160

Naus, Joseph I. (with Neff, Norman D.) *Selected tables in mathematical statistics. Vol. VI. The distribution of the size of the maximum cluster of points on a line. Edited by W. J. Kennedy, R. E. Odeh and J. M. Davenport. American Mathematical Society Providence, R.I., 1980. vii + 207 pp. ISBN 0-8218-1906-2 (Editors) 82a:62157

iss, Robert M. ★Parametric integer programming. University of Missouri Studies, LXVII. University of Missouri Press, Columbia, Mo., 1979. ix+98 pp. ISBN 0-8262-0250-0 (Heinz-Michael Winkels) 82d:90120 90C31 (90C10)

Nautiyal, A. On the coefficients of an analytic function represented by Dirichlet series. Comment. Math. Univ. St. Paul. 30 (1981), no. 1, 37-48. (M. E. Noble) 82i:30004

uwelaerts, E. (with van Oystaeyen, F.) Birational hereditary Noetherian prime rings. Comm. Algebra 8 (1980), no. 4, 309-338. (J. C. Robson) 82a:16009 16A14 (with van Oystaeyen, F.) Zariski extensions and biregular rings. Israel J. Math. 37 (1980), no. 4, 315-326. (G. Michler) 82a:16018 16A30

Naval, E. S. Optimal control of the heat conduction process of a hollow cylinder. (Russian) Mathematical methods in mechanics. Mat. Issled. No. 57 (1980), 77-82, 136. (Author's

summary) 82b:49054 49D99

(with Rimskii, V. K.) Elastic stress waves in an inhomogeneous layer. (Russian) Izv. Akad. Nauk Moldav. SSR Ser. Fiz.-Tehn. Mat. Nauk 1980, no. 2, 20-26, 94. (J. Ignaczak (Zbl 454:73018)) 82g:73020 73D30 (73C40)

(with Sabodaš, P. F.) Nonstationary thermoelastic waves in a closed spherical shell under local heating. (Russian) Mathematical methods in mechanics. Mat. Issled. No. 57 (1980), 111–119, 137. (Authors' summary) 82c:73086 73U05

(with Rimskil, V. K.) Investigation of transient elastic waves in a layered bar. (Russian) Boundary value problems for partial differential equations. Mat. Issled. No. 63 (1981), 93-106, 183. (Authors' summary) 82k:73019 73D05

(with Sabodaš, P. R.) Thermoelastic waves in a cylindrical shell under local heating. (Russian) Computational methods of mechanics. Mat. Issled. No. 64 (1981), 69-77, 192. (See 82k:73001) 73D99

Navarrete, Norberto, Jr. (with Fukushima, Masao; Mine, Hisashi) A fuzzy preference model in decision making. Mem. Fac. Engrg. Kyoto Univ. 43 (1981), no. 1, 145–158. (Jiří Šústal) 82k:90013 90A06 (03E72, 92A25)

Navarro, José-Luis (with Castellet, Manuel) Le groupe des co-H-extensions de deux co-H-espaces (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A139-A142. (Authors' summary) 82a:55012 55P45

(with Castellet, Manuel) Co-H structures on the wedge union of two co-H spaces. (Spanish) Collect. Math. 31 (1980), no. 1, 23-39. (Authors' summary) 82a:55011

Navarro Aznar, V. Conditions de Whitney et sections planes. Invent. Math. 61 (1980), no. 3, 199-225. (Margherita Galbiati) 82h:32019 32C42 (32C40) (with Trotman, D. J. A.) Whitney regularity and generic wings. (French summary) Ann. Inst. Fourier (Grenoble) 31 (1981), no. 2, v, 87-111. (A. Verona) 82j:58009

58A35 (57R99, 58C27) estrada Navas, Luis See Estrada Navas, Luis

Naveira, A. M. (with Johnson, David L.) A topological obstruction to the geodesibility of a foliation of odd dimension. Geom. Dedicata 11 (1981), no. 3, 347-352. (John Cantwell) 82k:57018 57R30

Nävert, Uno (with Johnson, Claes) An analysis of some finite element methods for advection-diffusion problems. Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ. Nijmegen, Nijmegen, 1980), pp. 99-116, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (Authors' summary) 82e:65127 65P05 (76R99)

Navet, M. (with Choquard, Ph.; Kunz, Herve; Martin, Philippe A.) One-dimensional Coulomb systems. Physics in one dimension (Proc. Internat. Conf., Fribourg, 1980), pp. 335-350, Springer Ser. Solid-State Sci., 23, Springer, Berlin, 1981. (See 82g:82003)

82A05 Navickis, K. V. Intrinsic framings of nonholonomic hypercomplexes in four-dimensional affine space. (Russian. Lithuanian and English summaries) Litovsk. Mat. Sb. 20 (1980), no. 1, 119-133, 219. (M. A. Akivis) 82a:53004 53A15
(with Vaškas, P. Ju.) Geometry of ruled manifolds and the theory of nets. (Russian.

Lithuanian and English summaries) Litousk. Mat. Sb. 20 (1980), no. 3, 77-81, 217.

(Vladislav Goldberg) 82c-53002 53Axx (01A65, 01A73)

Navojan, V. H. On the continuity of the conformal capacity of a three-dimensional condenser. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 3, 421-426. (A. È. Eremenko)

31B15 (31A15) Navrátil, Jiří A note on the theorem on change of variable in a Riemann integral. (Czech. English summary) With a loose Russian summary. Časopis Pēst. Mat. 106 (1981), no. 1,

79-83. (Đuro Kurepa) 82i:26001 26A06 (26A42) vrods'kii, V. O. Some problems of minimax state estimation in stochastic systems. (Russian. English summary) Vyčisl. Prikl. Mat. (Kiev) No. 43 (1981), 110-116, 159. (Author's summary) 82k:93072 93E12

wortzki, Kurt *Diskrete offene Systeme. (German) [Discrete open systems] With English and Russian summaries. Wissenschaftliche Sitzungen zur Stochastik 79, 5. Akademie der Wissenschaften der DDR, Institut für Mathematik, Berlin, 1979. 102 pp. (Serban Grigorescu) 821:60151 60005 (15A51, 60K25, 68D25) rban Grigorescu) 82f:60151 60J05 (15A51, 60K25, 68D25) (with Jansen, Uwe; König, Dieter) A criterion of insensitivity for a class of queueing

systems with random marked point processes. (German and Russian summaries) Math.

Operationsforsch. Statist. Ser. Optim. 10 (1979), no. 3, 379–403. (Robert Kertz) 82e:60152 60K25 (60G55)

 Stationäre Verteilungen endlicher offener Systeme. Elektron. Informationsverarb.
 Kybernet. 16 (1980), no. 7, 345-351. (D. Kalin) 82:60120 60J05 (60G99)
 Nayak, B. K. Spherically symmetric charged dust distribution in general relativity. I.
 General solution. Austral. J. Phys. 33 (1980), no. 4, 765-769. (Author's summary) 83C50 (83C15)

Nayak, K. C. (with Nanda, Sudarsan; Srivastava, P. D.) Certain subspa space. Indian J. Pure Appl. Math. 12 (1981), no. 8, 971-976. (V. K. Srinivasan) 46E10 (30H05)

Nayar, B. M. Neumann function for the sphere. I, II. Indian J. Pure Appl. Math. 12 (1981), no. 10, 1266–1282, 1283–1292. (P. Lappan) 82j:31004 31A25

Nayfeh, A. H. See Nayfeh, Ali Hasan

Nayfeh, Adnan H. (with Nassar, Elsayed Abdel-Ati M.) Mathematical simulation of singularities for isoparametric elements of arbitrary orders. Internat. J. Numer. Methods Engrg. 17 (1981), no. 3, 465-470. (Authors' summary) 82d:73053 73K25 (73M05)

Nayfeh, Ali Hasan A comparison of perturbation methods for nonlinear hyperbolic waves. Singular perturbations and asymptotics (Proc. Adv. Sem., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1980), pp. 223-276, Publ. Math. Res. Center Univ. Wisconsin, 45, Academic Press, New York, 1980. (From the introduction) 821:35131 35L99 (76N99, 76Q05)

★Introduction to perturbation techniques. A Wiley-Interscience Publication.

Wiley-Interscience [John Wiley & Sons], New York, 1981. xiv+519 pp. ISBN 0-471-08033-0 (Peter Smith) 82f:34068 34E10 (34E20)

 (with Kelly, S. G.) Nonlinear propagation of general directional spherical waves. J.
 Sound Vibration 79 (1981), no. 1, 145-156. (Authors' summary) 82k:76059 76Q05
 (with Ragab, S. A.) Görtler instability. Phys. Fluids 24 (1981), no. 8, 1405-1417. (Authors' summary) 82j:76039 76E05 (76D10)

Naylor, R. H. Galileo's theory of projectile motion. Isis 71 (1980), no. 259, 550-570.
(William R. Shea) 82i:01015 01A40 (70-03)

Nayroles, Bernard (with Jean, Michel) Signorini problem in linear viscoelasticity. Duality and complementarity in mechanics of solids (School-Conf. Duality Problems of Mech. Deformable Bodies, Jabtonna, 1977), pp. 419-481, Ossolineum, Wrocław, 1979. (See 73F99 (49A29)

Nazaikinskii, V. E. (with Maslov, V. P.) Algebras with general commutation relations and their applications. I. Pseudodifferential equations with increasing coefficients. (Russian) Current problems in mathematics, Vol. 13 (Russian), pp. 5-144, 270, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (See 82d:47025) 47G05 (with Ošmjan, V. G.; Sternin, B. Ju.; Šatalov, V. E.) Fourier integral operators and the canonical operator. (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 81-140. (Alan

Weinstein) 82h:58049 S8G15 (35S05, 47G05, 81C15)
Nazarathy, Moshe (with Shamir, Joseph) Wavelength variation in Fourier optics and

holography described by operator algebra. *Israel J. Tech.* 18 (1980), no. 5, 224-231 (1981). (Authors' summary) 82i:78006 78A10 (78A55)

(with Shamir, Joseph) Holography described by operator algebra. J. Opt. Soc. Amer. 71 (1981), no. 5, 529-541. (Authors' summary) 82d:78006 78A10

Nazarčuk, Z. T. (with Panasjuk, V. V.; Savruk, M. P.) Diffraction of a plane electromagnetic wave by a periodic system of curvilinear screens (H-polarization). (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 3, 57-60, 95. (Authors' summary) 82h:78016 78A45

(with Panasjuk, V. V.; Savruk, M. P.) Diffraction of electromagnetic waves on an arbitrary profile cylinder containing a system of curvilinear screens. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 4, 61-65, 97. (Authors' summary) 82g:78018 78A45

Nazarenko, N. A. Reconstruction of plane curves with the aid of parametric Hermitian splines. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint No. 26 Splainy v Zadačah Approksimac. i Sglaživan. (1978), 11–31. (Editors) 82a:41012 41A15

Approximation of plane curves by parametric Hermitian splines. (Russian) Ukrain.

Mat. Z. 31 (1979), no. 2, 201-205, 223. (Gheorghe Coman) 82e:41043 41A55

Nazarenko, T. I. (with Marčenko, L. V.) Some experiments on the application of interval analysis to the solution of systems of ordinary differential equations with linear boundary conditions. (Russian) Numerical methods of optimization (applied mathematics) (Russian), pp. 161-175, Akad. Nauk SSSR Sibirsk. Otdel., Energet. Inst., Irkutsk, 1978.

(G. S. Tabidze) 82a:65034 65G10 (65L10)

Nazarjan, G. A. The relations of some complexity characteristics of sets of Boolean functions. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 71 (1980), no. 4, 217–220. (M. B. Trahtenbrot) 82g:03073 03D15 (03G05, 94C10)

Nazarjan, R. O Decompositions of some simple Lie groups. (Russian. Armenian summary Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 5, 257-260. (K. Teleman) 82e:22021

Nazarov, A. A. Adaptation of servicing intensity to unknown parameter of incommunications of the servicing intensity to unknown parameter of incommunications. by an automaton with purposeful behavior. Avtomat. i Vyčisl. Tehn. (Riga) 1979, no. 5, 56-61, 93 (Russian); translated as Automat. Control Comput. Sci. 13 (1979), no. 5, 54-58. (Author's summary) 82h:68056 68C15 (68D25, 90B22)

Nazarov, E. A. Convergence conditions in a generalized Lienard equation. (Russian)

Differencial'nye Uravnenija 17 (1981), no. 5, 927-929, 959. (C. Corduneanu) 82i:34036

Nazarov, H. H. Classification of a quadruple of congruences in a three-dimensional projective space P₃. (Russian) Differential geometry of manifolds (Russian), pp. 13-22, 59, Taškent. Gos. Ped. Inst., Tashkent, 1980. (Vladislav Goldberg) 82h:53020 53A25 (53A20)

See also Differential geometry of manifolds, 82t:53002

Nazarov, L. V. (with Smirnov, S. N.) Limit theorems of n-multiple convolutions of probability measures on compact semitopological semigroups. (Russian) Vestnik Maskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1980, no. 3, 62–64, 70. (Authors' summary) 60B15 (60F05)

Nazarov, N. G. (with Tarasenko, V. F.) Planning of the collection and processing of observations in solution of problems of testing statistical hypotheses. (Russian) Methods in operations research and reliability theory in systems of analysis (Russian), pp. 81-88,

- wov, S. A. The index of an elliptic boundary value problem with a small parameter
 - multiplying the highest derivative. (Russian. Lithuanian and English summaries)

 Differencial nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija

 Sekcija No. 24 (1979), 75-85, 109. (Frederick A. Howes) 82f:35072 35140 (35B25)
 - (with Semenov, B. N.) The connection between stress factors for a plane problem of classical and couple-stress elasticity theory. (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 148-154, 313, Leningrad. Univ., Leningrad, 1980. (L. A. Ivanov) 82g:73013 73C40 (35J05)
 - Asymptotic behavior with respect to a small parameter of the solution of a second-order differential equation on a manifold with corners. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 9, 18–24. (Frederick A. Howes) 82f:35017
 - Principle of virtual work and Rice weighting integrals. Izv. Akad. Nauk SSSR Meh.
 Toerd. Tela 15 (1980), no. 1, 72-76 (Russian); translated as Mech. Solids 15 (1980), no. 1,
 64-67. (Author's summary) 82i:49001 49A05 (73M05)
 Elliptic boundary value problems with periodic coefficients in a cylinder. (Russian) ed as Mech. Solids 15 (1980), no. 1,
- d. Nauk SSSR Ser. Mat. 45 (1981), no. 1, 101-112, 239. (Johannes Elschner) 35355
- 82e:35035 35J55 carova, E. V. On the geo EV. On the geometry of tangent bundles of Lie groups. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 11 (1979), 70-78. (V. Cruceanu) 82g:53042 53C10 (22E10) rarova, L. A. (with Bondarenko, V. M.; Zavadskii, A. G.) Representations of tame
- partially ordered sets. (Russian) Representations and quadratic forms (Russian), pp. 75-106, 155, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1979. (Sheila Brenner) 82m:16027 16A64 (15A21)
- Nazestkina, E. I. (with Rusanov, V. V.) Difference approximation near the boundary for hyperbolic systems of quasilinear equations. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 32, 30 pp. (Authors' summary) 82e:65099
- (with Rusanov, V. V.) Approximation of boundary conditions in difference schemes. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 6, 1483-1499, 1630. (E. Schechter) 65M05
- cimov, A. B. On the rate of convergence of the regularization method in Hilbert space. (Russian. Tajiki summary) Dokl. Akad. Nauk Tadžik. SSR 24 (1981), no. 4, 211-214.
- (Nicholas Young) 22ms47011 47A50 (38C15, 65J10)
 Nazis, G. I. (with Krivolapova, V. V.) The functional generating method and Gibbs random fields on countable sets. (Russian. English summary) Teoret. Mat. Fiz. 47 (1981), no. 3, 362-374. (Authors' summary) 82is82010 82A05
- Nazyrova, V. P. See Mathematical methods in cybernetics, 82a:93006 and 82d:93006
- Neaderhouser, Carla C. An almost sure invariance principle for partial sums associated with a random field. Stochastic Process. Appl. 11 (1981), no. 1, 1-10. (Sándor Csörgő) 60F17 (60G60)
- leagu, Ana Maria (with Rosculet, Marcel) Fonctions quasi monogènes sur des algèbres à radical. (Romanian summary) Bul. Inst. Politehn. Bucureşti Ser. Electrotehn. 42 (1980), no. 1, 3-14. (Wazir Hasan Abdi) 82k:30054 30G35 (30A05)
- Neagu, M. (with Crstici, B.; Tudor, Gh.) Construction of certain classes of solutions of certain functional equations. (Romanian. French summary) Bul. Stiint. Tehn. Inst. Politehn. "Traian Vuia" Timişoara 24(38) (1979), no. 2, 33-35. (B. Schweizer) 82m:39007
- Nebeský, Ladislav Projectivity as a minimalization. Prague Bull. Math. Linguist. No. 34 (1980), 59-63. (From the text) 82g:68072 68F05 (05C05)
 - (with Wisztová, Elena) Regular factors in powers of connected graphs. With a loose Russian summary. Časopis Pest. Mat. 106 (1981), no. 1, 52-59, 101. (David P. Sumner) 82g:05074 05C70 (05C99)
 - A new characterization of the maximum genus of a graph. Czechoslovak Math. J. 31(106) (1981), no. 4, 604-613. (A. T. White) 82;:05053 05C10 (05C35)
 - Every connected, locally connected graph is upper embeddable. J. Graph Theory 5 (1981), no. 2, 205-207. (Author's summary) 82e:05064 05C10 (05C35)
- ev, A. A. Polynomial transformations of finite commutative local principal ideal rings (Russian) Mat. Zametki 27 (1980), no. 6, 885-897, 989. (Stefan Dodunekov) 82b:13013 13M10 (12C05)
- s, Jindřich (with Hlaváček, Ivan) *Mathematical theory of elastic and elasto-plastic bodies: an introduction. Studies in Applied Mechanics, 3. Elsevier Scientific Publishing Co., Amsterdam-New York, 1980. 342 pp. ISBN 0-444-99754-7 (E. S. Şuhubi) 82h:73002 73-02 (46N05, 49D15, 65Nxx)
- (with Travniček, Luděk) Evolutionary variational inequalities and applications in plasticity. (Czech summary) With a loose Russian summary. Apl. Mat. 25 (1980), no. 4, 241–256. (Hélène Lanchon) 82e:49021 49A29 (73E99)
- (with Jarušek, Jiří; Haslinger, Jaroslav) On the solution of the variational in to the Signorini problem with small friction. (Italian summary) Boll. Un. Mat. Ital. B (5) 17 (1980), no. 2, 796-811. (Hélène Lanchon) 82a:49015 49A29 (73T05)
- (with Mawhin, Jean; Novák, Břetislav) Docent Svatopluk Fučík has died. (Czech) Časopis Pest. Mat. 105 (1980), no. 1, 91-101. (Editors) 82f:01122 01A70
- (with John, O.; Starf, J.) Counterexample to the regularity of weak solution of elliptic systems. Comment. Math. Univ. Carolin. 21 (1980), no. 1, 145–154. (Bernhard Kawohi) 82e-35023 35D10 (35J60)
- Variational inequalities in elasticity and plasticity with application to Signorini's blems and to flow theory of plasticity. Z. Angew. Math. Mech. 60 (1980), no. 6, T20-T26. (Rolf Leis) 82h:73027 73C99 (49A29, 73E99)
- Nečitailova, L. S. Groups of motions of an n-orthogonal system of the space V_n into itself. (Russian) Kaliningrad. Gos. Univ. Differencial naja Geom. Mnogoobraz. Figur No. 10 (1979), 70-74, 163. (I. P. Egorov) 82a:53022 53B20
 - Infinitesimal transformations of n-orthogonal systems in a Riemannian space
 - (Russian. Georgian and English summaries) Soobsi: Akad. Nauk Gruzin. SSR 97 (1980), no. 3, 541-544. (Valentin Boju) 82g:53025 53B20 53B20
- Infinitesimal transformations of n-orthogonal systems in a Riemannian V_n (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 1, 72–78. (Valentin Boju) 82e:53041
- Neck, Reinhard Controllability and observability of dynamic economic systems

- Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 2, pp. 462–472, Lecture Notes in Control and Information Sci., 23, Springer, Berlin, 1980. (Author's introduction) 82i:90020 90A16 (93B05, 93B07)
- Nečval', N. A. Synthesis of adaptive control strategies for sequential processes in problems of statistical search for the extremum and the theory of statistical decision making. (Russian) Problemy Shičain. Poiska No. 8 Voprosy Strukturnoï Adaptacii (1980), 186–236, 334. (P. Neumann) 82k:62061 62F10 (65K99)
- skovs'kii, M. O. Analysis of errors of direct methods of solution of systems of linear algebraic equations by branching continued fractions. (Ukrainian. Russian summary) Studies in the qualitative theory of differential equations and its applications (Ukrainian), pp. 41–42, 74, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Author's summary) 821:65035 65F10
- Convergence and computational stability of branching continued fractions with elements satisfying conditions of Pringsheim type. (Ukrainian. Russian summary) dies in the qu litative theory of differential equations and its applications (Ukra pp. 43-44, 74, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Author's summary)
- 40A15 A direct method for solving systems of linear algebraic equations by branching continued fractions. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 8, 24–28, 87. (Włodzimierz Proskurowski) 82b:65018 65F05 Nedelčev, Hristo (with Semerdžiev, Hristo) Diagonal Pade approximants for a
- discontinuous function given by its Fourier series. (Bulgarian. Russian and English summaries) Ploudio. Univ. Naučn. Trud. 15 (1977), no. 1, 247-261 (1979). (Authors' nary) 82h:41021 41A21 (42A16)
- Nédélec, J.-Claude (with Nedoma, Jiří) Numerical approximation of potential problems. (French, German and Russian summaries) Modern potential theory as a foundation for the inverse problem in geophysics (Summer School, Freiberg, 1978), pp. 96–110, Geodät. ingen, Reihe III, 45, Akad. Wiss. DDR, Berlin, 1980. (See Geophys. Veröffentlich
 - 82g31001) 65N30
 (with Johnson, Claes) On the coupling of boundary integral and finite element methods. Math. Comp. 35 (1980), no. 152, 1063-1079. (Reinhard Scholz) 82c:65072
 - Incompressible mixed finite elements for the Stokes equation in R³. Seventh International Conference on Numerical Methods in Fluid Dynamics (Stanford Univ., Stanford, Calif.; NASA/Ames Res. Center, Moffett Field, Calif., 1980), pp. 299-303, re Notes in Phys., 141, Springer, Berlin, 1981. (Author's summary) 82k:65065 65N30 (76A60, 76D05)
- edeljković, Nikola B. New algorithms for unconstrained nonlinear optimal control problems. IEEE Trans. Automat. Control 26 (1981), no. 4, part 1, 868-884. (Author's
- summary) 82m:65057 65K10 (49D15) elman, J. (with Rubinow, Sol I.) Facilitated diffusion of oxygen and carbon monoxide in the large affinity regime. J. Math. Biol. 12 (1981), no. 1, 73-90. (Authors' summary) 82k:92032 92A09
- Nediță, N. I. Variété lorentzienne à connexion spatiale quasi-plate et à champ spatial si-récurrent. Atti Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur. 55 (1980),
- 11-25 (R. Rosca) 82k:53078 53C50

 Nedjalkov, I. P. On equations of the inverse problem of a geoelectrical field for homogeneous isotropic bodies in a constant current variant. (Russian) C. R. Acad. ure Sci. 33 (1980), no. 10, 1337-1340. (A. S. Alekseev) 82i:86008 86A20 (35R30, 85A99)
- ma, Jiří (with Nédélec, J.-Claude) Numerical approximation of potential problems. (French, German and Russian summaries) Modern potential theory as a foundation for the inverse problem in geophysics (Summer School, Freiberg, 1978), pp. 96–110, Geodät. Geophys. Veröffentlichungen, Reihe III, 45, Akad. Wiss. DDR, Berlin, 1980. (See 65N30
 - On stochastic differential equations in geophysical potential problems. Modern potential theory as a foundation for the inverse problem in geophysics (Summer School, Freiberg, 1978), pp. 244–259, Geodät. Geophys. Veröffentlichungen, Reihe III, 45, Akad. Wiss. DDR, Berlin, 1980. (See 82g:31001) 86A20 (60H15)
- Nedorezov, L. V. (with Isaev, A. S.; Hlebopros, R. G.) The nonlinear theory of the forest insect number dynamics. Systems analysis and simulation, 1980 (Proc. Internat. Sympos., Berlin, 1980), pp. 428-432, Math. Research, 5, Akademie-Verlag, Berlin, 1980. (Howard B. Stauffer) 82c:92020 92A15 (34C99) hunuri, Ramamurty Some new results in the theory of normal distributed networks.
- IEEE Trans. Circuits and Systems 28 (1981), no. 5, 460-461. (Author's summary)
- 82±94059 94C05 Nedzhesku-Klezha, S. On the theorem of uniqueness for two-mode elastoplastic processes. Prikl. Mat. Meh. 42 (1978), no. 2, 377-383 (Russian); translated as J. Appl. Math. Mech. 73E05 (47H05)
- 42 (1978), no. 2, 396-403 (1979). (Cornelius O. Horgan) 82h:73034 dham, Joseph Speech for the opening meeting of the Fifteenth International Congress of the History of Science at Edinburgh (11th Aug., 1977). Organon No. 14 (1978), 5-14 (1980). (Joong Fang) 82h:01078 01A80 (01A60, 01A74)
- Needham, Paul Temporal intervals and temporal order. Logique et Anal. (N.S.) 24 (1981), no. 93, 49-64. (David Makinson) 82k:03020
- Néel, D. See Data analysis and computer science, 82h:62096
- Ne'eman, Yuval ★Symétries jaugées et variétés de groupe. (French) [Gauge symmetries and group manifolds] Translated from the English by Luc Vinet. Collection "Chaire tadt". Presses de l'Université de Montréal, Montreal, Que., 1979. 141 pp.
 - ISBN 2-7606-0441-1 (P. Hillion (Zbl 404:22021)) 82e:81044 81E99 (58A99, 81D20) (with Thierry-Mieg, Jean) Extended geometric supergravity on group manifolds with spontaneous fibration. Ann. Physics 123 (1979), no. 2, 247-273. (From the text) 82h:83070 83E50 (22E65)
 - (with Thierry-Mieg, Jean) Gauge asthenodynamics (SU(2/1)) (classical discussion). Differential geometrical methods in mathematical physics (Proc. Conf.,
 - Aix-en-Provence/Salamanca, 1979), pp. 318-348, Lecture Notes in Math., 836, Springer, Berlin, 1980 (W. Cox) 82h:81137 81G20
 - Gravity, groups, and gauges. General relativity and gravitation, Vol. 1, pp. 309–328,
 Plenum, New York, 1980. (P. K. Smrz) 82f:83089 83E99 (58D25, 81E10) (with Thierry-Mieg, Jean) Geometrical theory of ghost and Higgs fields and
 - SU(2/1). Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat

Anavim, 1979), pp. 100-115, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81004) 81G20 (17A70)

Quantum gravity and supergravity. Some strangeness in the proportion (Einstein tennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 429-443,

Addison-Wesley, Reading, Mass., 1980. (See 82d:83002) 83C45 (83E99)

(with Sijački, Djordje) Minimal and centered graded spin-extensions of the SL(3, R) algebra. J. Math. Phys. 21 (1980), no. 6, 1312-1317. (Wayne J. Holman, III) 82h:17011 17B70 (22E65, 81C40)

(with Takasugi, E.; Thierry-Mieg, Jean) Soft-group-manifold Becchi-Rouet-Stora transformations and unitarity for gravity, supergravity, and extensions. Phys. Rev. D (3) 22 (1980), no. 10, 2371–2379. (W. Cox) 82h:83071 83E99 (22E70, 53C05, 81G20)

(with Sijački, Djordje) Correction to: "Gravitational interaction of hadrons and leptons: linear (multiplicity-free) bandor and nonlinear spinor unitary irreducible representations of SE(4, R)" [Proc. Nat. Acad. Sci. U.S.A. 76 (1979), no. 2, 561-564; MR

80d:81149]. Proc. Nat. Acad. Sci. U.S.A. 77 (1980), no. 4, part 2, 2353. (Editors) 81M05 (22E45)

1982

Gauged and affine quantum gravity. To fulfill a vision (Jerusalem Einstein Centennial npos., Jerusalem, 1979), pp. 99–114, Addison-Wesley, Reading, Mass., 1981. (See 183003) 83C45 82d:83003)

See also To fulfill a vision, 82d:83003 and Group theoretical methods in physics, 87b-81004

Neevina, N. P. (with Klimov, V. E.) An algorithm for stacking a planar graph on concentric circles (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 415 (1979), 94–96, 134. (Authors' summary) 82a:68122 68E10 (68A05, 94C15)

Nef, Walter Gleichungen vom Dehn-Sommervilleschen Typ für nicht beschränkte konvexe

Polytope und für Raumzerlegungen durch Hyperebenen. Elem. Math. 35 (1980), no. 5, 107-115. (J. M. Wills) 82c:52009 52A25

107-115. (J. M. Wills) 82c:52009 52A25
Nefedkina, G. F. (with Kočnev, V. F.; Šileško, A. V.) On the question of information value.
I. (Russian. English summary) Elektronnoe Modelirovanie 1981, no. 4, 3-8, 109. (Authors' summary) 82h:94015 94A17

Nefedov, S. A. On the rigidity property of linear dynamical systems with control given in infinite-dimensional spaces. (Russian) Differencial'nye Uravnenija 16 (1980), no. 10, 1786-1793, 1915. (H. O. Fattorini) 82e:93059 93C25 (93C05)

Dynamical systems with a nonexpanding domain of attainability. (Russian) Differencial'nye Uravnenija 16 (1980), no. 11, 1995-2002, 2109. (L. Reizinš) 82c:49029 49E15 (34G10, 47D05)

Nefedov, V. N. Lexicographic problems with a polyhedral set of strategies. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1981, no. 1, 77-81, 88. (Author's summary) 82e:90075 90C20 (90C39)

Neff, Norman D. (with Naus, Joseph I.) *Selected tables in mathematical statistics. Vol. VI. The distribution of the size of the maximum cluster of points on a line. Edited by W. J. Kennedy, R. E. Odeh and J. M. Davenport. American Mathematical Society, Providence, R. I., 1980. vii + 207 pp. ISBN 0-8218-1906-2 (Editors) 82a:62157

Neffke, H. Ein mathematisches Lagerhaltungsmodell mit variablen Periodenlängen. Third Symposium on Operations Research (Univ. Mannheim, Mannheim, 1978), Section 5, pp. 373-389, Operations Research Verfahren, 35, Hain, Meisenheim, 1979. (E. V.

Bulinskaja) 82a:90050 90B05 Neggers, Joseph (with Kim, Ki Hang; Makar-Limanov, L. G.; Roush, Fred William) Graph algebras. J. Algebra 64 (1980), no. 1, 46-51. (Dominique Foata) 82e:05114a

goiță, C. V. (with Kelemen, M.) An extension of the internal model principle (IMP). Systems theory (Proc. Nat. Conf., Univ. Brazov, Brazov, 1977) (Romanian), pp. 71-76, Univ. Brazov, Brazov, 1978. (Authors' summary) 82h:93053 93D15

★Fuzzy systems. Cybernetics and Systems Series, 2. Abacus Press, Tunbridge Wells, 1981. viii+111 pp. ISBN 0-85626-164-5 (Editors) 82i:93002 93A10 (03E72, 92A05,

Negrepontis, S. (with Argyros, S.) Universal embeddings of l_n^1 into C(X) and $L^{\infty}(\mu)$. Topology, Vol. I (Proc. Fourth Colloq., Budapest, 1978), pp. 75–128, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (Y. Benyamini) 82e:46054 46E99 (46B25, 54C25)

(with Tsarpalias, A.) A nonlinear version of the Amir-Lindenstrauss method. Israel J. Math. 38 (1981), no. 1-2, 82-94. (Y. Benyamini) 82f:46018

Negrini, Piero (with Salvadori, Luigi) Stability problems for Hopf bifurcation. Applied nonlinear analysis (Proc. Third Internat. Conf., Univ. Texas, Arlington, Tex., 1978), pp. 273-286, Academic Press, New York, 1979. (F. Visentin) 824:34066 34D20

(with Tesei, Alberto) Attractivity and Hopf bifurcation in Banach spaces. Anal. Appl. 78 (1980), no. 1, 204-221. (J. K. Hale) 82f:58068 58F14 (34C25, 34G20) (with Bernfeld, S. R.; Salvadori, Luigi) Stability and generalized Hopf bifurcation through a reduction principle. Nonlinear differential eq tions (Proc. Internat. Conf. Trento, 1980), pp. 29-40, Academic Press, New York, 1981. (N. D. Kazarinoff) 82j:58071 58F10 (34C25, 58F14)

(with Caprino, Silvia) Attractivity properties of closed orbits in a case of generalized Hopf bifurcation. J. Math. Anal. Appl. 80 (1981), no. 1, 92-101. (G. B. Ermentrout) 58F10 (34C25, 58F22) 821:58051

Negro, F. (with Tartaglia, A.) Quantization of motion in a velocity-dependent field: the ν^2 se. Phys. Rev. A (3) 23 (1981), no. 4, 1591-1593. (Authors' summary) 82b:81050 81D99

Negura, V. V. (with Šišijanu, F. S.) One-dimensional numerical analysis of the process of diffusion of an impurity in semiconductors. (Russian) Izv. Akad. Nauk Moldav. SSR Ser. Fiz.-Tehn. Mat. Nauk 1980, no. 1, 76-78, 94. (L. I. Rubinstein) 82b:80008

Nehari, Zeev On computation of eigenvalues for differential equations by Newton's method. Trans. Amer. Math. Soc. 263 (1981), no. 2, 397-409. (Stefan Balint) 82k:34025 (65L15)

d Klassifikation der einfachen reellen speziellen Jordan-Tripelsysteme. (English nary) Manuscripta Math. 31 (1980), no. 1-3, 197-215. (Oda Kühn) 82a:17011 17C20

Involutive gradings of Jordan structures. Comm. Algebra 9 (1981), no. 6, 575-599. (I.

P. Šestakov) 82i:17025 17C30 (17C20)

Klassifikation der einfachen reellen Ausnahme-Jordan-Tripelsysten Angew. Math. 322 (1981), 145–169. (K. Meyberg) 82g:17017 17C4 17C40 (17C10)

mihova-Nehmer, V. M. See Mihova-Nehmer, V. M.
Nehse, Reinhard Separation of two sets in a product space. Math. Nachr. 97 (1980),

179-187. (S. Simons) 82f:46003 46A22 A new concept of separation. Comment. Math. Univ. Carolin. 22 (1981), no. 1, 169-179. (Author's summary) 82m:46004 46A40 (90C25)

Nehzat, Mohammed S. (with Hall, Kenneth R.; Eubank, Philip T.) A new, generalized equation of state valid within the critical region. Equations of state in engineering and research (Sympos., Amer. Chem. Soc., Miami Beach, Fla., 1978), pp. 109-124, Advances in Chem. Ser ., 182, Amer. Chem. Soc., Washington, D.C., 1979. (See 82f:82003) 35O20 (82A25)

Nei, Masatoshi (with Yokoyama, Shozo) Population dynamics of sex-determining alleles in honey bees and self-incompatibility alleles in plants. Genetics 91 (1979), no. 3, 609-626. (Ivar Heuch) 82a:92025 92A10 (92A15)

nd, V. Ja. (with Stepanov, G. Ju.) Laminar and turbulent detached flows. (Russian) Current problems in theoretical and applied mechanics (Proc. Fourth All-Union Congress Theoret. Appl. Mech., Kiev, 1976) (Russian), pp. 216–232, 408, "Naukova Dumka", Kiev, 1978. (L. A. Bunimovich) 82c:76040 76D10 (35B40, 35Q10, 76F10)

Neiman, František See Neuman, František Neiman, František See Neuman, František Neimark, Ju. I. (with Preobraženskaja, A. M.) Speeding up of procedures of recurrent optimization of control of a Markov process with gains. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 6, 72-79, 220 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 6, 50-56 (1980). (Authors' summary) 82h;90123 90C40 (90B22)

Neirynck, Jacques (with Carlin, Charles-Henri) Synthesis of the lossless reciprocal

three-port based on a canonic form of its scattering matrix. IEEE Trans. Circuits and s 28 (1981), no. 7, 736-744. (Authors' summary) 82f:94021

Neisendorfer, Joseph A. (with Cohen, F. R.; Moore, John C.) Note on higher torsion in the homotopy groups of single suspensions. Illinois J. Math. 24 (1980), no. 4, 619-623. (M. 55Q05

3-primary exponents. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 1, 63-83. (J. F. Adams) 82e:55026 55O40 (55O35)

See also Husemoller, D., 82a:55010

Neishlos, H. (with Israeli, Moshe; Kivity, Y.) Stability of some explicit difference schemes for fluid-structure interaction problems. Comput. & Structures 13 (1981), no. 1-3, 97-101. 73J06 (65N05) (Authors' summary) 82j:73041

anmäki, Pekka Dirichletsche und Neumannsche Randwertaufgaben in der statischen Elastizitätstheorie. Ann. Acad. Sci. Fenn. Ser. A I Math. 5 (1980), no. 2, 227-236. (I. Aganović) 82m:35044 35J50 (73C30)

(with Picard, Rainer) Error estimates for the finite element approximation to a Maxwell-type boundary value problem. Numer. Funct. Anal. Optim. 2 (1980), no. 4, 267-285. (J. S. Colonias) 82h:78006 78A25 (49G10, 65N30)

(with Saranen, Jukka) Finite element approximation of electromagnetic fields in three-dimensional space. Numer. Funct. Anal. Optim. 2 (1980), no. 6, 487–506 (1981). (Authors' summary) 82h:78005 78A25 (65N30, 65P05)

(with Saranen, Jukka) On the finite element approximation for Maxwell's problem in polynomial domains of the plane. Applicable Anal. 12 (1981), no. 1, 73-83. (David F. Griffiths) 82h-65085 65N30

Iffiths) 8220-050005 OSPIGO (with Saranen, Jukka) A mixed finite element method for the heat flow problem. T 21 (1981). no. 3. 342–346. (Authors' summary) 82m:65092 65M60 BIT 21 (1981), no. 3, 342-346. (Authors' summary) 82m:65092

(with Picard, Rainer) On the finite element method for time-harmonic acoustic boundary value problems. Comput. Math. Appl. 7 (1981), no. 2, 127-138. (Authors' 76Q05 (65N30, 76A60) summary) 82g:76031 .

(with Saranen, Jukka) On finite element approximation of the gradient for solution of Poisson equation. Numer. Math. 37 (1981), no. 3, 333-337. (Authors' summary) 65N30

(with Saranen, Jukka) Semidiscrete Galerkin approximation method applied to initial-boundary value problems for Maxwell's equations in anisotropic, inhomogeneous media. Proc. Roy. Soc. Edinburgh Sect. A 89 (1981), no. 1-2, 125-133. (Authors' summary) 82h:65070 65M60

Nekljudova, E. A. (with Calenko, M. Š.) Logical schema synthesis for relational data bases.

Programmirovanie 1979, no. 6, 58-68, 111 (Russian); translated as Programming and Comput. Software 5 (1979), no. 6, 401-409 (1980). (From the introduction) 82a:68035

Nekorkin, V. I. (with Belyh, V. N.) Qualitative structures and bifurcations generated by a nonlinear third-order phase synchronization equation. Prikl. Mat. Meh. 42 (1978), no. 5, 808-819 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 5, 871-884 (1979). (F. Visentin) 82h:58030 58F14 (93D20)

Nekrasov, M. L. (with Ročev, V. E.) Two-particle equations for fermions in models with three-linear interaction. (Russian. English summary) Teoret. Mat. Fiz. 48 (1981), no. 2, 187-196. (Authors' summary) 82:81063 81D10
Nekrasov, V. V. Standard procedure for integrating a system of quasilinear partial differential equations of hyperbolic type. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980),

no. 2, 359-370, 550. (G. I. Sulhanišvili) 82f:65128 65P05 Nekricuhin, A. I. Approximation of free groups with respect to conjugacy. (Russian) Mat. Zametki 29 (1981), no. 3, 381-385, 479. (Author's summary) 82m:20029

Nekrylova, Z. V. (with Kaniovskii, Ju. M.; Knopov, P. S.) ★Предельные теоремы для процессов стохастического программирования. (Russian) [Limit theorems for processes of stochastic programming] "Naukova Dumka", Kiev., 1980. 156 pp. (A.

Prékopa) 82f:90072 90C15 (60F99) On matrix differentiation in statistics. South African Statist. J. 14 (1980), no. 2, 137-193. (Yasuko Chikuse) 82f:15023 15A99 (62H12)

Nel, L. D. Universal topological algebra needs closed topological categories. Topology Appl. 12 (1981), no. 3, 321-330. (D. Pumplun) 82i:18007 18C05 (08C05, 18B30)

Nelder, J. A. Iterative weighted least squares, an algorithm for many occasions. Data analysis and informatics (Proc. Second Internat. Sympos., Versailles, 1979), pp. 75–81, North-Holland, Amsterdam, 1980. (See 821:62004) 92A15 (93E10) North-Holland, Amsterdam, 1980. (See 822:62004) 92A15 (93E10)
Nelipa, N. F. (with Demičev, A. P.) Invariant operators of inhomogeneous groups. I. The

group IGL(n, R). (Russian) Vestnik Moskov. Univ. Ser. III Fiz. Astronom. 21 (1980),

no. 2, 3-7, 109. (Jiří Patera) 82j:17014a (with Demičev, A. P.) Invariant operators of inhomogeneous groups. II. The group ISL(n, R). (Russian) Vestnik Maskov. Univ. Ser. III Fiz. Astronom. 21 (1980), no. 2, 7-10, 109. (Jiří Patera) 82j:170146 17B35 (81C40)

17B35 (81C40)

(with Demičev, A. P.; Invariant operators of inhomogeneous groups. III. The group ISO(p,q). (Russian) Vestnik Moskov. Univ. Ser. III Fiz. Astronom. 21 (1980), no. 4, 23-27, 87. (Jiří Patera) 82;1704c 17835 (81C40)

(with Demičev, A. P.; Chaichian, M.) Invariant operators of inhomogeneous groups. IV. Unitary and symplectic groups. (Russian) Vestnik Moskov. Univ. Ser. III Fiz. Astronom. 21 (1980), no. 4, 27-31, 87. (Jiří Patera) 82;17014d 17835 (81C40)

(with Demičev, A. P.; Chaichian, M.) Invariant operators of inhomogeneous groups. V. The Weyl group. (Russian) Vestnik Moskov. Univ. Ser. III Fiz. Astronom. 21 (1980), no. 5, 20-23, 101. (Jiří Patera) 82j:17014e 17B35 (81C40) (with Chaichian, M.; Fischer, Jan; Molodenskii, S. M.; Vrkoč, Ivo) A new

on for the high-energy upper bound on the scattering amplitude. J. Math. Phys. 22 (1981), no. 2, 380-384. (N. D. Sengupta) 82f:81070

Soon, B. L. (with DeWitt-Morette, C.; Elworthy, K. D.; Sammelman, G. S.) A stochastic scheme for constructing solutions of the Schrödinger equations. Ann. Inst. H. Poincaré Sect. A (N.S.) 32 (1980), no. 4, 327–341. (Aubrey Truman) 82m:81028 81C35 (35110, 58D30_60H10_81C05)

son, David R. (with Toner, John) Smectic, cholesteric, and Rayleigh-Bénard order in two ons. Phys. Rev. B (3) 23 (1981), no. 1, 316-334. (Authors' summary) 82c:82019 82A05 (58F13, 81J05, 82A50, 82A60)

m, Evelyn Internal hom functors for polarities. Canad. Math. Bull. 22 (1979), no. 2, 87-202. (From the text) 82j:18012 18D10 187-202. (From the text) 82j:18012

ogical aspects of formal languages. Math. Systems Theory 13 Categorical and topolo

(1979/80), no. 3, 255–273. (Walter Tholen) 82a:68149 68F05 (18D10) On exponentiating exponentiation. J. Pure Appl. Algebra 20 (1981), no. 1, 79–91. (Roy Dyckhoff) 82c:18010 18D15 (06A10, 18B35, 18F20)

n, H. F. Saturation effects on stagnation radiative heating for the Jupiter probe. AIAA J. 18 (1980), no. 9, 1133-1140. (From the summary) 82h:80009 80A20

n, Harry L. A solution to Archimedes' cattle problem. J. Recreational Math. 13 10-04 (1980/81), no. 3, 162-176. (From the text) 82f:10002

son, L. A. (with Anderson, Richard L.; Monroe, R. J.) Gertrude M. Cox—a modern pioneer in statistics. *Biometrics* 35 (1979), no. 1, 3–7. (Editors) 82f:01168b 01A70

on, Lloyd S. (with Bingham, Christopher) An approximation for the distribution of the von Neumann ratio. Technometrics 23 (1981), no. 3, 285-288. (Authors' summary) 82j:62043

Nelson, Paul I. A note on strong consistency of least squares estimators in regression mod with martingale difference errors. Ann. Statist. 8 (1980), no. 5, 1057-1064. (K. C. Chanda) 82m:62077 62F12

n, Paul, Jr. (with Ray, A. K.) An automatic error-control techn of eigenlengths. J. Comput. Phys. 37 (1980), no. 3, 388-398. (A. J. Zajta) 82b:65075 651.15 (651.10)

lems in ordinary differential eq See also Codes for bo dary value prob 825-65074

son, Peter R. Numerical evaluation of an equicorrelated multivariate noncentral t distribution. Comm. Statist. B—Simulation Comput. 10 (1981), no. 1, 41-50. (Author's summary) 82±62090 62H10

on, Pierre Philippe (with Bernard-Weil, E.) Justification d'un modèle de la régulation des couples ago-antagonistes. (English summary) Internat. J. Bio-Med. Comput. 11 (1980), no. 2, 145-162. (T. W. Barrett) 82a:92007 92A07

m, R. D. Perfect quadrilaterals. Amer. Math. Monthly 86 (1979), no. 10, 845-847. (O. Bottema) 82f:51017 51M25

son, Robert A. Coordinate-dependent 3+1 formulation of the general relativity ations for a perfect fluid. Gen. Relativity Gravitation 13 (1981), no. 6, 569-580. (Author's summary) 82i:83046 83C55 (58D25)

mat-Nasser, S. (with Horgan, C. O.) Variational methods for eigenvalue problems with discontinuous coefficients. Mechanics today, Vol. 5, pp. 365-376, Pergamon, Oxford, 1980. (Vadim Komkov) 82a:34034 34B25 (49G05, 65L15)
On stability of the growth of interacting cracks, and crack kinking and curving in

brittle solids. Numerical methods in fracture mechanics (Proc. Second Internat. Conf., University College, Swansea, 1980), pp. 687-706, Pineridge, Swansea, 1980. (See 82c:73005) 73M05

(with Sumi, Y.; Keer, L. M.) On stability and postcritical behavior of interactive on cracks in brittle solids. (German summary) Z. Angew. Math. Phys. 31 (1980), 673–690. (Authors' introduction) 82f:73042 73M05 (58E07)

no. 6, 673-690. (Authors' introduction) 821:73042 73M05 (58E07)
meev, E. A. (with Galimov, K. Z.) Some mathematical aspects of the theory of shells. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 6, 8-19. (J. D. Zund) 82k:73063a 73L05 (53A45, 73C99)

(with Galimov, K. Z.) Some mathematical aspects of the theory of shells. II. assian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 11, 26–37. (J. D. Zund) 73L05 (53A45, 73C99)

Němec, Petr (with Kepka, Tomáš) Distributive groupoids and the finite basis property. J.

Algebra 70 (1981), no. 1, 229–237. (Pl. Kannappan) 82f:20100 20N05 meth, A. B. Some differential properties of the convex mappings. Math 22(45) (1980), no. 1, 107–114. (Jean-Paul Penot) 82k:46066 46G05 (46G05 (46A22, 58C20,

parison of the Michal-Bastiani and of the Clarke subdifferential. (Roman mary) Studia Univ. Babeş-Bolyai Math. 25 (1980), no. 3, 60-65. (Jean-Paul Penot) 58C25 (49B99)

Note on imbedding theorems. Publ. Math. Debrecen 25 (1978), no. 3-4,

291-302. (A. Pryde (Zbl 399:46024)) 82m:46033 46E35 (42B30)
methy, A. On a finite element method for a certain class of time-dependent problems er. Funct. Anal. Optim. 2 (1980), no. 5, 331-345. (Reinhard Scholz) 82c:65076 65N30

meti, István (with Andréka, Hajnal) Neat reducts of varieties. Studia Sci. Math. Hungar. 13 (1978), no. 1-2, 47-51 (1981). (Anna Romanowska) 82j:08013 08B99 (03G15,

(with Andreka, Hajnal) Los lemma holds in every category. Studia Sci. Math.

03C95

From hereditary classes to varieties in abstract model theory and partial algebra. Beiträge zur Algebra und Geometrie, 7. Wiss. Beitr. Martin-Luther-Univ.

Halle-Wittenberg M 11 (1978), 69-78. (Andreas Blass) 82a:03025 03C95, 08A55)

(with Andréka, Hajnal; Sain, Ildikó) Program verification within and without logic.

Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 8 (1979), no. 3, 124–129. (Author's review (H.A.)) 82bs68005 68B10 (03B60, 03C80)

(with Andréka, Hajnal) On systems of varieties definable by schemes of equations Algebra Universalis 11 (1980), no. 1, 105-116. (S. Comer) 82d:08007 08B05 (03G1: 08B05 (03G15) (with Andreka, Hajnal) Does SP K⊋ PS K imply axiom of choice? Con Math. Univ. Carolin. 21 (1980), no. 4, 699-706. (E. Mendelson) 82a:08002 (04A25, 08A30)

(with Andréka, Hajnal) Dimension-complemented and locally finite-dimensional indric algebras are elementarily equivalent. Algebra Universalis 13 (1981), no. 2,

157-163. (D. Monk) 82j:03081 03G15 (03C60, 03C65)
(with Andréka, Hajnal) HSP K is equational class, without the axiom of choice. Algebra Universalis 13 (1981), no. 2, 164-166. (Stanley N. Burris) 82k:03081 (03C05, 08B05)

(with Andréka, Hajnal) Similarity types, pseudosimple algebras, and congruence representations of chains. Algebra Universalis 13 (1981), no. 3, 293-306. (S. Comer)

metz, Tibor Run-test discrimination between written Hungarian and random sequences.

The First Pannonian Symposium on Mathematical Statistics (Bad Tatzmannsdorf, 1979),

pp. 182-194, Lecture Notes in Statist., 8, Springer, New York, 1981. (Author's summary) 94B05 (65U05)

Nemhauser, George L. (with Hsu, Wen Lian; Ikura, Yoshiro) A polynomial algorithm for maximum weighted vertex packings on graphs without long odd cycles. Math Programming 20 (1981), no. 2, 225-232. (T. R. S. Walsh) 82j:68021 68C25 (68E10)

Nemirovskii, A. S. (with Judin, D. B.) ★Сложность задач и эффективность методог OITTEMB3AITME. (Russian) [Complexity of problems and effectiveness of methods of optimization] Теория и Методы Системного Анализа. [Theory and Methods of Systems Analysis] "Nauka", Moscow, 1979. 384 pp. (Zenon Fortuna) 82e:90081 90C25 (90-01)

rovskii, Ju. V. (with Slemenzon, K. M.) Dynamical compactness of wave processes described by linear hyperbolic systems of second-order partial differential equations. (Russian) Dinamika Splošn. Sredy No. 39 (1979), 88-101, 166. (K. A. Jagdžjan) 35L55 (35B99)

(with Slemenzon, K. M.) Dynamical compactness of connected thermoelastic waves in continuous-nonhomogeneous media. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1981, no. 3, 154-163, 174. (Authors' summary) 82k:73081 73U05

knov, O. F. (with Zvjagin, V. F.; Kukuškin, B. A.) Methods of identifying and utilizing regular properties of logic circuits in test synthesis. Avtomat. i Vyčisl. Tehn (Riga) 1981, no. 1, 59-63, 99 (Russian); translated as Automat. Control Comput. Sci. 15 (1981), no. 1, 48-52. (Authors' summary) 82m:94067 94C15

to, Hiroaki On almost paracontact manifolds. TRU Math. 17 (1981), no. 1, 89-102. (R. Roşca) 82j:53068 53C15

nytov, A. I. (with Solov'ev, Ju. P.) Homotopy multiplication in the classifying spaces of Hermitian K-theory. (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 1, 30-34. (L. N. Vaserstein) 82i:18021 18F25

Nenahov, È. I. (with Ščepakin, M. B.) A modification of the sequential projection method. (Russian) Methods in operations research and reliability theory in systems of analysis (Russian), pp. 60-66, 101, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. (Authors' summary) 82e:90082 90C25

(with Rževskii, S. V.) Application of e-subgradient descent for the solution of convex programming problems. (Russian) Methods of solution of problems of nonsmo optimization and stochastic programming (Russian), pp. 13-17, 34-35, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Authors' summary) 82f:90079

Nenciu, A. (with Nenciu, G.) The existence of energy gaps for three-dimensional systems without long-range order. J. Phys. A 14 (1981), no. 5, L109-L112. (Authors' summitted orders.) 81F05 (35P05, 81C10)

(with Nenciu, G.) Dynamics of Bloch electrons in external electric fields. I. Bounds for interband transitions and effective Wannier Hamiltonians. J. Phys. A 14 (1981), no. 10, 2817-2827. (Authors' summary) 82j:81069 81H10 (47A55)

Nenciu, Elena Sur la répartition asymptotique d'un processus aléatoire à temps aléatoire. (Romanian summary) Bul. Inst. Politehn. Iaşi Sect. I 25(29) (1979), no. 3-4, 41-44. (A. De Hoyos) 82a:60033 60F05 Nenciu, G. (with Rasche, G.; Woolcock, W. S.) General solution of multichannel

partial-wave dispersion relations. II. Noncoincident thresholds, one pole approximation. Helv. Phys. Acta 53 (1980), no. 1, 134-158. (Authors' summary) 82b:81119 (with Nenciu, A.) The existence of energy gaps for three-dimensional systems without long-range order. J. Phys. A 14 (1981), no. 5, L109-L112. (Authors' summary) 81F05 (35P05, 81C10)

(with Nenciu, A.) Dynamics of Bloch electrons in external electric fields. I. Bounds for interband transitions and effective Wannier Hamiltonians. J. Phys. A 14 (1981), no. 10, 2817-2827. (Authors' summary) 82j:81069 81H10 (47A55)

Nenov, Nedjalko D. (with Hadžiivanov, Nikolai G.) On minimal t-graphs. (Russian) Serdica 6 (1980), no. 2, 128-142. (Pavel Tomasta) 82c:05072 05C55 (05C15) Existence of a minimal t-graph with a given number of vertices. (Russian) Serdica 6

(1980), no. 3, 270-274. (Larry Basenšpiler) 82e:05084 05C35 (05C15) Nepeivoda, N. N. Stable truth and computability. (Russian) Studies in the theory of algorithms and mathematical logic (Russian), pp. 78-89, 133, "Nauka", Moscow, 1979. (1. D. Zaslavskii) 82f:03052 03F50 (03F55, 68C01, 68C30)

Nepomiastchy, Pierre (with Gabay, Daniel; Rachdi, M'hamed; Ravelli, Alain) Numerical methods for simulation and optimal control of large-scale macroeconomic models. Applied stochastic control in econometrics and management science, pp. 115-158, Contrib. Econom. Anal., 130, North-Holland, Amsterdam, 1980. (From the introduction) 82k:90040 90A16 (62P20, 65C99)

Nepomnjaščii, G. M. On the spectral decomposition of multivalued absolute retracts.

(Russian) Uspehi Mat. Nauk 36 (1981), no. 3(219), 221-222. (V. A. Kalinin) 82j:54022 54C55 (54C60)

Neprincev, V. I. Self-excited oscillators with distributed parameters, their mathematical models and methods of analysis. Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. II (Prague, 1978), pp. 993-997, Academia, Prague, 1979. (See 94C05 (78A55)

renberg, M. A. Invariance proofs for canonical transformations. Internat. J. Math. Ed. Sci. Tech. 10 (1979), no. 2, 215-219. (Author's summary) 82c:70022 70H15 Mutual synchronization in a system of differential equations. J. Math. Anal. Appl. 78 (1980), no. 1, 195-203. (From the introduction) 82i:81169 81J05

Neretin, Ju. A. Differential operators on Lie groups. (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 195-196. (V. S. Varadarajan) 82;:17016 17B35 (22E99)
Neri, Filippo (with Cosenza, Guido) On the instability in nonabelian gauge theories with

nt magnetic flux. Nuclear Phys. B 170 (1980), no. 3, FS 1, 433-444. (James D. Fabrey) 82j:81040 81E10 (58E20)

Neri, Umberto (with Fabes, Eugene B.) Dirichlet problem in Lipschitz domains with BMO data. Proc. Amer. Math. Soc. 78 (1980), no. 1, 33-39. (Authors' summary) 82g:31005 31B05 (31B25)

Nerlich, Graham What can geometry explain? British J. Philos. Sci. 30 (1979), no. 1, 69-83.

(From the introduction) 82:00028 00A69 (83805)

Nerlove, Marc (with Grether, David M.; Carvalho, José L.) *Analysis of economic time series. A synthesis. Economic Theory, Econometrics, and Mathematical Economics. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1979. xvi+468 (graph inserts). ISBN 0-12-515750-9 (TITLE) 82g:90031

Nerman, Olie On the convergence of supercritical general (C-M-J) branching processes. Wahrsch. Verw. Gebiete 57 (1981), no. 3, 365–395. (W. A. O'N. Waugh) 82m:60104 60180

Nerode, Anil (with Metakides, G.) Effective content of field theory. Ann. Math. Logic 17 (1979), no. 3, 289-320. (John W. Berry) 82b:03082 03D45 (12L05)

(with Smith, Rick L.) The undecidability of the lattice of recursively enumerable subspaces. Proceedings of the Third Brazilian Conference on Mathematical Logic (Inst. Math., Fed. Univ. Pernambuco, Recife, 1979), pp. 245-252, Soc. Brasil. Lógica, São Paulo, 1980. (Viggo Stoltenberg-Hansen) 82i:03060 03D45 (03D35, 06D99)

(with Shore, Richard A.) Second order logic and first order theories of reducibility orderings. The Kleene Symposium (Proc. Sympos., Univ. Wisconsin, Madison, Wis., 1978), pp. 181-200, Stud. Logic Foundations Math., 101, North-Holland, Amsterdam, 1980. (Barry Cooper) 82g:03078 03D30 (03B15, 03D35, 03F35)

(with Ash, C. J.) Functorial properties of algebraic closure and Skolemization. J. Austral. Math. Soc. Ser. A 31 (1981), no. 2, 136-141. (Jiří Adámek) 82m:12014 12F05 (03C45, 03C60)

See also Crossley, John N., 82m:03060

Néron, André ★Notions élémentaires de géométrie algébrique. (French) [Elementary notions of algebraic geometry] Cours 1964-65. [Courses 1964-65] Reprint. Publications Mathématiques d'Orsay. [Mathematical Publications of Orsay] Université de Paris-Sud, Département de Mathématique, Orsay, 1979. iii+107 pp. (Editors) 82a:14001 Neronov, V. S. (with Luk'janov, A. T.) ★Принцип максимума для одномерных

параболическо-гиперболических систем. (Russian) [A maximum principle for one-dimensional parabolic-hyperbolic systems] Kazah. Gas. Univ., Alma-Ata, 1979. 47 pp. (L. von Wolfersdorf) 82b:49029 49B22 (35M05)

Neroslavskii, O. M. (with Vlassov, A. T.) Sur les déformations de l'algèbre des fonctions d'une varièté symplectique. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 71–73. (Authors' summary) 82c:58026 58F06 (17B65, 70H99, 81B99)
Nersesjan, A. A. A uniform approximation with simultaneous interpolation by analytic

functions. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 15 (1980), no. 4, 249-257, 333. (J. Siciak) 82g:30067 30E10 (30E05)

Nersesjan, V. A. Classification of admissible complexes of two-dimensional planes in R⁵. ssian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 3, 151-155. (W. J. Firey) 82a:53067 53C65

A class of permissible complexes of two-dimensional planes in R6. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 5, 280-285. (Z. Nádenik) 87e-51013 53455 (530-65) Nádeník) 82c:53013 53A25 (53C65)

Nersisjan, A. A. (with Mamedhanov, Dž. I.) Approximation in the metric of the space L_1 . (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1978, no. 2, 13-21. (B. Bojanov) 41A65 (41A20, 41A25) 82a:41033

Inequalities of S. N. Mergeljan and V. K. Dzjadik type in a metric of $L(\Gamma)$. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 7, 12–17. (Todor G. Genčev) 82m:30003 30A10 (41A17)

Nersisjan, A. B. (with Avetisjan, A. E.; Akopjan, S. A.; Arakeljan, N. U.; Zaharjan, V. S.; Sarkisjan, I. S.; Hačatrjan, I. O.) Mhitar Mkrtičevič Džrbašjan (on his sixtieth birthday). (Russian) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 13 (1978), no. 5-6, 360-375. (R. P. 01A70 Boas, Jr.) 82c:01044

senjuk, A. P. (with Fedorčenko, A. I.) Indeterminate values and control of a dynamic system with incomplete information. (Russian) Discrete control systems (Russian), pp. 23-31, 70, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (Authors' summary) 82i:93098 93F25

Nešetřil, Jaroslav (with Lovász, László; Pultr, Aleš) On a product dimension of graphs. J. nbin. Theory Ser. B 29 (1980), no. 1, 47-67. (William T. Trotter, Jr.) 82b:05085 05C35 (05C38)

(with Poliak, Syatopluk; Turzik, Daniel) Amalgamation of matroids and its lications. J. Combin. Theory Ser. B 31 (1981), no. 1, 9-22. (John H. Mason) 05C55 (05B35, 05C65) 82k:05080

Nešić, Slobodan Some fixed-point theorems in metric spaces. (Serbo-Croatian. English summary) Mat. Vesnik 4(17)(32) (1980), no. 2, 181-186. (Author's summary) 82d:54053

emejanova, N. I. (with Eremin, Ju. A.; Zaharov, E. V.) A method of fundamental solutions in diffraction problems of electromagnetic waves on bodies of revolution. dy i Programmirovanie No. 32 (1980), 28-44. (Piero Bassanini) (Russian) Vyčisl. Metod 78A45 (35J99)

Nessel, Rolf J. (with Becker, Michael) On the global approximation by Kantorovitch polynomials. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980),

pp. 207-212, Academic Press, New York, 1980. (Charles K. Chui) 82f:41010 41A10 (41A30)

(with Mertens, H. J.) An equivalence theorem concerning multipliers of strong convergence. J. Approx. Theory 30 (1980), no. 4, 284-308. (Walter Trebels) 82i:41041a 41A65 (42C10)

(with Mertens, H. J.) Quasikonvexe Multiplikatoren starker Konvergenz. (Russian summary) Anal. Math. 7 (1981), no. 1, 49-67. (Walter Trebels) 82i:41041b (42C10)

(with Becker, Michael) Some global direct estimates for Kantorovitch polynom Analysis 1 (1981), no. 2, 117-127. (M. W. Müller) 82k:41004 41A10 (41A25, 41A36) (with Dickmeis, W.) On uniform boundedness principles and Banach-Steinhaus theorems with rates. Numer. Funct. Anal. Optim. 3 (1981), no. 1, 19-52. (D. Leviatan) 41A17 (46B99, 65D99)

n, M. Î. (with Golodec, V. Ja.) Invariant states on asymptotically abelian factors of type III. (Russian) Operators of mathematical physics and infinite-dimensional analysis (Russian), pp. 36-57, 141, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1979. (G. A. Elliott) 82j:46077 46L30 (46L55)

Automorphisms with a purely discrete spectrum of an approximately finite factor of type II₁. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A No. 3 (1980), 23-26, 90. (N. N. Ganihodžaev) 82c:46079 46L40

Structure of factors of the type III_{λ} (0< λ <1). (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 3, 89–90. (N. N. Ganihodžaev) 824:46085 46L35

(with Golodec, V. Ja.) Asymptotic algebra and outer conjugacy classes of

automorphisms of factors. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 3, 510-532, 719. (N. N. Ganihodžaev) 82d:46084 46L35 On the structure of factors of type III_{λ} (0< λ <1). (Russian) Ukrain. Mat. Ž. 32

(1980), no. 3, 348-354. (N. N. Ganihodžaev) 82i:46095 46L35

Nester, James M. (with Isenberg, James A.) Canonical gravity. General relativity and gravitation, Vol. 1, pp. 23–97, Plenum, New York, 1980. (M. Carmeli) 82e:83001 83-02 (53C80, 58F05)

A new gravitational energy expression with a simple positivity proof. Phys. Lett. A 83 (1981), no. 6, 241-242. (Author's summary) 82f:83034 83C30 (with Israel, Werner) Positivity of the Bondi gravitational mass. Phys. Lett. A 85

(1981), no. 5, 259-260. (Authors' summary) 82k:83016 83C30

Nesterenko, B. B. See Methods and means for modeling physical processes, 82k:00027
Nesterenko, L. Ī. A two-sided method for solving the two-point boundary value problem for a system of ordinary differential equations. (Russian. English summary) Dokl. Akad.

Nauk Ukrain. SSR Ser. A 1980, no. 11, 19-22. (I. Kiguradze) 828:34023 34B15 sterenko, V. A. (with Beilin, V. A.; Vereškov, G. M.; Griškan, Ju. S.; Ivanov, N. M.; Poltavcev, A. N.) Quantum gravitational effects in an isotropic universe. Ž. Eksper. Teoret. Fiz. 78 (1980), no. 6, 2081-2098 (Russian); translated as Soviet Phys. JETP 51 (1980), no. 6, 1045-1052. (Authors' summary) 82h:83634 83C45 (83F05)

sterenko, V. V. (with Barbašov, B. M.) Relativistic string model in a space-time of a constant curvature. Comm. Math. Phys. 78 (1980/81), no. 4, 499-506. (Carl Brans) 82c:83045 83C99 (32F20, 53B25, 58F07, 81E99)

(with Barbašov, B. M.) Differential geometry and nonlinear field models. Fortschr Phys. 28 (1980), no. 8-9, 427-464. (M. I. Monastyrskii) 82g:81073 81E99 (53C05, 58F05)

On the geometric origin of the equation $\varphi_{,11} - \varphi_{,22} = e^{\varphi} - e^{-2\varphi}$. Lett. Math. Phys. 4 (1980), no. 6, 451–456. (F. A. E. Pirani) 82i:53008 53A15 (35Q99, 58A15) (with Barbašov, B. M.; Červjakov, A. M.) Generalization of the relativistic string

model in the scope of the geometric approach. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 365-376. (M. I. Monastyrskii) 82f:81058 81E99 (58F07)

Nesterihin, Ju. E. (with L'vov, V. S.) Transition to turbulence in simple hydrodynamic flows. (Russian) Vestnik Akad. Nauk SSSR 1980, no. 10, 25-35. (Editors) 82g:58053

(with Vasilenko, Ju. G.; Kuznecov, E. N.; L'vov, V. S.; Sobolev, V. S.; Spektor, M. D.; Timohin, S. A.; Utkin, E. N.; Šmoilov, N. F.) Generation of Taylor vortices in a Couette flow. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 2, 58-64, 173. (M. Yanowitch) 82d:76053 76E99

Nesterov, A. V. (with Kinščak, V. I.) Method of filtering a function having discontinuities of the first kind by the results of measurements with determination of the value of a jump that is an information parameter. (Russian) Computer technology and boundary value problems, No. 19 (Russian), pp. 154-165, 174, Rižsk. Politehn. Inst., Riga, 1978. (Authors' summary) 82i:65085b 65U05

Nesterova, T. N. Asymptotic behavior of a solution of the Burgers equation in the neighborhood of the merging of two lines of discontinuity. (Russian) Differential equations with a small parameter (Russian), pp. 66-86, 155, Akad. Nauk SSSR, Ural. Naučn. Centr, Sverdlovsk, 1980. (Author's summary) 82i:35031 35C20 (35K55)

Nestke, Andreas *Kohomologie elliptischer Komplexe und die Fixpunktformel von Atiyah-Bott. (German) [Cohomology of elliptic complexes and the fixed-point formula of Atiyah-Bott] With Russian and English summaries. Seminarberichte [Seminar Reports], 19. Humboldt Universität, Sektion Mathematik, Berlin, 1979. xv + 145 pp. (J. Vanžura) 58G10 (57R20)

Nestoridis, V. Inner functions: noninvariant connected components. Pacific J. Math. 87 (1980). no. 1, 199-209. (Kenneth Stephenson) 82b:30038 30D50 (1980), no. 1, 199-209. (Kenneth Stephenson) 82b:30038

Neta, Beny On three inequalities. Comput. Math. Appl. 6 (1980), no. 3, 301-304. (D. C. Russell) 82d:26012 26D15

Netanyahu, E. (with Pinchuk, Bernard) Symmetrization and extremal bounded univalent functions. J. Analyse Math. 36 (1979), 139-144 (1980). (D. R. Wilken) 82a:30032 30C70

Netea. Aurel Sur un problème de programmation linéaire aléatoire pseudo-booléenne. Proceedings of the Third Colloquium on Operations Research (Chy-Napoca, 1978) pp. 194–198, Univ. "Babes-Bolyai", Chy-Napoca, 1979. (See 82e:90005) 90 (90C05, 90C09)

lins Neto, Akcidės See Lins Neto, Akcidės
Netrebin, A. G. Separability of convex sets and the concept of convexity on the surface of a convex body. (Russian) Mat. Zametki 27 (1980), no. 4, 633–645, 671. (V. P. Soltan) 821:52007 52A20 (52A01)

Nettleton, R. E. (with Stephen, Michael J.) XY model near the percolation point. Phys.

Rev. B (3) 24 (1981), no. 3, 1500-1503. (Authors' summary) 82h:82009

(82A42, 82A68)

wha, Ivan (with Vesely, Jiří) The Dirichlet problem and the Keldyš theorem. (Czech) Pokroky Mat. Fyz. Astronom. 24 (1979), no. 2, 77-88. (Editors) 82f:01126 (31-03)

The classical Dirichlet problem and its generalizations. Potential theory, Copen 1979 (Proc. Colloq., Copenhagen, 1979), pp. 235–256, Lecture Notes in Math., 787, Springer, Berlin, 1980. (M. Brelot) \$2ex31018 31D05 (35105, 46A55)

The Dirichlet problem for harmonic functions. Amer. Math. Monthly 87 (1980), no. 8, 621–628. (Ü. Kuran) \$2ex31005 31B25

ia, Vlastimil) Smoothness of a typical convex function. Czech

Math. J. 31(106) (1981), no. 4, 569-572. (Chung Lie Wang) 82;26011 26B25 herger, H. (with Bardakci, Korkut; Caldi, D. G.) Dominant Euclidean configurations for all N. Nuclear Phys. B 177 (1981), no. 2, 333-364. (Authors' summary) 82h:81080 81E99 (49H05, 58G99)

erger, John W. Iteration for systems of nonlinear partial differential equations. Nonlinear equations in abstract spaces (Proc. Internat. Sympos., Univ. Texas, Arlington, Tex., 1977), pp. 253–263, Academic Press, New York, 1978. (Author's introduction) 65J15 (35G20, 47H17)

A type-independent iterative method for systems of nonlinear partial differential uations: application to the problem of transonic flow. Comput. Math. Appl. 6 (1980),
1, Special Issue, 67–78. (From the introduction) 824:76059 76H05 (65N05,

A solvability condition for systems of functional-differential equations. Integral and functional differential equations (Proc. Conf., West Virginia Univ., Morgantown, W. Va., 1979), pp. 213–220, Lecture Notes in Pure and Appl. Math., 67, Dekker, New York, 1981. (K. Smitalová) 82i:34101 34K30

Finite-dimensional potential theory applied to numerical analysis of linear system Linear Algebra Appl. 35 (1981), 193–202. (A. A. Fonarev) 82j:65080 65N20 (310

runn, Tibor On transfinite convergence in measure spaces. (Slovak and Russian summaries) Acta Fac. Rerum Natur. Univ. Comenian. Math. 35 (1979), 7-16 (1980). (Alessio Volčič) 82c:28013 28A20

Dominated sets of measures. (Slovak and Russian summaries) Acta Fac. Rerum ur. Univ. Comenian. Math. 36 (1980), 137-148. (B. Rodríguez-Salinas) 82g:28006 28A12

(with Kostyrko, Pavel; Smital, J.; Šalát, Tibor) On locally symmetric and symmetrically continuous functions. Real Anal. Exchange 6 (1980/81), no. 1, 67-76. (James Foran) 82c:26005 26A15 (26A21)

Docent Ladislav Mišik (on the occasion of his 60th birthday). (Slovak summary) Math. Slovaca 31 (1981), no. 2, 217-220. (Editors) 82h:01063 01A70

chrunnová, Anna On transfinite convergence and generalized continuity. (Russian summary) Math. Slovaca 30 (1980), no. 1, 51-56. (From the summary) 82m:54005

er, Joachim (with Felsch, Volkmar) An algorithm for the computation of conjugacy classes and centralizers in p-groups. Symbolic and algebraic computation (EUROSAM '79, Internat. Sympos., Marseille, 1979), pp. 452-465, Lecture Notes in Comput. Sci., 72, Springer, Berlin, 1979. (Colin M. Campbell) 824-20003 20-04 (with Plesken, Wilhelm; Wondratschek, H.) An emendatory discursion on defining

crystal systems. Proceedings of the Conference on Kristallographische Gruppen (Univ. elefeld, Bielefeld, 1979), Part II. Match No. 10 (1981), 77-96. (Daniel B. Litvin) 92i-20059 20H15 (51F15, 82A60)

vulbiser, N. See Proceedings: Conference on Crystallographic Groups, 82e:20060 eudecker, H. (with Magnus, Jan R.) The elimination matrix: some lemmas and plications. SIAM J. Algebraic Discrete Methods 1 (1980), no. 4, 422-449. (D. S. Tracy)

15A24 chwander, E. Riemann und das "Weierstraßsche" Prinzip der analytischen

Fortsetzung durch Potenzreihen. Jahresber. Deutsch. Math.-Verein. 82 (1980), no. 1, 1-11. (J. Dieudonnė) 82b:01025 01A55 (14-03, 30-03)

Studies in the history of complex function theory. II. Interactions among the French school, Riemann, and Weierstrass. Bull. Amer. Math. Soc. (N.S.) 5 (1981), no. 2, 87–105. (Phillip S. Jones) 82;01050 01A55 (30–03)

Neugebauer, Gernot Variationsprinzipien in der Thermodynamik irreversibler Prozesse. (Russian and English summaries) Wiss. Z. Friedrich-Schiller-Univ. Jena Math.-Natur. Reihe 27 (1978), no. 2-3, 335-347. (Author's summary) 82a:82024 82A35 (49H05)

(with Kramer, Dietrich) Soliton concept in general relativity. Gen. Relativity Gravitation 13 (1981), no. 3, 195-200. (Authors' summary) 82f:83024 83C20 (35Q20) (with Kramer, Dietrich) Prolongation structure and linear eigenvalue equations fo Einstein-Maxwell fields. J. Phys. A 14 (1981), no. 9, L333-L338. (Authors' summary) 82h:83038 83C50 (58A15)

Relativistic gravitational fields of rotating bodies. Phys. Lett. A 86 (1981), no. 2,

91-93. (Author's summary) **82j:83006** 83C05 (58D25, 83C40) sugebauer, Otto See Klein, Felix, **82c:01027**; Sachs, J.; et al., **82f:01138** and "Astronomical" chapters of the Ethiopic Book on Enoch (72-82), 82m:01002 euhold, E. J. See Pritchard, Paul, 82j:68008

Neukirch, J. Extensions of number fields with solvable Galois groups. Seminar on Number Theory, Paris 1979-80, pp. 223-236, Progress in Math., 12, Birkhäuser, Boston, Mass.,

1981. (See 82j:10004) 12A55

maier, Arnold Cliques and claws in edge-transitive strongly regular graphs. Math. Z. 174 (1980), no. 3, 197-202. (Robert B. Feinberg) 82c:05085 05C99 (05B05, 05C50) (with Brouwer, Andries) *Strongly regular graphs where mu equals two and lambda is large. Afdeling Zuivere Wiskunde [Department of Pure Mathematics], 151. matisch Centrum, Amsterdam, 1981. i+7 pp. (Authors' introduction) 82k:05032

Distance matrices, dimension, and conference graphs. Nederl. Akad. Wetensch. Indag. Math. 43 (1981), no. 4, 385-391. (J. J. Seidel) 82m:05071 05C50 (05C99. 05C50 (05C99,

Strong balanced tuple systems, 2-designs, and near vector spaces. Quart. J. Math Oxford Ser. (2) 32 (1981), no. 125, 97-107. (R. W. Quackenbush) 82h:05010 05B03

man, Edward Quadratic splines and histospline projections. J. App. (1980), no. 4, 297-304. (Jean Tzimbalario) 82h:41017 41A15 (65D07) J. Approx. Theory 29

Note on Stirling numbers of the first and second kinds. (Serbo-Croatian s Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 135-138 (1981). (F. T. Howard) 82m:05017 05A20 (10A40)

Cubic splines with given values of the second derivatives at the knots. Dem Math. 14 (1981), no. 1, 115-125. (Gerhard Merz) 82f:41016 41A15 (65D07)

Moments and Fourier transforms of B-splines. J. Comput. Appl. Math. 7 (1981), no. 1, 51-62. (Christian Coatmèlec) 82e:41017 41A15 (42A38, 65D07)

k Transformations of nth-order linear differential equations. (Russian) Sixth Scientific Conference of the College of Transport Engineering (College Transport Engrg., Žilina, 1979) (Slovak), pp. 11–19, College of Transport Engrg., Žilina, 1979. (A. A. Reinfelds) 82m:34038 34C20 (34A30)

Academician Otakar Borůvka (on the occa sion of his eightieth birthday). (Czech) Casopis Pest. Mat. 104 (1979), no. 2, 214-220 (1 plate). (Editors) 82f:01127 A generalization of Floquet theory. (Slovak and Russian summaries) Acta Math.

Univ. Comenian. 39 (1980), 53-59. (L. Reizigš) 82h:34050 34C20 (53A55) Second order linear differential systems. Am. Sci. Ecole Norm. Sup. (4) 13 (1980), no. 4, 437–449. (H. Hochstadt) 82d:34053 34C28

Functions of two variables and matrices involving factorizations. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 1, 7-11. (From the summary and text) 82e:26014 26B40 (15A23)

On transformations of differential equations and systems with deviating argument. With a loose Russian summary. Czechoslovak Math. J. 31(106) (1981), no. 1, 87–90. (M. K. Grammatikopoulos) 82e:34074 34K05 (34C20)

nan, Shlomo P. An Eulerian-Lagrangian numerical scheme for the

dispersion-convection equation using conjugate space-time grids. J. Comput. Phys. 41 (1981), no. 2, 270–294. (Author's summary) 32m:86001 86A05 (65M60, 76A60,

rd (with Kim, Ann Chi; Rhemtulla, Akbar H.) More Fibonacci varieties. Bull. Austral. Math. Soc. 22 (1980), no. 3, 385-395. (Sheila Oates-Williams) 82d:08009 08B99 (20F50)

Another single law for groups. Bull. Austral. Math. Soc. 23 (1981), no. 1, 81-102. (I. Gy. Maurer) 82g:20002 20A05 (08B05)

Not quite inner automorphisms. Bull. Austral. Math. Soc. 23 (1981), no. 3, 461-469. (S. Andreadakis) 82i:20039 20D45 (20E36)

Andreadans) See also Sani, J.; et al., 82g-01050 nn, Dean A. Uncountably many distinct topologically hyperbolic equilibria in R⁴. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 340-352, Lecture Notes in Math., 819, Springer, Berlin, 1980. (F. W.

Wilson, Jr.) 82g:58076 58F25 (34D30, 58F15) Neumann, John *A kvantummechanika matematikai alapjai. (Hungarian) [Mathematical foundations of quantum mechanics] With an introduction by Ivan Abonyi. Translated from the 1964 Russian edition by Akos Sebestyén. Akadémiai Kiadó (Publishing House of the Hungarian Academy of Sciences), Budapest, 1980. 284 pp. ISBN 963-05-2295-0 (Editors) 82i:81001 81-01 (81-03)
See also Heims, Steve J., 82i:01111 and Abraham-Frois, Gilbert; et al., 82g:90018

mann, Maria Über einige regelmäßige prismatische Flächen mit gemeinsamen Ebenen.

An. Univ. Timişoara Ser. Ştiinţ. Mat. 17 (1979), no. 2, 143–146. (J. Hoschek) 82e:51033 51M20 (51-01)

m, Michael (with Johnson, Charles R.) Square roots with positive definite Hermitian part. Linear and Multilinear Algebra 8 (1979/80), no. 4, 353-355. (James R. 15A24 Wall) 82b:15008

(with Albrecht, Ernst) Automatische Stetigkeitseigenschaften einiger Klassen linearer Operatoren. Math. Ann. 240 (1979), no. 3, 251-280. (Heinz Langer) 82f:47052 47B99 (47B38, 47B55)

A combined direct-iterative approach for solving large scale singular and rectangular sistent systems of linear equations. *Linear Algebra Appl.* 34 (1980), 85-101. (Iain S. Duff) 82f:65041 65F20 (65F10)

On the Schur complement and the LU-factorization of a matrix. Linear and Multilinear Algebra 9 (1980/81), no. 4, 241-254. (Thomas L. Markham) 82g:15007

(with Albrecht, Ernst) On the continuity of nonanalytic functional calculi. J. Operator Theory 5 (1981), no. 1, 109-117. (S. Suljagić) 82m:47013 47A60

The Kahan S.O.R. convergence bound for nonsingular and irreducible M-matrices. Linear Algebra Appl. 39 (1981), 205-222. (R. J. Plemmons) 82;65021 65F10 (15A06) (with de Pillis, John) A noncommutative spectral theorem for operator entried companion matrices. Linear and Multilinear Algebra 10 (1981), no. 1, 45-51. (Chandler Davis) 82i:15010 15A18 (47A10)

mann, Olaf Über einige Tagebuchnotizen von C. F. Gauss (zur Entstehung der Kreisteilungstheorie). Festakt und Tagung aus Anlaß des 200. Geburtstages von Carl Friedrich Gauss (Berlin, 1977), pp. 141–150, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1978, 3, Akademie-Verlag, Berlin, 1978. (William C. Waterhouse) 01A55 (01A70, 12-03)

Zur Genesis der algebraischen Zahlentheorie. II. Bemerkungen aus heutiger Sicht über Gauß' Beiträge zu Zahlentheorie, Algebra und Funktionentheorie. NTM Schr. Geschichte Natur. Tech. Medizin 17 (1980), no. 1, 32-48. (G. Frei-Imfeld) 82i:01032a 01A55 (12-03)

Zur Genesis der algebraischen Zahlentheorie. III. (English summary) Bemerkungen aus heutiger Sicht über Gauß' Beiträge zu Zahlentheorie, Algebra und Funktionentheorie. NTM Schr. Geschichte Natur. Tech. Medizin 17 (1980), no. 2, 38-58. (G. Frei-Imfeld) 01A55 (12-03)

Two proofs of the Kronecker-Weber theorem "according to Kronecker, and Weber". J. Reine Angew. Math. 323 (1981), 105-126. (Lawrence Washington) 82h:12008 12A35 (01A55, 12-03)

in, Peter An asymptotically optimal procedure for searching a zero or an extre of a function if a prior distribution of its location is known. Proceedings of the Second Prague Symposium on Asymptotic Statistics (Hradec Králové, 1978), pp. 291-302, North-Holland, Amsterdam, 1979. (See 81c:62005) 65H05 (65K10)

mann, Peter M. (with Stoy, Gabrielle A.; Thompson, E. C.) *Groups and geometry.

Vol. I. Chapters 1–11. Oxford University, Mathematical Institute, Oxford, 1980. iii+150 pp. (loose errata). (Editors) 82j:20002a 20-01 (20Bxx, 51-01)

(with Stoy, Gabriele A.; Thompson, E. C.) * Groups and geometry. Vol. II. Chapters 12–19. Oxford University, Mathematical Institute, Oxford, 1980. pp. 151–312. 20-01 (20Bxx, 51-01) (Editors) 82i:20002b

(with Behrendt, Gerhard) On the number of normal subgroups of an infinite group.

J. London Math. Soc. (2) 23 (1981), no. 3, 429-432. (I. D. Macdonald) 82j:20081

n, Walter D. An invariant of plumbed homology spheres. Topology Symposium,

Siegen 1979 (Proc. Sympos., Unio. Siegen, Siegen, 1979), pp. 125-144, Lecture Notes in Math., 788, Springer, Berlin, 1980. (Louis H. Kauffman) 82j-57033 57R90 (57Q15) umann-Lara, Victor Autonomous subsets of topological spaces. An. Inst. Mat. Unio. Nac. Autonoma México 19 (1979), no. 2, 177-184 (1980). (Anne K. Steiner) 82k:54026 54D05 (54A10)

(with Meyer, Paul R.; Wilson, Richard G.) Is every GO-topology a join of two orderable topologies? Proc. Amer. Math. Soc. 84 (1982), no. 2, 291-296. (Richard A. 54F05

nzert, H. (with Petry, K. H.) Ein Existenzsatz für die Vlasov-Gleichung mit selbstkonsistentem Magnetfeld. (English summary) Math. Methods Appl. Sci. 2 (1980), no. 4, 429-444. (Reinhard Illner) 82c:76114 76X05 (35Q20, 45K05)

istadter, S. F. The time dependent Poisson queue and moving boundary problems for the heat and wave equation. *Indian J. Pure Appl. Math.* 10 (1979), no. 5, 567-580. (From the introduction) 82k:35055 35K05 (60K25, 80A20)

stupa, Jiří (with Barták, Jaroslav) A remark on the stability of the solutions of a equation on the oscillation of a rod. (Russian. Czech summary) Časopis Pēst. Mat. 104 (1979), no. 4, 338-352, 412. (From the introduction) 82h:35086 35Q20 (73H10)

ts, Marcel F. (with Lucantoni, David M.) A Markovian queue with N servers subject to breakdowns and repairs. Management Sci. 25 (1979), no. 9, 849-861 (1980). (Authors' summary) 82g:90050 90B22 summary) 82g:90050

Computational problems related to the Galton-Watson process. Compa probability (Proc. Actuarial Res. Conf., Brown Univ. Providence, R.I., 1975), pp. 11-37, Academic Press, New York, 1980. (Douglas P. Kennedy) 82b:60108 60380

*Matrix-geometric solutions in stochastic models. An algorithmic approach. Johns Hopkins Series in the Mathematical Sciences, 2. Johns Hopkins University Press,

Baltimore, Md., 1981. ix + 332 pp. ISBN 0-8018-2560-1 (Andrew D. Barbour) 82j:60177 60K25 (60-04, 60J10)

(with Chakravarthy, S.) A single server queue with platooned arrivals and phase type services. European J. Oper. Res. 8 (1981), no. 4, 379-389. (D. J. Daley) 82k:60194 60K25 (60K15, 90B22)

(with Bhattacharjee, Manish C.) Shock models with phase type survival and shock resistance. Naval Res. Logist. Quart. 28 (1981), no. 2, 213-219. (Authors' summary) 90B25

euvo, Yrjö (with Renfors, Markku) The maximum sampling rate of digital filters under hardware speed constraints. IEEE Trans. Circuits and Systems 28 (1981), no. 3, 196-202. (Authors' summary) 82a:94024 94A12

Nevai, Paul G. Convergence and summability of orthogonal series. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 679-685, Academic Press, New York, 1980. (Tikam Singh) 82c:42022 42C05

Mean convergence of Lagrange interpolation. II. J. Approx. Theory 30 (1980), no. 4, -276. (R. A. Askey) 82i41003 41A05 263-276. (R. A. Askey) 82i:41003

Eigenvalue distribution of Toeplitz matrices. Proc. Amer. Math. Soc. 80 (1980), no. 2, 247-253. (J. V. Ryff) 82::15012 15A18

inen, O. (with Ernvall, J.; Katajainen, J.) Finding minimal spanning trees in a Euclidean coordinate space. BIT 21 (1981), no. 1, 46-54. (Authors' summary) 82h:68092 68E10 (05C05, 05C35)

Nevanlinna, Olavi Global iteration schemes for monotone operators. Nonlinear Anal. 3 (1979), no. 4, 505-514. (M. Joshi) 82b:47081 47H17 (47H05, 65J15)

Engineering mathematics. (Finnish. English summary) Arkhimedes 32 (1980), no. 3,

139-143. (Author's summary) 82g:00014 00A69 (with Odeh, F.) Multiplier techniques for linear multistep methods. Numer. Funct. Anal. Optim. 3 (1981), no. 4, 377-423. (Peter Alfeld) 82k:65040 65L05

(with Jeltsch, Rolf) Stability of explicit time discretizations for solving initial value problems. Numer. Math. 37 (1981), no. 1, 61-91. (Aurél Galántai) 82g:68042 65L20 alinna, Rolf See Cartan, Henri, 82a:01028; Lehto, Olli, 82b:01056 and Gautheret,

Roger, 82f:01100

Neveln, Robert C. (with Alps, Robert A.) A predicate logic based on indefinite description and two notions of identity. Notre Dame J. Formal Logic 22 (1981), no. 3, 251-263. (N. 03B60 (03B10) C. A. da Costa) 82f:03020

Nevel'son, M. B. A property of distributions of the Robbins-Monro process with continuous time. (Russian) Construction and analysis of information transmission systems (Russian), pp. 134-139, 144, "Nauka", Moscow, 1980. (V. Dupač) 82e:62134 62L20

Asymptotically efficient recursive estimation of a location parameter. (Russian. English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 3, 577-587. (Dana Vorličková) 82a:62049

Neves, K. W. See Electric power problems: the mathematical challenge, 82a:90004 Neves da Silva, R. Three-particle bound states in even $\lambda P(\varphi)_2$ models. Helv. Phys. Acta 54 (1981/82), no. 1, 131-190. (John L. Challifour) 82:81092 81E10 (81D10)

wesenko, N. V. Strict suns and lower semicontinuity of a metric projection in normed linear spaces. (Russian) Mat. Zametki 23 (1978), no. 4, 563-572. (Author's summary) 41A65 (46B99)

Continuity of the diameter of a metric projection. (Russian) Ural. Gos. Univ. Mat. Zap. 11 (1978/79), no. 4, 72-82, 131-132, (G. J. O. Jameson) 82e:46028 (41A65)

Neveu, A. Semiclassical approximations in field theory. *Phys. Scripta* 24 (1981), no. 5, 836-840. (Author's summary) 82m:81064 81E99 (58G15, 81F99)

Nevière, M. The homogeneous problem. Electromagnetic theory of gratings, pp. 123-157, Topics Current Phys., 22, Springer, Berlin, 1980. (See 82a:78001) 78A45 (with Maystre, D.; Petit, Roger) Experimental verifications and applications of the theory. Electromagnetic theory of gratings, pp. 159–225, Topics Current Phys., 22, Springer, Berlin, 1980. (See 82a:78001) 78A45

Neville, Charles W. (with Kronstadt, Eric P.) Interpolation by vector-valued functions of class HP and absolutely convergent sequences of interpolating functions. (Italian mary) Rend. Mat. (6) 13 (1980), no. 1, 153-163. (Eric Amar) 82b:32022

(32A35, 46J15)

(with Lloyd, Stuart P.) N-projective spaces. Illinois J. Math. 25 (1981), no. 1, 159-168. (O. T. Alas) 82c:54036 54G05

rison, Chr. H. Structural power and satisfaction in simple games. Applied game theory (Proc. Conf., Inst. Ado. Stud., Vienna, 1978), pp. 39-57, IHS—Studies, 1, Physica, Würzburg, 1979. (A. Rapoport) 82i:90132 90D35 (90A07, 90D40)

zorov, V. B. Large deviations for sample quantiles. (Russian. English su Problems of the theory of probability distributions, VI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 97 (1980), 144-150, 229, 237. (B. S. Nahapetjan) 60F10 (62E20)

sbery, A. C. R. Spline-based methods for O.D.E.'s. Proceedings of the Ninth Manitoba Conference on Numerical Mathematics and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 323–327, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (H. Werner) 82a:65047 651.05

A consistency test for interpolators. BIT 21 (1981), no. 3, 381-384. (Author's 65D05

Summary Same Section 1 Section 2 (1980), no. 2, 463–465. (Roch Roy) 82b:62120 62M10

Some recent developments in time series analysis. (French summary) Internat. Statist. Rev. 49 (1981), no. 1, 53-66. (Author's summary) 82f:62166

whorn, Monroe (with Avis, David) On pop-stacks in series. Utilitas Math. 19 (1981), 129-140. (I. Kaufmann) 82m:68032 68B15 (68E05)

wcomb, Robert W. The semistate description of nonlinear time-variable circuits. IEEE Trans. Circuits and Systems 28 (1981), no. 1, 62-71. (Author's summary) 82a:94100 94C05

(with Dolezal, Vaclav) A nonlinear impedance converter. IEEE Trans. Circuits and Systems 28 (1981), no. 2, 149-152. (D. H. Chyung) 824:94054

el-Neweihi, Emad See El-Neweihi, Emad Newell, Alan C. Bifurcation and nonlinear focusing. Pattern formation by dynamic systems and pattern recognition (Proc. Internat. Sympos. Synerget., Garmisch-Partenkirchen, 1979), pp. 244-265, Springer Ser. Synergetics, 5, Springer, Berlin, 1979. (See 82k:00028) 58E07 (58F14, 76E99, 81K05)

(with Knickerbocker, Collen) Internal solitary waves near a turning point. Phys. Lett. A 75 (1979/80), no. 5, 326-330. (A. Degasperis) 82g:76009 76V05)

The inverse scattering transform. Solitons, pp. 177-242, Topics Current Phys., 17, Springer, Berlin, 1980. (See 82m:35001) 35Q20 (35R30, 58F07)

(with Flaschka, Hermann) Monodromy- and spectrum-preserving deformations. I. Comm. Math. Phys. 76 (1980), no. 1, 65-116. (Hélène Airault) 82g:35103 35Q21 (14D05, 58F07, 81C05)

(with Knickerbocker, Collen) Shelves and the Korteweg-de Vries equation. J. Fluid Mech. 98 (1980), no. 4, 803-818. (K. K. Puri) 82e:76017 76B25 (35Q20)

(with Knickerbocker, Collen) Propagation of surface and internal solitary waves in niform media. Appl. Sci. Res. 37 (1981), no. 1-2, 111-126. (D. ter Haar) 82m:76010 76B25 (35O20)

Newell, Gordon F. *Approximate behavior of tandem queues. Lecture Notes in Economics and Mathematical Systems, 171. Springer-Verlag, Berlin-New York, 1979. xi+410 pp. ISBN 3-540-09552-7 (John P. Lehoczky) 82i:60165 60K25 (90B22) Asymptotic distribution of eigenvalues for the multidimensional Schrödinger equation. J. Math. Phys. 21 (1980), no. 8, 2193-2201. (A. Devinatz) 82c:35054 35P20 (81C05)

house, Sheldon E. The abundance of wild hyperbolic sets and nonsmooth stable sets for diffeomorphisms. Inst. Hautes Études Sci. Publ. Math. No. 50 (1979), 101-151. (Zbigniew Nitecki) 82e:58067 58F13

Dynamical properties of certain noncommutative skew-products. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 353-363, Lecture Notes in Math., 819, Springer, Berlin, 1980. (Peter Walters) 92h:58047 58F11 (28D20)

wman, B. B. The flippin' coins problem. Math. Mag. 54 (1981), no. 2, 51-59. (D. A. Klarner) 82i:05007 05A99 (05-01, 10-01)

an, C. M. (with Schulman, Lawrence S.) Complex free energies and metastable lifetimes. J. Statist. Phys. 23 (1980), no. 2, 131-148. (P. D. F. Ion) 82k:82010 (35P99, 82A25)

Self-similar random fields in mathematical physics. Measure theory and its applications (Proc. Conf., Northern Illinois Univ., De Kalb, III., 1980), pp. 93-119, Northern Illinois Univ., DeKalb, III., 1981. (See 82g:28002) 82A05 (81E10) 82A05 (81E10)

(with Wright, A. L.) An invariance principle for certain dependent sequ Probab. 9 (1981), no. 4, 671-675. (S. K. Srinivasan) 82m:60034 60F17 (60G15)

Critical point dominance in one dimension. Comm. Math. Phys. 79 (1981), no. 1, 133-140. (Author's summary) 82g:81060 81E10 (81E25)

(with Schulman, Lawrence S.) Number and density of percolating clusters. J. Phys. A 14 (1981), no. 7, 1735–1743. (Andrzej Zardecki) 82i-82047 82A43

n, Donald J. Approximation to x^n by lower degree rational functions. J. Approx. Theory 27 (1979), no. 3, 236-238. (T. J. Rivlin) 82c:41014 41A20 (41A25)

mple analytic proof of the prime number theorem. Amer. Math. Monthly 87 (1980), no. 9, 693-696. (G. L. Cohen) 82h:10056 10H15

Polynomials and rational functions. Approxima cory and applications (Proc. Workshop, Technion-Israel Inst. Tech., Haifa, 1980), pp. 265-282, Academic Press, New

Worksnop, Technion—Israel Inst. Tech., Haija, 1980, pp. 205–282, Academic Press, New York, 1981. (Z. Rubinstein) 82h:30006
 30C10 (30E10, 41A20)
 Differentiation of asymptotic formulas. Amer. Math. Monthly 88 (1981), no. 7, 526–527. (Editors) 82h:26006
 26A06

(with Anderson, James Milne) On the coefficients of lacunary power series. Que J. Math. Oxford Ser. (2) 32 (1981), no. 125, 1-9. (Shri Nivas Bhatt) 82e:40003 (42A55)

rman, Ezra T. The good cut equation for Maxwell fields. Advances in twistor theory, pp. 150–151, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81D25

The theory of K-space. Gravitation, quanta and the universe (Proc. Einstein Centenary Sympos., Ahmedabad, 1979), pp. 82–90, Wiley, New York, 1980. (See 824:8305) 83C30

Self-dual gauge fields. Phys. Rev. D (3) 22 (1980), no. 12, 3023-3033. (H. Rund) 81E10 (53C05, 53C80) 82c:81090

(with Ludvigsen, Malcolm; Tod, K. P.) Asymptotically flat %-spaces. J. Math. Phys. 22 (1981), no. 4, 818-823. (Garry Ludwig) 82;83016 83C30 (53C55) (with Ko, M.; Ludvigsen, Malcolm; Tod, K. P.) The theory of %-space. Phys. Rep.

71 (1981), no. 2, 51-139. (Garry Ludwig) 82j:83015 83C30 (53C55)

wman, G. G. (with Butterworth, D. S.) The application of modelling to southern African fisheries management. Mathematical modelling in biology and ecology (Proc. Sympos., ria, 1979), pp. 305-337, Lecture Notes in Biomath., 33, Springer, Berlin, 1980. (Colin

W. Clark) 82b:90037 90A30 (92A15)

rman, Kenneth (with Sweedler, Moss E.) A realization of the additive Witt group. Proc.

Amer. Math. Soc. 76 (1979), no. 1, 39–42. (Authors' introduction) 82g:16016 16A24 16A24

(14F30, 14L05)

wman, M. F. (with Gani, J.) Bernhard Neumann's 70th birthday. Math. Sci. 4 (1979), no. 2, 69-76 (1 plate). (Editors) 82g:01050 01A70

(with Grunewald, Fritz J.; Havas, George; Mennicke, J. L.) Groups of exponent cight. Burnside groups (Proc. Workshop, Univ. Bielefeld, Bielefeld, 1977), pp. 49–188, Lecture Notes in Math., 806, Springer, Berlin, 1980. (Peter M. Neumann) 824:20039a

(with Havas, George) Application of computers to questions like those of Burnside.

Burnside groups (Proc. Workshop, Univ. Bielefeld, Bielefeld, 1977), pp. 211-230, Lecture

Notes in Math., 806, Springer, Berlin, 1980. (Colin M. Campbell) 824:2002 20-04

Problems. Burnside groups (Proc. Workshop, Unio. Bielefeld, Bielefeld, 1977), pp. 249-254, Lecture Notes in Math., 806, Springer, Berlin, 1980. (From the introduction)

rman, Morris (with Shanks, Daniel; Williams, H. C.) Simple groups of square order and an interesting sequence of primes. Acta Arith. 38 (1980/81), no. 2, 129-140. (Leo J. Alex) 82h:20022 20D05 (10A40)

(with Mahoney, Michael K.) Determinants of abelian group matrices. Linear and Multilinear Algebra 9 (1980), no. 2, 121–132. (John D. Leadley) 824:15013 15A36 Determinants of circulants of prime power order. Linear and Multilinear Algebra 9

(1980), no. 3, 187-191. (Bradley W. Dickinson) 82c:15020 15A36 (12A35) wman, R. P. A. C. Instabilities of certain empty Robertson-Walker space-tim Relativity Gravitation 13 (1981), no. 3, 257-282. (C. J. S. Clarke) 82h:83074 (58B25, 83C99)

nan, William I. Some exact solutions to a nonlinear diffusion problem in population genetics and combustion. J. Theoret. Biol. 85 (1980), no. 2, 325-334. (Author's summary) 92A10 (35K55, 60J70, 80A25, 92A15)

narch, J. D. (with Golding, R. M.) The Racah algebra for groups with time reversal symmetry. J. Math. Phys. 22 (1981), no. 2, 233-244. (Anthony J. Bracken) 82g:81025

tead, P. E. Correction to: "Rationality of moduli spaces of stable bundles" [Math. Ann. 215 (1975), 251–268; MR 54 #7468]. Math. Ann. 249 (1980), no. 3, 281–282. (F. Gherardelli) 82±14011 14F05 (14D20, 32L05)

Invariants of pencils of binary cubics. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 2, 201-209. (Klaus Hulek) 82d:14007 14D20 (14L30)

Comparison theorems for conic bundles. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 1, 21-31. (Klaus Hulek) 82g:14020 14F05

wton, D. (with Keynes, H. B.) Ergodicity in (G, σ) -extensions. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 197 pp. 265-290, Lecture Notes in Math., 819, Springer, Berlin, 1980. (See 81j:58002) III., 1979),

★The correspondence of Isaac Newton. Vol. VI. 1713-1718. Edited by A. on, Isaac Rupert Hall and Laura Tilling. Cambridge University Press, New York, 1976. xxxviii + 499 pp. ISBN 0-521-08722-8 (Editors) 82;01079 01A75 (01A50)

See also Solinas, Giovanni, 82h:01022; Cohen, I. Bernard, 82b:01038; Hall, See also Sotinas, Giovanni, Saixviuzz; Conen, I. Bernaro, Sazxviuso; Flais, A. Rupert, 82b:01046; Hendry, John, 82c:01021; Fleckenstein, J. O., 82d:01010; Hall, A. Rupert, 82d:01043; Guerlac, Henry, 82e:01035; Cekić, Miodrag, 82e:01040; Vita, Vincenzo, 82e:01046; Hall, Marie Boas, 82e:01051; Hoskin, M. A., 82e:01052; Jacob, Margaret C., 82e:01053; Shapiro, Alan E., 82g:01020; von Borzeszkowski, Horst-Heino; et al., 82i:01021; Janich, P., 82i:01034; Pogrebysskaja, E. I., 82j:01036

Newton, Roger G. Scattering theory in the mixed representation. Mathematical methods ms of scattering theory (Proc. Conf., Catholic Univ., Washington, D.C., 1979), pp. 123-127, Lecture Notes in Phys., 130, Springer, Berlin, 1980. (See 82h:81117) 81F10

Probability interpretation of quantum mechanics. *Amer. J. Phys.* **48** (1980), *no.* 12, 1029–1034. (Author's summary) **82c-81003** 81B05

Erratum: "Inverse scattering. II. Three dimensions" [J. Math. Phys. **21** (1980), no. 7, 1698–1715; MR 81m:81066b]. *J. Math. Phys.* **22** (1981), *no.* 3, 631. (Editors) **82a:81044** 81F99 (34B25, 35A25, 35Q20)

Ney, B. Determination of the deformations of horizontal geodetic networks by approximation. Optimization of design and comp on of control networks (Proc

Internat. Sympos., Sopron, 1977), pp. 287-303, Akad. Kiadó, Budapest, 1979. (Author's summary) 82g:86015 86A30 Ney, Peter A refinement of the coupling method in renewal theory. Stochastic Process.

Appl. 11 (1981), no. 1, 11-26. (Paul Embrechts) 824:60169 60K05 (60J10)

man, Abraham (with Dubey, Pradeep; Weber, Robert James) Value theory without efficiency. Math. Oper. Res. 6 (1981), no. 1, 122–128. (J. Moulen) 82k:90139 90D12 (90D13)

Singular games have asymptotic values. Math. Oper. Res. 6 (1981), no. 2, 205-212. (Author's summary) 82m:90173 90D13

ian, Jerzy C(α) tests and their use. Sankhyā Ser. A 41 (1979), no. 1-2, 1-21. (Lionel 62F05

Origins of statistical mathematics. (Polish) Wiadom. Mat. (2) 22, no. 1, 91-106

(1979). (E. Seneta) 82:01038 01A60 (62-03) Egon S. Pearson (August 11, 1895-June 12, 1980). An appreciation. Ann. Statist. 9 (1981), no. 1, 1-2. (Editors) 82b:01057 01A70

See also Bartoszyński, Robert, 82h:01034

Neymark, Yu. I. See Neimark, Ju. I.

Neymotin, Evsey The influence of a moving medium on neutron distribution. Transport Theory Statist. Phys. 9 (1980), no. 4, 161-183 (1981). (Author's summary) 82g:82063 82A75

Nežinskii, V. M. Generalization of the Zeeman-Haefliger theorem on links. (Russian) Uspehi Mat. Nauk 35 (1980), no. 5(215), 235-236. (From the text) 82b:57028 (57Q45)

Nežmetdinov, T. K. (with Afoničkin, A. I.) On the study of some qualitative characteristics of information in the formation of an information measure. (Russian) Information reception and processing in structurally complex systems, No. 9 (Russian), pp. 49-54, Kazan. Gos. Univ., Kazan, 1979. (See 82c:94008) 94A17

See also Information reception and processing in structurally co

Ng, B. S. (with Reid, William Hill) On the numerical solution of the Orr-Sommerfeld problem: asymptotic initial conditions for shooting methods. J. Comput. Phys. 38 (1980), no. 3, 275-293. (Alan D. Sloan) 82h:76022 76E05 (65L10, 76A60)

C. T. (with Aczel, J.) On general information functions. Utilitas Math. 19 (1981), 157–170. (F. J. Papp) 82m:39011 39B40 (94A17)

Ng, Esmond A two-level one-way dissection scheme for finite element problems.

Proceedings of the Ninth Manitoba Conference on Numerical Mathematics and Comp (Univ. Manitoba, Winnipeg, Man., 1979), pp. 329-363, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (E. G. D'jakonov) 82a:65083 65N20 (65N30)

(with George, Alan). A comparison of some methods for solving sparse linear least ares problems. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. II (Winnipeg, Man., 1980). Congr. Numer. 31 (1981), 17–43. (Authors' summary) 82m:65034 65F20 (65U05)

(with Mak, T. K.) Analysis of familial data: linear-model approach. B 68 (1981), no. 2, 457-461. (Authors' summary) 82h:62180 62P10 (62H20)

Ng, K. Y. K. (with Sancho, N. G. F.) Dynamic programming algorithm for optimizing distributed parameter trajectories with constraints. Automatica-J. IFAC 16 (1980). no. 2, 197-203. (Authors' summary) 82i:49024 49C20
Solution of Navier-Stokes equations by goal programming. J. Comput. Phys. 39 (1981), no. 1, 103-111. (Author's summary) 82b:35129 35Q10 (65P05, 90C31)

Ng, Kung Fu (with Duhoux, Michel) Directedness in ordered normed spaces and operators Math. Ann. 256 (1981), no. 2, 281-287. (C. D. Aliprantis) 82g:46018 46A40 (47B55) Ng, M. H. (with Leigh, J. R.) Correction to: "An algorithm for decomposing a

nensional nonlinear vector field" [IEEE Trans. Automat. Control 25 (1980), no. 1, 131-132; MR 80m:93010]. IEEE Trans. Automat. Control 26 (1981), no. 2, 618. (Editors) 93A99 824:93009

Ng, Peng Nung On a sequence space of nonabsolute type. Tamkang J. Math. 8 (1977), no. 2, 145-152. (Author's summary) 82b:46010 46A45 (40J05)

See also Grobler, Jacobus J.; et al., 82b:46048

Ng, Peter A. (with Tsai, Lun) The design and implementation of a scheme for large ordered

indices. Internat. J. Comput. Inform. Sci. 9 (1980), no. 5, 407-434. (Authors' summary) 82h:68016 68B15 (68H05)

Further analysis of the entity-relationship approach to database design. IEEE Trans. Software Engrg. 7 (1981), no. 1, 85-99. (Author's summary) 82a:68036

Ng, S. K. (with Chan, W. L.) Minimum principle for systems with boundary conditions and cost having Stieltjes-type integrals. J. Optim. Theory Appl. 33 (1981), no. 4, 557-573. (J. Borwein) 82k:49032 49B27

Ng, Tung Sang (with Qureshi, Zahid H.) Optimal experiment design for autoregressive model with output power constraints. IEEE Trans. Automat. Control 26 (1981), no. 3, 739-742. (Authors' summary) 82:62110 62K05 (62M10) Ng, Wai Hung Use of error patterns in coded communication

nication systems. Electron. Lett. 17 (1981), no. 6, 241-242. (Author's summary) 82d:94032 94A24 (94B50)

truong công Nghê See Truong Công Nghê Nghiệm Đăng Ngọc See Đặng Ngọc Nghiệm Nghiệm Xuân Hải ★Construction analytique de la transformation de Fourier Plancherel des groupes de Lie. (French) [Analytic construction of the Fourier-Plancherel transform of Lie groups] Publications Mathématiques d'Orsay 79 [Mathematical Publications of Orsay 79], 6. Université de Paris-Sud, Département de Mathématique, Orsay, 1979. 91 pp. (not consecutively paged). (L. Corwin) 82e:22023 22E27

La transformation de Fourier analytique des groupes de Lie nilpotents. Seminar on Harmonic Analysis (1979-1980) (French), pp. 74-88, Publ. Math. Orsay 80, 7, Univ. Paris 22E25 (17B35) XI, Orsay, 1980. (Anthony Joseph) 82g:22009

Une variante de la conjecture de Gel'fand-Kirillov et la transformation de

Fourier-Plancherel. (English summary) [A variant of the Gel'fand-Kirillov conjecture and the Fourier-Plancherel transform] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 8, 381-384. (Author's summary) 82m:17004 17B35 (17B30, 22E27)

ha t'en Ngoan See Ha T'en Ngoan

ha t'en Ngoan See Ha T'en Ngoan
nguyễn văn Ngoc See Nguyễn Văn Ngọc
pham Ngọc Anh See Pham Ngọc Anh
pham Ngọc Phuc
dinh Ngọc Thanh
Ngọc Phan Ngọc Phuc
dinh Ngọc Thanh
Ngọc Bham Ngọc Phuc
dinh Ngọc Thanh
Ngọc Bham Ngọc Phuc
dinh Ngọc Thanh
Ngọc Dak Tan Über abelsche Gruppen, deren voller Endomorphismenring ein EE_k MI-ring
(k=1,2) ist. Ann. Univ. Sci. Budapest. Eörvös Sect. Math. 22/23 (1979/80), 75–85. (J.
Hausen) 82c:20098 20K30 (16A42)

nguen Ngok Tju See Nguen Ngok Tju

Ngô Việt Trung Spezialisierungen allgemeiner Hyperflächenschnitte und Anwendungen. Seminar D. Eisenbud/B. Singh/W. Vogel, Vol. 1, pp. 4-43, Teubner-Texte zur Math., 29, Teubner, Leipzig, 1980. (Jürgen Herzog) 82j:14005 14B25 (13H99)

Some criteria for Buchsbaum modules. Monatsh. Math. 90 (1980), no. 4, 331-337. (Manfred Herrmann) 82c:13030 13H10

A class of imperfect prime ideals having the equality of ordinary and symbolic vers. J. Math. Kyoto Univ. 21 (1981), no. 2, 239–250. (Jürgen Herzog) 82k:13013 13C15 (13H10)

A characterization of two-dimensional unmixed local rings. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 2, 237-239. (Markus Brodmann) 82d:13012 13C15 (13H10)

(with Nguyễn Tu' Cu'ờ ng) Über schwache Sequenzen. Period. Math. Hungar. 12 (1981), no. 1, 77-80. (Ulrich Orbanz) 82j:13030 13H99

Ngo Zui Kan Rotary motion of a rigid body with a cavity partially filled with a fluid. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 4, 990–1002, 1071. (Author's 70E99 (35Q20) summary) 82i:70007

1982

nguen suan Nguen See Nguen Suan Nguen Nguen, M. (with Horomskii, B. N.; Jamaleev, R. M.) Increasing the accuracy of difference solutions of an eigenvalue problem for an integro-differential equation. (Russian) Differencial'nye Uravnenija 16 (1980), no. 7, 1293–1302, 1351. (R. S. Anderssen)

82c:65089 65R20 Nguen Dong An' (with K'eu The Dyk) Random oscillations in third-order system n) Ukrain. Mat. Z. 32 (1980), no. 5, 674-678. (Nina B. Maslova) 82e:60097 60H10 (34F05)

Some methods for integrating Fokker-Planck-Kolmogorov equations in the theory of random oscillations. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 1, 87-91. (M. I.

Kamenskii) 82f:34077 34H05 (60H99)

Nguen Hoa Son Controllability of nonlinear systems with damped perturbations. (Russian) Vestnik Har'kov. Gos. Univ. No. 174 vyp. 43 (1978), 21-34, 104. (N. N. Petrov) 824:49035 49E15

(with Korobov, V. I.) Controllability of linear systems in a Banach space in the presence of constraints on the control. I. (Russian) Differencial'nye Uravnenija 16 (1980),

no. 5, 806-817, 955. (Jerzy Klamka) 82h:93007a 93B05 (34H05)
(with Korobov, V. I.) Controllability of linear systems in a Banach space in the presence of constraints on the control. II. (Russian) Differencial nye Uravnenija 16 (1980), no. 6, 1010-1022, 1146-1147. (Jerzy Klamka) 82b:93007b 93B05 (34H05)

Nguen Ngok Tju The solvability of a system of linear inequalities in integers under any vector of the right-hand part. (Russian) Ukrain. Mat. Z. 32 (1980), no. 4, 557–561. (László Lovász) 82c:90055 90C05 (90C10)

Nguen Suan Nguen (with Kafarov, V. V.; Mešalkin, V. P.; Nguen Van Bao) An algorithm for the synthesis of heat exchange systems using the Lagrange function and implicit decomposition strategy. (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 1, 150-154. (Editors) 82e:90113 90C50

uen Tang Exact statistical relations for susceptibilities and conductivities. (Russian. English summary) Teoret. Mat. Fiz. 47 (1981), no. 3, 352-361. (Author's summary)

82i:82035 82A35

Nguen T'en Tai On the estimates of zero orders of polynomials of analytic functions and their application to estimates of the measure of mutual transcendence of E-function values. (Russian) Dokl. Akad. Nauk SSSR 259 (1981), no. 6, 1302-1306. (John H. Loxton) 82k:10043 10F37 (30C10, 33A35)

Nguen The Hoan See Nguyen The Hoan
Nguen Thyong Uen See Nguyen Thuong Uen

Nguen Tu Than' (with Baranova, V. A.) Uniform approximation of functions by generalized polynomials in multiply connected domains. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 2, 13-17, 124. (Anthony G. O'Farrell) 82g:30064 30E10 (30C99)

Nguen Van Bao (with Kafarov, V. V.; Mešalkin, V. P.; Nguen Suan Nguen) An algorithm for the synthesis of heat exchange systems using the Lagrange function and implicit decomposition strategy. (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 1, 150-154. (Editors) 82e:90113 90C50

Nguen Zui Tien See Nguyễn Duy Tien

N'Guérékata, Gaston Mandata Sur les solutions presqu'automorphes d'équations différentielles abstraites. Ann. Sci. Math. Québec 5 (1981), no. 1, 69-79. (S. Zaidman) 34G20

Nguyen, C. (with Bhargava, V. K.) Weight distribution of some cyclic codes of MacWilliams. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. 1, pp. 117–122, Reidel, Dordrecht, 1980. (Authors'

summary) 82i:94025 Nguyen, D. G. (with Murthy, D. N. P.) A note on the repair limit replacement policy. J. Oper. Res. Soc. 31 (1980), no. 12, 1103-1104. (From the text) 82h:90058 90B25 (with Murthy, D. N. P.) Optimal repair limit replacement policies with imperfect repair. J. Oper. Res. Soc. 32 (1981), no. 5, 409-416. (Authors' summary) 82d:90062

Nguyen, Hung T. (with Banon, G.) Recursive estimation in diffusion model. SIAM J. Control Optim. 19 (1981), no. 5, 676-685. (Authors' summary) 82k:62071 (60J60)

Nguyen, L. (with Naimpally, A.; Jordanides, T. J.; Santina, M.) Feedforward control of biochemical reactors. Fourteenth Asilomar Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 149-152, IEEE, New York, 1981. (See 82d:93001) 92A09

Nguyen, Phuong See Barnett, William A., (See 82c:90003a)

Nguyen, Q. S. See Nguyen Quoc Son Nguyen, Sang (with Hammer, Peter L.) A partial order in the solution space of bivalent programs. Combinatorial optimization (Lectures, Summer School, Urbino, 1977), pp. 93-106, Wiley, Chichester, 1979. (See 82a:90099) 90C09

Nguyen, V. Hien (with Strodiot, J.-J.; Mifflin, Robert) On conditions to have bounded multipliers in locally Lipschitz programming. Math. Programming 18 (1980), no. 1, 100-106. (Authors' summary) 82i:90097 90C30

Nguyen, V. V. (with Wood, E. F.) Review and unification of linear identifiability concepts SIAM Rev. 24 (1982), no. 1, 34–51. (Authors' summary) 82m:93027 93B30 (93E12)
Nguyen, Xuan-Xanh Ergodic theorems for subadditive spatial processes. Z. Wahrsch. Verw.

Gebiete 48 (1979), no. 2, 159-176. (R. T. Smythe) 82c:60056 60F15 (60G99, 60K35) Gebiete 48 (1979), no. 2, 139-176. (R. 1. smytne) &accourse our 13 (60039), 6008.33)

Some ergodic theorems for spatial processes. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 495-503, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (H. Kesten) 82g-60046 60F15 (28D15)

(with Lang, Reinhard) Smoluchowski's theory of coagulation in colloids holds rigorously in the Boltzmann-Grad-limit. Z. Wahrsch. Verw. Gebiete 54 (1980), no. 3,

227-280. (F. L. Spitzer) 82i:60180 60K35 (60J65, 82A05)

Nguyễn Anh Minh The almost normal structure. A fixed-point theorem. (Russian) Acta Math. Vietnam. 4 (1979), no. 1, 92-99 (1980). (V. Lakshmikantham) 82d:47060 47H10 (47H09)

Nguyen-Dang, T. Tung (with Bader, Richard F. W.; Tal, Yoram) Quantum topology of molecular charge distributions. II. Molecular structure and its change. J. Chem. Phys. 70 (1979), no. 9, 4316–4329. (From the summary) 82h:81149b 81G55 (58C28, 92A40) (with Biegler-König, Friedrich W.; Tal, Yoram; Bader, Richard F. W.; Duke, A. J.) Calculation of the average properties of atoms in molecules. J. Phys. B 14 (1981), no. 16, 2739-2751. (Authors' summary) 82i:81166 81G55 81G55

Nguyen Dang Hung (with de Saxcé, Gery; Gladwell, G. M. L.) Finite element analysis of contact problems based on the unilateral constraints formulation. Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 341-373, North-Holland, Amsterdam, 1980. (See 82g:93003) 49D99

Nguyen Dinh Dan Remark on a question of Kirk about Caristi's fixed point theorem. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 12 (1981), no. 2, 177-179. (Harold Bell) 821:54078 54H25

Nguyễn Duy Thuân ©-strict tau categories. Acta Math. Vietnam. 5 (1980), no. 1, 182-194 (1981). (Walter Tholen) 82]:18013 18D10 (18D99) 18D10 (18D99)

Nguyễn Duy Tiến (with Đặng Hùng Thắng) On symmetric stable measures on spaces l, (1≤p<+∞). (Russian) Acta Math. Vietnam. 4 (1979), no. 1, 39-52 (1980). (B Schreiber) 82f:60024 60B12

(with Dang Hung Thang) On symmetric stable measures with discrete spectral measure on Banach spaces. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Blażejewko, 1979), pp. 286-301, Lecture Notes in Math., 828, Springer, Berlin, 1980. (J.-T. Laprestè) 821:60018 60B11 (28C20)

(with Đăng Hùng Thắng) On the extension of stable cylindrical measures. Acta n. 5 (1980), no. 1, 169-177 (1981). (Gilles Pisier) 82k:60010

(28C20, 47B10)

(with Weron, Aleksander) Banach spaces related to a-stable measures. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Błażejewko, 1979), pp. 309-317, Lecture Notes in Math., 828, Springer, Berlin, 1980. (L. Egghe) 82h:60011 60B11 (28C05, 46B20)

(with Đảng Hùng Thắng) On the convergence of martingales and

geometric properties of Banach spaces. (Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 2, 385-391. (W. A. Woyczyński) 82m:60006 60B11 (46B20)

Nguyễn Hữu Anh (with Vưo'ng Manh So'n) On square integrable factor representations of locally compact groups. Acta Math. Vietnam. 4 (1979), no. 1, 63-70 (1980). (Jonathan M. Rosenberg) 82i:22008 22D10 (22D25)

Classification of connected unimodular Lie groups with discrete series. (French summary) Ann. Inst. Fourier (Grenoble) 30 (1980), no. 1, vii, 159-192. (Jonathan M. Rosenberg) 82a:22016 22E45 (22E27)

Nguyễn Hữ'u Đứ'c (with Hà Huy Vui; Nguyễn Tu' Cu'ô'ng; Nguyễn Sĩ Minh) Germs of infinite determinacy. (Russian) Acta Math. Vietnam. 3 (1978), no. 1, 43-50. (J. S. Joel) 82g:58017 58C27

Nguyen Huu Tien On the accelerated stochastic approximation. Studia Sci. Math. Hungar. 12 (1977), no. 3-4, 371-380 (1980). (S. Csibi) 82k:62159

Nguyen Minh Khue (with Solyom, J.) Exact solution of a quasi-one-dimensional model with long range interaction (coupled Tomonaga chains). Acta Phys. Acad. Sci. Hungar. 48 (1980), no. 2-3, 169-185. (Authors' summary) 82e:82020 82A65

Nguyễn Nhuy Almost convex sets in metric spaces and the problem of extending uniformly continuous mappings. (Vietnamese. English summary) Tap Chi Toán Học 9 (1981), no. 2, 23-30. (Author's summary) 82m:54012 54C99 (54E35)

Nguyen-Quang-Do Thong Sur les extensions quasi régulières de corps locaux. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 1-3. (Author's summary) 82b:12013 12B15 (12B25)

Nguyen Quoc Son (with Bui, H. D.; Ehrlacher, A.) Propagation de fissure en

thermoèlasticité dynamique. (English summary) J. Mécanique 19 (1980), no. 4, 697-723. (Authors' summary) 82d:73084 73U05 (73M05)

Stabilité et bifurcation en rupture et en plasticité. (English summary) C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci. Univers Sci. Terre 292 (1981), no. 11, 817-820. (Author's summary) 82i:73026 73H99 (58E07, 73M20) (Author's summary) 82i:73026 (with Rahimian, Mohammad) Mouvement permanent d'une fissure en milieu

élastoplastique. (English summary) J. Méc. Appl. 5 (1981), no. 1, 95-120. (Authors' summary) 82e:73076 73M05

Nguyên Quý Hỷ On the kernel representation of some positive linear operators. Acta Math. Vietnam. 5 (1980), no. 1, 68-76 (1981). (Peter Dodds) 82m:47023 47B38 (47R55)

Nguyễn Sĩ Minh (with Hà Huy Vui; Nguyễn Tu' Cư'o'ng; Nguyễn Hũ'u Đú'c) Germs of infinite determinacy. (Russian) Acta Math. Vietnam. 3 (1978), no. 1, 43-50. (J. S. Joel) 82g:58017 58C27

Nguyen The Hoam Asymptotic behavior of solutions of nonlinear systems of differential equations. (Russian) Differencial'nye Uravnenija 17 (1981), no. 4, 624-628, 764. (J. Jarnik) 82e:34047 34D05 (34A34)

Nguyên Thủ'a Ho'p Solution of a class of operational equations and its applications. Act Math. Vietnam. 4 (1979), no. 1, 80-91 (1980). (D. Przeworska-Rolewicz) 82e:47012

Conditions de prolongement harmonique et ses applications. Acta Math. Vietnam. 5 (1980), no. 1, 42-67 (1981). (J. Veselý) 82i:31009 31B20

ong Uen Interpolation with multiple nodes in a half plane in the class of analytic functions of finite order and normal type. (Russian) Teor. Funkcii Funkcional Anal. i Priložen. No. 31 (1979), 119-129, 168. (Author's summary) 82e:30045

Nguyen To Nhu Shape of a metric space in the category of metric spaces and uniformly continuous maps. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 11-12, 929-934 (1981). (S. Mardešić) 82i:54037 54C56 (54E15)

Fundamental deformation retracts and weak deformation retracts in the category of metric spaces and uniformly continuous maps. (Russian summary) Bull. Acad. P. Sci. Sér. Sci. Math. 27 (1979), no. 11-12, 935-940 (1981). (Ju. M. Smirnov) 82h:54022

On the extensions of uniformly continuous mappings. Collog. Math. 41 (1979), no. 2, 243-252. (A. Császár) 82h:54019 54C55 (46A05, 54E15, 54E35)

Extending metrics uniformly. Colloq. Math. 43 (1980), no. 1, 91-97 (1981). (Ivan L. Reilly) 82:554048 54E50

Nguyễn Tư Cường (with Hà Huy Vui; Nguyễn Sĩ Minh; Nguyễn Hữu Đức) Germs of infinite determinacy. (Russian) Acta Math. Vietnam. 3 (1978), no. 1, 43-50. (J. S. Joel) 58C27

ith Ngô Việt Trung) Über schwache Sequ no. 1, 77-80. (Ulrich Orbanz) 82j:13030 13H99

yen Van Dao Nonlinear oscillations of third order systems. I. Autonomous system ian and Polish summaries) J. Tech. Phys. 20 (1979), no. 4, 511-519. (Ch. G. Philos) 34C15 (34A45, 70K99)

Multifrequency excitation of parametric oscillations of dynamical systems. Acta th. Vietnam. 5 (1980), no. 1, 21-32 (1981). (G. V. Hmelevskaja-Plotnikova) 82k:34060

Nonlinear oscillations of third order systems. II. Nonautonomous systems. (Polish and Russian summaries) J. Tech. Phys. 21 (1980), no. 1, 125-134. (Ch. G. Philos) 34C15 (34A45, 70K99)

Nonlinear oscillations of the third order systems. III. Parametric oscillation. (Polish and Russian summaries) J. Tech. Phys. 21 (1980), no. 2, 253-265. (Ch. G. Philos) 34C15 (34A45, 70K99)

ven Van Ho Application of the normal distribution to quality control. (Czech sum With a loose Russian summary. Apl. Mat. 26 (1981), no. 1, 45-56. (W. Uhlmann) 82c:62141 62N10

riguyen Van Huu Parametric test for change in a parameter occurring in the density of one-parameter exponential family. (Czech and Russian summaries) Apl. Mat. 25 (1980), no. 1, 1-10. (Shelemyahu Zacks) 82g:62039 62F03

Nguyen Van Lam On Möbius transformations in a Hilbert space. Rev. Rou. Pures Appl. 25 (1980), no. 5, 765-769. (R. G. Bartle) 82i:46024 460 46C10 (30C20, 47H99)

Nguyễn Văn Ngọc Solution of a periodic contact problem for an elastic strip by the paired equation method. (Russian) Acta Math. Vietnam. 4 (1979), no. 1, 9-23 (1980). (Author's nmary) 82i:73049 73T05 (65P05)

res. Acta Math. Vietnam. 4 (1979), no. 1, 71-75 Nguyễn Văn Thu Stable random me (1980). (Pedro Jiménez Guerra) 82b:28021 28C05

A characterization of some probability distributions. Probability theory on vector aces, II (Proc. Second Internat. Conf., Błażejewko, 1979), pp. 302-308, Lecture Notes in

Math., 828, Springer, Berlin, 1980. (J.-T. Laprestè) 821:60021 60B11 (28C20)

A new version of Doeblin's theorem. Ann. Inst. H. Poincaré Sect. B (N.S.) 17 (1981), no. 2, 213–217. (B. Schreiber) 821:60017 60B12 (28C15)

(with Hò Đăng Phúc) Universal random distributions. (Vietnamese. English nary) Tap Chi Toán Học 9 (1981), no. 2, 1-4. (Authors' summary) 82k:60009 60B05 (28C20)

Nguyen-Xuan-Loc Singularities of locally analytic processes (with applications in the study of finely holomorphic and finely harmonic functions). Potential theory, Copenhagen 1979 (Proc. Colloq., Copenhagen, 1979), pp. 267-288, Lecture Notes in Math., 787, Springer, Berlin, 1980. (Mou-Hsiung Chang) 82a:60115 60J45 (30G30, 60G44)

du'o'ng trọng Nhân See Du'o'ng Trọng Nhân nguyên to Nhu See Nguyên To Nhu

tran van Nhung See Tran Van Nhung nguyễn Nhuy See Nguyễn Nhuy Ni, A. L. (with Ryžov, O. S.) Tran (with Ryžov, O. S.) Transonic flows of a multicomponent relaxing mixture through a Laval nozzle. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 6, 1536–1553, 1631. (Authors' summary) 82d:76060 76H05 (65P05, 80A32)

Guang Jiong (with Su, Ru Keng) Vacuum spontaneously broken symmetry of Higgs field and Bose condensation. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 1, 9-12. Kexue Tongbao (English) 25 (1980), no. 1, 26-30. (From the text) 82k:81074 81E99 (81D20, 81J05)

Jin (with Sun, Hui Cheng; Chen, Guang Di) Spanning balanced bipartite subgraphs of regular graphs: on R. Häggkvist's conjecture. (Chinese. English summary) Nanjing Daxue Xuebao 1980, no. 4, 16-20. (Authors' summary) 82i:05061 05C75

Ni, Lionel M. (with Hwang, Kai) Performance evaluation and resource optimization of multiple SIMD computer organizations. Proceedings of the 1979 Internation nal Conference on Parallel Processing (Bellaire, Mich., 1979), pp. 86-94, IEEE, New York, 1979. (See

(with Hwang, Kai) Performance modeling of shared-resource array process IEEE Trans. Software Engrg. 7 (1981), no. 4, 386-394. (Authors' summary) 82f:68041

Ni, Lu Qun (with Dai, Zong Duo; Yang, Jun Hui; Chen, Wen De) The estimation of the correlations of a class of binary sequences. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 2, 207-213. (Authors' summary) 82j:94014 94A34 (10L10, 94B99)

Ni, Wei Ming Some minimax principles and their applications in nonlinear elliptic equations. J. Analyse Math. 37 (1980), 248-275. (Richard C. Swanson) 82b:58024 58E05 (35J60, 49A40)

Xing Tang Boundary value problems with three characteristic supports for linear totally hyperbolic equation of the third order. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 2, 54-59. Kexue Tongbao (English) 25 (1980), no. 5, 361-369. (J. Vaillant) 35L35 (35E99)

ng, S. (with Krivošein, L. E.; Mangeron, Dumitru Ion; Fernandez, Dicesar Lass) Théorèmes d'unicité, d'existence, de stabilité et d'évaluation des erreurs commises lors du choix des solutions approchées concernant certains systèmes integrodifférentiels non linéaires aux opérateurs paraboliques et aux autoreglages dans les limites d'intégration et dans les conditions initiales. (English and Spanish summaries) Rev. Real Acad. Cienc. ct. Fis. Natur. Madrid 73 (1979), no. 3, 437-446. (Claudia Simionescu) 82m:45025 45M10 (93C22)

Nica, Vasile (with Basarab, Şerban A.; Popescu, Dorin) Approximation properties and existential completeness for ring morphisms. Manuscripta Math. 33 (1980/81), no. 3-4, 227-282. (Carlo Toffalori) 82k:03047 03C60 (03H05)

Nichol, L. W. (with Sculley, M. J.; Winzor, D. J.) Interactions between micellar ligand systems and acceptors: forms of binding curves. J. Theoret. Biol. 90 (1981), no. 3, 365-376. (Authors' summary) 82f:92018 92A09 (80A32)

Nicholls, D. F. (with Hannan, E. J.) Corrigenda: "The estimation of the prediction error

variance" [J. Amer. Statist. Assoc. 72 (1977), no. 360, part 1, 834-840; MR 58 #24804]. J. Amer. Statist. Assoc. 74 (1979), no. 368, 941. (R. J. Bhansali) 82a:62144 62M20 (with Quinn, B. G.) The estimation of random coefficient autoregressive models. I.

J. Time Ser. Anal. 1 (1980), no. 1, 37-46. (William D. Ray) 82e:62148 62M10 (with Quinn, B. G.) The stability of random coefficient autoregressive models. nat. Econom. Rev. 22 (1981), no. 3, 741-744. (From the introduction) 82m:62205 62M10

ls, Peter J. Garnett points for Fuchsian groups. Bull. London Math. Soc. 12 (1980), no. 3, 216-218. (B. Maskit) 82h:30056 30F35 (32G15)

Fundamental regions and the type problem for a Riemann (1980), no. 2, 187-196. (L. Keen) 82a:30055 30F35 (22E40) n surface. Math. Z. 174

(with Sons, L. R.) Automorphic functions with gap power series. Illinois J. Math. 25 (1981), no. 3, 383–389. (A. M. Macbeath) 82j:10044 10D05

The orbital counting function for discrete groups of infinite volume. J. Lon 30F35 (05A15, fath. Soc. (2) 23 (1981), no. 3, 460-468. (A. F. Beardon) 82f:30050 20H10, 30F40)

Kleinian groups of divergence type. Proc. Amer. Math. Soc. 83 (1981), no. 2, 319-324. (Caroline Series) 82j:30071 30F40 (20H10)

Nichols, J. C. (with Smith, J. C.) A remark on the equivalence of certain dimension functions. Portugal. Math. 37 (1978), no. 1-2, 45-51 (1981). (M. G. Charalambous)

Nichols, Warren D. (with Green, James A.; Taft, Earl J.) Left Hopf algebras. J. Algebra 65

(1980), no. 2, 399-411. (David E. Radford) 82d:16007 16A24
Nicholson, David W. Bounds on the forced response of damped linear systems. Mech. Res. Comm. 7 (1980), no. 5, 305-308. (Rudolf Veselkov) 82b:70007 70J20 (34C15) IEEE Trans

Eigenvalue bounds in the Lyapunov and Riccati matrix equations. IEE tomat. Control 26 (1981), no. 6, 1290-1291. (Author's summary) 82m:93063 Molson, Dwight R. (with Johnson, Stevens F.; Lonngren, Karl E.) On the invariants of the nonlinear Schrödinger equation. *Phys. Lett. A* 74 (1979), *no.* 6, 393–394. (Authors'

summary) 82d:35094 35Q20 (81C05) (with Hansen, P. J.) Cubic turbulence: a model problem. Phys. Fluids 24 (1981),

no. 4, 615-628. (Authors' summary) 82e:76034 76F99 (34F05, 58F13, 76X05)
Nicholson, H. (with Fernando, K. V. M.) Karhunen-Loève expansion with reference to

singular-value decomposition and separation of variables. Proc. IEE-D 127 (1980), no. 5, 204-206. (Gur Dial) 82j:94002 94A05 (15A99, 62H25)

(with Fernando, K. V. M.) Degree of controllability due to individual inputs. Electron. Lett. 17 (1981), no. 9, 330-331. (Authors' summary) 82e:93007 93B05 (94A17)

alson, J. W. (with Simmonds, James G.) On Sanders' energy-release rate integral and conservation laws in finite elastostatics. Arch. Rational Mech. Anal. 76 (1981), no. 1, 1-8. (Authors' summary) 82k:73035 73G05 (73M05)

son, W. K. (with Watters, J. F.) Normal classes of rings and tensor products. Algebra 9 (1981), no. 3, 299-311. (Stuart A. Steinberg) 82h:16002 16A12 (16A20) (with Desale, G.) Endoprimitive rings. J. Algebra 70 (1981), no. 2, 548-560. (John

16A20 (16A21) A. Beachy) 82j:16016 16A20 (16A21)
(with Watters, J. F.) Normal classes of prime rings determined by modules. Proc Amer. Math. Soc. 83 (1981), no. 1, 27-30. (Louis Rowen) 82j:16033 16A48 (16A49)

Nickel, Bernie Hyperscaling and universality in 3 dimensions. (French summary) Statphys 14 (Proc. Fourteenth Internat. Conf. Thermodynamics and Statist. Mech., Univ. Alberta, nonton, Alta., 1980). Phys. A 106 (1981), no. 1-2, 48-58. (See 82d:82003) 82A05 Nickel, Karl L. The construction of a priori bounds for the solution of a two-point boundary value problem with finite elements. I. (German summary) Computing 23 (1979), no. 3,

247-265. (Author's summary) 82f:65088 65L10 Arithmetic of complex sets. (German summary) Computing 24 (1980), no. 2-3, 97-105. (Author's summary) 82;65026 65G10

A globally convergent ball Newton method. SIAM J. Numer. Anal. 18 (1981), no. 6, 988-1003. (Author's summary) 82k:65031 65H10
Nickell, Stephen Biases in dynamic models with fixed effects. Econometrica 49 (1981),

no. 6, 1417-1426. (L. G. Godfrey) 82k:62207 62P20

Nickles, Thomas What is a problem that we may solve it? Synthese 47 (1981), no. 1, 85-118. (Manfred Kochen) 82m:00019 00A25 (68G20, 92A25) See also Scientific discovery, logic, and rationality, 82g:03006

Nicklin, E. H. (with Kumar, K. D.; Paulson, A. S.) Comment on: "Estimating mixtures of normal distributions and switching regressions" [J. Amer. Statist. Assoc. 73 (1978), no. 364, 730-752; MR 80a:62040] by R. E. Quandt and J. B. Ramsey. With a rejoinder by ndt and Ramsey. J. Amer. Statist. Assoc. 74 (1979), no. 365, 52-56. (N. Giri) 82h:62048 62F10

Nickolas, Peter A Kurosh subgroup theorem for topological groups. Proc. London Math. Soc. (3) 42 (1981), no. 3, 461-477. (M. I. Kabenjuk) 82j:22002 22A05

Nico, William R. Categorical extension theory of monoids. Proceedings of a Sym Regular Semigroups (Northern Illinois Univ., De Kalb, Ill., 1979), pp. 118-127, Northern Illinois Univ., DeKalb, Ill., 1979. (See 82):20126) 20M50

ossian, G. G. (with Häggkvist, Roland) A remark on Hamiltonian cycles. J. Combin Theory Ser. B 30 (1981), no. 1, 118-120. (Carsten Thomassen) 82f:05068 05C45 (05C38)

e, Soare On helices in real and complex Euclidean spaces of odd dimension. Fac. Sci. Univ. Nat. Zaïre (Kinshasa) Sect. Math.-Phys. 5 (1979), no. 1-2, 75-79. (M. Barros) 82d:53064 53A04

Nicolae, V. (with Chiroiu, V.) Lagrange equations in the nonhomogeneous viscoelastic solid dynamics. Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 24 (1979), no. 6, 855-860. (Warren S. Edelstein) 82d:73027 73F99

(with Teodosiu, C.) On the generalized plane strain of an anisotropic elastic body. Roumaine Sci. Tech. Sér. Méc. Appl. 25 (1980), no. 6, 879-892. (Authors' summary) 82i:73010 73C30

Nicolaenko, B. (with Brauner, C. M.) Internal layers and free boundary problems. Boundary and interior layers—computational and asymptotic methods (Proc. Conf., Trinity College, Dublin, 1980), pp. 50–61, Boole, Dún Laoghaire, 1980. (Z. Schuss) 82a:35009 35B25 (35R35, 80A30, 92A09)

(with Brauner, C. M.) Singular perturbations and free boundary value problems Computing methods in applied sciences and engineering (Proc. Fourth Internat. Sympos., Versailles, 1979), pp. 699-724, North-Holland, Amsterdam, 1980. (Hans Kaper) 82c:35005 35B25 (35P30, 35R35, 49A29)

Nicolai, H. Supersymmetry and functional integration measures. Nuclear Phys. B 176 (1980), no. 2, 419-428. (Author's summary) 82c:81148 81G20 (58D25, 81E99)

(with Townsend, Paul; van Nieuwenhuizen, Peter) Comments on 11-dimen ergravity. Lett. Nuovo Cimento (2) 30 (1981), no. 10, 315-320. (W. Cox) 82m:83054

(with de Wit, B.) Extended supergravity with local SO(5) invariance. Nuclear Phys. B 188 (1981), no. 1, 98-108. (M. A. Namazie) 82m:83057 83E50 (81G20) (with Grosse, H.; Lang, C. B.) Equivalence of the Z_4 and the $Z_2 \times Z_2$ lattice gauge theories. Phys. Lett. B 98 (1981), no. 1-2, 69-73. (Authors' summary) 82b:81092

81E99

A transformation formula for integrals over superfields. Phys. Lett. B 101 (1981), no. 6, 396-398. (Author's summary) 82h:81138 81G20 (58D30)

Nicolai, W. On the temporal analysis of special GERT networks using a modified Markov renewal process. Z. Oper. Res. Ser. A-B 24 (1980), no. 7, A263-A272. (B. W. Stuck) 60K25 (90B15, 90B22)

olaides, R. A. (with Fix, George J.) An analysis of mixed finite element approximatio for periodic acoustic wave propagation. SIAM J. Numer. Anal. 17 (1980), no. 6, 779-786. (H. K. Cheng) 82f:76029 76Q05 (65N30)

(with Fix, George J.; Gunzburger, Max D.) On mixed finite element methods for first-order elliptic systems. Numer. Math. 37 (1981), no. 1, 29-48. (David F. Griffiths)

Nicolas, Anne-Marie Généralisation d'un critère de Pontryagin concernant les groupes sans torsion dénombrables à des modules sans torsion sur des anneaux de Dedekind. Conditions de rang, de type, de chaînes ascendantes. Séminaire d'Algèbre Paul Dubreil 31ème année (Paris, 1977-1978), pp. 385-396, Lecture Notes in Math., 740, Springer, Berlin, 1979. (Robert Gilmer) **82e:13016** 13E15 (20K99)

Nicolas, J. L. (with Erdős, Paul) Grandes valeurs d'une fonction liée au produit d'entiers consecutifs. Conference on Analytic and Elementary Number Theory (Orsay, 1980) (French), pp. 30-34, Publ. Math. Orsay 81, 1, Univ. Paris XI, Orsay, 1981. (See 10A20

Nicolas, Jean-Marie (with Gallaire, Hervé; Minker, Jack) Background for advances in data base theory. Advances in data base theory, Vol. 1 (Proc. Workshop, Toulouse, 1979), pp. 3-21, Plenum, New York, 1981. (See 82a:68040) 68B15

See also Advances in data base theory, 82a:68040 Nicolas, Patrice Un problème de transmission inverse appliqué à la restitution des activités électriques de l'encéphale. (English summary) Rev. CETHEDEC No. 59 (1979), 37-124. (T. Poggio) 82b:92017 92A09 (35J05, 78A99)

Nicolau, Bogdan The representation of certain ordered topological spaces. (Romanian. English summary) Stud. Cerc. Mat. 32 (1980), no. 4, 431-433. (R. Cristescu) 82i:46008

rical transmission, data processing and con control, 82a:94003

Nicolau, Marcel (with Girbau, Joan) Pseudodifferential operators on V-manifolds and foliations. I. Collect. Math. 30 (1979), no. 3, 247-265. (Tetsuro Kawasaki) 82k:58087a

(with Girbau, Joan) Pseudodifferential operators on V-manifolds and foliations. II. Collect. Math. 31 (1980), no. 1, 63-95. (Tetsuro Kawasaki) 82k:58087b

Nicolescu, Al. A class of Bertrand curves. (Romanian. French summary) Bul. Inst. Politehn. Iași Secț. I 26(30) (1980), no. 1-2, 27-29. (P. Drăgilă) 82e:53004 53A04

Nicolescu, Liviu Connexions linéaires compatibles à des structures de Weil. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 3, 285-298. (J. R. Vanstone) 82i:53038 53C25

On the semisymmetric metric connection. Tensor (N.S.) 35 (1981), no. 1, 40-44. (O. Kowalski) 82j:53031 53B15 (53C20)

Nicolescu, Miron *Opera matematică. (Romanian) [Mathematical works] Funcții poliarmonice. [Polyharmonic functions] With a preface by Şerban Tiţeica. Edited and with a biography and its French translation by Solomon Marcus. Editura Academiei Republicii Socialiste România, Bucharest, 1980. 355 pp. (1 plate). (I. Netuka) 82f:01185 01A75 (01A70, 31B30)

oletti, Bernardo (with Giannessi, Franco) The crew scheduling problem: a travelling salesman approach. Combinatorial optimization (Lectures, Summ pp. 389-408, Wiley, Chichester, 1979. (See 82a:90099) 90B3 er School, Urbino, 1977), 90B35 (90C10)

Nicoletti, Giorgio A cyclic finite geometry. (Italian) Atti Accad. Sci. Istit. Bologna Cl. Sci. Fis. Rend. (13) 6 (1978/79), no. 1, 219-226. (J. W. Freeman) 82b:51017 (05B25)

(with Barnabei, Marilena; Brini, Andrea) Polynomial sequences of integral type. J. Math. Anal. Appl. 78 (1980), no. 2, 598-617. (F. T. Howard) 82c:05016 05A99 (10A40)

Polynomials and incidence structures. (Italian. English summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 2, 227-234. (Nicholas Krier) 82:05011 05B05 (51E05)

Nicolich, M. J. (with Fields, K. L.) The fragile lattice packings of spheres in four-dimensional space. Acta Cryst. Sect. A 36 (1980), no. 4, 588-591. (C. G. Lekkerkerker) 82e:52015b 52A45 (06B99, 10E30)

Nicolis, C. (with Nicolis, G.) Stochastic aspects of climatic transitionsfluctuations. (Russian summary) Tellus 33 (1981), no. 3, 225-234. (Authors' summary) 86A10 (93E03)

Nicolis, G. Bifurcations and symmetry-breaking in far from equilibrium systems. Systems far from equilibrium (Conf., Sitges/Barcelona, 1980), pp. 91–124, Lecture Notes in Phys. 132, Springer, Berlin, 1980. (Koichiro Matsuno) 82k:82026 82A35 (35B32, 58F14, 82A35 (35B32, 58F14,

(with Malek-Mansour, M.; van den Broeck, C.; Turner, J. W.) Asymptotic properties of Markovian master equations. Ann. Physics 131 (1981), no. 2, 283-313. (Koichiro Matsuno) 82d:82042 82A35 (58E07, 80A30)

(with Prigogine, Ilya) Symmetry breaking and pattern selection in far-from-equilibrium systems. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 2, part 1, 659-663. (Authors' summary) 82a:82025 82A35 (35K55)

(with Nicolis, C.) Stochastic aspects of climatic transitions—additive fluctuations. (Russian summary) Tellus 33 (1981), no. 3, 225–234. (Authors' summary) 82g/86005

Nicoll, J. F. (with Chang, T. S.; Young, J. E.) A closed-form differential renormalization-group generator for critical dynamics. Phys. Lett. A 67 (1978), no. 4, 287–290. (Authors' summary) 82b:82026 82A25 (58E99)

Nicolò-Amati Gori, L. (with Morelli, A.) The convergence of certain quadrature formulas. (Italian. English summary) Riv. Mat. Univ. Parma (4) 6 (1980), 413-418 (1981). (D. D. Stancu) 82j:41031 41A55 (65D32)

Nicolosi, Francesco Regularity of weak solutions of boundary value problems for degenerate parabolic operators. (Italian. English summary) Matematiche (Catania) 33 (1978), no. 1, 83-98 (1980). (R. Guenther) 82h:35045 35K20

Weak solutions of boundary value problems for parabolic operators that may degenerate. (Italian) Ann. Mat. Pura Appl. (4) 125 (1980), 135-155. (M. Zerner)

82f:35091 35K20

Nicolson, Iain ★Gravity, black holes and the universe. A Halsted Press Book. John Wiley & Sons, Inc., New York, 1981. 264 pp. ISBN 0-470-27111-6 (Editors) 82j:01003 01-01 (85-03)

Nicu, Mihail (with Nicu, Silvia) A general mathematical model for the study of the evolution and the therapeutic concept of a lesion of inflammatory type. (Romanian. English summary) Bul. Inst. Politehn. Bucureşti Ser. Mec. 43 (1981), no. 1, 45-48. (Authors' summary) 82k:92015 92A07

Nicu, Silvia (with Nicu, Mihaii) A general mathematical model for the study of the evolution and the therapeutic concept of a lesion of inflammatory type. (Romanian. English summary) Bul. Inst. Politehn. Bucureşti Ser. Mec. 43 (1981), no. 1, 45–48. (Authors' summary) 82k:92015

Niculescu, Constantin P. New progress on $\mathcal{E}(E,F) = N_1(E,F)$. An. Univ. Craiova Mat. Fiz.-Chim. 6 (1978), 27-29. (Yehoram Gordon) 82e:46029

Absolutely continuous operators and their applications. (Romanian. English narray) An. Univ. Craioca Mat. Fiz.-Chim. 7 (1979), 5-20. (Author's summary) 47B05 (47B10, 47D30)

On the equality $\hat{E}(E,F) = N(E,F)$. (Romanian. English summary) Stud. Cerc. Mat. 31 (1979), no. 4, 427–432. (Author's summary) 82e:47057 47D15 (46B20)

(with Vraciu, George Gh.) On the integral representation of linear operators on C(S). The significance of Baire space. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 9, 1407-1410. (From the text) 821:47042 47B38

(with Popa, Nicolae) *Elemente de teoria spațiilor Banach. (Romanian) [Elements of the theory of Banach spaces] With an English summary. Editura Academiei Republicii Socialiste România, Bucharest, 1981. 239 pp. (G. J. O. Jameson) 82m:46010

Niculescu, Cornelia Complex operators and associated differential equations. (Romanian. English summary) Bul. Inst. Politehn. București Ser. Chim.-Metal. 42 (1980), no. 4, 3-5. (Author's summary) 82j:30073 30G20

A class of first-order nonlinear differential equations; geometric properties of the integral curves. (Romanian. English summary) Bul. Inst. Politehn. Bucureşti Ser. Electrotehn. 42 (1980), no. 4, 13-17. (Author's summary) 82h:34013 34A34

Niculescu, Ştefan P. On the residual waiting time. An. Univ. Craiova Mat. Fiz.-Chim. 6 (1978), 51-54. (W. L. Steiger) 82e:60157 60K25 (60F05)

Optional stopping for denumerable time martingales in universal semifields. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 2, 163-166. (J. H. Kučkarov) 82m:60061a 60G48

Doob's inequalities for denumerable time supermartingales in universal semifields. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 3, 299-302. (J. H. Kučkarov) 82g:60061b 60G48

(with Wiener, Ulrich) Sur un modèle markovien pour la fiabilité des instruments de mesure. [A Markov model for the reliability of measuring instruments] Proceedings of the Sixth Conference on Probability Theory (Braşov, 1979), pp. 363-366, Ed. Acad. R.S. România, Bucharest, 1981. (Authors' summary) 82k:60173 60K10

On the law of large numbers in universal semifields. Rev. Ros

Appl. 26 (1981), no. 3, 449-455. (J. Hüsler) 82j:60048 60F15 (46L50, 60A05)
Nie, Yi Yi Pansystem logic conservations of Δ fuzzy sets. (Chinese. English summary) J.
Huazhong Inst. Tech. 1980, no. 2, Special Issue on Fuzzy Math, iii, 42-43. (Editors) 68D50 (03E72, 94D05) 820:68034

eyer-Nieberg, Peter See Meyer-Nieberg, Peter

edack, Marianne (with Gorenflo, Rudolf) Conservative difference schemes for diffusion problems with boundary and interface conditions. (German summary) Computing 25 (1980), no. 4, 299–316. (Authors' summary) 821:65101 65N05 (80A20)
Niederdrenk, Klaus (with Esser, Henning) Nichtläquidistante Diskretisierungen von

Randwertaufgaben. (English summary) Numer. Math. 35 (1980), no. 4, 465-478. (J. B.

Butler, Jr.) 82h:65068 65L10
Niederhausen, Heinrich Sheffer polynomials in path enumeration. Proceedings of the West Coast Conference on Combinatorics, Graph Theory and Computing (Humboldt State Univ., Arcata, Calif., 1979), pp. 281–294, Congress. Numer., XXVI, Utilitas Math., Winnipeg, Man., 1980. (S. G. Mohanty) 824:05015 05A15 (33A70)

Sheffer polynomials and linear recurrences. Proceedings of the Eleventh

Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 689-698. (B. R. Handa) 82m:05012 05A15 (05A17, 65Q05)

(with Kreweras, G.) Solution of an enumerative problem connected with lattice European J. Combin. 2 (1981), no. 1, 55-60. (S. G. Williamson) 82d:05014 05A15

Niederle, J. (with Hlavatý, L.) Field equations invariant under indecomposable representations of the Lorentz group. J. Math. Phys. 22 (1981), no. 8, 1775-1780. (B. Gever) 82i:81034 81D25 (22E43)

Niederle, Josef (with Polák, Libor) The category of nonindexed algebras and weak omomorphisms. Colloq. Math. 41 (1979), no. 2, 167-179. (Marta C. Bunge) 82st 18006 18B99 (08A05)

A note on tolerance lattices of finite chains. (Czech summary) With a loose Russian mary. Časopis Pēst. Mat. 106 (1981), no. 1, 75-78, 101. (Ivan Chajda) 821:08003 08A30 (06D05, 92A27)

Niederreiter, Harald (with Shiue, Jau Shyong) Equidistribution of linear recurring sequences in finite fields. II. Acta Arith. 38 (1980/81), no. 2, 197-207. (L. Kuipers) 10F40

Verteilung von Resten rekursiver Folgen. Arch. Math. (Basel) 34 (1980), no. 6,

- 526-533. (G. J. Rieger) 82i:10015 10A40 (10F40)
 (with Robinson, Karl H.) Bol loops of order pq. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 2, 241-256. (D. A. Robinson) 82c:20121 20N05
 eh, H. T. (with Rauch, Richard T.) Riemann-Cartan type gravitational theories satisfying Birkhoff's theorem. Phys. Lett. A 81 (1981), no. 2-3, 113-115. (Authors' summary) 82a:83650 83E10 (53B50, 83D05)
- (with Rauch, Richard T.) Birkhoff's theorem for general Riemann-Cartan-type R+R² theories of gravity. Phys. Rev. D (3) 24 (1981), no. 8, 2029-2048. (R. Soldati) 83E10 (83D05) 82k:83045
- III, Arcadio Pedro Luis Checchi. (Spanish) Rev. Un. Mat. Argentina 29 (1979/80), no. 3, 239. (Editors) 82f-91128 01A70 ell, Arcadi
- elsen, H. A. See Fossum, Robert M., 82a:13003 elsen, J. On calculation with noncommutative fa nutative factors and its application to group theory. Math. Sci. 6 (1981), no. 2, 73-85. (R. C. Lyndon) 82f:20059 20F05 (01A75, 20E05, 20F10)
- Isen, Jens P. Cohomology of some nonselfadjoint operator algebras. Math. Scand. 47 (1980), no. 1, 150–156. (Kenneth R. Davidson) 82k:47062 47D25 (46M20)
- ben, Mogens (with Plotkin, Gordon D.; Winskel, Glynn) Petri nets, event structures and domains. I. Theoret. Comput. Sci. 13 (1981), no. 1, 85-108. (Ryszard Janicki) 68D90 (68B05)
- dorff-Nielsen, Ole See Barndorff-Nielsen, Ole
- Nielsen, Ole A. The failure of the topological Frobenius property for nilpotent Lie groups.

 Math. Scand. 45 (1979), no. 2, 305-310. (A. Kleppner) 82a:22009 22E27 (22D30)

 *Direct integral theory. Lecture Notes in Pure and Applied Mathematics, 61. Marcel Dekker, Inc., New York, 1980. ix+165 pp. ISBN 0-8247-6971-6 (M. Takesaki) 46L10 (22D10, 28B99)
- son, Gregory M. (with Mangeron, Dumitru Ion) Bilinear interpolation in triangles based upon a Mangeron theorem. Acta Math. Sinica 23 (1980), no. 3, 471-475. (James D. Fabrey) 82k:65005 65D05
 - (with Franke, Richard) Smooth interpolation of large sets of scattered data rnat. J. Numer. Methods Engrg. 15 (1980), no. 11, 1691-1704. (D. C. Handscomb)
 - 65D05 824:65011 Blending methods of min m norm for triangular domains. Rev. Rou Pures Appl. 25 (1980), no. 6, 899-910. (Wolfgang Wetterling) 82c:65005 65D05
- (41A05) (with Mangeron, Dumitru Ion) Bilinear interpolation in triangles based upon a
- Mangeron theorem. (Spanish summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 75 (1981), no. 1, 89–96. (Authors' summary) 82m:41002 41A05 (65D05) emann, Heinrich ★Pattern analysis. Springer Series in Information Sciences, 4. Springer-Verlag, Berlin-New York, 1981. xiii + 302 pp. ISBN 3-540-10792-4 (Sidney
- Berkowitz) 82m:68002 68-01 (68G10, 92A05, 94A15) Unsupervised learning. Pattern recognition, pp. 11-19, Arbeitsber. Inst. Math.

 Masch. u. Datenverarb., Band 14, 1, Friedrich-Alexander-Univ., Erlangen, 1981. (See 68G05
- menmaa, Markku A note on nonprimary Rédei groups. Arch. Math. (Basel) 36 (1981), no. 3, 214-215. (From the text) 82f:20055 20E34
- Antti Gribov vacuum copies and interpolation in the Coulomb and Landau gauges of SU(N) Yang-Mills theories. Nuclear Phys. B 189 (1981), no. 1, 115-134. (Author's summary) 82:81093 81E10 (58E20)
- Niemi, Hannu On the construction of Wold-Cramér decomposition for bivariate stationary occsses. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Blażejewko, 1979), pp. 215-222, Lecture Notes in Math., 828, Springer, Berlin, 1980. (P. A. Morettin) 82&60065 60G10
 - On the construction of the Wold decomposition for no processes. Probab. Math. Statist. 1 (1980), no. 1, 73-82. (H. Salehi) 82c:60064
 - (with Weron, Aleksander) Dilation theorems for positive definite operator kernels having majorants. J. Funct. Anal. 40 (1981), 1. 1, 54-65. (F. H. Szafraniec) 82m:47005 47A20 (47D10, 60G05)
- Niemi, Seppo The central limit theorem for Markov chains with the simultaneous total variation convergence of the chain. Math. Scand. 48 (1981), no. 1, 96-100. (Richard F. Serfozo) 82h:60046 60F05 (60J10)
- n, Juhani Translations of ternary algebras. Comment. Math. Prace Mat. 22 (1980),
- no. 1, 125-130. (David J. Allen) 82e:08002 08A35 (06B99)
 Nienhuis, B. Analytical calculation of two leading exponents of the dilute Potts model. J. Phys. A 15 (1982), no. 1, 199-213. (Author's summary) 82k:82053
- Nienhuys, J. W. Uniform continuity of derivatives in convex sets. Amer. Math. Monthly 87 (1980), no. 2, 118–120. (Clifford E. Weil) 82a:26011 26B05 (26E15)

 Niepel, L'udovit (with Tomasta, Pavel) Elevation of a graph. With a loose Russian
- nary. Czechoslovak Math. J. 31(106) (1981), no. 3, 475-483. (Bruce Sagan) 82m:05057 05C30
- cazzani Nieri, Maria Grazia See Cazzani Nieri, Maria Grazia
- Nierwetberg, J. (with Geisel, T.) Universal fine structure of the chaotic region in period-doubling systems. *Phys. Rev. Lett.* **47** (1981), *no.* 14, 975–978. (Authors' summary) **82h:58027** 58F13 (82A05)
- (with Geisel, T.) Onset of diffusion and universal scaling in chaotic systems. Phys. Rev. Lett. 48 (1982), no. 1, 7-10. (Authors' summary) 82k:58067 58F13 (82A05)
 Niesi, Gianfranco Some observations on Cousin complexes and Gorenstein modules.
- (Italian) Rend. Circ. Mat. Palermo (2) 29 (1980), no. 3, 450-456 (1981). (D. Kirby) 13D25 (13H10) 82k:13017
 - (with Cavaliere, Maria Pia) On Serre's conditions in the form ring of an ideal. J. Math. Kyoto Univ. 21 (1981), no. 3, 537-546. (Hamid Rahbar-Rochandel) 82m:13013
- Nieto, Michael Martin (with Gutschick, Vincent P.: Simmons, L. M., Jr.) Coherent states for the "isotonic oscillator". Phys. Lett. A 76 (1980), no. 1, 15-18. (Authors' summary) 826:81011 81C05
 - Coherent states for general potentials. IV. Three-dimensional systems. Phys. Rev. D (3) 22 (1980), no. 2, 391-402. (Author's summary) 82h:81074a 81D30 (with Gutschick, Vincent P.) Coherent states for general potentials. V. Time

- evolution. Phys. Rev. D (3) 22 (1980), no. 2, 403-418. (Authors' summary) 82h:81074b
- (with Simmons, L. M., Jr.; Gutschick, Vincent P.) Coherent states for general potentials. VI. Conclusions about the classical motion and the WKB approximation Phys. Rev. D (3) 23 (1981), no. 4, 927-933. (Authors' summary) 82h:81074c 81D3
- uwenhuis, J. W. About a local approximation theorem and an inverse function theorem J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 2, 185-192. (M. Z. Nashed) 82a:58007 58C15 (47H15, 90C25)
 - A general multiplier rule. J. Optim. Theory Appl. 31 (1980), no. 2, 167-176. (Author's introduction) 82m:90158 90C48
- van Nieuwenhuizen, Peter (with Ferrara, S.) Supergravity: an odyssey through space-time
- York, 1980. (Jiff Niederle) 821:83086 83E99
 Supergravity as a gauge theory derived from matter coupling. Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 276-281,
 - Lecture Notes in Phys., 116, Springer, Berlin, 1980. (From the text) 82b:83072 (81G20, 83C45)
 - Supergravity. Some strangeness in the proportion (Einstein Centennial Sympos., Inst. Ado. Study, Princeton, N.J., 1979), pp. 444-452, Addison-Wesley, Reading, Mass., 1980. (See 824-83002) 83E99 (53B50)
- (with West, P. C.) From conformal supergravity in ordinary space to its superspace traints. Nuclear Phys. B 169 (1980), no. 5-6, 501-513. (Authors' summary) 83E50 82h:83068
- (with Sezgin, E.) New ghost-free gravity Lagrangians with propagating torsion. Phys. Rev. D (3) 21 (1980), no. 12, 3269-3280. (Authors' summary) 82c:83061 83D0: (with Nicolai, H.; Townsend, Paul) Comments on 11-dimensional supergravity. Lett. Nuovo Cimento (2) 30 (1981), no. 10, 315-320. (W. Cox) 82m:83054 (58A99, 81G20)
- eva, R. (with Christensen, G. S.) Optimal control of distributed nuclear reactors using functional analysis. J. Optim. Theory Appl. 34 (1981), no. 3, 445-458. (J. P. Babary) 82m:49029 49B22 (82A75, 93C20)
- Nievergelt, Jurg (with Reingold, Edward M.; Deo, Narsingh) ★Комбинаторы алгоритмы. (Russian) [Combinatorial algorithms] Теория и практика. [Theory and practice] Translated from the English by E. P. Lipatov. Edited and with a preface by V. B. Alekseev. "Mir", Moscow, 1980. 478 pp. (Editors) 82a:68056
- Trees as data and file structures. CAAP '81 (Proc. Sixth Colloq., Genoa, 1981), pp. 35-45, Lecture Notes in Comput. Sci., 112, Springer, Berlin, 1981. (Author's summary) 82j:68014 68B15 (68-02, 68H05)
- Niezgódka, Marek (with Pawłow, Irena) Optimal control for parabolic systems with free boundaries. Existence of optimal controls, approximation results. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 412-420, Lecture Notes in Control and Information Sci., 22, Springer, Berlin, 1980. (L. Longdon) 82e:49032
- Nigam, A. K. (with Purl. P. D.: Singh, Murari: Gupta, R. A.) A note on balanced row-and-column designs. Sankhyā Ser. B 41 (1979), no. 1-2, 124-127. (Authors' summary) 82f:62144 62K10
- Nigam, Anil (with Feldman, Jerome A.) A model and proof technique for message-based systems. SIAM J. Comput. 9 (1980), no. 4, 768-784. (Authors' summary) 82a:68020
- Nigam, G. D. (with Ray, Barada Kinkar) Quick enumeration of independent tensor components of physical properties of crystals in trigonal and hexagonal point groups. Proc. Indian Nat. Sci. Acad. Part A 45 (1979), no. 5, 387-391. (Vojtěch Kopský) 82e:20013 20C35 (82A60)
- Nigam, S. D. (with Srinivasan, S. K.) Professor Bhoj Raj Seth (1907-1979). J. Math. Phys. Sci. 13 (1979), no. 6, i-ii. (Editors) 82f:01145 01A70 See also Jaswon, M. A.; et al., 82m:31010
- Nightingale, Peter Phenomenological renormalization group theory. I. General principles. Nederl. Akad. Wetensch. Proc. Ser. B 82 (1979), no. 3, 235-244. (P. Roman) 82a:81027a
 - Phenomenological renormalization group theory. II. Numerical method. Nederl. Akad. Wetensch. Proc. Ser. B 82 (1979), no. 3, 245-268. (P. Roman) 82a:81027b 81E15 (82A25)
 - Phenomenological renormalization group theory. III. Results. Nederl. Akad. Wetensch. Proc. Ser. B 82 (1979), no. 3, 269-291. (P. Roman) 82a:81027c 81F15
- (82A25) Nigijan, S. A. Reducibility to free schemes. Programmirovanie 1980, no. 4, 14-19, 95
- (Russian); translated as Programming and Comput. Software 6 (1980), no. 4, 175-180 (1981). (Author's summary) 821:68011 68B05 (03D35)

 Nigm, A. M. (with Evans, I. G.) Bayesian prediction for two-parameter Weibull lifetime models. Comm. Statist. A-Theory Methods 9 (1980), no. 6, 649-658. (S. Blumenthal) 824:62149 62N05 (62F15)
- Nigmatulin, B. I. (with Krošilin, A. E.; Krošilin, V. E.) Questions of the hydrodynamics of a mixture of a low-viscosity fluid with gas bubbles (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1981, no. 1, 79-82, 109. (Authors' summary) 82j:76082
- illin, R. G. See Probabilistic methods and cybernetics, 82a:68006
- Nigul, U. The method of successive integration of the linear inhomogeneous wave equations in the theory of transient wave propagation in nonlinear hereditary elastic media. (French and German summaries) Internat. J. Non-Linear Mech. 15 (1980), no. 6, 469-483. (Author's summary) 82a:73020 73F15 (45J05)
- Niijima, Köichi Numerical computation of solutions of two-point boundary value problems with a boundary layer. Funkcial. Ekvac. 23 (1980), no. 2, 207-219. (A. Haimovici) 82j:65055 65L10 (34B05)
 - On a three-point difference scheme for a singular perturbation problem without a first derivative term. I, II. Mem. Numer. Math. No. 7 (1980), 1-27. (Uri Ascher)
- Niimi, Hideyuki (with Minamiyama, Motomu; Hanai, Sotaro) Steady axisymi stagnation-point flow impinging obliquely on a wall. J. Phys. Soc. Japan 50 (1981), no. 1, 17–18. (Authors' summary) 82e:76023 76D05 (76Z99)

ara, Mikio (with Gamelin, T. W.) Cluster values of analytic functions along paths. Math. Scand. 43 (1978/79), no. 1, 81-91. (D. A. Storvick) 82c:30050

Asymptotic point sets of analytic mappings. Arch. Math. (Basel) 34 (1980), no. 2, 122-126. (Albert Baernstein, II) 82f:30028 30D40 (30C85, 30F99)

Cluster sets in the large of meromorphic functions on Riemann surfaces. Israel J. Math. 37 (1980), no. 4, 327-330. (M. Nakai) 82h:30032 30D40 (30F25)

Boundary behavior of meromorphic functions along Green's lines. J. Austral. Math. Soc. Ser. A 31 (1981), no. 4, 470-474. (C. L. Belna) 82k:30034 30D40

oto, Ikka Verisimilitude, theory-change, and scientific progress. The logic and epistemology of scientific change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn. 30 (1978), no. 2-4, 243-264 (1979). (See 82i:00024) 00A25 (03A05)

Degrees of truthlikeness: from singular sentences to generalisations. British J. Philos. Sci. 30 (1979), no. 4, 371-376. (David W. Miller) 82c:03009 03A05 (03B10, 03B48) Scientific progress. Synthese 45 (1980), no. 3, 427-462. (Editors) 82a:03009

Statistical explanation reconsidered. Synthese 48 (1981), no. 3, 437-472. (Author's summary) 82j:03026 03B48 (03A05)

See also Logic and epistemology of scientific change, 82i:00024

Niino, Kiyoshi (with Suita, Nobuyuki) Growth of a composite function of entire functions. Kodai Math. J. 3 (1980), no. 3, 374-379. (Chung-Chun Yang) 82b:30023 (30D20)

Niizeki, Shyôzô (with Yamaguti, Masaya) On the Cauchy problem for a semilinear hyperbolic system. J. Math. Kyoto Univ. 20 (1980), no. 4, 625-634. (Alan Jeffrey) 82c:35043 35L45 (92A17)

On a representation of solutions of the Cauchy problem for a semilinear hyperbolic system. II. Mem. Fac. Sci. Kôchi Univ. Ser. A Math. 2 (1981), 101-112. (L. A. Ivanov) 82h:35067 35L70 (35C10)

Nijenhuis, Albert A minimal-path algorithm for the "money changing problem". Amer. Math. Monthly 86 (1979), no. 10, 832-835. (M. Frumkin (Zbl 424:10016)) 82m:68070a 68C05 (10B05, 68E10, 90B10)

(with Wilf, Herbert S.) The enumeration of connected graphs and linked diagrams. J. Combin. Theory Ser. A 27 (1979), no. 3, 356-359. (Nicholas Wormald) 82b:05074 05C30

Correction to: "A minimal-path algorithm for the 'money changing problem".

Amer. Math. Monthly 87 (1980), no. 5, 377. (Editors) 82m:68070b 68C05 (1080) 68C05 (10B05, 68E10, 90B10)

Complete solutions of linear difference equations. Amer. Math. Monthly 87 (1980), no. 8, 658-660. (Shigeru Haruki) 82a:39001 39A10

Nijhoff, F. W. (with Capel, H. W.) Separable interactions and liquid 3He. Phys. A 106 (1981), no. 3, 369-397. (Authors' summary) 82h:81159 81J05

Nijholt, Anton ★Context-free grammars: covers, normal forms, and parsing. Lecture Notes in Computer Science, 93. Springer-Verlag, Berlin-New York, 1980. vii + 253 pp. ISBN 3-540-10245-0 (Michael Bauer) 82f:68081 68F05 (03D05, 68-02, 68F25)

A survey of normal form covers for context-free grammars. Acta Inform. 14 (1980), no. 3, 271-294. (J.-M. Autebert) 82e:68082 68F05

LL-regular grammars. Internat. J. Comput. Math. 8 (1980), no. 4, 303-318. (Author's summary) 82e:68083 68F05

Nijkamp, Peter *Multidimensional spatial data and decision analysis. In association with Piet Rietveld, Jaap Spronk, Wouter van Veenendaal and Henk Voogd. John Wiley & Sons, Ltd., Chichester, 1979. xii + 322 pp. ISBN 0-471-27603-0 (J. K. Ord) 82c:90090 90C31 (62H20, 92A90, 94D05)

(with Spronk, Jaap) Interactive multidimensional programming models for locational decisions. European J. Oper. Res. 6 (1981), no. 2, 220-223. (Authors' summary)

82h:90038 90B05 (90C31)
Nijmelier, Henk ★Controllability distributions for nonlinear control systems. Afdeling Mathematische Besliskunde [Department of Operations Research], 140. Mathematisch Centrum, Amsterdam, 1981. i+12 pp. (Antoinette Sec) 82m:58046 58F25 (57R27,

Nikaido, Gyokai On the normally solvable operators in Banach and Hilbert spaces. TRU Math. 16 (1980), no. 2, 9-18. (Richard Bouldin) 82g:47012 47A53 (47A55)

Nikanorov, S. P. (with Persic, D. B.) A direction in the development of systems theory and its value for applications. (Russian) Energetics approach to systems research. Voprosy Kibernet. (Moscow) No. 32 (1977), 74-89. (Jerzy Jaroń) 82e:93003 93A05

Niki, Hiroshi (with Ikeuchi, Masatoshi; Inoue, Kazuo; Sawami, Hideo) Arbitrarily shaped hollow waveguide analysis by the a-interpolation method. SIAM J. Appl. Math. 40 (1981), no. 1, 90-98. (J. S. Colonias) 82b:78024 78A50 (65N30)

to Canonical correlation analysis of categorical data. Quantification based on the correlation between two sets of categorical variates. (Japanese. English summary) Proc. Inst. Statist. Math. 28 (1981), no. 1, 13-26. (C. Hayashi) 82m:62127 62H20

Nikiė, Jovanka Totally geodesic submanifolds of the space SO(m+2)/SO(m)×SO(2). (Serbo-Croatian. English summary) Mat. Vesnik 4(17)(32) (1980), no. 3, 323–328. (O. Kowalski) 82j:53091 53C35

Nikiforov, A. F. (with Uvarov, V. B.; Novikov, V. G.) Solution of the Schrödinger equation for bound states by the inverse iterative method. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 42, 15 pp. (Authors' introduction) 82j:65091

Nikiforov, Vladimir S. (with Hadžiivanov, Nikolai G.) Estimates for the number of cliques of a graph with a given vertex independence number. (Russian) Serdica 5 (1979), no. 1, 50-59. (A. K. Kelmans) 82a:05056 05C35

Nikišin, E. M. Logarithms of natural numbers. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 43 (1979), no. 6, 1319-1327. (John H. Loxton) 82b:10044a 10F37 Correction: "Logarithms of natural numbers". (Russian) Izv. Akad. Nauk SSSR

Ser. Mat. 44 (1980), no. 4, 972. (John H. Loxton) 82b:10044b 10F37

Simultaneous Padé approximants. (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 4(12), 499-519, 637. (H. İ. Kučmins'ka) 82e:30053 30E15 (41A21)

A property of Taylor coefficients. (Russian) Mat. Zametki 29 (1981), no. 4, 525-527, 632. (R. P. Boas, Jr.) 82e:10063 10F35 (10B45)

A set of power series. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 4, 164–168, 231. (A. Pethö) 82k:10045 10F37 (41A21)

Nikitčenko, N. S. (with Byc', V. V.; Manakova, E. I.) A means of specifying the semantics

of programming languages. (Russian) Design of interpreters. *Mat. Issled. No.* 59 (1980), 13-22, 154. (Authors' summary) **82a:68015** 68B10

Nikitenko, A. S. A modified stochastic approximation algorithm for control of an

automated vibration test system. Automatika 1980, no. 5, 22-24, 92 (Russian. English summary); translated as Soviet Automat. Control 13 (1980), no. 5, 19-21 (1981). (Author's summary) 82j:93063 93E25

Nikitin, A. G. Galilean invariant equations with anomalous interaction. (Russian. English summary) Ukrain. Fiz. Z. 26 (1981), no. 3, 394-402, 523. (Author's summary) 824:81063

Nikitin, A. K. (with Nikitina, I. A.) A bearing of finite length with a system of lubrication sources. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vyaš. Školy Ser. Tehn. Nauk. 1980, no. 4, 61-67, 111. (Authors' summary) 82d:76036 76D99

(with Pevzner, L. V.; Skrigan, N. I.) Graph-programming grammars for analysis of hierarchical graph structures. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 1, 5-9, 137. (Authors' summary) 82a:68150

Nikitin, Ja. Ju. Large deviations and asymptotic efficiency of integral type statistics. II. (Russian English summary) Problems of the theory of probability distributions, VI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 97 (1980), 151–175, 229-230, 237. (S. A. Book) 82j:60041 60F10 (62G20)

Asymptotic efficiency in the sense of Bahadur of ω^2 -type tests in the many-sample case. (Russian. English summary) Studies in mathematical statistics, IV. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 98 (1980), 140-148, 163, 167. (Dana

Vorličková) 82h:62049 62G20 (62G30)
Nikitin, Ju. P. (with Berkov, A. V.; Rozental', I. L.) Two-dimensional field theories. Fortschr. Phys. 29 (1981), no. 7, 303-344. (R. Delbourgo) 82i:81074 81E10 (81G05, 81L05)

Nikitin, L. V. (with Ryžak, E. I.) Accuracy of the Boussinesq approximation for an incompressible fluid. Izv. Akad. Nauk SSSR Meh. Židk. Gaza 1981, no. 2, 19-26 (Russian); translated as Fluid Dynamics 16 (1981), no. 2, 174-180. (Authors' summary) 82k:76064 76R 10 (76E15)

Nikitin, Yu. P. See Nikitin, Ju. P.

Nikitina, E. P. (with Meržanova, R. F.) *Каталог планов третьего порядка. (Russian) [Catalog of third-order designs] Moskov. Gos. Univ., Moscow, 1979. 171 pp. (E. Seiden) 62K05

Nikitina, E. S. (with Krugljakov, L. Z.; Norden, A. P.) Construction of some focal complexes of two-dimensional planes. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 12 (1980), 50-57. (Josef Vala) 82i:53016 53A20

Nikitina, I. A. (with Nikitin, A. K.) A bearing of finite length with a system of lubrication

sources. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Tehn. Nauk. 1980, no. 4, 61–67, 111. (Authors' summary) 82&76036 76D99 Nikitina, I. V. (with Sazontov, A. G.) The spectral structure of turbulent convection. (Russian) Ž. Prikl. Meh. i Tehn. Fiz. 1981, no. 4, 88–97, 175. (Authors' summary) 82k:76040 76F99

Niknam, Assadollah On Powers-Sakai conjecture. Bull. Iranian Math. Soc. 8 (1980/81), no. 1, 15-31. (Editors) 82i:46099 46L40

Nikodem, Kazimierz On convex stochastic processes. Aequationes Math. 20 (1980), no. 2-3, 184-197. (M. Métivier) 82i:60053 60G05 (26B25)

On quadratic stochastic processes. Aeguationes Math. 21 (1980), no. 2-3, 192-199. (S. Kurepa) 82h:39008 39B70 (60G07)

On additive set-valued functions. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 7, 1005–1013. (S. M. Srivastava) 82m:28005 28A10

Some remarks on quadratic stochastic processes. (Polish summary) Uniw. Śląski w Katowicach Prace Nauk.-Prace Mat. No. 11 (1981), 21-25 (loose errata). (T. T. Soong) 60G17

Nikolaev, A. M. (with Boguta, B. K.) A remark on coverings of semigroup varieties. (Russian) Modern algebra (Russian), pp. 12-17, Leningrad. Gos. Ped. Inst., Leningrad; 1980 (P. Goralčík) 82h:20082 20M07

Nikolaev, E. S. (with Kaporin, I. E.) A method of fictitious unknowns for solving difference equations of elliptic type in domains of complex form. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 3, 544-548. (G. W. Hedstrom) 82a:65082 65N20

Nikolaev, P. N. (with Bazarov, I. P.) Integral equations in crystal theory. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1981, no. 2, 82-85. (Authors' summary) 82h:82041 82A60 (with Bazarov, I. P.) Solution of a quantum chain of Bogoljubov equations for a crystal. (Russian. English summary) Teoret. Mat. Fiz. 47 (1981), no. 1, 120-124. (Authors' summary) 82g:82015 82A15 (82A60)

Nikolaev, V. B. Solvability of a mixed problem for equations of one-dimensional axisymmetric motion of a viscous gas. (Russian) Dinamika Splošn. Sredy No. 44 Dinamika Neodnorodn. Židkosti (1980), 83–92, 175. (Author's summary) 82m:76045 76N15 (35Q20)

Nikolaev, V. L (with Petuhov, O. A.; Hodorovskii, L. A.) A family of relation-manipulation operations that extends the class of operations in relational algebra. Programmirovania 1980, no. 3, 52-56, 94 (Russian); translated as Programming and Comput. Software 6 (1980), no. 3, 150-153 (1981). (Authors' summary) 82d:68014 68B15 (04A05)
Nikolaev, V. S. Optimal aerodynamically loaded wing in a supersonic flow. (Russian)

Učen. Zap. CAGI 11 (1980), no. 5, 30-39. (Author's summary) 82e:76042

Nikolaëva, R. V. (with 2morovič, V. A.) Integral transformation with logarithmic kernels in some classes of univalent functions. (Russian) Mathematical analysis and probability theory (Russian), pp. 66-70, 211, "Naukova Dumka", Kiev, 1978. (Authors' summary) 824:30016 30C45 (44A15)

Nikolaevskaja, T. E. Study of a pair of congruences in E_3 , adjoined to a surface V_2 in E_4 . (Russian) Geometry of imbedd ed manifolds (Russian), pp. 67-71, Moskov. Gos. Ped. Inst., Moscow, 1979. (E. Pavlov) 82f:53007 53A05

Nikolaišvili, Š. S. (with Grigorovič, G. A.) On numerical solution of Volterra integral equations using spline approximations. (Russian. Georgian and English sumr Sem. Inst. Prikl. Mat. Dokl. No. 12-13 (1978), 67-70. (G. F. Miller) 82a:65100

ferentinou-Nikolakopoulou, Ioanna See Ferentinou-Nikolakopoulou, Ioanna Nikolenko, V. M. (with Čebotarev, A. N.) Simple decompositions of asynchronous circuits. Kibernetika (Kiev) 1979, no. 6, 51-55 (Russian); translated as Cybernetics 15 (1979).

no. 6, 828-834 (1980). (A. J. Tosser) 82c:94011 94C10
ullé, Snežana I. Data structure for microprocessor implementation of threshold
functions. Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 634-677 (1979), 94C10

vić, Danica One type of random diffusion eq ry) Unio u Nocom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 19-22 (1980). (Z. 82g.35125 35R60 (35C99, 60I60)

(with Hadžić, Olga) Fixed point theorems of Krasnoselski's type in prob locally convex spaces. (Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad.

Prirod.-Mat. Fak. 9 (1979), 23-28 (1980). (V. Istrățescu) 82b:47072 47H10 (46A99)

olov, A. V. A generalization of the notion of direct product of groups. (Russian

ary) Bulgar. J. Phys. 7 (1980), no. 5, 445-450. (Author's summary) 82h:20046 20E22 (20C35)

Nikolov, B. (with Trifonov, D. A.) SU(2)-coherent states of quantum systems. (Ru R. Acad. Bulgare Sci. 33 (1980), no. 3, 309-312. (A. H. Kuškulei) 82k:81041 (22E45, 81C40)

olova, T. St. (with Krivošcin, L. K.; Bainov, D. D.; Leung, K. V.; Oğuztöreli, M. N.) On the Goursat problem for nonlinear polywave integro-differential equations of Mangeron. (Bulgarian. Russian and English summaries) Ploodio. Univ. Naučn. Trud. 16 (1978), no. 1, 17-27 (1980). (Authors' summary) 82f:35177 35Q99 (with Bainov, D. D.) A boundary value problem for an infinite system of differential

tions. (Russian) Mat. Vesnik 4(17)(32) (1980), no. 1, 45-52. (M. Švec) 82i:34081

34K 10

Nikol'skaja, N. S. More on approximation of periodic functions of the classes SH*r by Fourier sums. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 4, 180-193, 239. (Paul Nevai) 82a:42014 42B05

82e-42014 42005

Nikol'skii, A. A. Plane vortex gas flows. A translation of Aeromechanics (Russian), pp. 55-66, "Nauka", Moscow, 1976. Fluid Mech.—Soviet Res. 9 (1980), no. 2, 41-50. (Author's summary) 82a:76057 76N15 (76J99)

Nikol'skii, M. S. (with Satimov, N.) A problem of evasion from certain pursuers. (Russian) Boundary value problems for equations of mathematical physics (Russian), pp. 133-146, 170, "Fan", Tashkent, 1980. (Authors' summary) 82m:90183 90D26

On a class of differential games with fixed time. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 99 (1980), no. 2, 293-296. (Bolesław

Some computational aspects of Pontrjagin's first direct method in differential games (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1980, no. 4, 27-32, 69-70. (Author's summary) 824:90144 90D26

Nikoi'skii, N. К. ★Лекции об операторе спита. (Russian) [Lectures on the shift operator] "Nauka", Массоw, 1980. 384 pp. (S. V. Hruščev) 82i:47013 47A45 (30H05, 47B35,

What problems do spectral theory and complex analysis solve for each other?

Proceedings of the International Congress of Mathematicians (Helsinki, 1978), pp. 631-638, Acad. Sci. Fennica, Helsinki, 1980. (B. Korenblum) 82a:30045 (47A15) Bases of exponentials and values of reproducing kernels. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 6, 1316-1320. (M. I. Nagnibida) 82e:30007 30B60

ns on linear operators and the theory of functions, 82e:46002;

Investigations on linear operators and the theory of functions, 82h:46002 and Complex analysis and spectral theory, 82h:46001 Nikol'skii, S. M. (with Korniičuk, M. P.; Ševčuk, I. A.) Vladislav Kirillovič Dzjadyk (on

the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 34 (1979), no. 4(208), 231-237. (Editors) 82h:01060 01A70

(with Lizorkin, P. I.) An elliptic equation with degeneration. Variational method. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 1, 42-45. (G. Wildenhain) 821:35083 35170 (35135)

(with Vekua, N. P.; Litvinčuk, G. S.; Rogožin, V. S.; Samko, S. G.; Simonenko, I. B.; Hvedelidze, B. V.; Čerskii, Ju. I.) Fedor Dmitrievič Gahov. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 193-194. (Editors) 82c:01056

uk 36 (1981), no. 1(217), 193-194. (Editors) 82c:01056 01A70 (with Velikin, V. L.; Žensykbaev, A. A.; Motornyi, V. P.; Ruban, V. I.) Nikolai Pavlovič Korneičuk (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Pavlore Rothereum (et al. 1922). Reditors) 82e:01105 01A70

See also Studies in the theory of differentiable functions of several variables and its

plications, 82e:46004

Nikofskiy, A. A. See Nikofskii, A. A.
Nikonov, O. I. Scale of estimates in a problem of game deviation of an ensemble of trajectories. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nau No. 30 Optimal. Uprav. v Dinamič. Sistem. (1979), 66-78, 111. (From the text) 82j:90086

nov, V. A. (with Nikonova, G. A.) The Cauchy problem for partially hyperbolic operators with constant coefficients. (Russian) Comp software (Russian), pp. 53-66, Kazan. Univ., Kazan, 1979. (K. A. Jagdžjan) 82f:35116

(with Kreinin, M. I.; Savickaja, T. I.) Solution of a problem of job-shop loading. (Russian) Computational methods and computer software (Russian), pp. 76-83, Kazan. Univ., Kazan, 1979. (Witold Lipski) 82f:90048 90B35

conov, V. V. (with Maksimenkov, A. V.) Processing control language in a computer network. Automat. i Vyčisl. Tehn. (Riga) 1980, no. 6, 14-20, 95 (Russian); translated as Automat. Control Comput. Sci. 14 (1980), no. 6, 9-14. (Authors' summary) 82h:68036

Nikonova, G. A. (with Nikonov, V. A.) The Cauchy problem for partially hyperbolic operators with constant coefficients. (Russian) Computational methods and co vare (Russian), pp. 53-66, Kazan. Univ., Kazan, 1979. (K. A. Jagdžjan) 82f:35116 35L30 (35E15)

Nikul'čenko, A. G. (with Goloskokov, E. G.; Frolov, Ju. A.; Šipulina, L. V.)

Regularization in the solution of an identification problem. (Russian) Mathematical hods in cybernetics (Russian), pp. 3-7, 82, Akad. Nauk Ukrain. SSR, Inst. Kibernet.,

Kiev, 1979. (Authors' summary) 82b:93018 93B30 (with Goloskokov, E. G.; Frolov, Ju. A.; Šipulina, L. V.) Finite-step methods of

identification of the equilibrium state of an automatic regulatory system. (Russian) Methods for optimizat ources in comp (Russian), pp. 23-44, 47, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (See 90A14

Nikulin, M. S. A test for detection of outlying observations in a multivariate normal family. A test for detection of outlying observations in a muturanate normal family.
 (Russian, English summary) Problems of the theory of probability distributions, VI.
 Zap. Naučn. Sem. Leningrad. Oidel. Mat. Inst. Steklov. (LOMI) 97 (1980), 176–180,
 230, 237. (František Rublik) 82c:62000 62H15
 An application of the model of two-factor analysis of variance without interaction.

(Russian. English summary) Studies in mathematical statistics, V. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 108 (1981), 134–153, 195, 199. (B. L. Granovskii) 82m:62159 62J10 (62F10)

See also Studies in mati matical statistics, 82i:62002

Nikulin, N. A. (with Kučerenko, S. I.) Some fourth-order curves. (Russian) Prikl. Geom. i Inžener. Grafika No. 30 (1980), 69–71, 134. (Authors' summary) 820:51026 51M15 Nikulin, V. V. Interaction of a linear vortex with a free surface. (Russian) Dinamika Splošn.

Sredy No. 42 Dinamika Neodnorod. Židkosti (1979), 31-42, 128. (Author's summ 82~76033 76D05

On the arithmetic groups generated by reflections in Lobačevskii spaces. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 3, 637-669, 719-720. (V. L. Popov) 82m-57029 57\$30 (10C30, 22E40)

Nikunen, Martti Limit theorems for certain continuous Markov processes. Ann. Acad. Sci. n. Ser. A I Math. Dissertationes No. 28 (1980), 43 pp. (Rashid Ahmad) 82a:60107 60J25 (60F05)

Weak compactness of a family of measures corresponding to continuous strong Markov processes. (Russian. English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 1, 157-161. (Constantin Tudor) 82d:60132 60J25 (60B10)

Nillsen, Rodney (with Browne, Patrick J.) The two-sided factorization of ordinary differential operators. Canad. J. Math. 32 (1980), no. 5, 1045-1057. (Robert Carlson) 47E05 (34B05)

sson, Arne (with Kleinrock, Leonard) On optimal scheduling algorithms for time-shared systems. J. Assoc. Comput. Mach. 28 (1981), no. 3, 477–486. (Authors' summary) 82h:68032 68B20 (68C15, 90B22, 90B35)

Sson, Bengt E. W. Simple 10-dimensional supergravity in superspace. Nuclear Phys. B 188 (1981), no. 1, 176–192. (S. Deser) 82h:83069 83E50

Nilsson, Börje (with Brander, Olle) The propagation of sound in cylindrical ducts with mean flow and bulk-reacting lining. I. Modes in an infinite duct. J. Inst. Math. Appl. 26

(1980), no. 3, 269–298. (Authors' summary) 82i:76076a 76Q05 (76E99)
(with Brander, Olle) The propagation of sound in cylindrical ducts with mean flow and bulk-reacting lining. II. Bifurcated ducts. J. Inst. Math. Appl. 26 (1980), no. 4, 381-410. (Authors' summary) 82i:76076b 76Q05 (76E99)

Nilsson, Per Multiplicatively invariant subspaces of Besov spaces. Trans. Amer. Math. Soc. 265 (1981), no. 2, 535-543. (Richard Bagby) 82h:46053 46E35

o, J. J. C. (with Crighton, D. G.) Bäcklund transformations for the cylindrical Korteweg-de Vries equation. Phys. Lett. A 82 (1981), no. 5, 211-214. (F. A. E. Pirani) 35O20 (35A30, 76B15)

omiya, Ichizo Improvements of adaptive Newton-Cotes quadrature methods. J. Inform. Process. 3 (1980/81), no. 3, 162–170. (C. Dagnino) 82b:65012 65D30

Ninomiya, Nobuyuki Professor Kinjirô Kunugui's works on potential theory. Special issue in memory of the late Professor Kinjirô Kunugi [Kunugui]. Math. Japon. 23 (1978), no. 3 Special issue, 287–289. (Editors) 82g:01065 01A70 (31–03)

nomiya, Yasushi (with Motose, Kaoru) On the commutativity of the radical of the group algebra of a finite group. Osaka J. Math. 17 (1980), no. 1, 23-26. (Robert L. Snider) 82g:20015a 20C05 (16A26)

On the commutativity of the radical of the group algebra of an infinite group. Osaka J. Math. 17 (1980), no. 1, 27-33. (Robert L. Snider) 82g:20015b 20C07 (16A27) On the Jacobson radical of the center of an infinite group algebra. Hokkaido Math.

J. 10 (1981), no. 2, 254-263. (Donald S. Passman) 82h:16006 16A27 Nir, A. On the departure of a sphere from contact with a permeable membrane. J. Engrg. Math. 15 (1981), no. 1, 65-75. (Author's summary) 82b:76031 76D99

Nir, Shlomo (with Bentz, Joe) Cation binding to membranes: com petition between mono di- and trivalent cations. Bull. Math. Biol. 42 (1980), no. 2, 191-220. (Authors' summary) 92A40

Nirenberg, Louis (with Kinderlehrer, David) The smoothness of the free boundary in the one phase Stefan problem. Comm. Pure Appl. Math. 31 (1978), no. 3, 257-282. (Michel Chipot) 82b:35152 35R35 (35K05)

Remarks on nonlinear problems. The Chern Symposium 1979 (Proc. Internat. Sympos., Berkeley, Calif., 1979), pp. 189-197, Springer, New York, 1980. (R. S. Palais) 82e:58012 58C15 (58E05)

Nishi, Akihiro Notes on combinatorial properties of matrices. J. Fac. Ed. Saga Univ. Part I No. 27 (1979), 77-80. (H. Minc) 82a:15003 15A15 (05B20, 15A48, 15A51)

Nishi, Tetsuo Realizability condition for two-ports composed of three reactance two-ports and two resistors. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 304–307, IEEE, New York, 1979. (See 82e:94002) 94C05

Nishida, Kenji On hereditary Noetherian prime rings. Proceedings of the 4th Symposium on Semigroups (Yamaguchi Univ., Yamaguchi, 1980), pp. 57-61, Yamaguchi Univ., Yamaguchi, 1980. (See 821:20008) 16A33 (16A12) Yamaguchi, 1980. (See 82f:20008)

Bicommutators of locally projective modules. Comm. Algebra 9 (1981), no. 1, 81–94. Zelmanowitz) 82b:16020 16A50 (J. Zelmanowitz) 82h:16020

Nishida, Takaaki (with Kano, Tadayoshi) Sur les ondes de surface de l'eau avec une justification mathématique des équations des ondes en eau peu profonde. J. Math. Kyoto Univ. 19 (1979), no. 2, 335-370. (D. H. Hyers) 824:76012 76B15

Nishida, Toshio (with Ohi, Fumio) Bivariate shock models: NBU and NBUE properties, and positively quadrant dependency. (Japanese summary) J. Oper. Res. Soc. Japan 22 (1979), no. 4, 266–274. (Authors' summary) 82;62075 62N05

(with Ohashi, Mamoru) A two-unit paralleled system with general distribution. (Japanese summary) J. Oper. Res. Soc. Japan 23 (1980), no. 4, 313-325. (Authors' nary) 82c:90044 90B25

(with Huang, Jun Ming; Yoneyama, Kanji) Commutative tandem queue with two types of customers. Math. Japon. 25 (1980), no. 5, 533-543. (B. R. K. Kashyap) 60K25 (90B22)

(with Ishii, Hiroaki; Nose, Toyokazu; Shiode, Shogo) Perishable inventory management subject to stochastic leadtime. European J. Oper. Res. 8 (1981), no. 1, 76-85. (Authors' summary) 82k:90047 90B05

(with Ichimori, Tetsuo; Ishii, Hiroaki) Weighted minimax real-valued flows.

(Japanese summary) J. Oper. Res. Soc. Japan 24 (1981), no. 1, 52-60. (Authorsummary) 824:90055 90B10 (90C35)

(with Ichimori, Tetsuo; Shiode, Shogo; Ishii, Hiroaki) Minimum spanning tree with normal variates as weights. (Japanese summary) J. Oper. Res. Soc. Japan 24 (1981), no. 1, 61-66. (Authors' introduction) 821:90095 90C35

(with Nose, Toyokazu; Ishii, Hiroaki) Some properties of perishable inventory control subject to stochastic leadtime. (Japanese sun mary) J. Oper. Res. Soc. Japan 24

(1981), no. 2, 110–135. (Authors' summary) 82g:90039 90805
(with Ishii, Hiroaki; Shiode, Shōgo) Chance constrained spanning tree problem.
(Japanese summary) J. Oper. Res. Soc. Japan 24 (1981), no. 2, 147–158. (James R. Evans) 82i:90084 90C15 (05C05)

Nishii, Ryuei (with Kuwada, Masahide) On a connection between balanced arrays and balanced fractional sm factorial designs. J. Japan Statist. Soc. 9 (1979), no. 2, 93-101. (U. B. Paik) 82c:62106 62K15

(with Kageyama, Sanpei) Nonexistence of equireplicated variance-balanced designs with b=v+1. Recent developments in statistical inference and data analysis (Proc. Internat. Conf., Inst. Statist. Math., Tokyo, 1979), pp. 171-176, North-Holland, Amsterdam, 1980. (Kishore Sinha) 82a:05015 05B05 (62K10)

Balanced fractional rm×sn factorial designs and their analysis. Hiroshima Math J. 11 (1981), no. 2, 379-413. (D. V. Chopra) 82f:05022 05B30 (05B15)

hijima, Kazuhiko (with Higashijima, Kiyoshi) Renormalization groups of Gell-Mann and Low and of Callan and Symanzik. Progr. Theoret. Phys. 64 (1980), no. 6, 2179–2186. (Authors' summary) 82b:81079 81E15

Nishikawa, K. (with Deguchi, Kisaboru; Sado, A.; Aono, S.) Generator coordinate method based on coherent states: calculation of nuclear bound and resonance states in molecules.

J. Phys. B 14 (1981), no. 18, 3305-3311. (Authors' summary) 82i:81165 81G50

hikawa, Seiki On the existence of global solutions of the nonlinear parabolic equation of Eells-Sampson over product manifolds. Proc. Amer. Math. Soc. 82 (1981), no. 3, 369–373. (Themistocles M. Rassias) 82h:58014 58E20 (35K55)

Nishikawa, Tomonori Analysis of the behavioral system by using control theory. Proceedings of the First International Conference on Mathematical Modeling (St. Louis, Mo., 1977), Vol. V, pp. 2577-2585, Univ. Missouri-Rolla, Rolla, Mo., 1977. (Author's summary) 82b:92642 92A20

Nishimi, Jisho An algorithm for the quick Fourier transform of products of trigonometric polynomials. Bull. Fac. Sci. Engrg. Chuo Univ. 22 (1979), 131-140. (A. D. Booth) 824-65089 65T05

Nishimori, Toshiyuki Octahedral webs on closed manifolds. Tõhoku Math. J. (2) 32 (1980), no. 3, 399-410. (M. A. Akivis) 82h:53025 53A60 (57R99)
Nishimoto, Katsuyuki Fractional differintegration of products and (log z), (continued). J.

College Engrg. Nihon Univ. Ser. B 21 (1980), 1-8. (E. R. Love) 82d:26005a 26A33

Some properties of the fractional differintegrated trigonometric functions. J. College Engrg. Nihon Univ. Ser. B 21 (1980), 9-17. (E. R. Love) 824:26005b 26A33 (30E99) On some contour integral representations for beta function and fractional

differintegrations of the functions $(1-z)^{q-1}$ and z^{p-1} . J. College Engrg. Nihon Univ. Ser B 22 (1981), 1-8. (P. Anandani) 82d:33003 33A15

Uniform asymptotic properties of the WKB method. Kodai Math. J. to, Toshihiko 4 (1981), no. 1, 71-81. (Evans M. Harrell) 82m:34058 34E20 (58G15, 81C15)

Asymptotic reduction of a certain boundary value problem arising from the density wave theory of spiral galaxies. Kodai Math. J. 4 (1981), no. 1, 152-180. (George Contopoulos) 82g:85003 85A05 (35C99)

Nishimura, Hirokazu Descriptively complete process logic. Acta Inform. 14 (1980), no. 4, 359–369. (R. Parikh) 82b:68012 68B10 (03B45)

A study of some tense logics by Gentzen's sequential method. Publ. Res. Inst. Math. Sci. 16 (1980), no. 2, 343–353. (Henry Africk) 82g:03028 03B45 (03F05)

Interval logics with applications to study of tense and aspect in English. Publ. Res. Inst. Math. Sci. 16 (1980), no. 2, 417–459. (Brian F. Chellas) 82k:03021 03B45 (03B65)

himura, Jun-ichi On ideal transforms of Noetherian rings. II. J. Math. Kyoto Univ. 20 (1980), no. 1, 149-154. (Editors) 82g:13005 13B20

ara, Kazuo (with Benhabib, Jess) Stability of equilibrium in dynamic models of capital theory. Internat. Econom. Rev. 22 (1981), no. 2, 275-293. (Anjan Mukherji) 90A14 (90A16) 82m:90034

ura, Yasuichiro Examples of analytic immersions of two-dimensional Stein manifolds Math. Japon. 26 (1981), no. 1, 81-83. (H. B. Laufer) 82i:32052 (32F10)

Nishino, Toshio (with Suzuki, Masakazu) Sur les singularités essentielles et isolées des applications holomorphes à valeurs dans une surface complexe. Publ. Res. Inst. Math. Sci. 16 (1980), no. 2, 461-497. (A. Hirschowitz) 82c:32024 32H25

Value distribution of analytic functions of two variables. (Japanese) Sûgaku 32 (1980), no. 3, 230-246. (Junjiro Noguchi) 82j:32001 32-02 (30F20, 32H30, 32L99)

Nishio, Hidenosuke Series of graphs generated by rational machines. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 20-31, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Author's summary) 82k:68024 68D05 (05C99, 92A05)

Nishioka, Keiji A theorem of Painlevé on parametric singularities of algebraic differential equations of the first order. Osaka J. Math. 18 (1981), no. 1, 249–255. (William F. eigher) 82g:12026 12H05 (12H20, 34A99)

shioka, Kunio The degenerate Neumann problem and degenerate diffusions with Venttsel's boundary conditions. Ann. Probab. 9 (1981), no. 1, 103-118. (D. Kannan) 60J60 (35B25, 60H15)

Nishioka, Michio (with Asai, M.; Iida, S.) Wall phenomena in the final stage of transition to turbulence. Transition and turbulence (Madison, Wis., 1980), pp. 113-126, Publ. Math. Res. Center Univ. Wisconsin, 46, Academic Press, New York, 1981. (See 82k:76002) 76E05 (58F13, 76-05, 76F10)

On the regeneration of an unstable particle in decay processes. J. Fac.

Liberal Arts Yamaguchi Univ. 11 (1977), 137-143. (C. S. Sharma) 82m:81076 81P20 (81D99, 82A35)

Nishisato, Shizuhiko *Analysis of categorical data: dual scaling and its application Mathematical Expositions, 24. University of Toronto Press, Toronto, Ont., 1980 xiii+276 pp. ISBN 0-8020-5489-7 (Graham J. G. Upton) 82462099 62H

Nishishiraho, Toshihiko Quantitative theorems on linear approximation processes of convolution operators in Banach spaces. *Thinku Math. J.* (2) 33 (1981), no. 1, 109–126. (W. Dickmeis and P. L. Butzer) 82m:41034 41A65 (41A30, 47D05)

Nishitani, Tatsuo On the Lax-Mizohata theorem in the analytic and Gevrey classes. *J.*

Math. Kyoto Univ. 18 (1978), no. 3, 509-521. (From the summary) 82h:35017 35G10 (35A20, 35H05)

The Cauchy problem for weakly hyperbolic equations of second order. Comm. Partial Differential Equations 5 (1980), no. 12, 1273-1296. (Maria Cinquini-Cibrario)

82±35107 35L15

Nishitani, Yasuaki (with Honda, Namio) The firing squad synchronization problem for 14 (1981) no 1 39-61. (Francesco Romani) 82e:68052 68D20 (05C99)

iura, Togo The topology of almost everywhere continuous, approximately continuous functions. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 4, 317-328. (D. Preiss) 26B05 826:26014

(with Goffman, Casper) De Giorgi perimeter, Lebesgue area, Hausdorff measure.

Michigan Math. J. 28 (1981), no. 3, 359-367. (C. Vinti) 82m:28015

28A75 (49F25) (with Bindschadler, David) The Goffman-Liu area and Plateau's problem.

Amer. Math. Soc. 82 (1981), no. 1, 66-70. (C. Vinti) 82g:28013 28A75 (49F25)

Nishiyama, Seiya Path integral on the coset space of the SO(2N) group and the time-dependent Hartree-Bogoliubov equation. Progr. Theoret. Phys. 66 (1981), no. 1, 348-350. (Author's summary) 82:81048 , 81C35 (81H05)

Nishizawa, Kiyoko À propos de l'unicité du calcul fonctionnel holomorphe des b-algèbres. ices in holomorphy (Proc. Sem. Univ. Fed. Rio de Janeiro, Rio de Janeiro, 1977), pp. 585-608, North-Holland Math. Studies, 34, North-Holland, Amsterdam, 1979. (Jorge 46H30 (32E25, 46J99) Mujica) 82e:46068

Nishizeki, Takao Lower bounds on the cardinality of the maximum matchings of regular multigraphs. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 443-444, IEEE, New York, 1979. (See 82e:94002) 05C35

(with Takamizawa, K.; Saito, Nobuji) An O(p3) algorithm for finding Hamiltonian cycles in certain digraphs. J. Inform. Process. 3 (1980/81), no. 2, 68-72. (Authors' summary) 82c:68046 68E10 (05C20, 05C45, 68C25)

(with Akiyama, Takanori; Saito, Nobuji) NP-completeness of the Hamiltonian cycle problem for bipartite graphs. J. Inform. Process. 3 (1980/81), no. 2, 73-76. (Authors' summary) 82a:68119 68E10 (68C25)

(with Takamizawa, K.; Saito, Nobuji) Combinatorial problems on series-parallel hs. Discrete Appl. Math. 3 (1981), no. 1, 75-76. (Authors' summary) 82e:05085 05C35 (05C99, 68C25)

Nisičenko, V. P. (with Rybakov, Ju. P.) Regular solution in Skyrme's model with a gauge field. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 9, 13-17. (Authors' summary) 824:81107 81E99

(with Kumar, Ajit; Rybakov, Ju. P.) Ljapunov stability of scalar charged solitons. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1981, no. 1, 56-60. (Authors' summary) 81E99 (35B35, 35Q20)

Nisijo, Keizi (with Maruoka, Akira; Kimura, Masayuki) An optimum decomposition of files. Systems-Comput.-Controls 10 (1979), no. 4, 76-83 (1981). (Authors' summary) 68H05

Nisimov, E. R. (with Pačeva, S. I.) Bäcklund transformation in the classical massive Thirring model. C. R. Acad. Bulgare Sci. 32 (1979), no. 9, 1191-1194. (Yvette Kosmann-Schwarzbach) 82a:81036 81E99 (35Q20, 58A15, 58F07, 81M05) 81E99 (35Q20, 58A15, 58F07, 81M05)

(with Arel'eva, I. Ja.; Pačeva, S. I.) BPHZL renormalization of 1/N expansion and critical behaviour of the three-dimensional chiral field. Comm. Math. Phys. 71 (1980), no. 3, 213-246. (Authors' summary) 82d:81089 81E15

Higher quantum conserved current in a new completely integrable model. Lett. Math. Phys. 4 (1980), no. 5, 405-411. (Author's summary) 82ac81624 81E10 (58F07) Higher local quantum conserved currents in two-dimensional scalar supersymmetric Nuclear Phys. B 163 (1980), no. 4, 374-396. (Author's summary) 82c:81113 81E99 (81G20)

(with Pačeva, S. I.) Phase transition and 1/N expansion in (2+1)-dimensional supersymmetric sigma models. Lett. Math. Phys. 5 (1981), no. 1, 67-73. (Nigel B. Backhouse) 82m:81081a 81G20 (81E99)

(with Pačeva, S. Ĭ.) Erratum to: "Phase transition and 1/N expansion in (2+1)-dimensional supersymmetric sigma models". Lett. Math. Phys. 5 (1981), no. 3,

255-256. (Nigel B. Backhouse) **82m:81081b** 81G20 (81E99) Nisio, Makiko On stochastic optimal controls and envelope of Markovian semigroups Proceedings of the International Symposium on Stochastic Differential Equations (Res. Inst.

Math. Sci., Kyoto Univ., Kyoto, 1976), pp. 297-325, Wiley, New York, 1978. (From the introduction) 82k:49024 49A60 (47H20, 60H10) introduction) 82k:49024 On a nonlinear semigroup associated with stochastic optimal control and its excessive

majorant. Probability theory (Papers, VIIth Semester, Stefan Banach Internat. Math. Center, Warsaw, 1976), pp. 175–202, Banach Center Publ., 5, PWN, Warsaw, 1979. (Jürgen Groh) 82j:93087 93E20 (47H20, 60J60) rgen Groh) 82j:93087 93E20 (47H20, 60J60)
On the optimal stopping semigroup for controlled Markov processes. Analysis and imisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978),

pp. 99-110, Academic Press, London, 1980. (Jürgen Groh) 82g:60099 60J35 (60G40, 93E20)

*Lectures on stochastic control theory. ISI Lecture Notes, 9. Macm India, Ltd., New Delhi, 1981. vi + 83 pp. ISBN 0-33390-378-1 (R. S. Lipcer) 82j:93058 93E20 (60G40, 60Hxx, 90C39)

Nisio, Sigeko The transmission of Einstein's work to Japan. Japan. Stud. Hist. Sci. No. 18 (1979), 1-8. (H. Treder) 82d:01020 01A60 (81-03)

Niss, Mogens See Mathematics and the real world, 82;00018
Nissen, David Notes on networks and mini-models. Computer-assisted analysis and model simplification (Proc. First Sympos., Univ. Colorado, Boulder, Colo., 1980), pp. 79–101, Academic Press, New York, 1981. (See 82g:00016) 00A69 (90B10, 93A13)

v, E. R. See Nisimov, E. R.

See Freire Nistal, J. L. al J. L.

tri, P. (with Massa bò, I.; Pera, Maria Patrizia) A result on the existence of infinitely ny solutions of a nonlinear elliptic boundary value problem at resonance. (Italian nmary) Boll. Un. Mat. Ital. A (5) 17 (1980), no. 3, 523-530. (Michele Mininni) 35J65 (47H15)

Niță, Ana Sur les ultraproduits des modules. Bull. Math. Soc. Sci. Math. R. S. Ro (N.S.) 24(72) (1980), no. 2, 167-170. (William H. Gustafson) 824:16038

(N.S.) 24(72) (1980), no. 2, 10/-1/0. (William H. Custatson) 82a:19008 10Ayy etck, Zbigniew H. Dynamic behavior determined by one function. J. Math. Anal. Appl. 72 (1979), no. 2, 446-471. (M. I. Brin) 82a:58037 58F12 (34C25) Anal. Angl. Anal. Appl. Anote on explosive flows. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evassion, Ill., 1979), pp. 364-374, Lecture Notes in Math., 819, Springer, Berlin, 1980. (Alan Dankner) 82e:58054 58F10

Recurrent structure of completely unstable flows on surfaces of finite Euler characteristic. Amer. J. Math. 103 (1981), no. 1, 143-180. (Richard C. Churchill) 58F25 (34C28, 34C40)

(with Coven, Ethan M.) Nonwandering sets of the powers of maps of the interval. codic Theory Dynamical Systems 1 (1981), no. 1, 9-31. (M. I. Brin) 82m:58043 58F20 (34C35, 54H20)

See also Classical mechanics and dynamical systems, 82k:58002 seu, Cătălina On birecurrent tensors in Riemannian spaces. (Roma escu, Cătălina On birecurrent tensors în Riemannian spaces. (Romanian summary) Bu Inst. Politehn. Iași Secț. I 24(28) (1978), no. 3-4, 53-58. (Yoshihiro Ichijyō) 82c:53020

erties of concircular related spaces. Mathe (1980), no. 1, 115-120. (S. S. Singh) 82h:53034 53B20

Riemannian spaces with A-recurrent vector field. (Romanian summary) Studia Univ. Babes-Bolyai Math. 25 (1980), no. 1, 12–19. (Y. Tashiro) 82a:53023 53B20

On Z-birecurrent spaces. (Romanian summary) Studia Univ. Babeş-Bolyai Math. 25 (1980), no. 2, 7-12. (S. S. Singh) 82k:53033 53B20

ch, Jürgen (with Hehl, Friedrich W.; von der Heyde, Paul) Gravitation and the Poincare gauge field theory with quadratic Lagrangian. General relativity and gravitation Vol. 1, pp. 329–355, Plenum, New York, 1980. (Larry L. Smalley) 82e:83032 83D0

che, Johannes C. C. (with Hildebrandt, Stefan) Minimal surfaces with free boundaries.

Acta Math. 143 (1979), no. 3-4, 251–272. (V. M. Mikljukov) 82e:49059 49F10 (with Hildebrandt, Stefan) Optimal boundary regularity for minimal surfaces with a free boundary. Manuscripta Math. 33 (1980/81), no. 3-4, 357-364. (João Lucas Marquês

Barbosa) 82i:49040 49F10 (53A10) Nitschke, A. Systems and changes of systems in history. Pattern formation by dynamic systems and pattern recognition (Proc. Internat. Sympos. Synerget.,

Garmisch-Partenkirchen, 1979), pp. 234–242, Springer Ser. Synergetics, 5, Springer, Berlin, 1979. (See 82k:00028) 92A20

Nitta, Yoshihiko (with Kaji, Hiroyuki) A fuzzy model of a document retrieval system and its implementation. Systems-Comput.-Controls 10 (1979), no. 2, 76-85 (1981). (Authors' summary) 824:68056 68H05

nda, Rajaram (with Komesaroff, M. M.; Narayan, Ramesh) The maximum entropy method of image restoration-properties and limitations. Astronom. and Astrophys. 93 (1981), no. 1-2, 269-281. (From the summary) 82a:94040 94A17 (78A55) (with Narayan, Ramesh) Validity of the quasistatic approximation in the theory of

black hole evaporation. Phys. Lett. A 82 (1981), no. 1, 1-3. (Authors' summary) 82b:83029 83C25

Nitzan, Abraham (with Salamon, Peter) Finite time optimizations of a Newton's law Carnot cycle. J. Chem. Phys. 74 (1981), no. 6, 3546-3560. (Authors' summary) 82d:80004 80A10

Nitzan, Shmuel (with Paroush, Jacob) The characterization of decisive weighted majority rules. Econom. Lett. 7 (1981), no. 2, 119-124. (Authors' summary) 82k:90007 (92A25)

Some measures of closeness to unanimity and their implications. Theory and Decision 13 (1981), no. 2, 129-138. (Rubin Saposnik) 82m:90007 90A06 (92A20)

Niu, Shun Chen (with Chiang, Dalen T.) Comparing alternating renewal processes. Res. Logist. Quart. 28 (1981), no. 2, 207-212. (Mark Brown) 82f:60189 (60K 10, 90B25)

On queues with dependent interarrival and service times. Naval Res. Logist. Quart. 28 (1981), no. 3, 497–501. (Author's summary) 82h:60185 60K25 (90B22)

Nivas, Ram (with Upadhyay, M. D.) On some special multity spaces. (Spanish summary)
Acta Mexicana Cienc. Tecn. 13 (1979), no. 35-38, 1, 41-47. (F. Brickell) 82a:53025 53B20

(with Upadhyay, M. D.) r-invariant immersions. An. Univ. Timişoara Ser. Ştiinţ. Mat. 17 (1979), no. 2, 169-177. (Y. Tashiro) 82b:53046 53C15 (53B25)

Nivat, Maurice Infinite words, infinite trees, infinite computations. Foundations of computer science, III (Third Adv. Course, Amsterdam, 1978), Part 2, pp. 1-52, Math. Centre Tracts 109, Math. Centrum, Amsterdam, 1979. (Max Dauchet) 82e:68015 68B10 (03D75,

(with Arnold, André) Formal computations of nondeterministic recursive program schemes. Math. Systems Theory 13 (1979/80), no. 3, 219-236. (Gianni Aguzzi) 68B10 (03D99)

(with Arnold, André) Controlling behaviours of systems: some basic concepts and some applications. Mathematical foundations of computer science, 1980 (Proc Sympos., Rydzyna, 1980), pp. 113-122, Lecture Notes in Comput. Sci., 88, Springer, Berlin, 1980. (K. B. Datta) 82h:93021 93B99

(with Arnold, André) The metric space of infinite trees. Algebraic and topological properties. Fund. Inform. (4) 3 (1980), no. 4, 445-475. (Max Dauchet) 82g:68037 68C20 (05C05, 54E45)

Nivergelt, Ju. See Nievergelt, Jurg Niwa, Masahiko Notes on K-theory of linear categories. III. Mem. Fac. Ed. Shiga Univ. Natur. Sci. No. 30 (1980), 1-8. (Author's summary) 82e:18018

Niwa, Yoshiji (with Watanabe, Eiichi; Isami, Hidenori) Catastrophe analysis of structures by discretization and modal transforms. Mem. Fac. Engrg. Kyoto Univ. 43 (1981), no. 1, 67-87. (D. R. J. Chillingworth) 82k:58024 58C28 (73H05)

Nižnik, L. P. (with Romanenko, R. V.) The 12th Mathematical School. (Russian) Methods of functional analysis in problems of mathematical physics (Russian), pp. 5-7, 179, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Editors) 82a:00008 00A10

Integration of multidimensional nonlinear equations by the inverse problem method. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 2, 332-335. (Peter Holod) 82k:35096

Njaga, V. I. (with Sakaljuk, K. D.) Inversion of a supersingular integral with a Cauchy-Abel kernel. (Russian) Investigations in functional analysis and differential equations, pp. 85–93, 142, "Śtiinca", Kishineo, 1981. (C. Tanaka) 82j:30061 30E20

(with Zolotarevskil, V. A.) Approximate solution of a singular integral equation with shift. (Russian) Linear operators and integral equations. Mat. Issled. No. 61 (1981),

17-28, 155. (V. D. Didenko) 82m:45024 45L05 (45E05)
Njaripja, H. Some new estimation problems for problems of integer linear programming (Russian. Estonian and English summaries) Eesti NSV Tead. Akad. Toimetised

Füüs.-Mat. 29 (1980), no. 2, 127-132, 229. (Author's summary) 82e:90066 A method for solving a group minimization problem with an additional linear constraint. (Russian. Estonian and English summaries) Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. 30 (1981), no. 2, 117-124, 182. (Author's summary) 82k:90125

Njašin, Ju. I. (with Trusov, P. V.) An approach to control of the level of residual stresses. (Russian) Differencial'nye Uravnenija 16 (1980), no. 3, 483-491, 573. (Petr Procházka)

be-Nlend, H. See Hogbe-Nlend, H.

No, J. (with Guillen, J. M.) Optimal decoupling of generalized nonlinear systems. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. II, pp. 30-36, Reidel, Dordrecht, 1980. (Authors' summary) 82e:93054

Noah, Aris Predicate-functors and the limits of decidability in logic. Notre Dame J. Formal Logic 21 (1980), no. 4, 701-707. (S. Comer) 82b:03042 03B40 (03B25, 03G15)

Nobelis, Ph. Fonctions aléatoires lipschitziennes. Seminar on Probability, XV (Univ Strasbourg, Strasbourg, 1979/1980) (French), pp. 38-43, Lecture Notes in Math., 850, Springer, Berlin, 1981. (Jack Cuzick) 82j:60066 60G17

Nobert, Y. (with Miliotis, P.; Laporte, G.) Computational comparison of two methods for finding the shortest complete cycle or circuit in a graph. (French summary) RAIRO Rech. Opér. 15 (1981), no. 3, 233-239. (Authors' summary) 82j:90032 05C38, 90C10)

Nobile, Amelia G. (with Ricciardi, Luigi M.) Growth and extinction in random environment. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. III, pp. 455-465, Reidel, Dordrecht, 1980. (Authors' mary) 82i:92029

summary) 82i:92029 92A15

Noble, B. (with Beighton, S.) Error estimates for three methods of evaluating Cauchy principal value integrals. J. Inst. Math. Appl. 26 (1980), no. 4, 431-446. (Authors ary) 82d:65028 65D30 (30E20)

Noble, Steeman B. Particularizing the generality of economic analysis. Computer-assisted analysis and model simplification (Proc. First Sympos., Univ. Colorado, Boulder, Colo., 1980), pp. 271-291, Academic Press, New York, 1981. (See 82g:00016)

busawa, Nobuo A remark on conjugacy classes in simple groups. Osaka J. Math. 18 (1981), no. 3, 749-754. (Gary L. Walls) 82k:20056 20E32

Nocedal, Jorge (with Bjørstad, Petter) Analysis of a new algorithm for one-dimensional minimization. (German summary) Computing 22 (1979), no. 1, 93-100. (Authors' summary) 82f:65057 65H05

Nocilla, Silvio Vibrations and stability in nonlinear systems with one degree of freedom. Recent developments in theoretical and experimental fluid mechanics, pp. 416-425, Springer, Berlin, 1979. (See 82c:76004) 70K20

Nočka, E. I. Uniqueness theorems for rational functions on algebraic varieties. (Russian) Bul. Akad. Štiince RSS Moldoven. 1979, no. 3, 27-31, 93. (Werner Kleinert) 82f:32040 32H25 (14E05)

Noda, Kazuo Bayes decision functions for selections of subpopulations. Recent developments in statistical inference and data analysis (Proc. Internat. Conf., Inst. Statist. Math., Tokyo, 1979), pp. 227-236, North-Holland, Amsterdam, 1980. (Khursheed Alam) 82e:62018 62D05 (62C10)

On a kernel-type decision function for selection of a subpopulation. J. Japan Statist. Soc. 10 (1980), no. 1, 17-27. (S. Panchapakesan) 82i:62017

Noë, H. *Numerical investigations on the problem of Molodensky. Mitteilungen des Geodätischen Instituts der Technischen Universität Graz [Reports of the Geodetic Institute of the Technical University of Graz], 36. Technische Universität Graz, Graz, 1980. iii + 75 pp. (C. C. Tscherning) 82j:86006 86A30 (35R30, 65P05)

Noebels, R. A note on stochastic order of probability measures and an application to Markov processes. (German summary) Z. Oper. Res. Ser. A-B 25 (1981), no. 1, A35-A43. (S. Ghosh) 82j:60008 60B05 (60J05)

Noether, Emmy See Dick, Auguste, 82:01047
Noether, F. On the question of the kinematics of an absolutely rigid body in the theory of relativity. (Russian) Translated from the German by L. Z. Ponizovskii. Einstein collection, 1977 (Russian), pp. 131-157, 327, "Nauka", Moscow, 1980. (Editors) 82e:01127 01A75 (83A05)

Nof, Shimon Y. (with Bullers, William I.; Whinston, Andrew B.) Artificial intelligence in manufacturing planning and control. AIIE Trans. 12 (1980), no. 4, 351–363. (Authors' summary) 82g;90055 90B30 (03B10, 03B35, 68G15)

Noga, Ju. V. An optimal control problem in the theory of surface gravitational waves. (Russian) Gidromeh. (Kiev) No. 42 (1980), 6-11, 121. (Author's summary) 82i:76018 76B99 (49A10)

Nogami, Yoshiko The k-extended set-compound estimation problem in a nonregular family

of distributions over $[\theta, \theta+1]$. Ann. Inst. Statist. Math. 31 (1979), no. 2, 169–176. (R. S. Singh) 82f:62025 62C25

Nogi, Tatsuo A difference scheme for solving two-phase Stefan problem of heat equation. Publ. Res. Inst. Math. Sci. 16 (1980), no. 2, 313-341. (J. R. Cannon) 82d:65082 65P05 (35K05, 65M99, 80A20)

Noguchi, Akira (with Ueda, Yutaka) On the relationship between the Zakharov-Shabat and Hirota-Oishi schemes for constructing various soliton solutions. *Progr. Theoret. Phys.* **64** (1980), *no.* 3, 794–802. (L. A. Takhtajan (Tahtadžjan)) **82e:35075** 35Q20 (35A25, Noguchi, Shoichi (with Harao, Masateru) Global mapping space of cellular systems. Inform. and Control 43 (1979), no. 2, 241–254. (Authors' summary) 82i:68036 68D26 (54C99, 92A05) 68D26

cassou-Noguès, Pierrette See Cassou-Noguès, Pierrette

Nohel, John A. A forced quasilinear wave equation with dissipation. Equadiff IV (Proc. Czechoslovak Conf. Differential Equations and their Applications, Prague, 1977), pp. 318–327. Lecture Notes in Math., 703, Springer, Berlin, 1979. (R. C. MacCamy) 82d:35064 35L70

Nonlinear Volterra equations for heat flow in materials with memory. Integral and functional differential equations (Proc. Conf., West Virginia Univ., Morgantown, W. Va., 1979), pp. 3-82, Lecture Notes in Pure and Appl. Math., 67, Dekker, New York, 1981. (Gustaf Gripenberg) 82p.45023 45N05 (45G05, 47H15, 80A20)

(with Clement, Ph.) Asymptotic behavior of solutions of nonlinear Volterra equations with completely positive kernels. SIAM J. Math. Anal. 12 (1981), no. 4, 514–535. (Gustaf Gripenberg) 82g:45022 45N05 (47H15, 80A20)

A nonlinear hyperbolic Volterra equation occurring in viscoclasticity. Transactions of the Twenty-seventh Conference of Army Mathematicians (West Point, N.Y., 1981), pp. 433-438, ARO Rep. 82, I. U. S. Army Res. Office, Research Triangle Park, N.C., 1982, (See 82k:00010) 45D05 (75F15)

Noid, D. W. (with Koszykowski, M. L.; Tabor, M.; Marcus, R. A.) Properties of vibrational energy levels in the quasiperiodic and stochastic regimes. J. Chem. Phys. 76 (1980), no. 11, 6169-6175. (Authors' summary) 82d:81174 81G55 (58F14)

(1980), no. 11, 6169-6175. (Authors' summary) 82d:81174 81G55 (58F14) (with Koszykowski, M. L.; Tabor, M.; Marcus, R. A.) On correlation functions and the onset of chaotic motion. J. Chem. Phys. 74 (1981), no. 4, 2530-2535. (Authors' summary) 82g:82007 82A05 (58F13)

Noiri, Takashi On 8-continuous functions. J. Korean Math. Soc. 16 (1979/80), no. 2, 161–166. (Tsugio Tani) 82b:54020 54C05

A note on hyperconnected sets. Mat. Vesnik 3(16)(31) (1979), no. 1, 53-60. (O. T. Alas) 82a:54029 54D05

Properties of S-closed spaces. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 3-4, 431-436. (S. Gene Crossley) 82b:54021 54C08

Functions which preserve hyperconnected spaces. (French summary) Rev. Roumain Math. Pures Appl. 25 (1980), no. 7, 1091–1094. (S. Gene Crossley) 82b:54038 54D9 (54C08)

Semicontinuity and weak-continuity. Czechoslovak Math. J. 31(106) (1981), no. 2, 314–321. (S. Gene Crossley) 82f:54018 54C08 (58C99)

Nojiri, H. On fuzzy-fuzzy team decision problems. Kybernetes 10 (1981), no. 1, 57-65. (Author's summary) 82a:90018 90A08 (03E72)

di Nola, Antonio See Di Nola, Antonio

Nola, Robert Fixing the reference of theoretical terms. Philos. Sci. 47 (1980), no. 4, 505-531. (David W. Miller) 82g:03011 03A05

"Paradigms lost, or the world regained"—an excursion into realism and idealism in science. Synthese 45 (1980), no. 3, 317-350. (Evandro Agazzi) 82e:00040 00A69 (03A05, 81B05)

Nolan, Michael J. (with Mazenko, Gene F.; Valls, Oriol T.) Real-space dynamic renormalization group. I. General formalism. Phys. Rev. B (3) 22 (1980), no. 3, 1263-1274. (Richard S. Ellis) 82c:82031 82A25 (82A67)

(with Mazenko, Gene F.; Valls, Oriol T.) Real-space dynamic renormalization group. II. Simple examples. *Phys. Rev. B* (3) **22** (1980), *no.* 3, 1275–1285. (Richard S. Ellis) **82c82032** 82A25 (82A67)

Nold, Amett Heterogeneity in disease-transmission modeling. Math. Biosci. 52 (1980), no. 3-4, 227-240. (Prajneshu) 82g:92038 92A15

Noldus, E. J. (with Dersee, I. A.) Nonlinear control of bilinear systems. *Proc. IEE-D* 127 (1980), no. 4, 169–175. (Authors' summary) 82f:93034 93C10 (93D20)

(with Derese, I. A.) Existence of bilinear state observers for bilinear systems. IEEE Trans. Automat. Control 26 (1981), no. 2, 590-592. (Authors' summary) 82h:93007 93B05

(with Derese, I. A.) Stability of nonlinear transportation systems. Internat. J. Control 34 (1981), no. 5, 1017–1026. (Authors' summary) 82m:93068 93D05

Nollau, Volker * Semi-Markovsche Prozesse. (German) [Semi-Markov processes]
Wissenschaftliche Taschenbücher, Reihe Mathematik/Physik [Scientific Paperbacks, Mathematics/Physics Series], 260. Akademie-Verlag, Berlin, 1980. 162 pp. (H. Hering)
82h:60172 60K15 (90B25)

(with Hahnewald-Busch, A.) A method of clustering for discounted Markovian decision problems. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 12 (1981), no. 1, 137-147. (Authors' summary) 82m:90155 90C40

Nolte, C. (with Naudé, G.) Linear systems: introductory remarks and a duality theory for systems over rings. Algebra Symposium (Potchefstroom Univ., Potchefstroom, 1979), pp. 77-92, Potchefstroom Univ. for Christian Higher Ed., Potchefstroom, 1980. (See 82:16002) 68D30 (16A99)

Nolte, Wolfgang (with Mäurer, Helmut; Metz, Rudolf) Die Automorphismengruppe der Möbiusgeometrie einer Körpererweiterung. Aequationes Math. 21 (1980), no. 1, 110–112. (Armin Herzer) 82:e51009 51B10

Eine projektive Spiegelungsgruppe, welche S-Gruppe ist. (English summary) J. Geom. 14 (1980), no. 2, 118–122. (Frieder Knüppel) 82i:51011 51F15 (51F20)

Noltemeier, Hartmut On a generalization of heaps. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 127–136, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Author's summary) 82h:68083 68E05 (06A10. 68H05)

See also Graphtheoretic concepts in computer science, 82g:68005
akuchi, Kentaro Sufficient condition for existence of conditional qualitative

Nomakuchi, Kentaro Sufficient condition for existence of conditional qualitative probability. Mem. Fac. Sci. Kyushu Univ. Ser. A 33 (1979), no. 2, 269–281. (A. I. Dale) 82b:60003 60A05 (62A15)

Nomizu, Katsumi (with Dajczer, Marcos) On the boundedness of Ricci curvature of an indefinite metric. Bol. Soc. Brasil. Mat. 11 (1980), no. 1, 25-30. (Paul E. Ehrlich) 826:53039 53C50 (15A63, 83C15)

Nomofilov, V. E. (with Buldyrev, V. S.) Asymptotic solutions of an elliptic equation system on a Riemannian manifold concentrated in the vicinity of a phase trajectory. J. Phys. A 14 (1981), no. 7, 1577–1585. (Ju. V. Kostarčuk) 82m:35043 35J45 (53C45, 58G05) Nomura, Takaaki Harmonic analysis on the universal covering group of certain semidirect product Lie group. Japan. J. Math. (N.S.) 6 (1980), no. 1, 129-145. (A. Kleppner) 82:22015 22E30 (43A80)

Nomura, Toshio (with Furuta, Katsuhisa) Invariant structures of general dynamical systems. SIAM J. Control Optim. 19 (1981), no. 1, 154-167. (Authors' summary) 82b:93024 93C35 (54H20)

Nomura, Yasutoshi On the homotopy enumeration of the extensions. Sci. Rep. College Gen. Ed. Osaka Univ. 29 (1980), no. 1, 1-26 (1981). (J. W. Rutter) 82k:55014 55005

Nonnenmacher, Theo F. Comments on the spinodal decomposition mechanism and the kinetics of phase separation. New frontiers in transport theory (Tucson, Ariz., 1979). Ann. Nuclear Energy 7 (1980), no. 4-5, 235-241. (Author's summary) 82:82078

Nôno, Takayuki (with Mimura, Fumitake) Dynamical symmetries. VI. Bull. Kyushu Inst. Tech. Math. Natur. Sci. No. 26 (1979), 1-11. (Manfred Andrié) 82k:58042 58F05

(with Sakurai, Takatoshi) On some properties of prolongations. Bull. Fukuoka Univ. Ed. III 30 (1980), 17–27 (1981). (Jean Pradines) 82k:58010 58A20

(with Mimura, Fumitake) Generalized contact transformations. Bull. Kyushu Inst. Tech. Math. Natur. Sci. No. 28 (1981), 1-5. (H. Rund) 82i:35010 35A30 (58A15, 58G35, 70H15)

Noor, Ahmed K. (with Weisstein, Larry S.) Stability of beamlike lattice trusses. Comput. Methods Appl. Mech. Engrg. 25 (1981), no. 2, 179–193. (Authors' summary) 82e:73038 731105

Recent advances in reduction methods for nonlinear problems. Comput. & Structures 13 (1981), no. 1-3, 31–44. (Author's summary) 82k:73058 73K:30 (65H10, 90C:30) (with Andersen, C. M.) Computerized symbolic manipulation in nonlinear finite element analysis. Comput. & Structures 13 (1981), no. 1-3, 379–403. (Authors' summary) 82k:73064 73K:25 (65–04, 73–04)

Noor, K. Inayat Bieberbach conjecture for univalent functions. Comment. Math. Univ. St. Paul. 30 (1981), no. 2, 131–133. (M. Reade) 82m:30023 30C50 (30C45)

Noor, M. Aslam A constructive proof of the Lax-Milgram lemma. Bull. Iranian Math. Soc. 7, no. 2, 33-39 (1980). (Robert D. Brown) 82c-47023 47A99 (46G99, 47H10, 49G20) Strongly nonlinear problems in a Hilbert space. Bull. Iranian Math. Soc. 8 (1980/81), no. 1, 3-7. (D. H. Hyers) 82i-47067 47H05 (47H15)

Error estimates for the finite element solutions of variational inequalities. *Internat. J. Math. Math. Sci.* 4 (1981), no. 3, 565-570. (I. Norman Katz) 82k:65066 65N30

Noordergraaf, Abraham (with Cecchini, Albert B. P.; Melbin, Julius) Set-point: is it a distinct structural entity in biological control? J. Theoret. Biol. 93 (1981), no. 2, 387–394.

(Authors' summary) 82m:92006 92A05 (93A10)

Noordzij, P. On [na]+[nb]=[nc]+[nd] for all positive integers n. Nieuw Arch. Wisk. (3)
29 (1981), no. 1, 59–70. (V. C. Harris) 82g:10011 10A20

Norando, T. (with Biroli, Marco; Marchi, S.) Homogenization estimates for quasivariational inequalities. (Italian summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 2, 267-274. (Lucio Boccardo) 821-49005 49A29 (35185)

Norberg, Ragnar Empirical Bayes credibility. Scand. Actuar. J. 1980, no. 4, 177-194. (Fl. De Vylder) 82de5159 62P05 (with Borgan, Ørnulf; Hoem, Jan M.) A nonasymptotic criterion for the evaluation of automobile bonus systems. Scand. Actuar. J. 1981, no. 3, 165-178. (Authors)

of automobile bonus systems. Scand. Actuar. J. 1981, no. 3, 165–178. (Authors' summary) 82:62149 62P05

Vorburv. John (with Keady, Grant) A semilinear elliptic eigenvalue problem. I. Proc. Ro

Norbury, John (with Keady, Grant) A semilinear elliptic eigenvalue problem. I. Proc. Roy. Soc. Edinburgh Sect. A 87 (1980/81), no. 1-2, 65-82. (John M. Ball) 82m:58018a 58E07 (3582, 35165, 73H99, 76C99, 76W05)

(with Keady, Grant) A semilinear elliptic eigenvalue problem. II. The plasma

(with Keady, Grant) A semilinear elliptic eigenvalue problem. II. The plasma problem. Proc. Roy. Soc. Edinburgh Sect. A 87 (1980/81), no. 1-2, 83-109. (John M. Ball) 82m:58018b 58E07 (35832, 35165, 73H99, 76C99, 76W05) ordberg, Lennart Stepvise selection of explanatory variables in the binary logit model.

Scand. J. Statist. 8 (1981), no. 1, 17-26. (Author's summary) 82f:62058 62F10

Norden, A. P. (with Višnevskii, V. V.; Il'inskii, N. B.; Šapukov, B. N.; Širokov, A. P.)

Boris Lukič Laptev (on the occasion of his 75th birthday). (Russian) Izv. Vysš. Učehn.

Zaved. Matematika 1980, no. 10, 3-5. (Editors) 82h:01067 01A70

(with Krugljakov, L. Z.; Nikitina, E. S.) Construction of some focal complexes of

(with Krugljakov, L. Z.; Nikitina, E. S.) Construction of some focal complexes of two-dimensional planes. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 12 (1980), 50–57. (Josef Vala) 82;53016 53A20

Norden, P. A. (with Garifullin, F. A.; Zapparov, F. I.; Mingaleev, N. Z.) Cellular convection in a viscoelastic fluid. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1981, no. 1, 133–136, 174. (Authors' summary) 82k:76032 76E15 (76R99)

Nordström, Gunnar See Isaksson, Eva; et al., 82g:01055 Norgaard, R. (with Killeen, Timothy J.) Expected utility and the truncated normal

Norgaard, R. (with Killeen, Timothy J.) Expected utunty and the truncated normal distribution. Management Sci. 26 (1980), no. 9, 901–909. (Jean-Louis Boursin) 82b;90019 90A10 (90B05)

Norgela, S. On approximation of some classes of classical predicate calculus by decidable classes. II. (Russian. Lithuanian and English summaries) Litowik. Mat. Sb. 20 (1980), no. 4, 89-96, 210. (Roman Murawski) 82i-03015 03B10 (03B25)
Nori, Madhav V. (with Narasimhan, M. S.) Polarisations on an abelian variety. Geometry

Nori, Madhav V. (with Narasimhan, M. S.) Polarisations on an abelian variety. Geometry and analysis, pp. 125-128, Indian Acad. Sci., Bangalore, 1980. (Tsutomu Sekiguchi) 82c:14033 14K10 (14K99)

(with Adimurthi, A.) Sur l'espace des solutions des systèmes sous-déterminés. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 6, 355-357. (J. Kajiwara) 82f:35006 35A99

lezama y Noriega, Pedro See Lezama y Noriega, Pedro Norkin, S. B. (with Donskaja, N. V.) Behavior of solutions of a homogeneous initial

Norkin, S. B. (with Donskaja, N. V.) Behavior of solutions of a homogeneous initial problem for second-order differential equations with retarded argument in the neighborhood of a singular point (Russian) Differential equations with deviating argument (Russian), pp. 23–34, Unito. Družby Narodov im. Patrisa Lumumby, Moscow, 1979. (R. R. Ahmerov) 82h:34094 34K15 (34C10)

Norkin, V. I. Conditions of convergence of combined algorithms of nonlinear programming. Kibernetika (Kiev) 1979, no. 6, 73–77 (Russian); translated as Cybernetics 15 (1979), no. 6, 854–860 (1980). (Kaj Madsen) 82c:90083 90C30

Generalized-differentiable functions. Kibernetika (Kiev) 1980, no. 1, i, 9-11, 149 (Russian); translated as Cybernetics 16 (1980), no. 1, 10-12. (L. V. Vasil'ev) 82e:90091 90C30

an, Alfred L. On the control of structural models. Econometric modeling and policy ign at the Federal Reserve, Part II. With a comment by Gregory C. Chow and a reply the author. J. Econometrics 15 (1981), no. 1, 13-29. (See 82c:90003b) 90A16

nald A. Twelve issues for cognitive science. Cognitive Sci. 4 (1980), no. 1, 1–32. the summary) 82b:92044 92A25

(From the summary) 82h:92044 92A25

rman, Paul Dennis (with Chandra, Jagdish; Dressel, Francis G.) A monotone method for a system of nonlinear parabolic differential equations. Proc. Roy. Soc. Edinburgh Sect. A 87 (1980/81), no. 3-4, 209-217. (Yoshihito Tomita) 82f:35099 35K60

m, Peter (with Oort, Frans) Moduli of abelian varieties. Ann. of Math. (2) 112 (1980), no. 3, 413-439. (T. Oda) 82h:14026 14K10 (14L05)

mand, Jean-Marie AA Lie group: rotations in quantum mechanics. North-Holland Publishing Co., Amsterdam-New York, 1980. xvii + 486 pp. ISBN 0-444-86125-4 (M. A. Rashid) 82h:81001 81-01 (20H15, 22E70, 81C40)

ie (with Fliess, Michel) Vers une approche algébrique des systèmes -Cyrot, Doroth non lineaires en temps discret. Analysis and optimization of systems (Proc. Internat. Conf., Versailles, 1980), pp. 594-603, Lecture Notes in Control and Infor. Sci., 28, Springer, Berlin, 1980. (Christopher I. Byrnes) 82m:93017 93B15 (cation of systems (Proc. Fourth 93B15 (93B05.

n, Dag A classification of higher type functionals. Proceedings from 5th Scandinavian Logic Symposium (Aalborg, 1979), pp. 301-308, Aalborg Univ. Press,
Aalborg, 1979. (S. S. Wainer) 82e:03044 03D65

*Recursion on the countable functionals. Lecture Notes in Mathematics, 811.

Springer-Verlag, Berlin-New York, 1980. viii + 191 pp. ISBN 3-540-10019-9 (S. S. Wainer) 824-03075 03D65 (03F99)

The recursion theory of the continuous functionals. Recursion theory: its pp. 171-183, London Math. Soc. Lecture Note Ser., 45, Cambridge Univ. Press, Cambridge, 1980. (From the introduction) 92, 222 tion and applications (Proc. Logic Colloq., Univ. Leeds, Leeds, 1979), bridge, 1980. (From the introduction) 82h:03045 03D65

(with Wainer, Stan S.) The 1-section of a countable functional. J. Symbolic Logic 45

(1980), no. 3,549-562. (Viggo Stoltenberg-Hansen) 82f:03040 03D65 onthe-Gabria, M. L. Ideals in the semiring N. Portugal. Math. 37 (1978), no. 1-2, 113-117 (1981). (From the text) 82f:16663 16A78 (20M25)

ris, Diane M. (with Tomber, Marvin L.; Reynolds, Mary; Balzer, Cindy; Trebilcott, Kathy; Terry, Tamara; Coryell, Hellen; Ordway, Judy) A nonassociative algebra ography. Proceedings of the Second Workshop on Lie-Admissible Formulations (Sci. Center, Harvard Univ., Cambridge, Mass., 1979), Part B. Hadronic J. 3 (1979/80), no. 1, 507-725. (J. Dieudonnė) 82i:17001 17-02 (00A15)

(with Tomber, Marvin L.; Smith, C. L.; Welk, R.) Addenda to: "A nonassociative algebra bibliography" [Hadronic J. 3 (1979/80), no. 1, 507-725; MR 82i:17001]. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ.

Massachusetts, Boston, Mass., 1980), Part C. Hadronic J. 4 (1980/81), no. 4, 1318-1443. (J. Dieudonné) 82i:17002 17-02 (00A15)

(with Tomber, Marvin L.; Smith, C. L.) A subject index of works relating to nonassociative algebras. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part C. Hadronic J. 4 (1980/81), no. 4, 1444-1625. (J. Dieudonnė) 82j:17001 17-02 (00A15)

Norris, Michael J. (with Bailey, Paul B.) On the interval of existence for nonlinear two-point boundary value problems. SIAM J. Math. Anal. 9 (1978), no. 3, 535-557. (Authors' summary) 82c:34018 34B15

(Authors' summary) 82c:34018

(with Vélez, William Yslas) Structure theorems for radical extensions of fields. Acta
Arith. 38 (1980/81), no. 2, 111–115. (Jack Sonn) 82i:12022 12E10 (12E05)

(with Driver, R. D.) A uniqueness theorem for ordinary differential equa SIAM J. Math. Anal. 12 (1981), no. 2, 141-144. (Juri Bogdanov) 82f:34004

(with Hanson, Richard J.) Analysis of measurements based on the singular value decomposition. SIAM J. Sci. Statist. Comput. 2 (1981), no. 3, 363-373. (Authors' summary) 82m:65011 65D10 (65F30)

Norsett, S. P. (with Brunner, H.; Wolkenfelt, P. H. M.) *On Vo-stability of numerical methods for Volterra integral equations of the second kind. Afdeling Numerieke Wiskunde [Department of Numerical Mathematics], 84. Mathematisch Centrum m, 1980. ii + 12 pp. (H. Brunner) 82g:65062 65R20

(with Wanner, G.) Perturbed collocation and Runge-Kutta methods. Numer. Math.

38 (1981/82), no. 2, 193-208. (Authors' summary) 82m:65065 65L05 Norsworthy, J. R. (with Kymn, Kern O.; Okamoto, Tatsuo) The computation of the alized inverse. Kyungpook Math. J. 20 (1980), no. 2, 199–206. (M. Lotkin) 1001 15–04 (15A09)

North, John D. Nicolaus Kratzer—the king's astronomer. Science and history, pp. 206-234, Studia Copernicana, XVI, Ossolineum, Wrocław, 1978. (See 82e:01003)

On making history. With comments by L. A. Markova and Carlos-Ulises Moulines Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science (Second Internat. Conf., Pisa, 1978), Vol. II, pp. 271–290, Synthese Library, 146, Reidel, Dordrecht, 1981. (Joong Fang) 82j:01005 01A05 (00A25)

Northcott, D. G. ★Affine sets and affine groups. London Mathematical Society Lecture
Note Series, 39. Cambridge University Press, Cambridge-New York, 1980. x+285 pp.
ISBN 0-521-22909-X (T. Kambayashi) 82c:14002 14-01 (14D25, 14L30, 15A72, 20G25)

*A first course of homological algebra. Reprint. Cambridge University Press. Cambridge-New York, 1980. xi + 206 pp. ISBN 0-521-29976-4 (Editors) 82k:18001 18-01 (13-01, 18Gxx)

Topological groups and integral extensions. Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 125, 109-117. (J. W. Brewer) 82i:13006 13B05 (13B20)

rthrup, Scott H. (with Hynes, James T.) The stable states picture of chemical reactions. I. Formulation for rate constants and initial condition effects. J. Chem. Phys. 73 (1980), no. 6, 2700-2714. (Authors' summary) 82i:80013a 80A30

rton, Graham H. (with Heath, Philip R.) Equiconnectivity and cofibrations. I.

cripta Math. 35 (1981), no. 1-2, 53-68. (J. Dugundji) 82m:55008 55P05

Norton, J. P. (with Brown, Reginald Frederick; Godfrey, K. R.) Modal analysis of identifiability of linear con ental models. Proc. IEE-D 127 (1980), no. 3, 83-92. (P. Bertrand) 82f:92015 92A09 (93B30)

Norton, Karl K. Acknowledgment of priority: "Remarks on the number of factors of an odd perfect number" [Acta Arith. 6 (1960/61), 365-374; MR 26 #4950]. Acta Arith. 36

(1980), no. 2, 163. (Editors) 822-10014 10A25

Norton, N. C. (with Hajarnavis, C. R.) The one and half generator property in Noetherian rings. Comm. Algebra 9 (1981), no. 4, 381-396. (G. Michler) 82e-16015 16A33

Norton, R. M. Moment properties and the arc sine law. Sankhyā Ser. A 40 (1978), no. 2, 192-198. (J. H. B. Kemperman) 82d-60026 60E05 (60E99)

Norton, Roger D. (with Scandizzo, Pasquale L.) Market equilibrium computations in

analysis models. Oper. Res. 29 (1981), no. 2, 243-262. (Authors' sum 90A14 (90C05)

Norton, Simon The construction of J4. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 271–277, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (Editors) 82a:20030 20D08

Norvaišas, E. (with Ališauskas, S.) Bases of two-parameter representations and some isofactors of the groups U, SO, (Russian. Lithuanian and English summaries) Litovsk. Fiz. Sb. 20 (1980), no. 2, 3-14, 131. (I. I. Jurik) 82b:22028 22E70 (81C40)

rwood, F. H. Long proofs. Amer. Math. Monthly 89 (1982), no. 2, 110–112. (Perry Smith) 82mc03002 03–01 (03B35, 03F20)

Smith) 82m:03002 03-01 (03B33, 012a)
macedońska-Nosalska, Olga See Macedońska-Nosalska, Olga
Nose, Toyokazu (with Ishii, Hiroaki; Shiode, Shōgo; Nishida, Toshio) Perishable

ntory management subject to stochastic leadtime. European J. Oper. Res. 8 (1981), no. 1, 76-85. (Authors' summary) 82k:90047 90B05

(with Ishii, Hiroaki; Nishida, Toshio) Some properties of perishable inventory control subject to stochastic leadtime. (Japanese summary) J. Oper. Res. Soc. Japan 24 (1981), no. 2, 110-135. (Authors' summary) 82g:90039

nko, V. I. (with Kotljar, V. D.; Hariton, L. R.) Conditions for existence of and algorithms for certain stackings of parallelotopes. (Russian) Mathematical methods in cybernetics (Russian), pp. 73–75, 86, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Authors' summary) 82b:52002 52–04 (68C20, 90C10)

Nosik, V. I. (with Makašev, N. K.) Steady-state Couette flow (with heat transfer) of a gas of Maxwell molecules. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 5, 1077-1081. (Nina B. Maslova) 82b:82046 82A40 (45K05, 76P05)

as, Jean-Clarence (with Candelpergher, Bernard) Solutions asymptotiques de l'équation de Schrödinger stationnaire associée à un potentiel central. (English summary) R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A175-A178. (Authors' summary) 81C05 (35B40, 58G25)

ov, S. L. Averaging of a perturbed system over the time interval $O(\varepsilon^{-k})$, $k \ge 1$. (Russian) Differencial'nye Uravnenija 15 (1979), no. 5, 805-808, 955-956. (V. G. Zadorožnii)

sov, V. R. Perron's theorem for stationary and periodic systems of functional-differential equations. (Russian) Differential equations with deviating argument (Russian), pp. 44-51. Univ. Družby Narodov im. Patrisa Lumumby, Moscow, 1979. (M. I. Kamenskii) 82i:34093

(with Kolmanovskii, V. B.) Stability of neutral systems with a deviating argument. (Russian) Prikl. Mat. Meh. 43 (1979), no. 2, 209-218 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 2, 227-236 (1980). (A. I. Kir'janen) 82k:34084 34K20

Nossal, Ralph Mathematical theories of topotaxis. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 410-439, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (Author's introduction) 82j:92009 92A05 (92A09)

estine, Ronald D. (with Wollkind, David J.) A nonlinear stability analysis of the solidification of a pure substance. IMA J. Appl. Math. 27 (1981), no. 1, 85-104. (Authors' summary) 82k:80004 80A20 (82A25)

tohara, Morihiro (with Shiga, Tokuzo) Convergence to genetically uniform state in stepping stone models of population genetics. J. Math. Biol. 10 (1980), no. 3, 281-294. (S. Levin) 82a:92831 92A15 (60H10, 92A10)

Eigenanalysis for the Kolmogorov backward equation for the neutral multi-allelic model. J. Math. Biol. 11 (1981), no. 3, 235–244. (Charles J. Mode) 82k:92045 92A10

ton, A. R. M. See Yamada, Takeo, 82d:93060

Nott, David Definite integrals of generalized functions. SIAM J. Appl. Math. 35 (1978), no. 4, 626-636. (Szymon Sznajder) 82a:46040 46F10 (26A42)

gahi-Noubary, G. R. See Dargahi-Noubary, G. R.
ugues-Sainte-Beuve, M.-F. Espaces de Lindelöf et quelques propriétés topologiques des espaces de mesures. Travaux Sém. Anal. Convexe 10 (1980), no. 2, exp. no. 15, 26 pp. (N. Dinculeanu) 82m:28004 28A05 (28A33, 28B05, 46E27, 54D20)

umi, Masatoshi On the equivalence of certain comparison theorems for holonomic systems of differential equations. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 2, 106-110. (P. Schapira) 82i:58063 58G07

abouel-Nour, Abdel-Razek A. See Abouel-Nour, Abdel-Razek A.

Nour, El-Sayed E. (with Wegman, Edward J.; Kukuk, Cris) A time series approach to life

table construction. Comm. Statist. A—Theory Methods 9 (1980), no. 15, 1587-1607. (Theo Gasser) 82i:62145 62N05 (62M10) Multiple decrement analysis with dependent risks. Biometrical J. 23 (1981), no. 2,

175-183. (Author's summary) 82i:62150 62P05

Nourani, Farshid A model-theoretic approach to specification, extension, and implementation. International Symposium on Programming (Proc. Fourth Internat. Sympos., Paris, 1980), pp. 282–297, Lecture Notes in Comput. Sci., 83, Springer, Berlin,

1980. (Author's summary) 82a:68037 68815 (03C99) ari-Moghadam, M. (with Taylor, John G.) On the quantization of gravity. Phys. Lett. B 94 (1980), no. 4, 487–490. (Authors' summary) 82a:83026 83C45 (53C05, 58D30, 58F06, 58G20)

ir. Ezzat S. On semilinear elliptic boundary value problems in unbounded domains J. Differential Equations 41 (1981), no. 3, 334-348. (Elvira Mascolo) 82k:35046 Noutsos, D. (with Evans, David J.; Hadjidimos, A.) Parallel solution of linear systems by quadrant interlocking factorisation methods. Comput. Methods Appl. Mech. Engrg. 29

(1981), no. 1, 97-107. (Authors' summary) 82k:65013 65F05
(with Evans, David J.; Hadjidimos, A.) The parallel solution of banded linear equations by the new quadrant interlocking factorisation (Q.I.F.) method. Internat. J. Comput. Math. 9 (1981), no. 2, 151-161. (Authors' summary) 82i:65021 65F05 (65N20)

Nouyrigat, Paul Sur les points extrémaux de la boule unité de l'espace des coefficients d'une représentation unitaire et sur l'égalité $A_n(G) = B_n(G)$. Publ. Dép. Math. (Lyon) 16 (1979), no. 1, 27-36. (Pierre Eymard) 82h:22005 22010 (43A99)

Novák, Bretislav (with Mawhin, Jean; Nečas, Jindřich) Docent Svatopluk Fučik has died. (Czech) Časopis Pēst. Mat. 105 (1980), no. 1, 91-101. (Editors) 82f:01122 01A70

Novak, David (with McKennon, Kelly) Exponentials on locally compact abelian groups Proc. Amer. Math. Soc. 83 (1981), no. 2, 307–314. (Pierre Eymard) 82j:43005 43A40
Novak, G. A. The isomorphism of solvable products of groups. (Russian. English summary)
Vestnik Moskov. Univ. Ser. I Mat. Meh. 1978, no. 3, 35–38. (Ja. P. Sysak) 82f:20062 20F16

Novák, Jiří On a conjecture of Turán. (Czech summary) With a loose Russian summary. Časopis Pěst. Mat. 106 (1981), no. 2, 127-137, 209. (G. F. Clements) 82h:05032 05C35 (05A05)

Novák, Josef (with Matušů, Josef) Über eine elementare Fläche. (English, Russian and Czech summaries) Apl. Mat. 24 (1979), no. 2, 93-104. (M. St. Botez) 82e:53007

On a free convergence group. Proceedings of the Conference on Convergence Structures (Cameron Univ., Lawton, Okla., 1980), pp. 97–102, Cameron Univ., Lawton, Okla., 1980. (Editors) 82b:20039 20E05 (20F38, 54A20)

vak, Ladislav A. (with Milić, Mirko M.) A general method of formulation of Lagrangian and anti-Lagrangian equations for nonlinear RLCMTG networks. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 231-234, IEEE, New York, 1979. 78A55 (58F05, 58F40, 94C05)

(with Milic, Mirko M.) Formulation of equations in terms of scalar functions for lumped nonlinear networks. Internat. J. Circuit Theory Appl. 9 (1981), no. 1, 15-32.

(Authors' summary) 82a:94099 94C05

Novak, Miroslav M. Interaction of photons with electrons in dielectric media. Fortschr. Phys. 28 (1980), no. 6, 285-353. (From the summary) 82h:82033 82A45 (78A99) Novák, Vítězslav Verallgemeinerte Sprachen und ihre Homomorphismen. Arch. Math.

(Brno) 16 (1980), no. 2, 115-125. (Heinrich Seidel) 82e:68084 68F05 Novello, M. A note concerning the gravitational indistinguishability of a neutrino field and Stokesian fluids. Phys. Lett. A 69 (1978/79), no. 5, 309-310. (Author's summary)

83E05 (83F05) (with Duarte de Oliveira, J.) On dual properties of the Weyl tensor. Gen. Relativity Gravitation 12 (1980), no. 11, 871-880. (Authors' summary) 82b:83031

Novick, Melvin R. (with Jackson, Paul H.; DeKeyrel, Dennis F.) Adversary preposterior analysis for simple parametric models. Bayesian analysis in econometrics and statistics, pp. 113-132, Stud. Bayesian Econometrics, 1, North-Holland, Amsterdam, 1980. (See

(with Ramsay, J. O.) PLU robust Bayesian decision theory: point estimation Amer. Statist. Assoc. 75 (1980), no. 372, 901-907. (M. M. Siddiqui) 82c:62049 62

(with Lindley, Dennis V.) The role of exchangeability in inference. Ann. Statist. 9 (1981), no. 1, 45-58. (V. P. Godambe) 82e:62007 62A99

Novickii, M. V. Completely subharmonic functions in the domain $D=(0,1)\times \mathbb{R}^m$, $m\geq 1$. (Russian) Teor. Funkcii Funkcional. Anal. i Priložen. No. 35 (1981), 86-93, vi. (Ü. Kuran) 82k:31006 31B10

Novickii, V. V. Conditions for determining the minimum number of controls and observations in linear stationary systems. (Russian) Complex control systems (Russian), pp. 33-42, 94-95, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. (Author's summary) 82b:93016 93B20 (93C45)

Novikov, A. A. Estimates for and asymptotic behavior of the probabilities of a Wiener process not crossing a moving boundary. (Russian) Mat. Sb. (N.S.) 110(152) (1979),

no. 4, 539-550. (G. A. Skorobogatov) 82e:60132 60J65 (60G40) Recursive interpolation of partially observable random fields. Mathematical

statistics, pp. 245-247, Banach Center Publ., 6, PWN, Warsaw, 1980. (J. Szpirglas) 82b-60042 60G25 (60G60)

On conditions for uniform integrability for continuous exponential martingales. Stochastic differential systems (Proc. IFIP-WG 7/1 Working Conf., Vilnius, 1978), pp. 304-310, Lecture Notes in Control and Information Sci., 25, Springer, Berlin, 1980. (S. D. Chatterji) 82g:60058 60G44

Estimates and asymptotic behavior of the probability of not crossing moving

boundaries by sums of independent random variables. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 4, 868-885, 974. (B. Jesiak) 82a:60071 60G50 (60J15)

On the time of exit of sums of bounded random variables from a curvilinear strip

(Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 2, 287-301. (M. M. Leonenko) 82h:60099 60G50 (60G42)

Novikov, A. P. The Kronecker limit formula in a real quadratic field. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 4, 886-917, 974. (Larry J. Goldstein) 82c:12010 12A65 (10D12)

Novikov, S. P. (with Kričever, I. M.) Holomorphic bundles and nonlinear equations. Finite-gap solutions of rank 2. (Russian) Dokl. Akad. Nauk SSSR 247 (1979), no. 1, 33-37. (Eugene Gutkin) 82j:14012 14F05 (35Q20, 58F07)

A method of solving the periodic problem for the KdV equation and its generalization. Solitons, pp. 325-338, Topics Current Phys., 17, Springer, Berlin, 1980.

58F07 (14K99, 35Q20) (See 82m:35001)

(with Dubrovin, B. A.) Fundamental states in a periodic field. Magnetic Bloch functions and vector bundles. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 6, 1293-1297. (Alexander A. Pankov) 82c:81181 81L05 (35P99, 35Q99, 58F07, 81K05) (with Dubrovin, B. A.) Ground states of a two-dimensional electron in a periodic magnetic field. Z. Eksper. Teoret. Fiz. 79 (1980), no. 3, 1006-1016 (Russian): translated as Soviet Phys. JETP 52 (1980), no. 3, 511-516 (1981). (Authors' summary) 82i:81018

Bloch functions in the magnetic field and vector bundles. Typical dispersion relations

and their quantum numbers. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 3,

538-543. (M. I. Monastyrskii) 82h:81111 81E99 (14F05, 58F07, 8IG10)

See also Investigations in the metric theory of surfaces, 82b:53083

Novikov, S. V. Method of implementing a system of partial Boolean functions by means of an arrangement of programmable logic arrays. Avtomat. i Vyčisl. Tehn. (Riga) 1980, no. 6, 33-37, 95 (Russian); translated as Automat. Control Comput. Sci. 14 (1980), no. 6, 25-29. (Author's summary) 82i:68044 68E99 (68D50, 94C10)

Novikov, V. A. (with Vainštein, A. I.; Zaharov, V. I.; Šifman, M. A.) Asymptotic freedom in quantum mechanics. Jadernaja Fiz. 32 (1980), no. 6, 1622–1635 (Russiam); translated as Soviet J. Nuclear Phys. 32 (1980), no. 6, 840–847 (1981). (Authors' summary)

81C05 (81G05)

vikov, V. G. (with Nikiforov, A. F.; Uvarov, V. B.) Solution of the Schrödinger equation for bound states by the inverse iterative method. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 42, 15 pp. (Authors' introduction) 82j:65091 65P05

Novikov, V. L. (with Mjasnikov, V. P.; Sazonov, Ju. V.) A direct problem of salt dome modeling. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1105-1107. 82b:86007 86A99 (35Q10, 49D30)

The variational principle of advective motions. (Russian) Dokl. Akad. Nauk SSSR

257 (1981), no. 3, 578-580. (Adelina Georgescu) 82i:86004 86A15 (76E20)
Novikov, V. V. Internal resonances and stability of elastic shells. (Russian) Z. Prikl. Meh. i

Tehn. Fiz. 1980, no. 4, 162-164, 174. (Author's summary) 82e:73070 Novillo Sardi, J. E. (with Assmus, E. F., Jr.) Generalized Steiner systems of type

3-(v, {4,6},1). Finite geometries and designs (Proc. Conf., Chelwood Gate, 1980), pp. 16-21, London Math. Soc. Lecture Note Ser., 49, Cambridge Univ. Press, Co. abridge Univ. Press, Cambridge, 1981. (Ian Blake) 82i:05012 05B07 (05B30, 51E10, 51E30)

gutiérrez-Novoa, L. See Gutiérrez-Novoa, L. Novokšenov, V. Ju. Asymptotic behavior at infinity of the solution of an elliptic

pseudodifferential equation in a half-space. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 28 Primen. Metoda Soglasovan. Asimptot. Razloženii k Kraev. Zadačam dl' ja Differencial. Urav. (1979), 93-106, 109-110. (Stephan Rempel) 82f:35195 35S15 (35J99)

Asymptotic behavior with respect to the small parameter of a solution of an elliptic pseudodifferential equation in half space. (Russian) Differential equations with a small parameter (Russian), pp. 87-110, 155-157, Akad. Nauk SSSR, Ural. Naučn. Centr, Soerdlovsk, 1980. (Stephan Rempel) 82:35174 35505 (35199)
Equations in convolutions on a finite interval and factorization of elliptic matrices.

(Russian) Mat. Zametki 27 (1980), no. 6, 935-946, 990. (N. K. Karapetjanc) 82d:45010

(with Habibullin, I. T.) Nonlinear differential-difference schemes that are integrable by the inverse scattering method. Asymptotic behavior of the solution as $t \to \infty$. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 3, 543-547. (Woodford W. Zachary) 82j:35134 35O20 (58F07)

(with Hannanov, S. H.) Kinetics of the development of an intercrystalline crack by means of diffusive mass transfer. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1981, no. 3, 136-141, 173. (Authors' summary) 82k:73067 73M05

roselov, A. P. (with Belonogov, G. G.) Principles of the construction of automated information systems. (Russian) Semiotics and information science, No. 13 (Russian), pp. 5-16, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (O. O. Romanovs'kii) 82a:94028 94A15 (68A05)

Novoselov, V. S. Algorithmization of the asymptotic theory of optimization of two-impulse transfer. (Russian) Mechanics of controllable motion (Russian), pp. 90-102, 200-201, Voprosy Meh. Process. Upravl., 3, Leningrad. Univ., Leningrad, 1979. (O. Ja. Savčenko) 826:70017 70M99 (49B10, 65H10)

On classes of equivalence of nonholonomic coordinates. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 2, 82-85, 126. (Author's summary) 82g:70029 70F25 (53B50)

Novoselova, S. M. (with Babic, V. M.) On basilar membrane vibration in the cochlea of mammals. (Russian. English summary) Mathematical questions in the theory of wave ropagation, 10. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 89 (1979), 54-62, 291-292. (Authors' summary) 82h:92010 92A09 (73P10)

rotná, Jarmila Discrete analogues of Wirtinger's inequality for a two-dimensi (Czech summary) With a loose Russian summary. Casopis Pest. Mat. 105 (1980), no. 4, 354-362, 409. (Catherine Bandle) 821:49049 49G05 (26D15, 52A40)

Novotný, Pavel A transformation of a sphere. (Slovak) Sixth Scientific Conference of the College of Transport Engineering (College Transport Engrg., Žilina, 1979) (Slovak), pp. 84–88, College of Transport Engrg., Žilina, 1979. (George Virsik) 82b:53007 53A05 (53C45)

vožilov, Ju. V. (with Franke, V. A.; Prohvatilov, E. V.) On the light-cone formulation of classical nonabelian gauge theory. Lett. Math. Phys. 5 (1981), no. 3, 239-245. (A. O. 81E99 (53C80) Barut) 82i:81111

Novožilov, V. V. See Birthday: Novožilov, V. V., 82a:01049

Novshek, William (with Sonnenschein, Hugo) Small efficient scale as a foundation for Walrasian equilibrium. Noncooperative approaches to the theory of perfect competition.

J. Econom. Theory 22 (1980), no. 2, 243-255. (See 82e:90023) 90A14

Equilibrium in simple spatial (or differentiated product) models. Noncooperative aches to the theory of perfect competition. J. Econom. Theory 22 (1980), no. 2, 313-326. (See 82e:90023) 90A14

The development of algebra in German universities at the end of the 19th century. (Czech. Russian and French summaries) DVT—Dējiny Vēd Tech. 11 (1978), no. 1, 8-22. (Author's summary) 82e:01067 01A55 (01A73)

International and national science. Historical aspects. (Czech. Russian and English naries) DVT-Dējiny Vēd Tech. 14 (1981), no. 1, 25-37. (Author's summary) 82e:01113 01A72 (01A80)

See also Revo ents in the field of science and engineering,

82g:01002

wak, Bogdan On the Lipschitzian retraction of the unit ball in infinite-dimensional Banach spaces onto its boundary. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 11-12, 861-864 (1981). (P. Mankiewicz) 82g:58008

See also Robust methods, 82is-2003

ak, M. (with Filipkowski, S.) Influence of hinge line gap on aerodynamic forces acting on a harmonically oscillating thin profile in an incompressible flow. I, II. (Polish and Russian summaries) Arch. Mech. (Arch. Mech. Stor.) 32 (1980), no. 4, 517-548. (Authors' summary) 82e:76008 76B05 (33A25)

s. (with Casati, G.; Lazzaro, E.) Stochastic effects induced by pulsed R.F. on trapped particles in a tokamak. Intrinsic stochasticity in plasmas (Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 273-283, École Polytech., Palaiseau, 1979. (J. S. Joel) 82m:82028 82A45 (70K50, 76W05)

nir (with Dydak, Jerzy) On unions of shape trivial compacta. (Russian wak, Sławon ary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 29 (1981), no. 7-8, 383-385. (J. Segal)

54F43 (54C56) 82m-54033

Algebraic theory of fundamental dimension. Dissert ones Math. (Rozprawy Mat.) 187 (1981), 54 pp. (Y. Kodama) 82j:55013 55P55 (54F43)

Nowak, T. M. See Schlicker, Wolfgang, 82g:01068

Nowak, Werner Georg Einige Verallgemeinerungen des Gaußschen Kreisproblems. Anz.

Österreich. Akad. Wiss. Math. Natur. Kl. 1978, no. 2, 45-51. (J. S. Joel) 82e:10086

sionales Gitterpunktproblem. (English summary) Man Fin dreidimen 10325 33 (1980/81), no. 1, 63-80. (Masako Izumi) 82f:10061

Gitterpunkte in Bereichen $x^++y^m < R$, x > 0, y > 0. (English summary Math. 89 (1980), no. 3, 223–233. (Henri Joris) 82b:10069 10J25 (10K05)

rakowska, Maria A model of memory with storage horizon control. Internat. J. Man-Mach. Stud. 13 (1980), no. 2, 213-221. (Manfred Kochen) 82h:92045

Structure of concepts. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 9 (1980), no. 1, 23-29. (Settimo Termini) 82f:03046 03E72

Influence of others on one's decision: a model of group choice. Math. Social Sci. 2 (1982), no. 1, 65-73. (Author's summary) 82m:92088 92A25 (90A07)

wski, Richard (with McFall, John D.) Strong independence in graphs. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 639–656. (J. Sedláček) 82h:05030 05C35 (90B25)

vell, William O., Jr. (with Eberhart, Carl; Nadler, Sam B., Jr.) Spaces of order arcs in hyperspaces. Fund. Math. 112 (1981), no. 2, 111-120. (Józef Krasinkiewicz) 82k:54011

Nowicki, Andrzei The primary decomposition of differential modules. Comment. Math. Prace Mat. 21 (1980), no. 2, 341-346. (R. Bkouche) 82g:13023 13N05 (12H05)

wicki, Eugeniusz (with Zdrzałka, Stanisław) Optimal control of a complex of independent operations. Internat. J. Systems Sci. 12 (1981), no. 1, 77-93. (Vincențiu Dumitru) 82i:49003 49A10

wicki, T. (with Stańczak, W.) Partitioning a set of elements into subsets due to their similarity. (French summary) Data analysis and informatics (Proc. Second Internat. Sympos., Versailles, 1979), pp. 583-591, North-Holland, Amsterdam, 1980. (See 92A20 (94C15)

sad, Pedro (with Brietzke, Eduardo) Optimal control of eigenvalues. I. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 366–374, Lecture Notes in Control and Information Sci., 22, Springer, Berlin, 1980. (See 81j:49001a) 49G20

Nožička, F. Konvexität und konvexe Optimierungsprobleme in gekrümmten Räumen. Vorträge der Wissenschaftlichen Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik, Teil I (Brussels, 1978). Z. Angew. Math. Mech. 59 (1979), no. 3, T109-T111. 82k:58035 58E15

zières, P. (with Saint-James, D.) Transient growth of fluctuations when sweeping a system through bifurcation. Progr. Theoret. Phys. Suppl. No. 69 (1980), 122-136 (1981). (Authors' summary) 82h:70027 70K50 (58F14, 82A05)

, Simeon C. (with Hakimi, S. Louis) On structured digraphs and program testing. IEEE Trans. Comput. 30 (1981), no. 1, 67-77. (Authors' summary) 82j:68064 (05C20, 68B10, 90B10)

is, S. K. (with Sficas, Y. G.) A boundary value problem for nth order functional differential equations. Nonlinear Anal. 5 (1981), no. 3, 325-336. (Bhagat Singh) 82e:34076 34K10

dart Rodón, David Martingales à variation indépendante du chemin. [Martingales with path independent variation] Two-index random processes (Paris, 1980), pp. 128-148, Lecture Notes in Math., 863, Springer, Berlin, 1981. (Bernard Prum) 82k:60112

(with Sanz, M.) The conditional independence property in filtrations associated to stopping lines. Two-index random processes (Paris, 1980), pp. 202-210, Lecture Notes in Math., 863, Springer, Berlin, 1981. (Bernard Prum) 82k:60099 60G40

(with Sanz, M.) Changing time for two-parameter strong martingales. (French summary) Ann. Inst. H. Poincaré Sect. B (N.S.) 17 (1981), no. 2, 147–163. (L.

60G40 (60G44, 60G60, 60J65)

On the convergence of martingales. (Spanish) Proceedings of the First

Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 638–646, Consejo Sup. Inv. Cient., Madrid, 1977. (Dominique Lépingle) 821:60098 60G42 Decomposition of independent valued stochastic measures. Contributions in

probability and mathematical statistics, teaching of mathematics and analysis (Spanish), pp. 83-90, Grindley, Granada, 1979. (Alan F. Karr) 82a:60074 60G57 (60J30) (with Sanz, M.) Random Gaussian Markov fields. Proceedings of the First World

Conference on Mathematics at the Service of Man (Barcelona, 1977), Vol. I, pp. 629-642, Univ. Politec., Barcelona, 1980. (J. Szpirglas) 82e:60087 60G60 (60J60) (with Aguilar-Martin, J.) Generalized wide sense Markov processes and quadratic

dynamical discrete systems. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. II, pp. 411-423, Reidel, Dordrecht, 1980. (Authors' summary) 82e:93109 93E11

Weak convergence to the law of two-parameter continuous processes. Z. Wahrsch. Verw. Gebiete 55 (1981), no. 3, 255-259. (Evarist Giné) 82d:60060 60F17 (60B12. 60F17 (60B12. Nucho, R. N. Transient behavior of the Kendall birth-death process-applications to capacity expansion for special services. Bell System Tech. J. 60 (1981), no. 1, 57-87. (R.

Fischler) 821:60186 60180 (60K25, 60K30)

Nudel'man, A. A. A generalization of classical interpolation problems. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 4, 790-793. (V. A. Tkačenko) 82f:30033

(41A05)

(with Krein, M. G.) Representation of entire functions that are positive on the real axis, or on the half axis, or outside a finite interval. (Russian) Linear operators and integral equations. Mat. Issled. No. 61 (1981), 40-59, 156. (R. P. Boas, Jr.) 82g:30050

ting, E. Schrankentreue Berechnung der Exponentialfunktion wesentlich-nichtnegativer Matrizen. (English summary) Computing 26 (1981), no. 1, 57-66. (Author's summary) 65F30 (65G10)

Nuffelen, Cyriel See Van Nuffelen, Cyriel

Nührenberg, J. (with Lortz, D.; Lotz, W.; Cap, Ferdinand) Three-dimensional analytical force-free MHD equilibria. Z. Naturforsch. A 36 (1981), no. 2, 144–149. (Authors' summary) 82i:76102 76W05

Nukherjee, R. N. A note on normality of operators. Tamkang J. Math. 11 (1980), no. 1, 33-35. (Kiran Chandra Das) 82j:47027 47B15 (47A15, 47B40)

ata, Minoru Another proof of the Erdős-Chao Ko-Rado theorem. (Japanese) Annu Rep. Fac. Ed. Iwate Univ. 40 (1980), no. 1, 109-110. (Sanpei Kageyama) 82b:05016 05A15 (05A20)

On primitive rank 5 permutation groups with two doubly transitive suborbits of same sizes. Annual Rep. Fac. Ed. Iwate Univ. 41 (1981), no. 1, 43-46. (Christian Ronse) 82k:28006 20B15

mata, Shigeru (with Matsumoto, Makoto) On semi-C-reducible Finsler spaces with constant coefficients and C2-like Finsler spaces. Tensor (N.S.) 34 (1980), no. 2, 218-222. (R. Miron) 82a:53031 53B40

melin, E. (with Arjas, E.; Tweedie, R. L.) Semi-Markov processes on a general state space: α-theory and quasistationarity. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 2, 187-200. (Authors' summary) 82j:60166 60K15

Regeneration in a general two-server tandem queue. Proceedings of the Sixth

Conference on Probability Theory (Braşov, 1979), pp. 439-441, Ed. Acad. R.S. România, Bucharest, 1981. (From the introduction) 82k:60195 60K25 (60K15)

Regeneration in tandem queues. Ado. in Appl. Probab. 13 (1981), no. 1, 221–230. (Jos H. A. de Smit) 82b:60122 60K25 (60K05)

The convergence of sums of transition probabilities of a positive recurrent Markov chain. Math. Scand. 48 (1981), no. 1, 79-95. (Rashid Ahmad) 82j:60122

Nunan, Kevin C. (with Caffisch, Russel E.) Evaluation of a function at infinity from its ower series. Phys. Rev. Lett. 46 (1981), no. 19, 1255-1256. (Authors' summary) 824-30032 30E10 (81E99)

Nunn, W. (with Keilson, Julian; Sumita, U.) The bilateral Laguerre transform. Appl. Math. Comput. 8 (1981), no. 2, 137-174. (N. C. Jain) 82h:44004 44A15

nney, Len The stability of complex model ecosystems. *Amer. Natur.* 115 (1980), no. 5, 639–649. (T. G. Hallam) 82nr.92073 92A17 (34D99, 92A15)

The influence of the type 3 (sigmoid) functional response upon the stability of predator-prey difference models. Theoret. Population Biol. 18 (1980), no. 2, 257-278. (L. d) 82a:92032 92A15 (58F13)

Nunziante, Diana Dirichlet problem in a dihedron for a class of elliptic equations. (Italian. English summary) Rend. Accad. Sci. Fis. Mat. Napoli (4) 47 (1980), 159-175 (1981). (Z. C. Motteler) 82j:35052 35J40 Nur, Ali See Archimedes' balance, 82b:01004

Nuriddinov, M. (with Dalabaev, U.) Construction of a difference scheme for equations of interpenetrating motions with account taken of lifting force. (Russian) Motion of single-and multiphase media (Russian), pp. 70-81, 114, "Fan", Tashkent, 1980. (Authors' summary) 82c:76067 76G99

Nurimov, T. (with Corsanbaev, I.) A study of certain classes of two-dimensional integral inequalities. (Russian) Research in mathematics and physics (Russian), pp. 115-121, 148, Taškent. Gos. Ped. Inst., Tašhkent, 1979. (B. Crstici) 82a:26017 26D15

Nurmeev, K. N. The complexity and running time of programs on a finite information set. (Russian) Algorithms and automata (Russian), pp. 66-77, Kazan. Gos. Univ., Kazan, 1978. (A. N. Maslov) 82e:68043 68C25 (20M35, 68D50)

Nurmeev, N. N. Complexity of symmetry recognition on multitape Turing machines. (Russian) Probabilistic methods and cybernetics. No. 14 (Russian), pp. 83-90, Kazan. Gos.

Vunio, Kazan, 1978. (Pavel Strand) 82a:68079 68C25
Nurmi, Hannu Modelling impreciseness in human systems. Progress in cybernetics and systems research, Vol. VII, pp. 225–230, Hemisphere, Washington, D.C., 1980. (Author's little and systems)

Nurminskii, E. A. On the differentiability of set-valued mappings. (Russian. English summary) Kibernetika (Kiev) 1978, no. 5, 46-48. (From the text) 82d:26015 26F25 (58C20)

On e-subgradient methods of nondifferentiable optimization. International Symposium on Systems Optimization and Analysis (Rocquencourt, 1978), pp. 187-195, Lecture Notes in Control and Information Sci., 14, Springer, Berlin, 1979. (Carl G.

Looney) 82h:49042 49D07 (65K05) (with Ermol'ev, Ju. M.) Stochastic quasigradient algorithms for mini stochastic programming. Stochastic programming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 275-285, Academic Press, London, 1980. (Klaus Tammer) 82a:90103

nedov, H. D. (with Filippov, I. G.) On the theory of oscillations of an elastic plate lying on a rigid base. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 7, 24-28. (W. Kecs) 73D35 (35B05)

mberger, Günther (with Singer, Ivan) Uniqueness of best approximations in spaces of continuous functions. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 687-692, Academic Press, New York, 1980. (A. Kroó) 82d:41037 41A52

(with Brosowski, Bruno; Deutsch, Frank) Parametric approximation. J. Approx. Theory 29 (1980), no. 4, 261-277. (Philip W. Smith) 82h:41033 41A50 (41A65)

(with Deutsch, Frank; Singer, Ivan) Weak Chebyshev subspaces and alternation. Pacific J. Math. 89 (1980), no. 1, 9-31. (Author's review (G.N.)) 82c:41026 41A50

Nurubloev, M. Boundary problems for a first-order system with lowest terms. (Russian. Turkmen summary) Dokl. Akad. Nauk Tadžik. SSR 24 (1981), no. 1, 13-16. (A. Džuraev) 82j:35031 35F15 (35M05)

Nurzia, Laura Relations between the geometric ideas of Federigo Enriques and German intuitionist mathematics. (Italian. English summary) *Physis—Riv. Internaz. Storia Sci.* **21** (1979), *no.* 1-4, 157–193 (1980). (J. Dieudonnė) **82m:00020** 00A25 (01A55)

Nute, Donald E. (with Fetzer, James H.) A probabilistic causal calculus: conflicting conceptions. Synthese 44 (1980), no. 2, 241-246. (Stephen Read) 82k:03024a

(with Fetzer, James H.) Errata to: "A probabilistic causal calculus: conflicting reptions". Synthese 48 (1981), no. 3, 493. (Stephen Read) 82k:03024b (60A05)

Nutku, Yavuz (with Gürses, Metin) New nonlinear evolution equations from surface theory. J. Math. Phys. 22 (1981), no. 7, 1393-1398. (F. A. E. Pirani) 82i:53002 (35Q20, 58F07)

Nuttall, J. (with Burley, S. K.; John, S. O.) Vector orthogonal polynomials. SIAM J. Numer. Anal. 18 (1981), no. 5, 919-924. (Authors' summary) 82h:65012 65D15

Nužin, M. T. (with Aksent'ev, L. A.; Il'inskii, N. B.; Salimov, R. B.; Tumašev, G. G.) The theory of inverse boundary value problems for analytic functions and its applications. (Russian) Mathematical analysis, Vol. 18 (Russian), pp. 67-124, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (V. Mičić) 824:30038 (76B99)

Nužnova, T. N. (with Genkin, I. L.) On the stability of a circular torus. (Russian. English summary) Akad. Nauk Kazah. SSR Trudy Astrofiz. Inst. 35 (1981), 73-79, 99. (B.

Garfinkel) 82k-85002 85A05 (76E20, 76W05)

Nwokah, O. D. I. Generalized Nyquist stability criterion for composite feedback control systems. Large Scale Systems 2 (1981), no. 3, 185–190. (Author's summary) 82k:93008

le Ny, Louis-Marie See Le Ny, Louis-Marie bhat-Nyak, Vasanti N. See Bhat-Nyak, Vasanti N.

Nyberg, Kaisa On subspaces of products of nuclear Fréchet spaces. Ann. Acad. Sci. Fenn. Ser. A I Math. Dissertationes No. 31 (1980), 56 pp. (E. Dubinsky) 82a:46010 Nye, V. A. Application to magnetohydrodynamic duct flows of a singular elliptic problem associated with a rectangle. Proc. Roy. Soc. Edinburgh Sect. A 86 (1980), no. 3-4, 355-365. (R. Thibault) 82e:76112 76W05 (35199)

Nygaard, Niels O. Higher de Rham-Witt complexes of supersingular K3 surfaces. Compositio Math. 42 (1980/81), no. 2, 245-271. (William E. Lang) 82d:14014

Nyikos, Peter J. A survey of two problems. Proceedings of the 1978 Topology Conference (Univ. Oklahoma, Norman, Okla., 1978), II. Topology Proc. 3 (1978), no. 2, 461–471

(1979). (From the text) 82i:54046 54D99 (with Reichel, Hans-Christian) Some results on cardinal functions in metrization theory. (Serbo-Croatian summary) Glas. Mat. Ser. III 15(35) (1980), no. 1, 183-202. (R.

54A25 (54E35) Hodel) 82f:54008 Tunnels, tight gaps, and countably compact extensions of N. The Proceedings of the 1980 Topology Conference (Univ. Alabama, Birmingham, Ala., 1980). Topology Proc. 5

(1980), 223-229 (1981). (From the text) 82k:54028 54D15 (54A35) Axioms, theorems, and problems related to the Jones lemma. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 441–449, Academic Press, New York, 1981. (Andrzej Szymański) 82g:54010 54A35 (03E35,

Metrizability and the Fréchet-Urysohn property in topological groups. Proc. Amer. Math. Soc. 83 (1981), no. 4, 793-801. (B. T. Sims) 82k:54049 54E35

-0-

- O, Chong Hyon Simple π products of symmetric matrices and their sums. (Korean) Cho-son In-min Kong-hwa-kuk Kwa-hak-wŏn T'ong-bo 1980, no. 5, 45-46. 82g:15018 Oakes, M. E. (with Skipping, C. R.; Moore, B. N.) Theory of an iterative, two-mode
- transmission network. Internat. J. Circuit Theory Appl. 9 (1981), no. 2, 217-231. (From the summary) 82d:94062 94C05
- Oaklander, L. Nathan (with Miracchi, Silvano) Russell, negative facts, and ontology. Philos. Sci. 47 (1980), no. 3, 434-455. (Authors' summary) 82a:03010 03A05 (00A69) Oaku, Toshinori A canonical form of a system of microdifferential equations with
- noninvolutory characteristics and branching of singularities. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 4, 205-209. (Author's introduction) 82e:58088 58G07 (35A30)

Analytic hypoellipticity of a system of microdifferential equations with noninvolutory characteristics. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 9, 438-441. (From the text) 82m:35026 35H05 (58G15)

Oates-Williams, Sheila Murskii's algebra does not satisfy min. Bull. Austral. Math. Soc. 22 (1980), no. 2, 199-203. (V. A. Artamonov) 82b:08010 08B15

Obideanu, V. Formes différentielles extérieures utilisées en électrodynamique. (Romanian summary) Proceedings of the Colloquium on Geometry and Topology (Cluj-Napoca, 1978) (Romanian), pp. 219–229, Univ. "Babeş-Bolyai", Cluj-Napoca, 1979. (See 821:53003)

Sur les équations de Maxwell en dynamique du point matériel. Ann. Fac. Sci. Univ. Nat. Zaïre (Kinshasa) Sect. Math.-Phys. 5 (1979), no. 1-2, 39-45. (A. Crumeyrolle) 78A25 (58F06)

Obala, J. *Exercices et problèmes de mécanique des milieux continus. (French) [Exercises and problems in the mechanics of continuous media] With a preface by Paul Germain. Masson, Paris, 1981. xii+211 pp. ISBN 2-225-74327-4 (E. G. Broadbent) 82k:00005 00A07 (73-01, 76-01)

nata, Tsunehiro (with Oshima, Hiroshi; Chiba, Jiro) A new geometrical gravitational theory. Gen. Relativity Gravitation 13 (1981), no. 4, 313-334. (Authors' summary)

Obayashi, Tetsuro (with Tougou, Hirohumi) Creeping flow of a slightly rarefied gas past two equal touching spheres. J. Phys. Soc. Japan 49 (1980), no. 3, 1171-1179. (Authors' summary) B2x76066 76P05 ibidapo-Obe, O. See Bidapo-Obe, O.
Oben, Ž.-P. See Aubin, Jean-Pierre

Oberaigner, W. Algorithms for multiplication with given precision. Fundamentals of numerical computation (computer-oriented numerical analysis) (Proc. Conf., Tech. Univ. Berlin, 1979), pp. 121–129, Comput. Suppl., 2, Springer, Vienna, 1980. (John Todd) 82h:65033 65G05

Oberhettinger, F. See Temme, N. M., 82a:65011a; Pexton, Robert L., 82a:65011b; Fettis, Henry E., 82g:65007a and Stuart, S. N., 82g:65007b
Oberle, Richard A. Extensions of measures with values in a topological group with

applications to vector measures. Tokyo J. Math. 4 (1981), no. 1, 73-103. (Z. Lipecki)

82k:28010 28B10 (28B05, 46G10)

Oberman, C. R. (with Jensen, Roderick V.) Calculation of the statistical properties of strange attractors. *Phys. Rev. Lett.* **46** (1981), no. 24, 1547–1550. (Authors' summary) **82e:58064** 58F13 (65U05, 81C35, 82A45, 92A09)

Oberschelp, Anneliese See Sawyer, W. W., 824:00001

Obi, Chike Analytical theory of nonlinear oscillations. X. Some classes of equations $\ddot{x}+g(x)=0$ with no finite Fourier series solution. (Italian summary) Atti Accord. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 53-56 (1980). (H. C. Howard) 82j:34039 34C25 (34C15)

Obi, E. C. The complete monotonicity of the Rayleigh function. J. Math. Anal. Appl. 77

 (1980), no. 2, 465–468. (B. R. Bhonsle) 82d:33023
 33A70
 Corrigendum: "A note on the Rayleigh polynomials" [SIAM J. Math. Anal. 9 (1978),
 no. 5, 825–834; MR 80j:33010]. SIAM J. Math. Anal. 12 (1981), no. 1, 139. (Editors) 33A40

Obi, Gabriel M. M. Closed graph theorem for quadratic spaces. J. London Math. Soc. (2) 22 (1980), no. 2, 245-250. (F. Cunningham, Jr.) 82c:15030 15A63 (15A99) An algebraic extension of the Lax-Milgram theorem. Pacific J. Math. 86 (1980), no. 2, 543-552 (R. Piziak) 824:15016 15A63 (46C10)

Obinata, Goro (with Inooka, Hikaru) Use of an aggregation model as an observer. Internat.

J. Control 34 (1981), no. 5, 979–989. (Authors' summary) 82m:93014 93B07

Obodovskii, L. B. (with Kosmodamians'kii, O. S.; Storožev, V. I.) The effect of an elastic wave in an isotropic solid with a series of curvilinear anisotropic inclusions. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 10, 35–39, 95. (Authors' summary) 82m:73028 73D99

Obolašvili, E. I. Some generalizations of the plane theory of elasticity and their relation to the shell theory. Theory of shells (Proc. Third IUTAM Sympos., Tbilisi, 1978), pp. 407-415, North-Holland, Amsterdam, 1980. (S. C. Das) 824:73068 73L99 (73C05)

nskii, A. Ju. (with Martinjuk, A. A.) Stability of the solutions of autonomous Ważewski systems. (Russian) Differencial'nye Uravnenija 16 (1980), no. 8, 1392-1407, 1532. (R. F. Datko) 82f:34056 34D05

Oborin, L. A. (with Aizengendler, P. G.) On the theory of bifurcations of dynamic systems depending on two small parameters. (Russian) Functional analysis, No. 13 (Russian), pp. 27-38, Ul' janousk. Gos. Ped. Inst., Ul' yanousk, 1979. (From the text) 822:58070 58F14 (34C25)

Obrębski, Jan B. A generalized numerical algorithm for analysis of rod constructions. (Polish. English and Russian summaries) Mechanics and computers, Vol. 2 (Polish), pp. 249-263, PWN, Warsaw, 1980. (From the summary) 82c:73060 73K30 (65N30)

Obrecht, Enrico (with Bove, Antonio; Franchi, Bruno) A boundary value problem for elliptic equations with polynomial coefficients in a half space. I. Pseudodifferential operators and function spaces. (Italian summary) Boll. Un. Mat. Ital. B (5) 18 (1981), no. 1, 25-45. (Gerd Grubb) 82j:35144a 35S15 (35J30, 35K25)
(with Bove, Antonio; Franchi, Bruno) A boundary value problem for elliptic

equations with polynomial coefficients in a half space. II. The boundary value problem. (Italian summary) Boll. Un. Mat. Ital. B (5) 18 (1981), no. 2, 355-380. (Gerd Grubb) 82i:35144b 35S15 (35J40)

(with Bove, Antonio; Franchi, Bruno) Boundary value problems for operators like $\Delta + x \cdot \nabla$. (Italian summary) Rend. Mat. (7) 1 (1981), no. 1, 95-120. (Elvira Mascolo)

82j:35045 35125 (46E35)

Obregón, Octavio (with Ryan, Michael P., Jr.) Bianchi type IX cosmological models with homogeneous spinor fields. J. Math. Phys. 22 (1981), no. 3, 623-630. (Authors' summary) 82f:83027 83C20

Obreškov, Nikola **Consumenus. Tom 2. (Bulgarian) [Works. Vol. 2] Edited by L. Iliev.

B"Igar. Akad. Nauk, Sofia, 1981. 336 pp. (Editors) 82k-01042 01A75

Obretenov, Apostol Upper bound of the absolute difference between a discrete IFR distribution and a geometric one. Proceedings of the Sixth Conference on Probability Theory (Bragov, 1979), pp. 177–184, Ed. Acad. R.S. România, Bucharest, 1981. (Editors)

820-62229 67005

O'Brian, Nigel R. (with Toledo, Domingo; Tong, Yue Lin L.) The trace map and characteristic classes for coherent sheaves. Amer. J. Math. 103 (1981), no. 2, 225-252. (K. Lamotke) 82f:32021 32C35 (32C15, 57R20, 58A14)

(with Toledo, Domingo; Tong, Yue Lin L.) Hirzebruch-Riemann-Roch for coherent sheaves. Amer. J. Math. 103 (1981), no. 2, 253-271. (K. Lamotke) 82f:32022 32C35 (32L15, 58C10)

(with Toledo, Domingo; Tong, Yue Lin L.) Grothendieck-Riemann-Roch for plex manifolds. Bull. Amer. Math. Soc. (N.S.) \$ (1981), no. 2, 182-184. (From the 82m:32011 32C35 (14F12, 58G05) text) 82m:32011

O'Brien, D. M. (with Holt, J. N.) The extension of generalized cross-validation to a multiparameter class of estimators. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 4, 501-514. (Authors' summary) 82h:65033 65F99 (15A12, 65R20)

Spherical Bessel functions of large order. J. Comput. Phys. 36 (1980), no. 1, 128-132. (B. D. Agrawal) 82e:33010 33A40 (33A45)

(with Lohe, M. A.) Soliton mass corrections and explicit models in two dimensions

Phys. Rev. D (3) 23 (1981), no. 8, 1771–1780. (Authors' summary) 824:81085 81E10
O'Brien, G. L. A new comparison theorem for solutions of stochastic differential equations.

Stochastics 3, no. 4, 245–249 (1980). (William J. Anderson) 821:60139 60H10 The road-colouring problem. Israel J. Math. 39 (1981), no. 1-2, 145-154. (J. W. Moon) 82f:05048 05C20 (05C15, 05C40)

racio Brauer quivers and almost split sequences. An. Inst. Mat. Un na México 19 (1979), no. 2, 185-220 (1980). (From the text) 82g:16028 ost split sequences. An. Inst. Mat. Univ. Nac.

- O'Bries, M. C. M. (with Barentzen, H.; Olbrich, G.) An approximate analytical treatment of the E⊗e Jahn-Teller effect. J. Phys. A 14 (1981), no. 1, 111-124. (Authors' summary) 81H10
- O'Brien, Mike J. (with Broussard, John R.) Trajectory tracking for a capacity planning model. IEEE Trans. Systems Man Cybernet. 10 (1980), no. 10, 650-652. (Authors'
- summary) 82a-49007 49A10

 O'Briea, Peter C. A likelihood test for multivariate serial correlation. Biometrika 67 (1980), no. 3, 531–537. (D. Dąbrowska) 82e-62067 62H20

 O'Briea, R. W. The gliding motion of a bacterium: Flexibacter strain BH3. J. Austral.
- Math. Soc. Ser. B 23 (1981/82), no. 1, 2-16. (Author's summary) 82j:92028 (76Z10)
- Obšta, A. F. Periodic solutions of systems in total differentials. (Ukrainian. Russian summary) Studies in the qualitative theory of differential equations and its applications (Ukrainian), pp. 45-46, 75, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Author's summary) 821:35002 35A25 (35B10)
- abova, V. S. Parametrization and canonical form of the equation of the torse T⁴₁. (Russian) *Prikl. Geom. i Inžener. Grafika No.* 30 (1980), 17–20, 132. (V. Medek) 82b:53006 53A05
- ovskii, I. T. (with Smirnov, Ju. F.; Čuvil'skii, Ju. M.) On the construction of wavefunctions in the six-quark system. J. Phys. A 15 (1982), no. 1, 7-23. (Authors' summary) 82m:81082 81G20 (22E70)
 O'Carroll, L. (with Mahmood, S. J.; Meldrum, J. D. P.) Inverse semigroups and near-rings.
- don Math. Soc. (2) 23 (1981), no. 1, 45-60. (Steve Ligh) 82e:16033 (20M20)
- O'Carroll, M. J. Finite elements: what are they and what use are they? Modelling and simulation in practice, 2 (Proc. Second Annual Polymodel Conf., Teesside Polytech., Middlesbrough, 1979), pp. 3-27, Emjoc, Northallerton, 1980. (See 82c:65001) 65N30
- See also Modelling and sime tion in practice, 82c:65001
- Occorsio, Mario Rosario (with Mastroianni, Giuseppe) On the derivatives of Stancu polynomials. (Italian. English summary) Rend. Accad. Sci. Fis. Mat. Napoli (4) 45 (1978), 273-281 (1979). (D. D. Stancu) 82a:41019 41A36 (41A10, 41A25)
- Ochanine, Serge Opérations de Conner-Floyd. (English summary). C. R. Acad. Sci. Pa Sèr. I Math. 292 (1981), no. 1, 79–81. (Author's summary). 82h:57016 57R20 (55S2 Ochiai, Mitsuyuki (with Homma, Tatsuo; Takahashi, Moto-o). An algorithm for 57R20 (55S25)
- recognizing S³ in 3-manifolds with Heegaard splittings of genus two. Osaka J. Math. 17 (1980), no. 3, 625–648. (John Hempel) 82i:57013 57N12 (57M40)

 Ochiai, Takushiro (with Inoue, Masahisa; Kobayashi, Shoshichi) Holomorphic affine
- connections on compact complex surfaces. J. Fac. Sci. Univ. Tokyo Sect. IA Math. 27 (1980), no. 2, 247-264. (C. A. M. Peters) 82g;32033 32J15 (14J15)
- ton, J. An elementary model for the classes of ideals of an algebraic torus. (Spanish)

 Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 68 (1974), no. 4, 771-806. (F. Diaz y Diaz) 82f:15012a 15A36 (10C05, 12A45)
 - An elementary model for the classes of ideals of an algebraic torus. II. (Spanish) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 2, 191-202. (F. Diaz y Diaz) 82f:15012b 15A36 (10C05, 12A45)
- Ochs, Wilhelm Concepts of convergence for a quantum law of large numbers. Rep. Math. Phys. 17 (1980), no. 1, 127-143. (S. Gudder) 82g:81020 81C20 (46L55, 47B99) The set of all projective limits of a projective system of state operators. J. Math. Phys. 22 (1981), no. 2, 284-289. (H. Araki) 82e:46082 46L30 (46M05, 81B10)
- Ochs-Halbig, Gertraude Das mathematische Museum. "Utile erit scribi" oder: praktischer schreibt man J. Praxis Math. 22 (1980), no. 6, 177-179. (Eberhard Knobloch) 82b:01017
- Ocirov, M. N. Summation of Fourier integrals by the Riesz method. (Russian) Theory of cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 167–168, 254, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Z. Čanturija) 82:42009 42A38
- Ockham, William See Ockham's theory of propositions, 82b:01013
 Ocneanu, Adrian Actions des groupes moyennables sur les algèbres de von Neumann.
 (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 6, A399–A401. (Trond Digernes) 82d:46093 46L55 (46L40)
- Ocone, D. (with Marcus, Steven I.; Mitter, Sanjoy K.) Finite-dimensional nonlinear estimation for a class of systems in continuous and discrete time. Analysis and nisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 387-406, Academic Press, London, 1980. (Martin Morf) 82e:93101 93E10
- O'Connell, M. J. (with David, Herbert Aron) Order statistics and their concomitants in some double sampling situations. Essays in probability and statistics, pp. 451–466, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 82h:62052 62G30
- O'Connell, R. F. (with Wigner, Eugene P.) Position operators for systems exhibiting the special relativistic relation between momentum and velocity. Phys. Lett. A 67 (1978), no. 5-6, 319-321. (A. O. Barut) 82f:81100 81M05 (81B05, 81E05)
- (with Wigner, Eugene P.) Quantum-mechanical distribution functions: conditions for neness. Phys. Lett. A 83 (1981), no. 4, 145-148. (Franklin E. Schroeck, Jr.)
- 82f.81023 81C20 (81B99)

 O'Connell, Richard T. (with Bowerman, Bruce L.) *Time series and forecasting. An lied approach. Duxbury Press, North Scituate, Mass., 1979. xiii+481 pp. ISBN 0-87872-218-1 (From the introduction) 82m:62199 62M10
- O'Connor, Thomas A. Some classes of limit laws containing the stable distributions. Z. Wahrsch. Verw. Gebiete 55 (1981), no. 1, 25-33. (M. Sreehari) 82e:60026 60E07 (60F05)
- Oda, Nobuyuki (with Mimura, Mamoru) Periodic families in homotopy groups. J. Math. Kyoto Univ. 21 (1981), no. 1, 171-187. (Shichirô Oka) 824:55013
- Oda, Tadao Works of P. Deligne. I. Japanese) Special issue: International Congress of Mathematicians (Helsinki, 1978). Sügaku 31 (1979), no. 1, 18–25. (Editors) 82a:01044 01A70

- arič, O. M. (with Grabovs'kii, B. O.; Derkač, V. P.; Korsuns'kii, V. M.) Investigation of an integral equation of the interaction of a beam of accelerated electrons with a target. (Russian) Qualitative investigations of functional differential equations (Russia pp. 23-33, 182, "Naukova Dumka", Kiev, 1980. (Authors' summary) 82h:81128 81F99 (45A05)
- Oddie, Graham Verisimilitude and distance in logical space. The logic and epistemology of scientific change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn. 30 (1978), no. 2-4, 227-242 (1979). (See 82i:00024) 00A25 (03A05)
- Odegard, Douglas Truth and redundancy. Mind 86 (1977), no. 343, 333-344. (Jill Humphries) 824:03012 03A05
- Odeh, F. (with Nevanlinna, Olavi) Multiplier techniques for linear multistep methods. Numer. Funct. Anal. Optim. 3 (1981), no. 4, 377–423. (Peter Alfeld) 82k:65040 65L05
 Odeh, Robert E. (with Owen, Donald B.) *Tables for normal tolerance limits, sampling
- plans, and screening. Statistics: Textbooks and Monographs, 32. Marcel Dekker, New York-Basel, 1980. ix + 316 pp. ISBN 0-8247-6944-9 (Editors) 82b:62039
- See also Neff, Norman D.; et al., 82a:62157
 Odekov, O. A. (with Tulaeva, S. V.) On the possibility of constructing a formal theory for logical formations. (Russian. Turkmen summary) Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk 1980, no. 5, 95-105. (J. S. Joel) 82f:86004 86A99 (93A13)
- Odell, E. (with Elton, John) The unit ball of every infinite-dimensional normed linear space contains a (1+e)-separated sequence. Colloq. Math. 44 (1981), no. 1, 105-109. (J. Reif) 82k:46025 46B20
- (with Haydon, R.; Sternfeld, Y.) A fixed point theorem for a class of star-shaped Israel J. Math. 38 (1981), no. 1-2, 75-81. (K. Goebel) 82c:47070 (52A05, 52A30)
- Odell, Garrett M. (with Bard, Jonathan L. B.: Ghozlan, Aline: Goldbeter, Albert: Hardt. Shoshana; Levitzki, Alexander; Liron, Nadav; Parnas, Hanna; Perelson, Alan S.; Rapp, P. E.; Rubinow, Sol I.; Segel, Lee A.; Tolkovsky, Aviva M.; Wehrhahn, Christian; Yagil, Gad; Zeigler, Bernard P.) ★Mathematical models in molecular and
 - cellular biology. Cambridge University Press, Cambridge-New York, 1980. x+757 pp.
- ISBN 0-521-22925-1 (John J. Tyson) 82c-92001 92-01 (92A09)

 Odell, Patrick L. (with Cale, William G., Jr.) Behavior of aggregate state variables in ecosystem models. Math. Biosci. 49 (1980), no. 1-2, 121-137. (Authors' summary) 82k:92060 92A17
 - (with Decell, Henry P., Jr.; Coberly, William A.) Linear dimension reduction and Bayes classification. Pattern Recognition 13 (1981), no. 3, 241–243. (From the introduction) 82i:68055 68G10 (62B05)
- Oden, J. T. Finite element methods for a class of nonlinear boundary value problems in finite elasticity. Mathematics of finite elements and applications, III (Proc. Third MAFELAP Conf., Brunel Univ., Uxbridge, 1978), pp. 327-339, Academic Press, London, 1979. (P. G. Ciarlet) 82h:73015 73C50 (73G05, 73K25)
 - Penalty-finite element approximations of unilateral problems in elasticity.
 - Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 693-697, Academic Press, New York, 1980. (Editors) 82e:65065 65110 (73C99)
 - (with Ohtake, K.; Kikuchi, Noboru) Analysis of certain unilateral problems in von Kármán plate theory by a penalty method. I. A variational principle with penalty. Comput. Methods Appl. Mech. Engrg. 24 (1980), no. 2, 187-213. (Claude Do) 82c:73047a 73K10 (49A29, 49D30, 65N99)
 - (with Ohtake, K.; Kikuchi, Noboru) Analysis of certain unilateral problems in von Karman plate theory by a penalty method. II. Approximation and numerical analysis. Comput. Methods Appl. Mech. Engrg. 24 (1980), no. 3, 317–337. (Claude Do) 82c:73047b 73K10 (49A29, 49D30, 65N99)
 - (with Le Tallec, P.) Existence and characterization of hydrostatic pressure in finite deformations of incompressible elastic bodies. J. Elasticity 11 (1981), no. 4, 341-357.
- (John M. Ball) 82k:73034 73G05 (49B22, 58E07)
 endahl, R. (with Funkenbusch, W. W.) Region count for straight line cutting of flat figures. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. I. Congr.
- Numer. 28 (1980), 409–420. (S. G. Hoggar) 82;05035 05B25
 Odifreddi, Piergiorgio Trees and degrees. Cabal Seminar 77–79 (Proc. Caltech-UCLA Logic Sem., 1977–79), pp. 235–271, Lecture Notes in Math., 839, Springer, Berlin, 1981. (Barry Cooper) 82h:03038 03D30
 - Strong reducibilities. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 1, 37-86. (A. N. Dēgtev) 82k:03064 03D30 (03D25)
- Odinec, Vladimir P. Remarks on the uniqueness of minimal projection with nonunit norm.
 (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 29 (1981), no. 3-4, 145-151. (D. E. Wulbert) 82m:46017 46B20 (41A65)
- Odišarija, M. G. (with Entov, V. M.) Asymptotic investigation of seepage flows in the case of a power resistance law. Inż.-Fiz. Z. 39 (1980), no. 5, 893-900 (Russian); translated as J. Engrg. Phys. 39 (1980), no. 5, 1247-1252 (1981). (Authors' summary) 82k:76067 76S05 (45E10)
- Odlyzko, Andrew M. (with Lagarias, J. C.) Divisibility properties of some cyclotomic sequences. Amer. Math. Monthly 87 (1980), no. 7, 561-564. (D. H. Lehmer) 82c:10014 10A40
 - (with Guibas, Leo J.) A new proof of the linearity of the Boyer-Moore string searching algorithm. SIAM J. Comput. 9 (1980), no. 4, 672-682. (Armin Cremers) 824:68024 68C05 (68C25, 68E99)
- On the ranks of some (0, 1)-matrices with constant row sums. J. Austral. Math. Soc. Ser. A 31 (1981), no. 2, 193-201. (Jennifer Seberry) 82j:05032 05B20 (05A15, 15A48) (with Guibas, Leo J.) String overlaps, pattern matching, and nontransitive games. J. Combin. Theory Ser. A 30 (1981), no. 2, 183-208. (J.-M. Goethals) 82g:05007 05A15
- (05A05, 68G10) (with Sloane, N. J. A.) On exceptions of integral quadratic forms. J. Reine Angew. Math. 321 (1981), 212-216. (H. Mizuno) 82b:10025 10C15 (10D12)
 - (with Landau, Henry J.) Bounds for eigenvalues of certain stochastic matrices.

Linear Algebra Appl. 38 (1981), 5-15. (Thomas H. Foregger) 82m:15022 15A51

Odobleja, Ştefan See Odobleja: Between Ampère and Wiener, 82h:01002

O'Donald, Peter Theoretical aspects of sexual selection: variation in threshold of female mating response. Theoret. Population Biol. 15 (1979), no. 2, 191-204. (From the introduction) 82j:92045 92A10

Odoni, Amedeo R. (with Berman, Oded; Larson, Richard C.) Developments in network location with mobile and congested facilities. European J. Oper. Res. 6 (1981), no. 2, 104-116. (Authors' summary) 82h:90049 90B15

Odoni, R. W. K. Généralisations du théorème de Landau sur les sommes de deux carrès: la

méthode de fonctions frobéniennes. Conference on Analytic and Elementary Number Theory (Orsay, 1980) (French), pp. 67-76, Publ. Math. Orsay 81, 1, Univ. Paris XI, Orsay, 1981. (See 82b:10001) 10H15

O'Donnell, Michael A practical programming theorem which is independent of Peano arithmetic. Begriffsschrift-Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 284-298, Friedrich-Schiller-Univ., Jena, 1979. (Editors) 82:03066

03F30 (03B05, 03B40, 03D20, 03F05, 68C30)

O'Donnell, Terence See Mathematics of hydrology and water resources, 82k:86001 O'Donovan, D. P. Unitary equivalence of essentially normal operators modulo the

compacts. Proc. Roy. Irish Acad. Sect. A 80 (1980), no. 2, 147-153. (S. Popa) 82k:47036 47B15 (46M20, 47C15)

Odzijewicz, Anatol Conformal kinematics and twistor flag spaces. Proceedings of the Summer School on Yang-Mills Equations (Kagel, 1979), pp. 53-63, Seminarberichte, 25, Humboldt Univ., Berlin, 1980. (See 82j:53062) 83C99

Ochmke, Robert H. On finite division rings. Proc. Amer. Math. Soc. 79 (1980), no. 2, 174–176. (S. D. Cohen) 82d:17001 17A20

Oelschlägel, D. (with Süsse, H.) Interval analytic treatment of convex programming

problems. (German summary) Computing 24 (1980), no. 2-3, 213-225. (Authors' summary) 82f:90080 90C25

(with Süsse, H.) Optimierung mit Hilfe des Intervall-Newton-Verfahrens. (English and Russian summaries) [Optimization by means of the interval Newton method] Z. Angew. Math. Mech. 61 (1981), no. 6, 243-251. (Authors' summary) 82m:65043

Oesterle, Joseph (with Douady, Adrien) Dimension de Hausdorff des attracteurs. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 24, A1135-A1138. (D. L. Rod) 58F12 (58F13)

Oettli, Karl Werner (with Kall, P.) Measurability theorems for stochastic extremals Stochastic programming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 93-95, Academic Press, London, 1980. (Authors' summary) 82e:90070 90C15 See also Optimization and optimal control, 82e:49004

Oevel, W. (with Schröter, J.) Balance equations for micromorphic materials. Phys. 25 (1981), no. 4, 645–662. (Authors' summary) 82m:82013 82A05 (73B99)

(with Steeb, W.-H.; Erig, J.) A note on the nonrelativistic and relativistic classical mechanics and the constants of the motion. Lett. Nuovo Cimento (2) 30 (1981), no. 14, 421-426. (Frans Cantrijn) 82g:58033 58F05 (70H99) (with Schröter, J.) On the asymmetry of the stress tensor of materials with internal

degrees of freedom. Phys. A 105 (1981), no. 1-2, 169-186. (Authors' summary)

824-73009 73B99 (82A99)
O'Farrell, Anthony G. (with Marshall, Donald E.) Uniform approximation by real functions. Fund. Math. 104 (1979), no. 3, 203-211. (Authors' summary) 82j:41035 41A65 (46E25)

Point derivations on an algebra of Lipschitz functions. Proc. Roy. Irish Acad. Sect. A 80 (1980), no. 1, 23-39. (C. C. White) 82g:46096 46J99 (58C99)

Five generalisations of the Weierstrass approximation theorem. Proc. Roy. Irish Acad. Sect. A 81 (1981), no. 1, 65-69. (Allan Pinkus) 82k:44004 44A10 (41A63, 46E25)

Offei, D. N. Eigenmatrices and nonhomogeneous boundary value problem order differential equation. Afrika Mat. 3, no. 1, 69-86 (1981). (William B. Day) 82e:34025 34B25

er, Edward K. See Barnett, William A., (See 82c:90003a)

Offner, Carl D. Zeros and growth of entire functions of order 1 and maximal type with an application to the random signs problem. Math. Z. 175 (1980), no. 3, 189-217. (G. Halász) 821:30026 30D15 (60E10)

Ofman, Salomon Transformée de Radon et intégrale sur les cycles analytiques compacts de certains ouverts de l'espace projectif complexe. (English summary) C. R. Acad. Sci. Paris Sèr. I Math. 292 (1981), no. 3, 179-182. (Author's summary) 82c:32009 32C30

Intégrale sur les cycles analytiques compact d'une variété algébrique projective complexe privée d'un point (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 4, 259-262. (Author's summary) 82j:32026 32C30

Ogai, S. V. Rational points on algebraic curves. (Russian) Studies in geometry and algebra (Russian), pp. 108-114, Kirgiz. Gos. Univ., Frunze, 1978. (S. A. Stepanov) 82;14029 14H45 (10B15, 14G05)

(with Poluljah, A. K.) Estimation of the number of subfields of index two of a hyperelliptic field. (Russian) Studies in geometry and algebra (Russian), pp. 114-119, Kirgiz. Gos. Unio., Frunze, 1978. (G. Eisenreich) 82h:12023 12F05

Oganesjan, G. K. A property of functions of the class B_p. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 5, 286-291. (J. Szabados) 82c:42005 42A16

Oganesjan, G. R. (with Grigorjan, S. D.) The Crofton theorem and the Buffon-Sylvester problem. (Russian) Combi atory principles in stochastic geometry (Russian), pp. 157-163, Akad. Nauk Armjan. SSR, Erevan, 1980. (See 82k:60027) 60D05

An initial value problem with given Wronskians. (Russian. Armenian and English ries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 15 (1980), no. 4, 292-309, 334.

(V.-V. Olariu) 82k:35004 35A10 Oganesjan, L. A. (with Ruhovec, L. A.) ★Варнационно-разностиме методы решения еслиптических уравнений. (Russian) (Variation-difference methods for solving elliptic equations] Akad. Nauk Armjan. SSR, Erecan, 1979. 236 pp. (loose errata). (А. G. Ramm) 82m:65105 65N30 (35Jxx, 49Dxx)

(with Dadajan, Ju. G.) Coordinatewise condensation of a net in the solution of a

diffraction problem in domains with corners. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 71 (1980), no. 5, 275-281. (A. Borzymowski) 82k:35026 (35A35, 65N50)

Oganjan, V. K. Combinatorial principles in stochastic geometry of random process segments. (Russian) Combinatory principles in stochastic geometry (Russian), pp Akad. Nauk Armjan. SSR, Erevan, 1980. (See 82k:60027) 60D05 (60G55)

Ogarkov, E. T. A class of finite groups. (Russian. English sum nary) Vesci Akad. Navi BSSR Ser. Fiz.-Mat. Navuk 1981, no. 1, 52-54, 138. (Ja. P. Sysak) 824:20025 20D15 Ogarkova, T. N. (with Hentov, A. A.) Magnetic-gravitational stabilization of a triaxial satellite. Izo. Akad. Nauk SSSR Meh. Toerd. Tela 15 (1980), no. 4, 40-49 (Russian);

translated as Mech. Solids 15 (1980), no. 4, 25-32. (Authors' summary) 82&70041

awara, Kaori (with Fukui, Masaki; Iwai, Noritsugu; Kizu, Kazuhiro; Hashizume Kozi; Mikuni, Tetsuro) On the U-tensor in Riemannian spaces. J. Hokkaido Univ. Ed. Sect. II A 31 (1980/81), no. 1, 9-14. (Krishna Amur) 82g:53026 53B21

Ogata, Akio On the existence and multiplicity theorems for the exterior elliptic boundary value problems. Funkcial. Ekvac. 23 (1980), no. 2, 229-243. (Michele Carriero) 35J25

Ogata, Shigeo (with Suzuki, Masayuki) On iterated maps of the interval. Res. Rep. Nagaoka Tech. College 17 (1981), no. 2, 25-30. (Frederick R. Marotto) 82i:58056 58F20 (28D20)

Ogawa, Hajimu Energy decay for differential inequalities in a Hilbert space with applications to ultrahyperbolic equations. J. Differential Equations 38 (1980), no. 3,

393-412. (Howard A. Levine) 82m:35106 35L99 (35R45)

Ogawa, Hiroshi (with Murata, Susumu; Miyake, Yutaka; Inaba, Takehiko) Laminar flow in a helically coiled pipe. Bull. JSME 24 (1981), no. 188, 355-362. (Authors' summary) 82e-76022 76D05

Ogawa, Junjiro (with Ikeda, Sadao) Randomization of a partially balanced incomplete block design. Essays in probability and statistics, pp. 155-177, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 82d:62124 62K10

A note on the optimal spacing of the systematic statistics-normal distribution. Essays in probability and statistics, pp. 467-474, Shinko Tsusho, Tokyo, 1976. (Author's summary) 82e:62046

See also Essays: Probability and statistics, 82a:62005 and Ikeda, Sadao, 82g:01054
Ogawa, Shirò (with Kida, Sôsaburò; Arioka, Shigekatsu) On a Jackson's type theorem in
two dimension. Math. Sem. Notes Kobe Univ. 8 (1980), no. 3, 611-615. (From the text) 41A10 (41A63)

(with Kida, Sosaburo; Arioka, Shigekatsu) An extension of Christoffel-Darboux' identity and its application. Math. Japon. 26 (1981), no. 3, 327-338. (T. S. Chihara) 82j:33019 33A65 (42C05)

Ogawa, Toru (with Kitano, Masao; Yabuzaki, T.) Optical tristability. Phys. Rev. Lett. 46 (1981), no. 14, 926–929. (Authors' summary) 824:81183 81K05 (58C28)

Ogawa, Tsuyoshi Japanese evidence for Einstein's knowledge of the Michelson-Morley Japan. Stud. Hist. Sci. No. 18 (1979), 73-81. (H. Treder) 82d:01021 01A60 (81-03)

Ogawa, Yoshito On the cohomology of finite groups. Proceedings of the 13th Symposium on Ring Theory (Okayama Univ., Okayama, 1980), pp. 83-90, Okayama Univ., Okayama, 1981. (From the text) 82c:20092 20106

Ogawa, Yôsuke Isometric immersions of conformally flat Riemannian spaces with negative sectional curvature. Natur. Sci. Rep. Ochanomizu Univ. 31 (1980), no. 1, 13-21. (H. Jacobowitz) 82:53068 53C42

Ogg, A. P. Modular functions. The Santa Cruz Conference on Finite Groups (Univ.

6.A.F. Modani Indictions. The Samia Cruz Conjerence on Finite Groups (Onto. California, Santa Cruz, Calif., 1979), pp. 521–532, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (David Goss) 82h:10037 10D05 (20D08)

Ogiebki, A. T. (with Prasad, M. K.; Sinha, A.; Wang, Ling Lie Chau) Backlund transformations and local conservation laws for principal chiral fields. *Phys. Lett. B* 91 (1980), no. 3-4, 387-391. (Peter Holod) 82f:81050 81E10 (35A30, 35Q20, 58A15)

Ogier, Richard G. (with Wong, Eugene) Recursive linear monothing of two-dimensional random fields. IEEE Trans. Inform. Theory 27 (1981), no. 1, 77–83. (Authors' summary) 94A05 (93E11) 82i:94002

Ogieveckii, V. I. (with Sokačev, E. S.) The simplest Einstein supergravity group. Jadernaja Fiz. 31 (1980), no. 1, 264-279 (Russian); translated as Soviet J. Nuclear Phys. 31 (1980), no. 1, 140-148 (1981). (Authors' summary) 82e:83041 83E99

(with Sokačev, E. S.) The gravitational axial-vector superfield and the formalism of differential geometry. Jadernaja Fiz. 31 (1980), no. 3, 821-840 (Russian); translated as Soviet J. Nuclear Phys. 31 (1980), no. 3, 424-433 (1981). (W. Cox) 82g:83030 83E50

(with Sokačev, E. S.) The normal gauge in supergravity. Jadernaja Fiz. 32 (1980), no. 3, 862-869 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 3, 443-447

(1981). (Authors' summary) 821:80990 831:99 (33C80)
(with Sokačev, E. S.) Torsion and curvature in terms of the axial superfield. Jadernaja Fiz. 32 (1980), no. 3, 870-879 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 3, 447-452 (1981). (Authors' summary) 82f:83091 83E99 (53C80)

Ogilvie, M. C. (with Houghton, A.) A field theory of dislocation mediated melting in two dimensions. J. Phys. A 13 (1980), no. 12, L449-L454. (Authors' summary) 82h82061 82A55 (82A42) Goldstone modes on Wilson's surface. Phys. Lett. B 100 (1981), no. 2, 163-165.

(Author's summary) 82d:81153 81G10 Ogiński, Ludwik Application of a distribution of Bessel type in the reliability theory. (Polish

and Russian summaries) Zeszyty Nauk. Politech. Lodz. Mat. No. 12 (1979), 31-43. 62N05 (Ramesh C. Gupta) 82m:62230

Ogneva, V. A. (with Černyšenko, V. M.) An iteration process with successive approximate of the inverse operator. (Russian) Mat. Zametki 28 (1980), no. 5, 785-790, 803. (Ju. G. Borisovič) 82f:47075 47H17 (65J15)

Ogoma, Tetsushi (with Matsumura, Hideyuki) Remarks on associated prime ideals. Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 2, 53-61 (1981). (Gerhard Pfister)

82k:13004 13A17
Oguchi, Akihide Ising chain with long- and short-range interactions. J. Phys. Soc. Japan 49 (1980), no. 5, 1692–1700. (B. Derrida) 82k:82079 82A67 Antiferromagnetic Ising chain with long-range forces. Progr. Theoret. Phys. 64

- (1980), no. 4, 1107-1118. (H. N. V. Temperley) 82h:82080 82A67 (82A25) achi, Takehiko (with Okamoto, Shigeru) Generalized susceptibilities for the random bond system of the ferromagnetic and antiferromagnetic exchange interactions. Progr. ret. Phys. Suppl. No. 69 (1980), 137-145 (1981). (Authors' summary) 82h:82018 82A25 (82A42)
- ike, B. A. A new approach to observer design for time-delay systems. Internat. J. Control 33 (1981), no. 3, 519-542. (Author's summary) 82c:93004 93B07 (93C50)
- Control 33 (1981), no. 3, 519-542. (Author's summary) 82c:93004 93B07 (93C30) stade, Olufemi O. (with Gero, John S.) Evaluation of architectural design profiles using fuzzy sets. Fuzzy Sets and Systems 5 (1981), no. 3, 221-234. (Authors' summary) 90B99 (03E72)
- gura, H. (with Nakayama, J.; Sakata, Hajime) Scattering of a scalar wave from a slightly random surface. J. Math. Phys. 22 (1981), no. 3, 471-477. (Andrzej Zardecki) 82g:78017
- Ogura, Yukio A remark on a branching Brownian motion on a Rien negative curvature. Rep. Fac. Sci. Engrg. Saga Univ. Math. No. 7 (1979), 13-23. (G. G. Vranceanu) 82&60157 60165 (35R60, 58G32, 60H15) (with Furusho, Yasuhiro) On the existence of bounded positive solutions of

 - semilinear elliptic equations in exterior domains. Duke Math. J. 48 (1981), no. 3, 497-521. (E. S. Noussair) 82j:35046 35J25
 - (with Kesten, Harry) Recurrence properties of Lotka-Volterra models with randor fluctuations. J. Math. Soc. Japan 33 (1981), no. 2, 335-366. (Z. Schuss) 82f:60182 60J70 (60H10, 92A15)
 - (with Yamada, Toshio) On the strong comparison theorems for solutions of stochastic differential equations. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 1, 3-19. (V. G. Kolomice) 82f:60142 60H10 (58G32)
- Oguz, Ö. (with Akdeniz, K. G.) A new class of meronic solutions. Lett. Nuovo Cimento (2) 28 (1980), no. 10, 343-349. (Editors) 82:81107 81E99 (35Q20)
- uz, Osman (with Magazine, Michael J.) A fully polynomial approximation algorithm for the 0-1 knapsack problem. European J. Oper. Res. 8 (1981), no. 3, 270–273. (Authors' summary) 82k:90084 90C10 (90C39)
- Biol. 5 (1977/78), no. 1, 1-31. (Authors' summary) 82m:92033 92A09
 - (with Krivošein, L. K.; Bainov, D. D.; Nikolova, T. St.; Leung, K. V.) On the Goursat problem for nonlinear polywave integro-differential equations of Mangeron. (Bulgarian. Russian and English summaries) Plovdiv. Univ. Naučn. Trud. 16 (1978), no. 1, 17-27 (1980). (Authors' summary) 82f:35177 35Q99
 - (with Leung, K. V.; Stein, R. B.) Numerical solution of neuro-muscular systems.

 Applied nonlinear analysis (Proc. Third Internat. Conf., Univ. Texas, Arlington, Tex., 1978), pp. 245–266, Academic Press, New York, 1979. (From the introduction) 82f;92012
 - (with Lakshmikantham, V.; Leela, S.) Quasisolutions, vector Lyapunov functions, and monotone method. IEEE Trans. Automat. Control 26 (1981), no. 5, 1149-1153. (J. Kato) 82k:34016 34A99 (34D20)
- Oh, C. H. (with Teh, Rosy) Linearly superposable and finite-action classical Yang-Mills fields. J. Math. Phys. 22 (1981), no. 3, 585-589. (H. R. Alagia) 82g:81061 81E10
 - (with Teh, Rosy; Koo, W. K.) Low energy static Yang-Mills configurations. Phys. Lett. B 101 (1981), no. 5, 337-340. (Authors' summary) 82f:81051 81E10
- (with Teh, Rosy; Koo, W. K.) Screening solutions to the Yang-Mills equations Phys. Rev. D (3) 23 (1981), no. 12, 3046-3049. (Authors' summary) 82h:81115 (with Teh, Rosy; Koo, W. K.) Static Yang-Mills fields in the presence of external sources. Phys. Rev. D (3) 24 (1981), no. 8, 2305-2308. (Authors' summary) 82k:81057
- O'Hagan, A. A moment of indecision. Biometrika 68 (1981), no. 1, 329-330. (Author's summary) 82f:62009 62A15
- Summary) 821:e2009 62A15

 O'Halloran, Joyce Weyl modules and the cohomology of Chevalley groups. Amer. J. Math. 103 (1981), no. 2, 399–410. (J. Wiegold) 82j:20085 20G10

 Ohara, Vasuhiro (with Ikebe, Nobunori) Degenerate quasilinear elliptic equations. Funkcial. Ekvac. 23 (1980), no. 2, 159–169. (Hideo Soga) 82g:35043 35J70
- Oharu, Shinnosuke (with Kobayasi, Kazuo; Kobayashi, Yoshikazu) Two integral inequalities related to Bénilan's integral solutions of nonlinear evolution equations. Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 93 (1980), 80-87. (Krishna M. Das) 82h:34084
- Öhashi, Katsuhiro Central limit theorems for lacunary Walsh series and an application. Sci. Rep. Fac. Ed. Fukushima Univ. No. 29 (1979), 7-13. (T. Kawata) 82k:42015 42C10 42C10 (60F05, 94A05)
- ashi, Mamoru (with Nishida, Toshio) A two-unit paralleled system with general distribution. (Japanese summary) J. Oper. Res. Soc. Japan 23 (1980), no. 4, 313-325. (Authors' summary) 82c:90044 90B25
- Ohba, Sachio The range of a multimeasure. (Japanese si nary) Rep. Fac. Engrg. Kanagawa Univ. No. 18 (1980), 4-6. (J. D. Knowles) 82i:28014
- Ohe, Syunichiro (with Tomita, Yutaka; Ohmatsu, Shigeru; Soeda, Takashi) Information-theoretical optimal smoothing estimators. Inform. Sci. 22 (1980), no. 3, 201-215. (L. L. Campbell) 82c:93023 93E14 (94A15)
- Ohi, Fumio (with Nishida, Toshio) Bivariate shock models: NBU and NBUE properties, and positively quadrant dependency. (Japanese summary) J. Oper. Res. Soc. Japan 22 (1979), no. 4, 266–274. (Authors' summary) 82j-62075 62N05
- Ohkubo, Motoaki A strong outer bound to the capacity region for multiple access channels. IEEE Trans. Inform. Theory 27 (1981), no. 4, 505-508. (Author's summary) 82m:94032
 - See also Peterson, Roger L.; et al., 82a:94048
- oo, Toshio Regularity of solutions to hyperbolic mixed problems with uniformly characteristic boundary. Hokkaido Math. J. 10 (1981), no. 1, 93-123. (Maria
- Cinquini-Cibrario) 82i:35114 35L50

 Ohm, Jack Space curves as ideal-theoretic complete intersections. Studies in algebraic geometry, pp. 47-115, MAA Stud. Math., 20, Math. Assoc. America, Washington, D.C.,
 - 1980. (Ulrich Orbanz) 821:14051 14M10 (13C05)

 (with Anderson, David F.) Valuations and semivaluations of graded domains. Math Ann. 256 (1981), no. 2, 145–156. (Paul M. Eakin) 82n:13003 13A15 (13G05)
 matsu, Shigeru (with Nagamine, Hirosige; Soeda, Takashi) Optimal filter for a

- discrete-time distributed parameter system and its application to environmental data processing. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. III, pp. 69-79, Reidel, Dordrecht, 1980. (Authors' summary) 93E11
- (with Ohe, Syunichiro; Tomita, Yutaka; Soeda, Takashi) Information-theoretical optimal smoothing estimators. Inform. Sci. 22 (1980), no. 3, 201-215. (L. L. Campbell) 93E14 (94A15) 82-93023
- (with Tamaki, Shirou; Kikuchi, Akira; Soeda, Takashi) Design of a discrete
- adaptive observer based on Lyapunov's direct method. Internat. J. Systems Sci. 12 (1981), no. 4, 473–484. (Authors' summary) 824:93047 93D05 (with Seinfeld, John H.) A unified approach to discrete-time distributed parameter
- estimation by the least-squares method. Internat. J. Systems Sci. 12 (1981), no. 6, 665-686. (Authors' summary) 82i:93073 93E10
- mori, Hiroyuki On the p-rank for symmetrical balanced incomplete block designs.

 Essays in probability and statistics, pp. 33-40, Shinko Tsusho, Tokyo, 1976. (From the introduction) 82g:05020 05B05 (05B20, 62K10)
- mori, Katsushi Correction to: "The discrete maximum principle for nonconforming finite element approximations to stationary convective diffusion equations" [Math. Rep. Toyama Univ. 2 (1979), 33-52; MR 80k:65092]. Math. Rep. Toyama Univ. 4 (1981),
- 179-182 (Reinhard Scholz) 82k:65067 65N30
 mori, Zyozyu Corrections and supplements to: "On the Schur indices of the finite unitary groups" [Osaka J. Math. 15 (1978), no. 2, 359-363; MR 58 #5875]. Osaka J. Math. 18 (1981), no. 1, 289. (Editors) 82d:20014 20C15
- Ohno, Katsuhisa (with Kimura, Toshikazu; Mine, Hisashi) Approximate analysis of optimal operating policies for a GI/G/1 queueing system. Mem. Fac. Engrg. Kyoto Univ. 42 (1980), no. 4, 377-390 (1981). (Martin J. Fischer) 82f:60218
- no, Shûichi Weak-* maximality of certain Hardy algebras $H^{\infty}(m)$. Tokyo J. Math. 3 (1980), no. 2, 303–309. (E. L. Stout) 82c:46067 46J10
- (with Wada, Junzo) Compact homomorphisms on function algebras. Tokyo J. Math.
- 4 (1981), no. 1, 105-112. (P. J. de Paepe) 82i:46079 46J10

 Ohnuki, Y. (with Kamefuchi, S.) On generalized Bose numbers. Lett. Nuovo Cimento (2) 30 (1981), no. 12, 367-371. (Hans Tilgner) 82h:81060 81D05 (17A70)
- Ohori, Masayuki On two theorems of U. Albrecht. J. Fac. Sci. Shinshu Univ. 15 (1980), no. 2, 77-78. (From the text) 82i:16019 16A39
- (with Tominaga, Hisao) Characterizations of division rings. II. J. Fac. Sci. Shinshu Univ. 15 (1980), no. 2, 79-80. (From the text) 82f:16019 16A39
- See Algorithms for calculation of the optimal mode of el Ohrimenko, N. A. and systems. 82g:90080a
- Ohriska, Ján Asymptotic properties of solutions of a second order nonlinear delay differential equation. (Russian summary) Math. Slovaca 31 (1981), no. 1, 83-90. (Eng-Bin Lim) 82f:34105 34K25
- Ohsawa, Takeo Analyticity of complements of complete Kähler dom Acad. Ser. A Math. Sci. 56 (1980), no. 10, 484-487. (Y.-T. Siu) 82j:32025 32C25 (53B25, 53B35)
- On complete Kähler domains with C1-boundary. Publ. Res. Inst. Math. Sci. 16 (1980), no. 3, 929-940. (Y.-T. Siu) 82j:32034 32E10
- A remark on the completeness of the Bergman metric. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 4, 238-240. (K. T. Hahn) 82j:32053 32H20 (32H15)
- On Hp.q(X, B) of weakly 1-complete manifolds. Publ. Res. Inst. Math. Sci. 17 (1981), no. 1, 113-126. (V. D. Golovin) 82j:32058 32L20 (32F15)
- Weakly 1-complete manifold and Levi problem. Publ. Res. Inst. Math. Sci. 17 (1981), no. 1, 153-164. (V. D. Golovin) 82j:32031 32E05 (32F15, 32L20)
- umi, Noboru (with Nakamura, Takashi) Some properties of monotone hierarchical dendrogram in numerical classification. (Japanese. English summary) Proc. Inst. Statist. Math. 28 (1981), no. 1, 117-133. (C. Hayashi) 82m:62135 62H30
- Ohta, Hiroshi (with Kase, Shigeo; Asao, Masashi) Classification of inspectors in sensory tests by Wald's sequential sampling technique. Bull. Univ. Osaka Prefect. Ser. A 29 (1980), no. 1, 65-72. (From the summary) 82k:62157 62L05
- Ohta, Mitsuo (with Ikuta, Akira; Yamaguchi, Shizuma) Generalization of Stratonovich's theory for random points system and a prediction method of road traffic noise generated by the general traffic flow of nonstationary and non-Poisson type. (Japanese. English summary) Systems and Control 25 (1981), no. 4, 231-240. (From the summary) 82i:90043 90B20
- Ohta, Takao (with Kawasaki, Kyozi; Onuki, Akira) Some topics in nonequilibrium critical phenomena. Systems far from equilibrium (Conf., Sitges/Barcelona, 1980), pp. 125-142, Lecture Notes in Phys., 132, Springer, Berlin, 1980. (See 82g:82004)
- Ohta, Tomoko An extension of a model for the evolution of multigene families by unequal crossing over. Genetics 91 (1979), no. 3, 591-607. (Author's summary) 82d:92015 92A10
 - (with Kimura, Motoo) Some calculations on the amount of selfish DNA. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 2, part 2, 1129-1132. (Authors' summary) 82a:92021 92A10
- Ohta, Yuzo Stability criteria for off-diagonally monotone nonlinear dynamical system 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 404–407, IEEE, New York, 1979. (See **82e:94002**) 34D20 (90A16, 93D20)
 - Stability criteria for off-diagonally monotone nonlinear dynamical systems. IEEE Trans. Circuits and Systems 27 (1980), no. 10, 956-962. (Author's summary) 82d:93052 93D20
 - Qualitative analysis of nonlinear quasimonotone dynamical systems described by functional-differential equations. IEEE Trans. Circuits and Systems 28 (1981), no. 2,
- 138-144. (A. A. Freiria) 82b:34100 34K20 (58F10, 90A16, 92A09)
 Ohtake, K. (with Oden, J. T.; Kikuchi, Noboru) Analysis of certain unilateral problems in von Kármán plate theory by a penalty method. I. A variational principle with penalty. Comput. Methods Appl. Mech. Engrg. 24 (1980), no. 2, 187-213. (Claude Do) 82c:73047a
 - 73K10 (49A29, 49D30, 65N99) (with Oden, J. T.; Kikuchi, Noboru) Analysis of certain unilateral problems in von Kármán plate theory by a penalty method. II. Approximation and numerical analysis Comput. Methods Appl. Mech. Engrg. 24 (1980), no. 3, 317-337. (Claude Do) 82c:73047b 73K10 (49A29, 49D30, 65N99)
- e, Koichiro A generalization of Kato's theorem on Morita duality. J. Pure Appl.

Algebra 17 (1980), no. 3, 323-332. (Toyonori Kato) 82d:18010 18E35 (16A63, 16A89, 18F40)

ro (with Toyoda, Toshihisa) Minimax regret critical values for a preliminary test in pooling variances. J. Japan Statist. Soc. 8 (1978), no. 1, 15-20. (Authors' summary) 82a:62039 62F03

Ohtsubo, Yoshio Controlled Markov jump processes associated with a choice of stopping rules. Mem. Fac. Sci. Kyushu Univ. Ser. A 34 (1980), no. 2, 311–337. (Lawrence D. Stone) 82f:90098 90C40 (93E20)

Controlled jump processes with a choice of stopping rules: a criterion of average type. Mem. Fac. Sci. Köchi Univ. Ser. A Math. 2 (1981), 29-35. (Nicole El Karoui) 82i:93095 93E20 (60G40, 60J75)

Ohuchi, Azuma (with Kaji, Ikuo) An algorithm for the Hitchcock transportation problems with quadratic cost functions. (Japanese summary) J. Oper. Res. Soc. Japan 24 (1981), no. 2, 170-182. (Authors' summary) 82g:90045 90B10 (90C30)

Ohya, Masanori On open system dynamics—an operator algebraic study. Kodai Math. J. 3 (1980), no. 2, 287–294. (Etang Chen) 82c:82024 82A15 (46L60)

Ohya, Yujiro Le problème de Cauchy à caractéristiques multiples. Seminar on Hyperbolic and Holomorphic Partial Differential Equations, 1979-1980 (French), Exp. No. 5, 11 pp., Univ. Paris VI, Paris, 1980. (From the text) 82s:35026 35G10 (35A05)

Ohyanagi, Shigeki (with Yoshinaga, Etsuo) Two-dimensional quasihomogeneous isolated singularities with geometric genus equal to two. Sci. Rep. Yokohama Nat. Univ. Sect. I No. 27 (1980), 1-9. (H. B. Laufer) 82g:32018 32C40 (14J17)

(with Yoshinaga, Etsuo) Some examples of weakly elliptic singularities. Sci. Rep. Yokohama Nat. Univ. Sect. I No. 27 (1980), 11-18. (H. B. Laufer) 82i:32037 32C40 On two-dimensional normal singularities of type A_n , D_n and E_n . Trans. Amer. Math. Soc. 266 (1981), no. 1, 57–69. (Etsuo Yoshinaga) 82k:32037 32C45 (14J17)

Oike, Hiroshi Simply connected closed smooth 5-manifolds with effective smooth U(2)-actions. Töhoku Math. J. (2) 33 (1981), no. 1, 1-24. (From the introduction) 57S15 (57S25)

Oikkonen, Juha On PC- and RPC-classes in generalized model theory. Proceedings from 5th Scandinavian Logic Symposium (Aalborg, 1979), pp. 257-270, Aalbo

Aalborg, 1979. (A. B. Slomson) 82d:03064 03C95 (03C52, 03C75)
Oinarov, R. (with Otelbaev, M. O.) A contractibility criterion for the Uryson operator. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 6, 1316-1318. (N. A. Sidorov)

82c:45023 45P05 (47H09) Criterion for boundedness and compactness of a class of Uryson integral operators. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1980, no. 5, 44-49, 87. (M. Tvrdý)

82c:47064 47G05 (45P05) On properties of the Uryson operator. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 2, 281-284. (P. P. Zabreiko) 82b:47066 47G05 (45P05)

Oishi, Shin'ichi Bilinearization of the Painlevé equations. J. Phys. Soc. Japan 49 (1980),

no. 4, 1647-1648. (Author's summary) 82e:35072 35Q20 (34A20, 58A15)

Oitmaa, J. High temperature multigraph expansions for general Ising systems. (French mary) Canad. J. Phys. 59 (1981), no. 1, 15-21. (Author's summary) 82b:82081

(with Kelland, S. B.; Betts, D. D.) The pair correlation function in the ground state of the two-dimensional spin-\(\frac{1}{2}\) XY model. J. Phys. A 14 (1981), no. 3, L69-L72. (Authors' summary) 82h:82074 82A67

Oja, Hannu On location, scale, skewness and kurtosis of univariate distributions. Scand. J. Statist. 8 (1981), no. 3, 154-168. (S. R. Patel) 82m:62033 62E10

Ojanguren, Manuel See Brauer group, 82c:14004
Ojha, S. N. On relativistic self-inductive fluids. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 6, 470-477 (1978). (Author's summary) 82e:76075 76W05 (83C55)

(with Rai, R. P.) On growth and decay of weak discontinuities in presence of thermal radiation. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 5, 771-775. (Authors' summary) 82c:80009 80A20

Ojika, Takeo (with Welsh, Wayne) A numerical method for multipoint boundary value problems with application to a restricted three-body problem. Internat. J. Comput. Math. 8 (1980), no. 4, 329-344. (Authors' summary) 82h:65063 65L10 (70F07)

8 (1980), no. 4, 329–344. (Authors' summary) 82ncostos

obl.10 (10707)

(with Welsh, Wayne) Modeling problems in ordinary differential equations using the initial value adjusting method. J. Math. Anal. Appl. 75 (1980), no. 2, 359–372. (Seihaku Higuchi) 82b:65077 65L99 (93B30)

Initial value adjusting method with interval decomposition for nonlinear multipoint boundary value problems. (Japanese summary) Mem. Osaka Kyoiku Univ. III Natur. Sci. Appl. Sci. 29 (1980), no. 1, 43-50. (Author's summary) 82h:65064

Initial value adjusting method for the solution of nonlinear multipoint boundary value problems with increases or decreases in system dimensions. (Japanese summary) Mem. Osaka Kyoiku Univ. III Natur. Sci. Appl. Sci. 29 (1980), no. 2-3, 151-162 (1981). (Author's summary) 82h:65065 65L10

(with Welsh, Wayne) The scaling method for free interface problems in ordinary differential equations. J. Math. Anal. Appl. 79 (1981), no. 2, 428–435. (H. C. Howard) 34B10 (65L10)

ima, Izumi (with Kugo, Taichiro) Subsidiary conditions and physical S-matrix unitarity in indefinite-metric quantum gravitation theory. Nuclear Phys. B 144 (1978), no. 1, 234-252. (Authors' summary) 82j:83026 83C45 (81E20)

Another BRS transformation. Progr. Theoret. Phys. 64 (1980), no. 2, 625-638. (E. Wieczorek) 82d:81108 81E99 (83C45)

(with Nakanishi, Noborou Superalgebras of nonabelian gauge theories in the nanifestly-covariant canonical formalism. Z. Phys. C 6 (1980), no. 2, 155–160. (W. Cox) 81G20 (22E65, 49C05, 81E99, 83E50) 82i-81147a

(with Nakanishi, Noboru) Indefinite-metric quantum field theory of general relativity. XI. Structure of spontaneous breakdown of the superalgebra. Progr. Theoret. Phys. 65 (1981), no. 2, 728-739. (Authors' summary) 82k:83029c 83C45 (81E20, 83E50)

(with Nakanishi, Noboru) Indefinite-metric quantum field theory of general relativity. XII. Extended superalgebra and its spontaneous breakdown. Progr. Theoret. Phys. 65 (1981), no. 3, 1041-1051. (Authors' summary) 82k:83029d 83C45 (81E20,

(with Nakanishi, Noboru) Errata: "Superalgebras of nonabelian gauge theories in the manifestly-covariant canonical formalism". Z. Phys. C 8 (1981), no. 1, 94. (Editors) 81G20

Oka, Masatoshi Classifications of two-dimensional homogeneous cubic differential equation systems. I. TRU Math. 16 (1980), no. 2, 19-62. (H. Röhrl) 822:34043a 34C20 (12H05, 58F14)

Classifications of two-dimensional homogeneous cubic differential equation syste

II. TRU Math. 17 (1981), no. 1, 65-88. (H. Röhrl) 82k:34043b 34C20 (12H) 34C20 (12H05. 58F14)

Oka, Mutsuo Correction to: "Deformation of Milnor fiberings" [J. Fac. Sci. Univ. Tokyo Sect. IA Math. 20 (1973), 397-400; MR 48 #11564]. J. Fac. Sci. Univ. Tokyo Sect. IA Math. 27 (1980), no. 2, 463-464. (J. A. Morrow) 82e:32011 32B30 (55R99)

Oka, Shichirò Ring spectra with few cells. Japan. J. Math. (N.S.) 5 (1979), no. 1, 81-100. (J. P. May) 82i:55009 55P42 (55Q10)

Oka, Shinpei Every Lasnev space is the perfect image of a zero-dimensional one. (Russian ammary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 11-12, 591-594 (1981).

(K. Nagami) 82h:54062 54F45 (54C10)
 Okabe, Hidehiko Formal expressions of infinite graphs and their families. Inform. and Control 44 (1980), no. 2, 164–186. (Max Dauchet) 82f:68071 68E10 (05C20, 68F10)

Okabe, Katsayuki On some open problems in the theory of quasiconformal mappings. II.

Area distortion under quasiconformal mappings. J. Hokkaido Univ. Ed. Sect. II A 30
(1979/80), no. 1, 5-12. (F. W. Gehring) 82e:30024 30C60

Okabe, Masayuki Complete Lagrange family for the cube in finite element interpolations Comput. Methods Appl. Mech. Engrg. 29 (1981), no. 1, 51-66. (Author's summary) 73K25

Analytical integral formulae related to convex quadrilateral finite elements. Comput. Methods Appl. Mech. Engrg. 29 (1981), no. 2, 201-218. (Author's summary) 82k:65068 65N30 (65D32, 73K25)

Okabe, Mitsuru An interpretation of Aristotle's modal syllogism. Ann. Japan Assoc. Philos. Sci. 6 (1981), no. 1, 19–41. (Charles F. Kielkopf) 82i:03029 03B45 (01A20, 03–03)

Okada, A. On stability of perfect equilibrium points. Internat. J. Game Theory 10 (1981), no. 2, 67–73. (Author's summary) 82k:90138 90D10

Okada, Masami Une estimation modifiée du type de Bezout pour les applications holomorphes équidimensionnelles entières de Cn. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 1, A35-A37. (Marcus Wright) 82c:32025

(32A22) Potentiels kählériens et espaces de Dirichlet. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 2, 159-161. (Author's summary) 82b:32027

Okada, Norio A martingale problem associated with diffusion operators in a domain. Kodai Math. J. 4 (1981), no. 1, 82-96. (Nicole El Karoui) 82j:60148 60J60 (60G44)

On the uniqueness problem of two-dimensional diffusion processes occurring in pulation genetics. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 1, 63-74. (K. B. Erickson) 60J70 (92A10)

Good Coincidence theorems on L-spaces. Math. Japon. 26 (1981), no. 3, 291-295. (S. L. Singh) 82h:54079 54H25

Okamoto, K. See Manifolds and Lie groups, 82m:53001
Okamoto, Kazuo Polynomial Hamiltonians associated with Painlevé equations. I. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 6, 264-268. (P. A. Kučment) 82j:34010a 34A34 (58A17, 58F05)

Polynomial Hamiltonians associated with Painlevé equations. II. Differential equations satisfied by polynomial Hamiltonians. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 8, 367–371. (P. A. Kučment) 82j:34010b 34A34 (58A17, 58F05)

On the 7-function of the Painlevé equations. Phys. D 2 (1981), no. 3, 525-535. (D. A. z) 82i:34005 34A20 (58A17, 58F18) Lutz) 82i:34005

Okamoto, Masashi Random model and fixed model of principal component analysis. Essays in probability and statistics, pp. 339-351, Shinko Tsusho, Tokyo, 1976. (Author's introduction) 82h:62090 62H25

(with Isogai, Takafumi) Optimality of multidimensional representation in Hayashi's fourth method of quantification. J. Japan Statist. Soc. 8 (1978), no. 2, 63-69. (From the summary) 82b:62069 62H25 (62P15)

(with Isogawa, Yoshiko) Asymptotic confidence regions for a linear structural relationship. J. Japan Statist. Soc. 11 (1981), no. 2, 119-126. (Authors' summary) 82m-62083 62F25

See also Essays: Probability and statistics, 82a:62005

See Matsuoka, Motohisa, 82j:01067 and Shimodaira, Kazuo 82j:01068

to. Shiperu (with Oguchi, Takehiko) Generalized susceptibilities for the random bond system of the ferromagnetic and antiferromagnetic exchange interactions. Progr. Theoret. Phys. Suppl. No. 69 (1980), 137-145 (1981). (Authors' summary) 82h:82018 82A25 (82A42)

Okamoto, Tatsuo (with Kymn, Kern O.; Norsworthy, J. R.) The computation of the Okamura, Haruko (with Seymour, P. D.) Multicommodity flows in planar graphs. J. Combin. Theory Ser. B 31 (1981), no. 1, 75–81. (James R. Evans) 82j:90033 90B10

(05C10, 90B35)

Okamura, Y. (with Fujita, Shigeji; Blaisten-Barojas, E.; Godoy, S. V.) Study of a Lorentz-gas based on correlated walks. J. Chem. Phys. 73 (1980), no. 9, 4569-4576. (Authors' summary) 82e:82012 82A40

Okano, Hatsuo Professor Kinjirô Kunugi's work and its developments on the theory of integration. Special issue in memory of the late Professor Kinjirô Kunugi. Math. Japon. 23 (1978), no. 3 Special issue, 325-331. (Editors) 82:01067 01A60 (28-03, 46-03)

Okazaki, Yoshiaki Gaussian measure on topological vector space. Mem. Fac. Sci. Kyushu Univ. Ser. A 34 (1980), no. 1, 1-21. (R. M. Dudley) 82m:60008 60B11 (60G15) 60B11 (60G15) Quotient and induced topologies of the S-topology on a Banach space. Mem. Fac.

Sci. Kyushu Univ. Ser. A 34 (1980), no. 1, 23-26. (R. M. Dudley) 82m:60007 Harmonic analysis in a Banach space. Mem. Fac. Sci. Kyushu Univ. Ser. A 34 (1980), no. 1, 27-69. (R. M. Dudley) 82m:60009 60B11

(with Ikeshoji, Kiyoshi; Mitoma, Itaru) The Eberlein the locally compact groups. Mem. Fac. Sci. Kyushu Unio. Ser. A 34 (1980), no. 2, 347-349. (Pierre Eymard) 82e:22014a 22D35 (43A65)

(with Ikeshoji, Kiyoshi) Pontryagin duality for nonabelian locally compact groups.

Mem. Fac. Sci. Kyushu Unio. Ser. A 34 (1980), no. 2, 357-362. (Pierre Eymard) 32b22014b 22D35 (43A65)

Bochner's theorem on measurable linear functionals of a Gaussian measure. Ann. Probab. 9 (1981), no. 4, 663-664. (Balram S. Rajput) 82m:28029 28C20 (46G12,

Bochner problem on a topological vector space with a quasi-invariant measure. Pro Japan Acad. Ser. A Math. Sci. 57 (1981), no. 1, 25-28. (D. J. H. Garling) 82i:46059

uzaki, Yoshinori (with Hara, Tadayuki; Yoneyama, Toshiaki) On the boundedness of solutions of perturbed linear systems. J. Math. Anal. Appl. 83 (1981), no. 1, 188-208. (Wolfdietrich Müller) 82;34033 34C11 (34D10, 34D40)

Geefe, M. (with Wong, Pak Ken) The smallest graph of girth 6 and valency 7. J. Graph Theory 5 (1981), no. 1, 79–85. (Norman Biggs) 82;05075 05C35

O'Keefle, J. D. A generalization of the vector product. Internat. J. Math. Ed. Sci. Tech. 12 (1981), no. 5, 541-547. (P. Podio-Guidugli) 82m:15035 15A75 (70B99)
Okeke, C. C. On exact inversion of certain matrices by a recursive form of the Cayley-Hamilton theory [theorem]. Matrix Tensor Quart. 31 (1980/81), no. 4, 97-99. (Author's summary) 82m:15008 15A09

non, Martha R. (with Lovass-Nagy, Victor; Rabson, G.) Pole assignment matrix generalized inverses. Internat. J. Systems Sci. 12 (1981), no. 3, 383-392. (Authors' ary) 82c:93012 93B55 (65F15)

(with Lovass-Nagy, Victor; Rabson, G.) Corrigendum: "Pole assignment using matrix generalized inverses" [Internat. J. Systems Sci. 12 (1981), no. 3, 383-392; MR 82c:93012]. Internat. J. Systems Sci. 12 (1981), no. 8, 1029-1030. (Editors) 82j:93019

Okiji, Ayao (with Kasai, Yasuhiro; Syozi, Itiro) The ground state of a replicated Ising system. Progr. Theoret. Phys. 65 (1981), no. 4, 1439-1442. (Authors' summary) 82A42

Okikioh, George Olatokunbo ★Special integral operators. Vol. I. Weierstrass operators and related integrals. Okikioh Scientific and Industrial Organization, London, 1980. ix+306 pp. ISBN 0-905499-04-2 (J. Horváth) 82d:44002 44A15 (31B10, 33A15, 33A40, 42B10, 42B15)

Representations of integrals and convolutions of radial functions. Bull. Math. 1981/82, no. 1, 2-47. (Philip Heywood) 82i:44005 44A35

Weighted inequalities for convolutions and homogeneous convolutions. Bull. Math. 1981/82, no. 1, 48-84. (Philip Heywood) 82i:44006 44A35 (26D10)

Weighted form of a general inequality. Bull. Math. 1981/82, no. 1, 85-95. (Philip Heywood) 82:44007 44A35 (26D10)

Okniński, Jan On spectrally finite algebras. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 7-8, 515-519 (1980). (H. Kraljevič) 82h:16015 16A40 (with Krempa, Jan) Semilocal, semiperfect and perfect tensor products. (Russi

nary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 5-6, 249-256 (1981). (A. Rosenberg) 82i:16024 16A51 (16A27) h, Frank Two classes of nonsingular matrices. Abacus 12 (1978), 84-89. (S. Lajos)

15A33

Hereditary algebras that are not pure-hereditary. Representation theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 432-437, Lecture Notes in Math., 832, Springer, Berlin, 1980. (Author's summary) 82b:16018

Indecomposable pure-injective modules over hereditary Artin algebras of tame type.

Comm. Algebra 8 (1980), no. 20, 1939–1941. (C. M. Ringel) 82j:16054 16A64 ecomposable rank two modules over some Artinian ring. J. London Math. Soc.

(2) 22 (1980), no. 3, 411-422. (Ju. A. Drozd) 82k:16038 16A64 (15A21) of nisnikova, E. A. The role of negations in the realization of monotone Boolean functions by formulas in the basis (\vee , &, \neg). (Russian) Diskret. Analiz No. 33 Metody

Diskret. Anal. v Rešenii Ekstremal. Zadač (1979), 68-76, 110-111. (N. A. Karpova) 82e:94072 94C10 (03G05)

Okrasiński, W. On a nonlinear convolution equation occurring in the theory of water percolation Ann. Polon. Math. 37 (1980), no. 3, 223–229. (Michael J. O'Carroll) 82b:76056 76S05 (45E10)

Some remarks about the infiltration of water from a cylindrical reservoir. (Polish ary) Zastos. Mat. 16 (1980), no. 4, 641-646. (J. R. Ockendon) 82e:76101 (35020)

Ok-Sakun, Y. (with Bochi, S.; Brossier, G.; Celeux, Gilles; Charles, Christian; Chifflet, R.; Darcos, J.; Diday, E.; Diebolt, J.; Fevre, P.; Govaert, G.; Hanani, O.; Jacquet, D.; Lechevallier, Yves; Lemaire, Jacques; Lemoine, Y.; Molliere, J. L.; Morisset, G.; Rousseau, P.; Sankoff, D.; Schroeder, A.; Sidi, J.; Taleng, F.) *Optimisation en classification automatique. Tome 1, 2. (French) [Optimization in automatic classification. Vol. 1, 2] Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. vii + 896 pp. ISBN 2-7261-0219-0 (A. Aiello) 82k:62116 62H30 (92A05)

Sets of harmonic measure zero. Aspects of contemporary complex analysis (Proc. NATO Adv. Study Inst., Univ. Durham, Durham, 1979), pp. 469-473, Academic Press, London, 1980. (J. Siciak) 82k:30028 30C85 (31A15)

Ber, B. L. (with Askarov, B.; Junusov, M. S.) The theory of Brillouin-Wigner perturbations in a two-level problem and its application to the problem of translational instability. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 3, 80-83, 100. (Authors' summary) 82h:82040 82A60 (58C28, 58E07, 82A55)

Oksimec, V. I. (with Mel'nik, I. M.) An interactive approach to the solution of a class of problems of vector optimization. (Russian) Complex control systems (Russian), pp. 41-51, 98, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (Authors' summary) 82m:90146 90C31

ubo, Susumu A generalization of Hurwitz theorem and flexible Lie-admissible algebras. Proceedings of the Second Workshop on Lie-Admissible Formulations (Sci. Center, Harvard Univ., Cambridge, Mass., 1979), Part B. Hadronic J. 3 (1979/80), no. 1, 1-52. (J. Löhmus) 82j:17002 17A20 (81C99)

(with Myung, Hyo Chul) Commutativity of adjoint operator algebras in simple Lie algebras. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ Massachusetts, Boston, Mass., 1980), Part A. Hadronic J. 4 (1980/81), no. 2, 199-215. (M. L. Tomber) 82i:17009 17B10

sion and classification of general composition algebras. Proceedings of the

Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part A. Hadronic J. 4 (1980/81), no. 2, 216-273. (Irvin Roy Hentzel) 82k:17003 17A42 (17A35)

Some classes of flexible Lie-Jordan-admissible algebras. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part A. Hadronic J. 4 (1980/81), no. 2, 354-391. (M. L. Tomber) 82h:17004 17A30

Nonassociative quantum mechanics and strong correspondence principle. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part B. Hadronic J. 4 (1980/81), no. 3, 608–633. (Nigel B. Backhouse) 82j:81010 81B99 (17A30, 17C99, 17D25)

(with Osborn, J. Marshall) Algebras with nondegenerate associative symmetric bilinear forms permitting composition. Comm. Algebra 9 (1981), no. 12, 1233–1261. (M. L. Tomber) 823:17005 17A45 (17D99)

Canonical quantization of some dissipative systems and nonuniqueness of Lagrangians. Phys. Rev. A (3) 23 (1981), no. 6, 2776-2784. (F. R. Halpern) 82g:81031

(with Tosa, Y.) Erratum: "Duffin-Kemmer formulation of gauge theories" [Phys. Rev. D (3) 20 (1979), no. 2, 462-473; MR 80f:81083]. Phys. Rev. D (3) 23 (1981), no. 6, 1468. (Editors) \$24:81092 81E15 (53C05)
(with Myung, Hyo Chul) Adjoint operators in Lie algebras and the classification of

simple flexible Lie-admissible algebras. Trans. Amer. Math. Soc. 264 (1981), no. 2, 459-472. (M. L. Tomber) 82g:17004 17B10 (17A20, 81C40)
Okubo, Tokuyuki (with Nagai, Shigeo) On the logic of a priori modalities. Ann. Japan Assoc. Philos. Sci. 5, no. 5, 213-223 (1980). (Peter Köhler) 82b:03058 03B60 (03B45) Okuda, Tetsuji Applications of the fuzzy integral evaluation model to brand selection problems. (Iapanese. English summary) Mem. Osaka Inst. Tech. Ser. A 25 (1980/81), no. 2, 193–202. (Author's summary) 82e:90032 90A30 (92A25)

Okumura, Masafumi The scalar curvature of a real hypersurface of a complex projective space. Geom. Dedicata 10 (1981), no. 1-4, 459–467. (S. C. Rastogi) 82m:53054 53C40 Okuncov, V. V. (with Zaharov, Ju. N.) Scheme with "nonlinear viscosity" for solution of a stationary system of Navier-Stokes equations. (Russian) Numerical analysis (Russian), pp. 37-54, 134-135, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Teoret. i Prikl. Meh., Novosibirsk, 1978. (L. Berg) 82a:65097 65P05 (76D05)

ano, Masahiro (with Zilcha, Itzhak) A proof of the existence of competitive equilibrium in a generation-overlapping exchange economy with money. Internal. Econom. Rev. 22 (1981), no. 1, 239-252. (From the introduction) 82f:90023 90A14

ara, Hiroyuki An asymptotic property of a certain Brownian motion expectation for large time. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 3, 155-159. (Dominique Lépingle) 82;60155 60J65 (58G32)

Some limit theorems of Donsker-Varadhan type for Markov process expectations. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 3, 419-440. (Robert Kertz) 82j:60132 60J25

Okuyama, Takashi Finite groups admitting an automorphism of prime order fixing a cyclic 2-group. Osaka J. Math. 18 (1981), no. 2, 393-402. (H. Bechtell) 82k:20049 Okuyama, Tetsuro Some studies on group algebras. Hokkaido Math. J. 9 (1980), no. 2, 217-221. (G. Michler) 82a:20017 20C20 (16A26)

(with Wajima, Masayuki) Character correspondence and p-blocks of p-solvable groups. Osaka J. Math. 17 (1980), no. 3, 801-806. (W. Ledermann) 82a:20013

On the radical of the center of a group algebra. Hokkaido Math. J. 10 (1981), no. 3, 406-408. (G. Michler) 82k:16010 16A26 (20C05)

(with Kiyota, Masao) A note on a conjecture of K. Harada. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 2, 128-129. (From the text) 82e:20010 20C20

Okuyama, Yasuo (with Tsuchikura, Tamotsu) On the absolute Riesz summability of orthogonal series. (Russian summary) Anal. Math. 7 (1981), no. 3, 199-208. (K. Tandori) 42A28 (42C15)

agunju, David O. (with Matkowsky, Bernard J.) Propagation of a pulsating flame front in a gaseous combustible mixture. SIAM J. Appl. Math. 39 (1980), no. 2, 290-300. (Richard J. Field) 82d:80023 80A25 (35K99)

nda, Domenico (with Lo Re, Pia Maria; Mazzocca, Francesco) Generalized hexagons and polar spaces. (Italian. English summary) Rend. Mat. (6) 13 (1980), no. 3, 401-408 (1981). (Stanley E. Payne) 82j:51022 51E20 (05B25) (with Brylawski, Thomas H.; Lo Re, Pia Maria; Mazzocca, Francesco) Some

applications of the intersection theory to Galois geometry. (Italian. English summary) Ricerche Mat. 29 (1980), no. 1, 65-84. (G. Tallini) 82i:05024 05B35

Olaniyan, O. O. Analysis of feedback communication systems. Proc. IEE-F 127 (1980),

no. 1, 30-33. (Author's summary) 82h:94016 94A40

Olaussen, Kaare (with Cheng, Hung; Dickinson, John A.) Diagrammatic derivation of the eikonal formula for high-energy scattering in Yang-Mills theory. Phys. Rev. D (3) 23 (1981), no. 2, 534-552. (Authors' summary) 82b:81113 81F20

Olbrich, G. (with Barentzen, H.; O'Brien, M. C. M.) An approximate analytical treatment of the E⊗ε Jahn-Teller effect. J. Phys. A 14 (1981), no. 1, 111-124. (Authors' summary)

Olbrot, Andrzej W. (with Żak, Stanisław H.) Controllability and observability problems for linear functional-differential systems. Functional differential systems and related topics (Proc. First Internat. Conf., Błażejewko, 1979), pp. 244-255, Higher College Engrg., Zielona Góra, 1980. (See 81j:34005) 93B05 (34K35)

(with Zak, Stanisław H.) Sufficient and necessary conditions for spectral controllability and observability of linear retarded systems. Functional differential systems and related topics (Proc. First Internat. Conf., Blażejewko, 1979), pp. 267-273, Highe College Engrg., Zielona Góra, 1980. (Arthur J. Krener) 82c:49030 49E15 (34K35.

Observability and observers for a class of linear systems with delays. IEEE Trans. Automat. Control 26 (1981), no. 2, 513-517. (Author's summary) 82e:93019 93B07
Author's reply to: "Comments on: 'Stabilizability, detectability, and spectrum

assignment for linear autonomous systems with general time delays' [IEEE Trans. Automat. Control 23 (1978), no. 5, 887-890; MR 58#26383] by A. W. Olbrot" [ibid. 25 (1980), no. 1, 134-135; MR 81d:93051] by K. J. Kurman. IEEE Trans. Automat. Control 26 (1981), no. 2, 617. (From the text) 82i:93059

(with Lee, E. B.) Observability and related structural results for linear hereditary systems. *Internat. J. Control* 34 (1981), no. 6, 1061–1078. (Authors' summary) 93B07

(with Sosnowski, Andrzej) Duality theorems on control and observation of discrete-time infinite-dimensional systems. Math. Systems Theory 14 (1981), no. 2, 173-187. (Authors' summary) 821:93012 93B05 (93D15)
blasco Olcina, José Luis See Blasco, José Luis
Olding, R. (with Teo, K. L.; Boyd, I. E.; Moore, E. J.) Suboptimal decision making of a

production firm. Opsearch 17 (1980), no. 4, 155-171. (Authors' summary) 82f:90012 90.405

O'Leary, Dianne Prost Conjugate gradient algorithms in the solution of optimization problems for nonlinear elliptic partial differential equations. (German summary) Computing 22 (1979), no. 1, 59-77. (Author's summary) 82e:65104 65N20

A generalized conjugate gradient algorithm for solving a class of quadratic programming problems. Linear Algebra Appl. 34 (1980), 371-399. (Michael Minkoff) 90C20 (65F30, 65K05)

Estimating matrix condition numbers. SIAM J. Sci. Statist. Comput. 1 (1980), no. 2, 205-209. (O. Pokorná) 82c:15006 15A12 (65F35)

(with Simmons, John A.) A bidiagonalization-regularization procedure for large scale discretizations of ill-posed problems. SIAM J. Sci. Statist. Comput. 2 (1981), no. 4, 474-489. (Authors' summary) 82k:65020 65F99 (45L10, 65R20)
Olech, C. Lower semiconductivity of integral functionals. Analysis and control of systems

(IRIA Sem., Rocquencourt, 1978), pp. 109-117, IRIA, Rocquencourt, 1978. (J. E. Rubio) 82f:49013 49A50

Oledzki, Juliusz (with Borsuk, Karol) Remark on the shape of domination. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 1-2, 67-69 (1981). (Götz Brunner) 82f:54028 54C56

Oleinik, A. Ja. (with Saltanov, M. V.; Jariš, R. R.) Investigation of the plane steady flows of a stratified fluid. (Russian. English surmary) *Dokl. Akad. Nauk Ukrain. SSR Ser. A* **1981**, no. 5, 53–57. (Authors' summary) **82g:76044** 76V05

Oleinik, O. A. (with Sobolev, S. L.; Tihonov, A. N.) The works of I. G. Petrovskii on partial differential equations and their role in the development of the theory of differential equations. (Russian) Proceedings of an All-Union Conference on Partial Differential Equations (Moscow State Univ., Moscow, 1976) (Russian), pp. 9–20, Moskov.

Gos. Unio., Meh.-Mat. Fakul'tet, Moscow, 1978. (Editors) 82;01069 01A70 (35-03) (with Kopáček, Jiří) Asymptotic properties of solutions of systems of equations in elasticity theory. (Russian) Uspehi Mat. Nauk 33 (1978), no. 5(203), 189-190. (From the

text) 82a:35015 35B40 (73C10)

(with Iosif'jan, G. A.; Tavhelidze, I. N.) The behavior of the solutions of the plane theory of elasticity in the neighborhood of irregular points of the boundary and at infinity. (Russian) Differential and integral equations. Boundary value problems (Rt pp. 237–255, Tbilis. Gos. Univ., Tbilisi, 1979. (L. Jentsch) 82e:73010 (with Aleksandrov, P. S.; Barenblatt, G. I.; Išlinskii, A. Ju.; Hristianov, S. A.) Pelageja Jakovlevna Kočina (on the occasion of her eightieth birthday). (Russian) Uspehi Mat. Nauk 34 (1979), no. 4(208), 217-220. (Editors) 82g:01035 01A70

(with Žikov, V. V.; Kozlov, S. M.; Ha T'en Ngoan) Averaging and G-convergence of differential operators. (Russian) Uspehi Mat. Nauk 34 (1979), no. 5(209), 65-133, 256.

(L. Cattabriga) 82f:35032 35B99 (35Jxx, 47F05)

(with Arnol'd, V. I.) Topology of real algebraic varieties. (Russian) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1979, no. 6, 7-17. (V. M. Harlamov) 82e:14064

Asymptotic properties of solutions of partial differential equations. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 135-144, 252, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Stefan Balint) 82d:35028 35B40

(with Iosif'jan, G. A.) The behavior at infinity of the solutions of second-order elliptic equations in domains with a noncompact boundary. (Russian) Mat. Sb. (N.S.) 112(154) (1980), no. 4(8), 588-610. (O. John) 82c:35024 35J25 (35B45)

(with Volevič, L. R.; Voskresenskii, G. P.; Zabrodin, A. V.; Kolmogorov, A. N.; Tihomirov, V. M.) Konstantin Ivanovič Babenko (on the occasion of his 60th birthday). (Russian) Uspehi Mat. Nauk 35 (1980), no. 2(212), 231-239. (Editors) 82g:01078

(with Aleksandrov, P. S.; Višik, M. I.; Ditkin, V. A.; Kolmogorov, A. N.; Lavrent'ev, M. A.) Lazar' Aronovič Ljusternik (on the occasion of his 80th birthday). (Russian) Uspehi Mat. Nauk 35 (1980), no. 6(216), 3-10. (Editors) 82g:01036 01A70 (with Aleksandrov, P. S.) On the eightieth anniversary of the birth of I. G. Petrovskii.

(Russian) Uspehi Mai. Nauk 36 (1981), no. 1(217), 3-10. (Editors) 82c:01067 01A73 (with Kondrat'ev, V. A.; Kopáček, Jiří) Estimates of solutions of second-order elliptic equations and systems of elasticity theory in the neighborhood of a boundary point. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 211–212. (I. Aganović) 83m:35036 35125 (73C02)

(with Aleksandrov, A. D.; Aminov, Ju. A.; Pogorelov, A. V.; Poznjak, E. G.; Rozendorn, E. G.; Sabitov, I. H.) Nikolai Vladimirovič Efimov (on the occ seventieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 3(219), 233-238. (Editors) 82g:01037b 01A70

ikov, A. H. (with Dragilev, M. M.) Continuable absolute bases in F-spaces. (Russian Inthony, A. H. (with Draguer, M. M.) Continuable absolute bases in r-spaces. (Russian) Izo. Secor-Kawkar. Naučn. Centra Vysš. Školy Ser. Estesto. Nauk. 1980, no. 2, 9–10, 108. (D. N. Zarnadze) 82d:46005 46A06 (46A35)

Olejček, Vladimir Ultrafilters and Darboux property of finitely additive measure. (Russian summary) Math. Slovaca 31 (1981), no. 3, 263–276. (J. Diestel) 82m:28006 28A12 (with Sipos, Ján) On recurrent functions. Semigroup Forum 22 (1981), no. 3, 235-241. (J. M. Day) 82i:22006 22A15 (54H15)

22A15 (34H15)

Olemskoř, A. I. Elastic energy of an inhomogeneous solid solution. I. (Russian) Izv. Vysš.

Učebn. Zaved. Fizika 1980, no. 9, 48−53. (Author's summary) 82d:73013 73C40

On the theory of elastic waves. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 12, 6−9. (Author's summary) 82e:73031 73D15

Oleščuk, T. Ju. (with Mihailenko, V. E.; Anpilogova, V. A.; Kovalev, S. N.; Levina, Ž. G.; Malinovskaja, V. I.; Panasjuk, L. S.; Puhov, I. K.; Sedleckaja, N. I.) ★C6орних задач

no maverparension recompute censentrams inporpassing nature. (Russian) [A collection of problems in descriptive geometry with elements of programming] Second edition, revised and augmented. "Višča Škola", Kiev. 1980. 208 pp. (E. Otto) 82e:51004

Oleščuk, Valentina (with Oleščuk, Valerii; Bulotas, Liudvikas) Selection of a working algorithm in a high-speed multichannel discrete information transfer system. (Russian. Lithuanian and English summaries) Statist. Problemy Upravlenija—Trudy Sem. Processy Optimal. Upravlenija V Sekcija No. 45 (1980), 91-98, 101. (Authors' summary) 82a:94062 94A40

Oleščuk, Valerii (with Oleščuk, Valentina; Bulotas, Liudvikas) Selection of a working algorithm in a high-speed multichannel discrete information transfer system. (Russian. Lithuanian and English summaries) Statist. Problemy Upravlenija—Trudy Sem. Processy Optimal. Upravlenija V Sekcija No. 45 (1980), 91-98, 101. (Authors' summary) 822:94062

sen, Dorte (with Gootman, Elliot C.) Spectra of actions on type I C*-algebras. Math. Scand. 47 (1980), no. 2, 329-349. (Ola Bratteli) 82g:46109 46L55

Olevskii, A. M. Change of variable and absolute convergence of the Fourier series. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 2, 284-287. (C. McGehee) 82a:42005h 42A28 (43A25)

Olhoff, Niels Optimal design with respect to structural eigenvalues. Theoretical and applied mechanics (Proc. 15th Internat. Congr., Univ. Toronto, Toronto, Ont., 1980), pp. 133–149, North-Holland, Amsterdam, 1980. (See 82d:00008) 73K40

(with Cheng, Keng Tung) An investigation concerning optimal design of solid elastic plates. Internat. J. Solids and Structures 17 (1981), no. 3, 305-323. (Authors' summary) 73K10

(with Lur'e, K. A.; Čerkaev, A. V.; Fedorov, A. V.) Sliding regimes and anisotropy in optimal design of vibrating axisymmetric plates. Internat. J. Solids and Structures 17 (1981), no. 10, 931-948. (Authors' summary) 82f:73035 73K40 (49B22, 73K12)

Ol'hovskii, Ju. G. (with Ljubič, Ju. I.; Maistrovskii, G. D.) Selection-induced convergence to equilibrium in a single-locus autosomal population. Problemy Peredači Informacii 16 (1980), no. 1, 93-104 (Russian); translated as Problems Inform. Transmission 16 (1980), no. 1, 66-75. (Charles J. Mode) 82g:92026 92A10

Oliger, Joseph (with Bube, Kenneth) Hyperbolic partial differential equations with nonstandard data. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 256-263, IMACS, New Brunswick, N.J., 1977. (Authors' summary) 82b:65150

Oliker, Vladimir Infinitesimal deformations preserving parallel normal vector fields Geometry and differential geometry (Proc. Conf., Univ. Haifa, Haifa, 1979), pp. 383-405, Lecture Notes in Math., 792, Springer, Berlin, 1980. (P. J. Ryan) 821:53071 53C45

Some remarks on elliptic equations and infinitesimal deformations of submanifolds. Global differential geometry and global analysis (Berlin, 1979), pp. 211-220, Lecture Notes in Math., 838, Springer, Berlin, 1981. (See 82i:53001) 53C45

Olin, Philip Varietal free products of bands. Semigroup Forum 21 (1980), no. 1, 83-87. (Phullendu Das) 82a:20065 20M07 (03C60)

Olin, Robert F. (with Thomson, James E.) Algebras of subnormal operators. J. Funct. Anal. 37 (1980), no. 3, 271-301. (D. Sarason) 82a:47024 47B20 (47A15, 47D20) (with Thomson, James E.) Irreducible operators whose spectra are spectral sets Pacific J. Math. 91 (1980), no. 2, 431-434. (John B. Conway) 82j:47012 47A2

ner, Arthur A. (with Peng, Song Tsuen) Guidance and leakage properties of a class of open dielectric waveguides. I. Mathematical formulations. IEEE Trans. Microwave Theory Tech. 29 (1981), no. 9, 843-854. (Authors' summary) 82h:78026

Olinick, Michael Mathematical models in the social and life sciences: a selected bibliography. Math. Modelling 2 (1981), no. 3, 237-258. (Editors) 82m:00011 (92-01)

Oliva, Pietro (with Caligaris, Ottavio) Existence theorems for moving boundary optimization problems. Rend. Sem. Mat. Univ. Padova 62 (1980), 221-231. (Françoise Berquier) 82b:49018 (with Caligaris, Ottavio) Necessary and sufficient conditions for Pareto problems.

(Italian summary) Boll Un. Mat. Ital. B (5) 18 (1981), no. 1, 177–216. (M. B. Suryanarayana) 82j:49022 49B27

Oliva, Terence A. (with Peters, Michael H.; Murthy, H. S. K.) A preliminary empirical test (with Leap, Terry L.) A typology of metamodels in collective bargaining. Behavioral Sci. 26 (1981), no. 2, 153–162. (Authors' summary) 82d-90047 90A30 (58C28) (with Leap, Terry L.) A typology of metamodels in collective bargaining. Behavioral Sci. 26 (1981), no. 4, 337–345. (Authors' summary) 82m:00027 00A69 (90A07,

Olive, D. I. Magnetic monopoles and nonabelian gauge theories. Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 249-262, Lecture Notes in Phys., 116, Springer, Berlin, 1980. (Author's summary) 82b:81125 81G10 (81E10)

Oliveira, F. Aleixo Collocation and residual correction. Numer. Math. 36 (1980/81), no. 1, 27-31. (R. M. M. Mattheij) 82a:65060 65L10

651.10 de Oliveira, G. N. Inverse eigenvalue problems for finite matrices. (Portuguese) Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 656-660, Consejo Sup. Inv. Cient., Madrid, 1977. (E. Marques de Sà) 82a:15010 15A18

The characteristic values of the matrix $A + XBX^{-1}$. Numerical methods (Third Collog., Keszthely, 1977), pp. 491–500, Colloq. Math. Soc. Jánoz Boyat, 22, North-Holla Amsterdam, 1980. (William W. Hager) 82bx65023 65F15 (15A18)

rte de Oliveira, J. See Duarte de Oliveira, J.

Oliveira, J. S. (with Sequeira, F. M.; Ferreira, Arturo V.) Étude de l'équation de Boltzmann du transport de neutrons. I. Portegal. Math. 36 (1977), no. 3-4, 175-189 (1980). (Paul F. Zweifel) 82482098 82A70 (45K05)

de Oliveira, L. A. R. (with Santos, F. C.; Kodama, T.) Path integrals for arbitrary or transformation. (Italian summary) Nuovo Cimento B (11) 58 (1980), no. 2, 251-266. (L. S. Schulman) 82:81049 81C35 (58D30)

Oliveira, Paula Un problème d'optimisation de structures. (English sumn Acad. Sci. Paris Sér. I Math. 292 (1981), no. 3, 239-242. (Author's summary) 824:73057

On the optimal design of a plate submitted to a rupture criterion. Comput. Methods

Appl. Mech. Engrg. 29 (1981), no. 1, 67-79. (Author's summary) 82m:73060 73K40

os, J. P. See Santos, J. P. de Otiveira

Oliver, Robert SK, for finite group rings. II. Math. Scand. 47 (1980), no. 2, 195-231. (Hans Opolka) 82m:18006a 18F25 (12B22, 16A54)
SK, for finite group rings. III. Algebraic K-theory, Evanston 1980 (Proc. Conf.,

Northwestern Univ., Evanston, III., 1980), pp. 29–337, Lecture Notes in Math., 854, Springer, Berlin, 1981. (Hans Opolka) 82m:180066 18F25 (12B22, 16A54)

Correction to: "SK, for finite group rings. I" [Invent. Math. 57 (1980), no. 2, 183–204; MR 81f:18031]. Invent. Math. 64 (1981), no. 1, 167–169. (From the text)

82j:18019 18F25 (12B22)
Olivie, Henk J. On a relationship between 2-3 brother trees and dense ternary trees.

Internat. J. Comput. Math. 8 (1980), no. 3, 233–245. (Derick Wood) 82c:68045 68EH

m son-trees. Internat. J. Comput. Math. 9 (1981), no. 4, 287–303. (Author's m:68112 68E05 (60C05, 68E10)

summary) 82m:68112

ld (with Laird, Nan) Covariance analysis of censored survival data using log-linear analysis techniques. J. Amer. Statist. Assoc. 76 (1981), no. 374, 231-240. (R. D. Gill) 82i:62143 62N05

Olivier, Jean-Pierre L'anneau abs ment plat universel, les épimorphis structibles. Bol. Soc. Mat. Mexicana (2) 23 (1978), no. 2, 68-74. (J. W. Brewer) 13A99

Olivier, Michel (with Batut, Christian) Sur l'accélération de la convergence de certa fractions continues. Seminar on Number Theory, 1979-1980 (French), Exp. No. 23, 25 pp., Univ. Bordeaux I, Talence, 1980. (F. Beukers) 82b:10041 10F20 (40A15, 10F20 (40A15.

(with Cassandro, M.) Renormalization group and analyticity in one dim a proof of Dobrushin's theorem. Comm. Math. Phys. 80 (1981), no. 2, 255-269. (J. Fritz) 821:82005 82A05 (60G60)

Olivos, J. (with Goles, E.) Periodic behaviour of generalized threshold functions. Discrete Math. 30 (1980), no. 2, 187-189. (J. R. Egan) 82c:68033 68D30 (05A10, 94C10)

Ol'khovskii, Yu. G. See Ol'hovskii, Ju. G.

Olkin, Ingram (with Siotani, Minoru) Asymptotic distribution of functions of a correlation matrix. Essays in probability and statistics, pp. 235-251, Shinko Tsusho, Tokyo, 1976. (Authors' introduction) 82b:62061 62H10 (62E20) (with Gleser, Leon Jay; Derman, Cyrus) ★Probability models and applications.

n, Inc., New York; Collier-Macmillan Publishers, London, 1980. xiii + 576 pp. ISBN 0-02-389230-7 (Peter Purdue) 82c:60002 60-01 (00A06, 00A69, 62-01)

(with Perlman, Michael D.) Unbiasedness of invariant tests for MANOVA and other tivariate problems. Ann. Statist. 8 (1980), no. 6, 1326-1341. (Takeaki Kariya)

82~62081 62H15 (with Shepp, L. A.) Entropy of the sum of independent Bernoulli random variables

and of the multinomial distribution. Contributions to probability, pp. 201-206, Academic

The maintain distinction of the maintains of proteining, pp. 201–200, Attachnic Peress, New York, 1981. (Yosef Rinott) 82g-60031 60E15 (with Petkau, A. John; Zidek, James V.) A comparison of n estimators for the binomial distribution. J. Amer. Statist. Assoc. 76 (1981), no. 375, 637–642. (Authors' summary) 82ic62050 62F10

ason, J. G. Learning to forage—optimally? Theoret. Population Biol. 18 (1980), no. 1, 44-56. (T. G. Hallam) 82g:92039 92A15 (92A17) erenshaw, Kathleen The minimum surface connecting the sides of a cubic frame. Bull.

Inst. Math. Appl. 16 (1980), no. 2-3, 54-60. (Robert Connelly) 82b:53014 53A10 (49F10)

The Hungarian magic cube. Bull. Inst. Math. Appl. 16 (1980), no. 4, 86-92. (David Singerman) 82c:05001 05-01 (20B25)

Ollero, A. (with Freire, E.) The structure of relations in personnel management. Fuzzy Sets and Systems 5 (1981), no. 2, 115-125. (Authors' summary) 82e:92053

Ollin, Harold Z. On best approximation by truncated series. J. Approx. Theory 32 (1981), no. 1, 82-84. (Joseph M. Lambert) 82i:41033 41A50 (41A58)

ngren, A. (with Bergstra, J. A.; Goeman, H. J. M.; Terpstra, G. A.; van der Weide, Th. P.) Axioms for multilevel objects. Fund. Inform. (4) 3 (1980), no. 2, 171-180. (From the summary) 82i:68014 68B15

man, V. Minimax confidence estimation of a location parameter. (Russian) Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. 28 (1979), no. 2, 161-164, 180. (František Rublik) 82c:62017 62C20

edilla, E. (with Martinez Alonso, L.; Guil, F.) Infinite-dimensional Hamiltonian systems associated with matrix Schrödinger operators. (Italian and Russian summaries) Nuovo Cimento B (11) 61 (1981), no. 1, 49-61. (Carmen Chicone) 82i:58065 (35I10, 47F05, 49C10, 81C99)

del Olmo, Mariano A. (with Cariñena, José F.; Santander, Mariano) Kinematic groups and dimensional analysis. J. Phys. A 14 (1981), no. 1, 1-14. (Stanley H. Benton, Jr.) 82f:00016 00A69 (22E70, 70B99)

Ol'saneckii, M. A. (with Degasperis, A.; Perelomov, A. M.) Group-theoretical approach to a class of Lax equations including those solvable by the spectral transform. Nuovo Cimento A (11) 59 (1980), no. 3, 245-262. (B. A. Kupershmidt) 82c:58027 58F07

(with Perelomov, A. M.) The Toda chain as a reduced system. (Russian. English nary) Teoret. Mat. Fiz. 45 (1980), no. 1, 3-18. (B. A. Kupershmidt) 82e:58049 58F07 (82A67)

Ol'šanskii, A. Ju. An infinite group with subgroups of prime orders. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 2, 309-321, 479. (N. S. Černikov) 82a:20035

On the question of the existence of an invariant mean on a group. (Russian) Uspehi Mat. Nauk 35 (1980), no. 4(214), 199-200. (M. Bożejko) 82b:43002 43A07

OFsanskii, G. I. New "Inge" groups of type I. (Russian) Current problems in mathematics, Vol. 16 (Russian), pp. 31–52, 228, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (Yasuhiro Asoo) 82k:22014 22E50

Description of unitary representations with highest weight for the groups U(p,q) ~. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 3, 32-44, 96. (H. Kraljević) 82c:22019 22E47

Ol'šanskii, V. Ju. Two methods for calculating the load on the surface of a slender body executing axisymmetric vibrations in a sonic gas flow. Izv. Akad. Nauk SSSR Meh. Zidk. Gaza 1980, no. 2, 151–154 (Russian); translated as Fluid Dynamics 15 (1980), no. 2, 300–302. (Author's summary) 82æ73023 73J05 (76H05)
 Ol'Sanskii, V. P. Fundamental solutions of equations of shallow shells. (Russian) Izv. Vysš.

Učebn. Zaved. Matematika 1980, no. 6, 52-56. (Szczepan Borkowski) 82e:73071

Olsder, Geert Jan (with Başar, Tamer) Team-optimal closed-loop Stackelberg strategies in hierarchical control problems. Automatica-Skowroński) 82e:90120 90D12 (90D25) tica-J. IFAC 16 (1980), no. 4, 409-414. (J. M.

Skowronski) 82e:99120 90172 (90172) (with Bagchi, Arunabha) Linear-quadratic stochastic pursuit-evasion games. Appl. Math. Optim. 7 (1981), no. 2, 95–123. (Authors' summary) 82f:93068 93E05

Olsen, D. R. See Poston, Tim; et al., 82i:58019

Olsen, G. (with Albeverio, Sergio; Hoegh-Krohn, Raphael) Dynamical semigroups and Markov processes on C*-algebras. J. Reine Angew. Math. 319 (1980), 25-37. (Ulrich Groh) 82h:47040 47D07 (46L55, 82A15)

-Olsen, Harald See Hanche-Olsen, Harald

Olsen, James H. The individual ergodic theorem for Lamperti contractions. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 2, 113-118. (M. I. Brin) 82h:47008 47A35

en, O. H. (with Christiansen, P. L.) Reflection of fluxons on a Josephson line cavity. Phys. D 1 (1980), no. 4, 412-419. (Authors' summary) 82b:81150 81J05 (35Q20) (with Lomdahl, P. S.; Christiansen, P. L.) Return and collapse of solutions to the near Schrödinger equation in cylindrical symmetry. Phys. Lett. A 78 (1980), no. 2,

125-128. (Authors' summary) 82c-81023 81C05
(with Samuelsen, M. R.) Interaction between solitary wave solutions to a double Gordon equation. Phys. Lett. A 80 (1980), no. 4, 209-212. (Authors' summary)

82d:35097 35Q20 (35B99, 81C99)
Olsen, Paul (with Eisner, Mark J.) Duality in probabilistic programming. Stochastic

mming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 147-158, Acades Press, London, 1980. (B. Bereanu) 82h:90083 90C15

Olsen, Randall J. A least squares correction for selectivity bias. Econometrica 48 (1980),

no. 7, 1815-1820. (Jacob Paroush) 82g:62093 62J05 (62E10)

Olshanetsky, M. A. See Ol'šaneckii, M. A. Ol'shanskii, V. Yu. See Ol'šanskii, V. Ju.

Olshen, Richard A. (with Gordon, Louis) Consistent nonparametric regression from recursive partitioning schemes. J. Multivariate Anal. 10 (1980), no. 4, 611-627. (Luc P. Devroye) 82d:62070 62G05 (62J02)

Olson, A. M. The solution of second order problems with a symbolic-numeric method. Codes for boundary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 101-108, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979, (See 82b:65074) 65L10 (65-04)

Olson, Dwight M. (with Jenkins, Terry L.) Upper radicals and essential ideals. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 4, 385-389. (Authors' summary) 82:16007

16A21

Otson, S. L. (with Banks, H. T.; Miech, R. P.) A comparison of mathematical models for a recycling cascade in glycogenolysis. Math. Modelling 1 (1980), no. 1, 13-26. (Authors' summary) 82j:92019 92A09
 Otszak, Zbigniew Five-dimensional nearly Sasakian manifolds. Tensor (N. S.) 34 (1980),

no. 3, 273-276. (D. K. Datta) 82h:53066 53C25

On almost cosymplectic manifolds. Kodai Math. J. 4 (1981), no. 2, 239-250. (Krishna Amur) 82k:53057 53C15

Olszewski, Eugeniusz See Polish bibliography on the philosophy of science and technology during the years 1974–1976, 82f:00009

mloyo, V. O. S. (with Hutter, K.) On the distribution of stress and velocity in an ice strip, which is partly sliding over and partly adhering to its bed, by using a Newtonian viscous approximation. Proc. Roy. Soc. London Ser. A 373 (1980), no. 1754, 385-403. (Authors' summary) 82c:86008 86A99 (76D05)

Olver, Frank W. J. Unrestricted algorithms for generating elementary functions.

Fundamentals of numerical computation (computer-oriented numerical analysis) (Proc. Conf., Tech. Univ. Berlin, Berlin, 1979), pp. 131-140, Comput. Suppl., 2, Springer, Vienna, 1980. (John Todd) 82b:65034 65G05 (65D15)

The general connection-formula problem for linear differential equations of the

second order. Singular perturbations and asymptotics (Proc. Adv. Sem., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1980), pp. 317-343, Publ. Math. Res. Center Univ. Wisconsin, 45, Academic Press, New York, 1980. (Frederick A. Howes) 82f:34069

Whittaker functions with both parameters large: uniform approximations in terms of parabolic cylinder functions. *Proc. Roy. Soc. Edinburgh Sect. A* **86** (1980), *no.* 3-4, 213-234. (P. F. Hsieh) **82c:34068** 34E20 (33A40)

Olver, Peter J. (with Shakiban, Chehrzad) A resolution of the Euler operator. I. Proc. Amer. Math. Soc. 69 (1978), no. 2, 223-229. (Alexander A. Pankov) 82i:13028 (49C10, 58F07)

Symmetry groups and group invariant solutions of partial differential equations. J. Differential Geom. 14 (1979), no. 4, 497-542 (1981). (A. M. Vinogradov) 82b:58104 58G35 (35A30, 76B15, 81C05)

On the Hamiltonian structure of evolution equations. Math. Proc. Cambridge Philos.

Soc. 88 (1980), no. 1, 71–88. (A. M. Vinogradov) 82f:58042 58F05 (58A20, 70H05)
Olžataev, B. A. (with Budehin, A. P.) Microwave radiation in the Friedmann model.
(Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1981, no. 1, 62–65, 92. (Authors' mmary) 82d:83067 83F05

Om, Gwan Dok On the form of positive integer solutions of the equation $x^p + y^p = z^p$. (Korean. English summary) Su-hak kwa Mul-li 1980, no. 1, 13-17. (Editors) 82b:10017

O'Malley, M. J. (with Brown, D. R.) On nth roots of positive operators. Amer. Math. Monthly 87 (1980), no. 5, 380-382. (From the text) 82k:47032 47B15

O'Malley, R. J. Selective derivatives and the M_2 or Denjoy-Clarkson properties. Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 195-199. (A. M. Bruckner) 82b:26009 26A24

O'Malley, Robert E. (with Howes, Fred A.) Singular perturbations of semilinear second

order systems. Ordinary and partial differential equations (Proc. Fifth Conf., Univ. Dundee, Dundee, 1978), pp. 131–150, Lecture Notes in Math., 827, Springer, Berlin, 1980. (K. W. Chang) 82i:34051 34D15 (34E15)

On multiple solutions of singularly perturbed systems in the conditionally stable case. Singular perturbations and asymptotics (Proc. Adv. Sem., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1980), pp. 87-108, Publ. Math. Res. Center Univ. Wisconsin, 45, Academic Press, New York, 1980. (W. Wasow) 82d:34077 34E15 anadze, R. Ś. On bounded Q-reducibility. (Russian. Georgian and English summaries)

Soobšč. Akad. Nauk Gruzin. SSR 100 (1980), no. 1, 57-60. (A. N. Děgtev) 82h:03039 03D30

Omarkulov, K. A. (with Omarov, T. B.) On integrable nonstationary problems of celestial mechanics. (Russian. English summary) Akad. Nauk Kazah. SSR Trudy Astrofiz. Inst. 35 (1981), 37-49, 98. (Editors) 82k:70010 70F15 (58F05)

harov, B. Ranks and Deg of countable ω_0 -categorical theories. (Russian) Theory of dels and its applications (Russian), pp. 61-65, Kazah. Gos. Univ., Alma-Ata, 1980. (B.

 Zil'ber) 82e:03029 03C35 (03C45)
 Omarov, T. B. (with Malkov, E. A.) On gravitating systems with a nonstationary distribution function. (Russian. English summary) Akad. Nauk Kazah. SSR Trudy Astrofiz. Inst. 35 (1981), 3-7, 97. (Authors' summary) 82g:85012 85A40 (83F05) (with Omarkulov, K. A.) On integrable nonstationary problems of celestial mechanics. (Russian. English summary) Akad. Nauk Kazah. SSR Trudy Astrofiz. Inst. 35

(1981), 37-49, 98. (Editors) 82k:70010

natu, Sigeru See Ohmatsu, Shigeru nbach, Jerzy On the stable manifold theorems. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys. 26 (1978), no. 4, 337-341. (M. C. Irwin) 82f:58055 58F10

70F15 (58F05)

Omel'janov, G. A. (with Maslov, V. P.) Asymptotic soliton-like solutions of equations with small dispersion. (Russian) Uspehi Mat. Nauk 36 (1981), no. 3(2!9), 63-126, 255. (P. Szeptycki) 82i:35021 35B40 (35Q20, 58F05, 58G15, 76B25, 82A45)

Omero, C. (with Fonda, L.; Ghirardi, G. C.; Rimini, A.; Weber, Tullio) Quantum dynamical semigroup description of sequential decays. Mathematical problems in the ntum theory of irreversible processes (Naples, 1978), pp. 99-114, Lab. Cibernet. CNR, Naples, 1978. (See 82i:82003) 82A15 (82A35)

ples, 1978. (See 82j:82003) 82A15 (82A35)
(with Ghirardi, G. C.; Rimini, A.; Weber, Tullio) The stochastic interpretation of tum mechanics: a critical review. Riv. Nuovo Cimento (3) 1 (1978), no. 3, 1-34. (P. D. F. Ion) 82i:81039

| Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Richard | Rich description of decay processes and Zeno's paradox in quantum mechanics. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 330-332, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81004) 81B99

eciński, Jan On convex homeomorphisms transforming a denumerable set onto a denumerable set. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 9-10, 437-439 (1981). (Chung Lie Wang) 82i:26005 26A51

Omodeo, Eugenio Giovanni (with Ferro, Alfredo; Schwartz, Jacob T.) Decision procedures for elementary sublanguages of set theory. I. Multilevel syllogistic and some extensions. Comm. Pure Appl. Math. 33 (1980), no. 5, 599-608. (G. Asser) 82i:03018a (03E30, 04A99)

Three existence principles in a modal calculus without descriptions contained in A. Bressan's MC". Notre Dame J. Formal Logic 21 (1980), no. 4, 711-727. (David Makinson) 82b:03047 03B45

(with Breban, M.; Ferro, Alfredo; Schwartz, Jacob T.) Decision procedures for elementary sublanguages of set theory. II. Formulas involving restricted quantifiers, together with ordinal, integer, map, and domain notions. Comm. Pure Appl. Math. 34 (1981), no. 2, 177–195. (G. Asser) 82i:03018b 03B25 (03E30, 04A99)

nori, Hideki *Mugen jigen ri gunron. (Japanese) [Theory of infinite-dimensional Lie

groups] Kinokuniya Sûgaku Sōsho [Kinokuniya Mathematics Collection], 15. Kinokuniya Book Store Co., Ltd., Tokyo, 1978. v+347 pp. (A. Morimoto) 82k:58001 (58B25, 58D05)

(2802., 351.03)

Theory of infinite-dimensional Lie groups. (Japanese) Sügaku 31 (1979), no. 2, 144–158. (A. Morimoto) 82c:22021 22E65 (58B25)

(with Maeda, Yoshiaki; Yoshioka, Akira) On regular Fréchet-Lie groups. I. Some differential geometrical expressions of Fourier integral operators on a Riemannian manifold. Tokyo J. Math. 3 (1980), no. 2, 353–390. (J. J. Duistermant) 82b:58069 58G15 (22E65)

note, Minoru (with Wadati, Miki) Bäcklund transformations for the Ernst equation. J. Math. Phys. 22 (1981), no. 5, 961-964. (G. L. Lamb, Jr.) 82f:35004 58A15, 83C20)

(with Wadati, Miki) Bäcklund transformations of the axially symmetric stationary Einstein-Maxwell equations. II. Phys. Lett. A 83 (1981), no. 9, 411-413. (Authors summary) 82h:83039 83C50 (35Q20, 58A15)

(with Wadati, Miki) The Bäcklund transformations and the inverse scattering method of the Ernst equation. Progr. Theoret. Phys. 65 (1981), no. 5, 1621-1631. (F. A. E. Pirani) 82i:35157 35Q20 (58A15, 58F07, 83C99)

noto, Norio (with Yamato, Kazuharu) An approach to the minimization for ternary logic function. Systems-Comput.-Controls 10 (1979), no. 1, 27-35 (1981). (W. Wechler)

82f:94028 94C10
ura, Jim K. Source and channel coding with block and convolutional codes. The information theory approach to communication, pp. 1–80, CISM Courses and Lectures, 229, Springer, Vienna, 1978. (See **82d:94024**) 94A24 (94A29, 94B10)

(with Viterbi, A. J.) Error bounds for intersymbol interference channels. The information theory approach to communication, pp. 127-169, CISM Courses and Lectures, 229, Springer, Vienna, 1978. (See 824:94024) 94A40

Cutoff rates when decoding with approximate channel statistics. Secon International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. I, pp. 101–110, Reidel, Dordrecht, 1980. (See 824:94002) 94A40

Omyla, Micczysław Propositional quantifiers in non-Fregean theories. Begriffsschrift—Jena Frege Conference (Friedrich-Schiller-Unio., Jena, 1979) (German), pp. 299–306, Friedrich-Schiller-Unio., Jena, 1979. (Ayda I. Arruda) 82c:03035 03B60

Onaga, Kenji (with Tani, Katsuji; Chan, Shu Park) Modeling and scheduling of resource-sharing concurrent processes in networks of recurrent multiprograms and multi-PERTS. Fourteenth Asilomar Conference on Circuits. Systems and Com (Pacific Grove, Calif., 1980), pp. 168-172, IEEE, New York, 1981. (See 824:93001) 90R35

O'Neill, Daniel E. (with Bruggeman, Werner) Comparison of classical econometric methods and multivariate time series analysis in assessing the relationship between consumption and income. Time series (Proc. Internat. Meeting, Univ. Nottingham, Nottingham, 1979), pp. 183-207, North-Holland, Amsterdam, 1980. (Authors' summary) 82d:62165

O'Neill, Kevin (with Lynch, Daniel R.) Continuously deforming finite elements for the solution of parabolic problems, with and without phase change. Internat. J. Nun Methods Engrg. 17 (1981), no. 1, 81-96. (From the summary) 82b:65131 651

(with Lynch, Daniel R.) Erratum: "Continuously deforming finite elements for the solution of parabolic problems, with and without phase change" [Internat. J. Numer. Methods Engrg. 17 (1981), no. 1, 81-96; MR 82b:65131]. Internat. J. Numer. Methods Engrg. 17 (1981), no. 7, i. (Editors) 82m:65104 65N30

O'Neill, M. E. The distribution of higher-order interactions in contingency tables. J. Roy Statist. Soc. Ser. B 42 (1980), no. 3, 357-365. (Erling Sverdrup) 82d:62100 A note on the canonical correlations from contingency tables. Austral. J. Statist. 23 (1981), no. 1, 58-66. (A. W. Davis) 82m:62128 62H20

(with Ranger, K. B.) On the slow motion of a fluid coated sphere in an immiscible viscous fluid. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 5, 261-266. (From the text) 82i:76092 76T05

(with Ranger, K. B.) Flow past a sphere straddling the interface of a two-phase system. (French summary) Z. Angew. Math. Phys. 32 (1981), no. 4, 474-477. (Authors' mary) 82j:76084 76T05

O'Neill, Richard P. How query systems can simplify models and aid analysis. Computer-assisted analysis and model simplification (Proc. First Sympos., Univ. Colorado, Boulder, Colo., 1980), pp. 437–442, Academic Press, New York, 1981. (See 82g:00016) 68G05 (68J10)

(with Greenberg, Harvey J.) Representing super-sparse matrices with perturbed values. Comm. ACM 24 (1981), no. 7, 451-456. (Authors' summary) 821:68033 68C05 (90C05)

Oniani, G. A. Integral representations of analytic and n-harmonic functions in the unit polydisc. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 93 (1979), no. 3, 545-548. (P. Agranovič) 82b:32006 32A25

Onickanskii, M. B. Reconstruction of a sublinear operator as a supremum with respect to partial subdifferentials. (Russian) Application of functional analysis to approximation theory (Russian), pp. 99-106, 159, Kalinin. Gos. Univ., Kalinin, 1980. (H. H. McFaden) 46A40 (47H99)

Oniščik, A. L. Transitive actions on Borel manifolds. (Russian) Problems of group theory and homological algebra, No. 1 (Russian), pp. 143-155, Jaroslav. Gos. Univ., Yaroslavl', 1977. (A. Morimoto) 82c:53033 53C30 (32M10, 57S15)

★Высдение в теорию групп и алтебр Ли. (Russian) [Introduction to the theory of Lie groups and Lie algebras] Jaroslav. Gos. Univ., Yaroslav!', 1979. 90 pp. (Eugene 22-01 (22E15) Gutkin) 82d:22001

Totally geodesic submanifolds of symmetric spaces. (Russian) Geometric methods in problems of algebra and analysis, No. 2 (Russian), pp. 64-85, 161, Jaroslav. Gos. Univ., Yaroslavl', 1980. (O. Kowalski) 82j:53092 53C35 (53C40)

Correction: "Extensions of transitive transformation groups" [Izv. Vysš. Učebn. Zaved. Matematika 1977, no. 3(178), 53-65; MR 57 #17671]. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 7, 88. (Editors) 82k:57029

See also Morris, Sidney A., 82c:22007 Oniščuk, O. V. (with Popov, G. Ja.) Some problems of bending of plates with cracks and thin inclusions. Izv. Akad. Nauk SSSR Meh. Tverd. Tela 15 (1980), no. 4, 141-150 (Russian); translated as Mech. Solids 15 (1980), no. 4, 110-118. (Authors' su 73M00

Onishi, Hironori (with Appelgate, Harry) Continued fractions and the conjugacy problem in SL₂(Z). Comm. Algebra 9 (1981), no. 11, 1121–1130. (Joseph B. Dennin, Jr.)

 82±20052
 20G30 (10A32, 10D07)

 Onishi, Makoto
 Neat-injectivity and neat-projectivity in abelian groups. Comment. Math. Univ. St. Paul. 29 (1980), no. 2, 123–134. (P. L. Sperry) 82d:20053
 Comment. Math. 20K40
 Onishi, Y. (with Jeffrey, D. J.) The slow motion of a cylinder next to a plane wall. Quart. J.

Mech. Appl. Math. 34 (1981), no. 2, 129-137. (Authors' summary) 82i:76028 76D0' meweer, C. W. On pointwise differentiability of functions on a p-adic or p-series field.

Ann. Univ. Sci. Budapest. Eötvős Sect. Math. 22/23 (1979/80), 49-57. (V. F. Osipov) 82b-12016 12B40 (26A24)

Ono, Hiroakira (with Nakamura, Akira) Decidability results on a query language for data atical foundations of computer science, 1980 bases with incomplete information. Mathema (Proc. Ninth Sympos., Rydzyna, 1980), pp. 452-459, Lecture Notes in Comput. Sci., 88, Springer, Berlin, 1980. (Authors' introduction) 82e:68102 68H05 (03B15, 03B25,

(with Nakamura, Akira) On the size of refutation Kripke models for some linear modal and tense logics. Studia Logica 39 (1980), no. 4, 325-333. (R. Parikh) 82i:03030 03B45

Ono, J. (with Kodama, Yukihiro) On fine shape theory. II. Fund. Math. 108 (1980), no. 2, 89-98. (Maria Moszyńska) 82h:54028 34C56 (54F43)

Ono, Takashi On the relative Mordell-Weil rank of elliptic quartic curves. J. Math. Soc. Japan 32 (1980), no. 4, 665-670. (Andrew Bremner) 82d:10030 10B10 (14K07)

On certain numerical invariants of mappings over finite fields. I. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 7, 342-347. (Bruce C. Berndt) 82f:10051a 10G05 (12C25)

On certain numerical invariants of mappings over finite fields. II. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 8, 397-400. (Bruce C. Berndt) 82f:10051b (12C25)

On certain numerical invariants of mappings over finite fields. III. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 9, 441-444. (Bruce C. Berndt) 82f:10051c 10G05 (12C25)

On certain numerical invariants of mappings over finite fields. IV. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 1, 66-71. (Bruce C. Berndt) 82f:160516 10G05 (12C25)

odern, Rikio (with Saishu, Kazuo; Sato, Kimio) Comments on: "Computer generation of trees and co-trees in a cascade of multiterminal networks" [IEEE Trans. Circuit Theory 16 (1969), 518-526; MR 40 #7023] by W. K. Chen. IEEE Trans. Circuits and

Systems 28 (1981), no. 7, 747–748. (Authors' summary) 82f-88072 68E10 (05C05)
ofri, Enrico Path integrals over coherent states. With the collaboration of M. Ciafaloni. Functional integration theory and applications (Proc. Colloq., Lourain-la-Newe, 1979), pp. 121-124, Plenum, New York, 1980. (Takashi Miura) 82h:81047 81C35 (81D30) (with Menotti, P.) The action of SU(N) lattice gauge theory in terms of the heat kernel on the group manifold. Nucleur Phys. B 190 (1981), no. 2, FS 3, 288–300. (Authors' summary) 82k:81066 81E25 packs, Ju. N. Simulation of the control process for superficial respiration and blood flow in the human organism. Kibernetika (Kiev) 1979, no. 6, 142–144 (Russian); translated as Cybernetics 15 (1979), no. 6, 935–938 (1980). (M. E. Wise) 82e:92016 92A09 (34H05,

ose, Hiroshi Nonlinear oscillation of functional-differential equations with complicated deviating argument. *Bull. Fac. Sci. Ibaraki Univ. Ser. A No.* 13 (1981), 29–43. (V. Staikos) 82j:34074 34K15 (34K25)

ulriev, A. T. Singularities of turbulent motion in the core of a vortex ring. (Russian)

Dynamic processes in gases and solid bodies (Russian), pp. 31-70, 220, Fizičeskaja

Mehanika, 4, Leningrad. Univ., Leningrad, 1980. (Author's summary) 82i:76021 76C99 (76F99)

Muli, Akira (with Kawasaki, Kyozi; Ohta, Takao) Some topics in nonequilibrium critical phenomena. Systems far from equilibrium (Conf., Sitges/Barcelona, 1980), pp. 125–142, Lecture Notes in Phys., 132, Springer, Berlin, 1980. (See 82g.82004) 82A50

(with Kawasaki, Kyozi) Critical phenomena in two-dimensional incompressible flows. Progr. Theoret. Phys. Suppl. No. 69 (1980), 146–159 (1981). (Authors' summary) 82j:76048 76E99 (58E07, 82A25)

nyshko, S. (with Elgazzar, S.) Modified maximum principle for nonlinear open-loop PFM control systems. *Internat. J. Control* 29 (1979), no. 6, 1067–1076. (O. V. Vasil'ev) 49B10 (49D05)

Onysyk, S. B. Optimal control of a class of objects with distributed parameters. (Russian) Adaptive control systems (Russian), pp. 33-38, 80, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (Author's summary) 82b:49906 49A22

Ooe, M. (with Ulrych, T. J.) Autoregressive and mixed autoregressive-moving average models and spectra. Nonlinear methods of spectral analysis, pp. 73-125, Topics Appl. Phys., 34, Springer, Berlin, 1979. (See 82j:62069) 62M10 (62M15)

hara, Ken-ichi (with Sato, Humitaka) Structure of superposed two Kerr metrics. Progr. coret. Phys. 65 (1981), no. 6, 1891-1900. (Colin B. G. McIntosh) 82m:83009 no, Yoshitsugu (with Kohda, Tohru) Necessary and sufficient condition for entrainment of dynamical systems with a certain class of coupling. 1979 International Symposium on

Circuits and Systems (Tokyo, 1979), pp. 402-403, IEEE, New York, 1979. (See 82e:94002)

(with Ito, Keisuke; Yamazaki, Hideki; Hirakawa, Kazuyoshi) Chaotic behavior in great earthquakes—coupled relaxation oscillator model, billiard model and electronic circuit model. J. Phys. Soc. Japan 49 (1980), no. 1, 43-52. (J. D. Atkinson) 82k:58068 58F13 (70K50, 86A15)

(with Takahashi, Yöichirö) Chaos, external noise and Fredholm theory. Progr. coret. Phys. 63 (1980), no. 5, 1804–1807. (Richard C. Churchill) 82g:58073 58F20 (58-04, 58F11)

(with Osikawa, Motosige) Chaos in nonlinear difference equations. I. Qualitative study of (formal) chaos. Progr. Theoret. Phys. 64 (1980), no. 1, 54–67. (L. A. Bunimovich) 82b:58060 58F40 (28D20, 39A10, 58F11) you (tolana) canal 1975 (tolana) canal 1975 (tolana) canal 1975 (tolana) canal 1975 (with Osikawa, Motosige) Chaos in C⁰-endomorphism of interval. Publ. Res. Inst.

Math. Sci. 17 (1981), no. 1, 165-177. (Frederick R. Marotto) 82e:58068 58F13

rt, Frans Abelian varieties: moduli and lifting properties. Algebraic geometry (Proc. Summer Meeting, Univ. Copenhagen, Copenhagen, 1978), pp. 477-495, Lecture Notes in Math., 732, Springer, Berlin, 1979. (Reinhard Bölling) 82e:14050 14K15 (14K10)

(with Steenbrink, Joseph) The local Torelli problem for algebraic curves. Journées de Géometrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers, 1979, pp. 157-204, Sijthoff & Noordhoff, Alphen aan den Rijn, 1980. (A. Duma) 82i:14014

(with Norman, Peter) Moduli of abelian varieties. Ann. of Math. (2) 112 (1980), no. 3, 413-439. (T. Oda) 82h:14026 14K10 (14L05)

Coarse and fine moduli spaces of algebraic curves and polarized abelian varieties. Symposia Mathematica, Vol. XXIV (Sympos., INDAM, Rome, 1979), pp. 293-313, Academic Press, London, 1981. (T. Oda) 82j:14021 14H10 (14K10) parin, N. P. Approximation of systems of neutral type. (Russian) Differential equ

with deviating argument (Russian), pp. 52-60, Univ. Družby Narodov im. Patrisa Lumumby, Moscow, 1979. (M. I. Kamenskii) 82i:34094 34K20

chowski, W. Remarks on metacrystallographic groups. Proceedings of the Conference on Kristallographische Gruppen (Univ. Bielefeld, Bielefeld, 1979), Part I. Match No. 9 (1980), 51-64. (From the introduction) 82h:20061 20H15 (82A60) enshaw, S. (with Taylor, P. J.) A million or so correlation coefficients: three experiments

e modifiable areal unit problem. Statistical applications in the spatial sciences, pp. 127-144, Pion, London, 1979. (See 82f:90003) 90A30

Opfer, Gerhard On approximations in subnorms. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 699-703, Academic Press, New York, 1980. (William

A. Light) 82a:41034 41A65
Evaluation of weakly singular integrals. Numerical treatment of integral equ (Workshop, Math. Res. Inst., Oberwolfach, 1979), pp. 191-202, Internat. Ser. Numer.
 Math., 53, Birkhäuser, Basel, 1980, (J. Kofroh) 82ac65018 65D30
 (with Puri, Madan L.) Complex planar splines. J. Approx. Theory 31 (1981), no. 4, 383-402. (Jean Tzimbalario) 82i:41014 41A15 (65D07)

Opitz, Otto (with Schader, Martin) Zur Berücksichtigung informeller Beziehungen in der Aufbauorganisation mit Hilfe von Klassifikationsmethoden. (English summary) Decision in small groups (Workshop, Jungholz, 1977) (German), pp. 218–228, Math. Systems in Econom., 45, Hain, Königstein/Ts., 1979. (See 82e:90130) 62H30 Opolka, Hans (with Scharlau, Winfried) *Von Fermat bis Minkowski. (German) [From Fermat to Minkowski] Eine Vorlesung über Zahlentheorie und ihre Entwicklung. [A course on number theory and its development]. Springer-Verlag, Berlin-New York, 1980. xi + 224 pp. ISBN 3-540-10086-5 (G. Frei-Imfeld) 82g:10001 10-01 (01A05, 10-03) Auflösung zahlentheoretischer Knoten in Galoiserweiterungen von Q. Arch. Math.

(Basel) 34 (1980), no. 5, 416-420. (Pierre Damey) 82e:12010 12A60

A note on projective representations over fields with many roots of unity. J. London Math. Soc. (2) 23 (1981), no. 2, 241-245. (I. Reiner) 82d:20017 20C25 (12A57) I, U. G. (with von Chossy, R.) Ein Invarianzeigenschaft für Startverteilungen einer

Klasse stochastischer Prozesse. (English summary) Metrika 28 (1981), no. 1, 63-69. (P. Laurie Davies) 82j:60058 60G10 (60J05)

Oppen, Derek C. Reasoning about recursively defined data structures. J. Assoc. Comput. 68G15 (03B25, Mach. 27 (1980), no. 3, 403-411. (George Tourlakis) 82a:68177 03D15, 68B15)

Complexity, convexity and combinations of theories. Theoret. Comput. Sci. 12 (1980), no. 3, 291-302. (E. Dantzin) 82a:03013 03B25 (03D15, 68B10, 68C25)

nheim, Alan V. (with Hayes, Monson H.; Lim, Jae S.) Signal reconstruction from phase or magnitude. IEEE Trans. Acoust. Speech Signal Process. 28 (1980), no. 6, 672-680. (Authors' summary) 82a:94010 94A11

(with Frisk, George V.; Martinez, David R.) Computation of the Hankel transform using projections. J. Acoust. Soc. Amer. 68 (1980), no. 2, 523-529. (T. Sasakawa) 82b:42018 42B99 (45F05, 65F05)

(with Quatieri, Thomas F., Jr.) Iterative techniques for minim reconstruction from phase or magnitude. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 6, 1187–1193. (Authors' summary) 82m:94014 94A05
penheim, Irwin (with Hanggi, Peter; Shuler, Kurt E.) On the relations between

Markovian master equations and stochastic differential equations. Phys. A 107 (1981),

no. 1, 143-157. (S. K. Srinivasan) 82m:60066 60H10 (60160, 82A05, 93E03)
Opper, M. (with Bolterauer, H.) Nonlinear excitations in the low temperature region of the classical Toda lattice. Phys. Lett. A 83 (1981), no. 2, 69-70. (Authors' summary) 824:82004 82A05

Oppezzi, Pirro Elliptic systems of Agmon-Douglis-Nirenberg type with variable coefficients, and radiation conditions. (Italian. English summary) Ann. Mat. Pura Appl. (4) 118 (1978), 143-161. (Rudolf Švarc) 82b:35053 35J45 (35D05)

(with Bottaro, Gianfranco) Lower semicontinuity of an integral functional depending on functions of class L^p with values in a Banach space. (Italian. English summary) Ann. Mat. Pura Appl. (4) 125 (1980), 349-365. (Paolo Marcellini) 82j:49010 49A50

(with Bottaro, Gianfranco) Necessary conditions for the lower semicontinuity of an integral functional that depends on functions with values in a Banach space. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 18 (1981), no. 1, 47-65. (J. E. Rubio) 82f:49010 49A50

Oprian, C. A. On the exact power rank tests for a Lehmann-type trend alternative. Metron 34 (1976), no. 1-2, 191-200 (1978). (Author's summary) 82b:62047 62G10 (with Voss, David A.; Aroian, Leo A.) Moving average models-time series in m-dimensions. Special issue on time series in M dimensions. Comm. Statist. -Simulation Comput. 9 (1980), no. 5, 467-489. (See 82e:62150)

(with Taneja, Vidya S.; Voss, David A.; Aroian, Leo A.) General considerations and interrelationships between MA and AR models, time series in m dimensions, the ARMA model. Special issue on time series in M dimensions. Comm. Statist. B-Simulation Comput. 9 (1980), no. 5, 515-532. (See 82e:62150)

Opticović, Serafim An extension of compromise programming to the solution of dynamic multicriteria problem. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 508-517, Lecture Notes in Control and Information Sci., 22, Springer, Berlin, 1980. (M. Mañas) 82a:90175 90C39 (90C31)

Oproiu, Vasile Some results concerning the nonembedding codimension of Grassmann manifolds in Euclidean spaces. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 2, 275-286. (Kee Yuen Lam) 82j:57030 57R40 (57R42)

O'Raifeartaigh, L. Axiomatic, or model-independent, approach to the symmetries of the elementary particles. Symposium on Mathematical Methods in the Theory of Elementary Particles (Liblice, 1978). Czechoslovak J. Phys. B 29 (1979), no. 1, 81-90. (Author's mary) 82g:81108 81G20 (22E70, 53C10)

(with Park, S. Y.; Wali, K. C.) On the long-range interaction of topologically charged monopoles. Genetrical and topological methods in gauge theories (Proc. Canad. Math. Soc. Summer Res. Inst., McGill Univ., Montreal, Que., 1979), pp. 89–95, Lecture Main. Soc. Summer Res. Inst., McGill Unic., Montreat, Que., 1979), pp. 59–59, Dectar Motes in Phys., 129, Springer, Berlin, 1980. (D. I. Olive) 82:81083 81Gil (81E99) al, Mulittin (with Subba Rao, S.) An objective function for inventory control models.

Stochastic programming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 403-426, Academic Press, London, 1980. (Kailash C. Kapur) 82e:90037 90B05

Oranskii, A. M. (with Afanas'ev, G. K.; Lebedev, V. I.) On the measurement of distance

between a point and a given straight line on a plane. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1981, no. 1, 67–69, 80. (Authors' summary) 82f:51001 51–04 (65S05)

Orășanu, Mircea T. A solving method of the seepage motions in inhom ogeneous media of type II. Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 25 (1980), no. 3, 379-385. (Author's ary) 82b:76057 summary) 82h:76057 76S05 Oravas, G. Ae. (with Gadala, M. S.: Dokainish, M. A.) Geometric and material

nonlinearity problems-"Lagrangian and updated Lagrangian formulations". Numerical nethods in fracture mechanics (Proc. Second Internat. Conf., University College, Swansea,

1980), pp. 277-293, Pineridge, Swansea, 1980. (See 82c:73005) 73B30 zov, D. The Darboux problem for a nonlinear hyperbolic-parabolic system of equations in the plane. (Russian) Dinamika Splošn. Sredy No. 42 Dinamika Neodnorod. Židkosti (1979), 116-121, 130. (A. P. Soldatov) 82c:35049 35M05

Orazov, I. A boundary value problem with shift for a generalized Tricomi problem. (Russian) Differencial nye Uravnenija 17 (1981), no. 2, 339-344, 391. (V. V. Kovrižkin) 82f:35137 35M05 (35L80)

Orazov, M. B. Normal oscillations of a heavy viscous fluid that partially fills an elastic vessel (a model problem). (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 239–241, 256, "Nauka" Sibirsk. Otdel., Novosibirsk,

1980. (Author's summary) 82c:73044 73J06 (76D99) On the completeness of root vectors of a selfadjoint quadratic pencil. (Russian.

- English summary) Izo. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk 1980, no. 5, 7–13. (P. A. Mišnaevskii) 82z:47022 47A70 (47B15) Orbach, Harry S. (with Bjorken, James D.) WKB approximation for general matrix
- tians. Phys. Rev. D (3) 23 (1981), no. 10, 2243-2251. (G. Albinus) \$2k:81017 81C15 (34E20, 58G15)
- Orbach, R. (with Alexander, Shlomo; Bernasconi, Jakob; Schneider, W. R.) Excitation dynamics in random one-dimensional systems. Rev. Modern Phys. 53 (1981), no. 2,
- 175-198. (Authors' summary) 82482051 82,442 (58F1).

 Orbán, Gheorghe (with Breckner, Wolfgang W.) ★Continuity properties of rationally s-convex mappings with values in an ordered topological linear space. Universitatea "Babeş-Bolyai", Facultatea de Matematica, Cluj-Napoca, 1978. viii + 92 pp. (Michel 46A40 (26B25) Valadier) 82a:46007
 - (with Breckner, Wolfgang W.) On the continuity of s-convex mappings. Proceedings
- of the Third Colloquium on Operations Research (Chy.Napoca, 1978), pp. 23–29, Unio.
 "Babeg-Bolyai", Chy.Napoca, 1979. (See 82e:90005) 90C25 (52A20)
 Ord, K. (with Rees, M.) Spatial processes: recent developments with applications to hydrology. The mathematics of hydrology and water resources (Proc. Conf., Unio. Lancaster, Lancaster, 1976), pp. 95-118, Academic Press, London, 1979. (See 82k:86001) 86A05 (60K30)
- -Ordaz, Francisco J. See Aranda-Ordaz, Francisco J.
- van Order, R. See Van Order, R.
- Ordeshook, Peter C. (with McKelvey, Richard D.; Ungar, Peter) Conditions for voting equilibria in continuous voter distributions. SIAM J. Appl. Math. 39 (1980), no. 1, 161-168. (J. H. Blau) 82d:90014 90A08
- Ordins'ka, Z. P. Invariant toroidal manifolds of systems with time lag. (Russian) Asymptotic methods in the theory of nonlinear oscillations (Proc. All-Union Conf. Asymptotic Methods in Nonlinear Mech., Katsiveli, 1977) (Russian), pp. 141-147, 275,
- "Naukova Dumka", Kiev, 1979. (Erwin Kozakiewicz) 82i:34096 34K25 Ordway, Judy (with Tomber, Marvin L.; Norris, Diane M.; Reynolds, Mary; Balzer, Cindy; Trebilcott, Kathy; Terry, Tamara; Coryell, Hellen) A nonassociative algebra bibliography. Proceedings of the Second Workshop on Lie-Admissible Formulations (Sci. Center, Harvard Univ., Cambridge, Mass., 1979), Part B. Hadronic J. 3 (1979/80), no. 1, 507-725. (J. Dieudonne) 82:17001 17-02 (00A15)
- Ordynskaja, Z. P. See Ordins'ka, Z. P. Ore, Oystein Niels Henrik Abel (1802-1829) (on the occasion of the 150th anniversary of his death). (Bulgarian) Translated from the German by B. Penkov. Fiz.-Mat. Spis. B"lgar. Akad. Nauk. 22(55) (1979), no. 3, 243-258. (Editors) 82h:01064
 - ★Теория графов. (Russian) [Theory of graphs] Translated from the English by I. N. Vrublevskaja. Second edition. "Nauka", Moscow, 1980. 336 pp. (Editors) 82c:05002
- Orecchia, Ferruccio Algebraic curves with ordinary points. The Curves Seminar at Queen's, Vol. I (Kingston, Ont., 1979-1980), Exp. B, 24 pp., Queen's Papers in Pure and Appl. Math., 58, Queen's Univ., Kingston, Ont., 1981. (See 82m:14015) 14H20 (13A10) (with Geramita, Anthony V.) On the Cohen-Macaulay type of s lines in An+
- Algebra 70 (1981), no. 1, 116-140. (D. Kirby) 82g:13018 13H10 (14H20)
 Points in generic position and conductors of curves with ordinary singularities. on Math. Soc. (2) 24 (1981), no. 1, 85-96. (Jonathan M. Wahl) 82j:14024
- Orehov, M. Ju. (with D'jakonov, E. G.) Minimization of computational work in finding the first eigenvalues of differential operators. (Russian) Mat. Zametki 27 (1980), no. 5, 795–812, 831. (I. P. Gavriljuk) 82a:65086 65N25
 Orehov, N. I. (with Antonovič, S. P.; Grišanovič, A. P.; Kolesnik, T. I.) A method of isolation that the trends of a tiric dependent second of the control of
- isolating the trends of a time-dependent process. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1981, no. 2, 50-54, 78. (Authors' summary) 82k:92008 92A07 (62M10)
- O'Reilly, John Minimal-order observers for linear multivariable systems with unn disturbances. Internat. J. Control 28 (1978), no. 5, 743-751. (Editors) 82a:93015a
 - Low-sensitivity feedback controllers for linear systems with incomplete state information. Internat. J. Control 29 (1979), no. 6, 1047-1058. (Author's summary) 82m:93035 93B35
 - Comments on: "An explicit pole-assigning feedback formula with application to deadbeat feedback construction in discrete linear systems" [IEEE Trans Control 22 (1977), no. 2, 263-265; MR 58 #26283] by M. Pachter. IEEE Trans. Automat. Control 25 (1980), no. 5, 1012-1013. (Author's summery) 82a:93027 93B55
 - The discrete linear time invariant time-optimal control problem-an overview. ntica-J. IFAC 17 (1981), no. 2, 363-370. (Author's summary) 82i:49036 49E15 (93C05, 93C45)
 - See also Murdoch, P., 82a:93015b and Hippe, P., 82a:93015c
- Orejas, F. On the representation of data types. Formalization of programming concepts (Proc. Internat. Colloq., Peñiscola, 1981), pp. 419-431, Lecture Notes in Comput. Sci., 107, Springer, Berlin, 1981. (Author's summary) 82h:68024 68B15
- Oren, Ishai The structure of exactly strongly consistent social choice functions. J. Math. 90A08 Econom. 8 (1981), no. 3, 207-220. (Author's summary) 82i:90008
- Oren, S. S. A conjugate directions method for subjective assessment of normal distributions. J. Optim. Theory Appl. 33 (1981), no. 1, 25-36. (Author's summary)
- 82m:62114 62H05 (90C40)

 Orenstein, Alex What makes substitutional quantification different?. Language, logic, and philosophy (Proc. Fourth Internat. Wittgenstein Sympos., Kirchberg am Wechzel, 1979), pp. 346–349, Hölder-Pichler-Tempsky, Vienna, 1980. (Stewart Shapiro) 82g:03012 03A05
- Orerkov, V. P. (with Maslov, S. Ju.; Matijasevič, Ju. V.; Minc, G. E.; Slisenko, A. O.) Nikolai Aleksandrovič Šanin (on the occasion of his 60th birthday). (Russian) Uspehi Mat. Nauk 35 (1980), no. 2(212), 241-245. (Editors) 82g01063 01A70 See also Theoretical applications of the methods of mathematical logic. 82g:03007 Orey, Steven (with Cranston, Michael; Rösler, Uwe) Exterior Dirichlet problems and the
- asymptotic behavior of diffusions. Stochastic differential systems (Proc. IFIP-WG 7/1 Working Conf., Vilnius, 1978), pp. 207-220, Lecture Notes in Control and Information Sci.,
 - 25, Springer, Berlin, 1980. (S. J. Taylor) 82e:69123 60160 (31C05, 35325) (with Sethna, P. R.) Some asymptotic results for a class of stochastic systems with parametric excitations. (French and German summaries) Internat. J. Now-Linear Mech. 15 (1980), no. 6, 431-441. (Authors' summary) 82:93083 93E15 (34F05, 60H10)

- Stationary solutions for linear systems with additive noise. Stochastics 5 (1981),
- Stationary solutions for linear systems with additive noise. Stochastics 5 (1981), no. 3, 241–251. (M. H. A. Davis) 82mcs60068 60H10 (60G10)
 Orfanidis, Sophocles J. SU(n) Heisenberg spin chain. Phys. Lett. A 75 (1979/80), no. 4, 304–306. (Author's summary) 82hc82082 82A67 (35Q20, 58F07)
 Orf, Ramesh. (with Thron, Wolfgang J.) A note on h-proximities. Proc. Amer. Math. Soc. 83 (1981), no. 1, 205–206. (H. L. Bentley) 82hc54039 54E05 (54D45)
- Orikasa, Teruaki (with Washisu, Shin; Fukai, Ichiro) Analysis of two-dimens horns by the finite element method extended to unbounded fields. (Japanese. English summary) J. Asahikawa Tech. College No. 18 (1981), 133-141. (From the summary) 78A50
- Orland, H. (with Leibler, S.) Functional integral methods for quantum spin systems. Ann. Physics 132 (1981), no. 2, 277–291. (Gheorghe Nenciu) 82k:82014 82A15 (58D30,
- Orlicz, Władysław (with Urbański, Ryszard) A generalization of the Brooks-Jewett theor (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 1-2, 55-59 (1981). (J. D. Knowles) 82:28013 28B10

 See also Special issue: Orlicz, Władysław, 82:00005

 Orlin, James B. (with Karp, Richard M.) Parametric shortest path algorithms with an application to cyclic staffing. Discrete Appl. Math. 3 (1981), no. 1, 37-45. (Authors'
- summary) 82d:90056 90B10 (90B35)
- (with Bonuccelli, Maurizio A.; Bovet, Daniel P.) An $O(n^2)$ algorithm for coloring proper circular arc graphs. SIAM J. Algebraic Discrete Methods 2 (1981), no. 2, 88–93. (M. M. Syslo) 82g:68062 68E10 (05C15, 05C38, 68C25)
- Orljuk, E. I. Functional equations of an axially symmetric problem of the theory of elasticity for a spherical lune and their solutions. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 63-67. (I. Aganović) 82e:73029 (35J99)
- Orlov, A. G. (with Rasina, I. V.) Relative optimality of discontinuous and discrete processes with parameters. (Russian) Numerical methods of optimization (applied mathematics) (Russian), pp. 66-75, Akad. Nauk SSSR Sibirsk. Otdel., Energet. Inst., Irkutsk, 1978. (K.
 - B. Mansimov) 82b:49035 49B36 (with Rasina, I. V.) Complex processes and sufficient conditions of relative optimality. (Russian) Upravljaemye Sistemy No. 18 (1979), 39-46, 76-77. (O. E. Citrickii) 82b:49027 49R10
- Orlov, A. I. Estimation of the dimension of a regression model. (Russian) Algorithms and software for applied statistical analysis. Učen. Zap. Statist. 36 (1980), 92-99. (Jiří Anděl) 82g:62094 62105
 - Random sets with independent elements (Luceans) and their applications. (Russian) Algorithms and software for applied statistical analysis. Učen. Zap. Statist. 36 (1980), 287-308. (V. Dupač) 82k:62120 62J15 (60D05)
- Orlov, E. V. Coefficients of Fourier series in Sidon sets. (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 6, 1312-1313. (A. Olevskii) 82i:42011 42A55
- Lacunary trigonometric series and complementability in L^p. (Russian) Mat. Zametki
 29 (1981), no. 4, 529–538, 633. (L. Gogoladze) 82h:42019 42A55 (43A46) Orlov, Ju. I. (with Kravcov, Ju. A.) ★Геометрическая оптика неоднородных сред.
- (Russian) [Geometric optics of inhomogeneous media] "Nauka", Moscow, 1980. 304 pp. (M. Martinis) 82d:78001 78-02 (78A05)
- Orlov, Konstantin Common general practical method for solving ordinary and partial differential equations. Mat. Vesnik 3(16)(31) (1979), no. 2, 201-208. (W. F. Ames) 35-01 (34-01) 824:35002
- Cases when the use of the analytic method for solving differential equations is better than the use of numerical ones. Mat. Vesnik 4(17)(32) (1980), no. 2, 187-195. (A. M. Il'in) 82i:65044 65L05 (34A10)
- Orlove, Michael J. The elevator effect or a lift in a lift: how a locus in neutral equilibrium can provide a free ride for a neutral allele at another locus. J. Theoret. Biol. 90 (1981), no. 1, 81-100. (Author's summary) 82e:92028 92A10
- Orlowska, Ewa Resolution systems and their applications. I. Fund. Inform. (4) 3 (1980),
- no. 2, 235-267. (M. M. Richter) 82i:03021a 03B35 (68G15)
 Resolution systems and their applications. II. Fund. Inform. (4) 3 (1980), no. 3, 333-361. (M. M. Richter) 82i:03021b 03B35 (03B50, 68G15)
- Orman, Gabriel F-equivalent context-free grammars. Proceedings of the Third Colloquium on Operations Research (Chy-Napoca, 1978), pp. 199–204, Univ. "Babey-Bolyai",
- Cluj-Napoca, 1979. (See \$2e:50005) 68F05

 Ormsby, J. F. A. Generalized interpolation, sampling expressions, and their relationship. J. Franklin Inst. 310 (1980), no. 4-5, 247-257. (John L. Brown, Jr.) \$2k:94006 94A12
- (41A05, 65D05) Oročko, Ju. B. Some properties of expansions in generalized eigenfunctions of Carleman selfadjoint operators. (Russian) Sibirsk. Mat. Z. 21 (1980), no. 6, 96-107, 221. (A. A. Arsen'ev) 82e:47030 47A70 (45P05)
 - The method of the operator cosine in a problem on the essential selfadjointness of a nonsemibounded symmetric operator. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 3, 348-355. (A. B. Buche) 82m:47016 47B25 (34G10, 47D05)
- Orsi, Annamaria Palamara (with Monaco, Roberto) Molecular gas-flow over convex bodies: a physico-mathematical model for heat transfer calculation. Appl. Math. Modelling 4 (1980), no. 5, 325-330. (Authors' summary) 82f:80003 80A20
 - Study of a linear equation with periodic coefficients in the dynamics of a rigid body. (Italian, English summary) Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 2, 123-135 (1981). (Plácido Z. Táboas) 82h:34011 34A30 (34A45)
- Orsingher, Enzo The random elastic walk with growing mass. (Italian. English summary) Metron 34 (1976), no. 1-2, 93-99 (1978). (Author's summary) 82c:60129
- (82A67) Orsted, B. (with Segal, I. E.; Jakobsen, Hans Plesner; Paneitz, S. M.; Speh, Birgit) Covariant chronogeometry and extreme distances: elementary particles. Proc. Nat. Acad. Sci. U. S. A. 78 (1981), no. 9, part 1, 5261-5265. (Authors' summary) 82:81150 81G20 (22E70, 83D05, 83F05)
- Orszag, Miguel (with Ramirez, Ricardo) Exact solution of the Dicke model for the interaction of one atom with the electromagnetic field. J. Math. Phys. 22 (1981), no. 6, 1306-1310. (Authors' summary) 82h81163 81K05
 Orszag, Steven A. (with Morf, Rudolf H.; Meiron, Daniel I.; Frisch, Uriel; Meneguzzi, Maurice) Analytic structure of high Reynolds number flows. Seventh International

(with Patera, Anthony T.) Transition and turbulence in planar channel flows. th International Conference on Numerical Methods in Fluid Dynamics (Stanford rd, Calif.; NASA/Ames Res. Center, Moffett Field, Calif., 1980),

pp. 329-335, Lecture Notes in Phys., 141, Springer, Berlin, 1981. (Authors' st

(with Patera, Anthony T.) Subcritical transition to turbulence in planar shear flows. Transition and turbulence (Madison, Wis., 1980), pp. 127-146, Publ. Math. Res. Center Univ. Wisconsin, 46, Academic Press, New York, 1981. (See 82k:76002) 76E05

(with Israeli, Moshe) Approximation of radiation boundary conditions. J. Comp

Phys. 41 (1981), no. 1, 115–135. (Authors' summary) 82g-65959 65P05 (78A25) (with Patera, Anthony T.) Finite-amplitude stability of axisymmetric pipe flow. J. Fluid Mech. 112 (1981), 467–474. (Authors' summary) 82m:76021 76D05 (76–04, 76A60, 76E99)

(with Gottlieb, David; Turkel, Eli) Stability of pseudospectral and finite-difference methods for variable coefficient problems. *Math. Comp.* 37 (1981), no. 156, 293–305. (Authors' summary) 82i:65054 65M10

(with Gottlieb, David; Lustman, Liviu) Spectral calculations of one-dimensional inviscid compressible flows. SIAM J. Sci. Statist. Comput. 2 (1981), no. 3, 296-310. (Authors' summary) 82m:76002 76A60 (65P05, 76L05, 76N10)

acuña Ortega, Osvaldo See Acuña Ortega, Osvaldo
Ortner, Norbert Faltung hypersingulärer Integraloperatoren. Math. Ann. 248 (1980), no. 1,
19-46. (Peter Dierolf) 82b:46047 46F05 (47G05)

Regularisierte Faltung von Distributionen. I. Zur Berech Fundamentallösungen. (English summary) Z. Angew. Math. Phys. 31 (1980), no. 1, 133–154. (Olaf von Grudzinski) 82e-46058a 46F10 (32E05)

Regularisierte Faltung von Distributionen. II. Eine Tabelle von Fundamentallösungen. (English summary) Z. Angew. Math. Phys. 31 (1980), no. 1, 155–173. (Olaf von Grudzinski) 82e:46058b 46F10 (35E05)

oleva, Peter (with Larter, R.; Schmidt, S.) Electrical effects in nonlin

physico-chemical systems: field chemical wave interaction and bio-self electrophoresis. Pattern formation by dynamic systems and pattern recognition (Proc. Internat. Sympos. Synerget., Garmisch-Partenkirchen, 1979), pp. 144-154, Springer Ser. Synergetics, 5,

Springer, Berlin, 1979. (See 82k-00028) 92A09 (35K.55, 80A30, 92A40)

Dynamic Padé approximant and behavior singularities in nonlinear physico-chemical systems. Bifurcation and nonlinear eigenvalue problems (Proc., Session, Univ. Paris XIII, Villetaneuse, 1978), pp. 255-264, Lecture Notes in Math., 782, Springer, Berlin, 1980. (D. ter Haar) 82k-58076 58F14 (80A30, 82A25, 92A40)

(with Feeney, R.; Schmidt, S. L.) Experiments on electric field-BZ chemical wave interactions: annihilation and the crescent waves. Phys. D 2 (1981), no. 3, 536-544. (Authors' summary) 82h:92013 92A09 (78A55, 80A30)

Orudžev, A. D. Spectral analysis of a class of higher-order nonselfadjoint differential ssian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 2, 8-11. (From the text) 82g:47636 47E05 (34B25)

Orzack, Steven Hecht (with Tuljapurkar, S. D.) Population dynamics in variable environments. I. Long-run growth rates and extinction. Theoret. Population Biol. 18 (1980), no. 3, 314–342. (Howard B. Stauffer) 82k:92056 92A15 (60J70)

Orzech, Grace (with Orzech, Morris) *Plane algebraic curves. An introduction via valuations. Monographs and Textbooks in Pure and Applied Math., 61. Marcel Dekker, Inc., New York, 1981. viii+225 pp. ISBN 0-8247-1159-9 (O.-H. Keller) 82e:14002 14-01

Orzech, Morris Correction to: "On the Brauer group of algebras having a grading and an action" [Canad. J. Math. 28 (1976), no. 3, 533-552; MR 53 #8115]. Canad. J. Math. 32 (1980), no. 6, 1523–1524. (Manuel Ojanguren) 82j:16014 16A16 (with Orzech, Grace) ★Plane algebraic curves. An introduction via valuations.

Monographs and Textbooks in Pure and Applied Math., 61. Marcel Dekker, Inc., New York, 1981. viii + 225 pp. ISBN 0-8247-1159-9 (O.-H. Keller) 82e:14002

(with Childs, Lindsay N.) On modular group rings, normal bases, and fixed points.

Amer. Math. Monthly 88 (1981), no. 2, 142-145. (H. F. Kreimer) 82:12025 12F10

da, E. Deformations of geodetic networks in gravity-invariant and potential-invariant resentations. Bull. Géodésique 54 (1980), no. 4, 510-519. (Author's summary) 86A30 (53A55) 82a:86003

ada, Masayuki Harmonic metric and Koebe's theorem. J. Hokkaido Univ. Ed. Sect. II A

30 (1979/80), no. 2, 97-100. (Charles M. Stanton) 82b:30054 30F25 (30D40)
Osadčenko, A. A. (with Demin, V. K.) A form of decomposition for finite controllable Markov processes. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 3, 104-108, 221 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 3, 77-81 (1980). (P. Neumann) 824-90125 90C40 (90C05)

aki, S. (with Ae, Tadashi) An easily diagnosable network for computing systems. Evolutions in computer communications (Kyoto, 1978), pp. 475–479, North-Holland, Amsterdam, 1978. (See 82m:94001) 68C05 (68A05)

Osawa, Hideo The analysis of the ruin problem using the queueing theory. Rep. Univ. Electro-Comm. 30 (1979/80), no. 2, 233-239. (Jacques Janssen) 82d:62160 62P05 (60K25)

Osborn, Hugh (with Corrigan, E.; Goddard, P.; Templeton, S.) Zeta-function regularization and multi-instanton determinants. Nuclear Phys. B 159 (1979), no. 3, 469-496. (Authors' summary) 82g:81077 81E99 (47B99, 58G25, 81G20)

Calculation of multi-instanton determ nants. Nuclear Phys. B 159 (1979), no. 3, 81E99 (81C35) 497-511. (Author's summary) 82d:81109 (with Moody, G. P.) Approximate forms for SU(2) multi-instanton determinants

Nuclear Phys. B 173 (1980), no. 3, 422-428. (Authors' summary) 82a:81037

(with Goddard, P.; Mansfield, P.) The functional measure for the exact SU(2) two-instanton solution. Phys. Lett. B 98 (1981), no. 1-2, 59-62. (Authors' summary) 81E10 (53C05, 81C35)

orn, J. Marshall (with Benkart, Georgia M.; Britten, Daniel J.) Flexible Lie-admissible algebras with the solvable radical of A abelian and Lie algebras with nondegenerate

forms. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part A. Hadronic J. 4 (1980/81), no. 2, 274-326. (Ane H. Boers) 82j:17006 17B05 (17B30, 17D25)

(with Benkart, Georgia M.; Britten, Daniel J.) On applications of isotopy to real division algebras. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part A. Hadronic J. 4 (1980/81), no. 2, 497-529. (Marie-Paule Malliavin) 82k:16024 16A39

(with Okubo, Susumu) Algebras with nondegenerate associative symmetric bilinear forms permitting composition. Comm. Algebra 9 (1981), no. 12, 1233-1261. (M. L. Tomber) 82h:17005 17A45 (17D99)

(with Benkart, Georgia M.) Derivations and automorphisms of nonassociative matrix algebras. Trans. Amer. Math. Soc. 263 (1981), no. 2, 411-430. (Arie H. Boers) 82h:16026 16A72 (17B40)

Osborn, John E. Eigenvalue approximation by mixed methods. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehi m, Pa., 1979), pp. 158-161, IMACS, New Brunswick, N.J., 1979. (Author's summary) 82h:65024 65F15

(with Falk, R. S.) Error estimates for mixed methods. (French summary) RAIRO Anal. Numér. 14 (1980), no. 3, 249-277. (A. V. Džiškariani) 82j:65076 65N15 (65J10) (with Mercier, Bertrand; Rappaz, J.; Raviart, P.-A.) Eigenvalue approximation by mixed and hybrid methods. Math. Comp. 36 (1981), no. 154, 427-453. (Authors' summary) 82b:65108 65N25 (65N15, 65N30)
Osborn, T. A. (with Froces, R. G.; Howes, S. F.) Sum-rule dynamics. Phys. Rev. Lett. 45

(1980), no. 25, 1987-1989. (Authors' summary) 82c:81136 81F20 (with Bollé, D.) Sum rules in classical scattering. J. Math. Phys. 22 (1981), no. 4,

883-892. (T. Sasakawa) 82£70002 70D99 (70H99, 81F99)
Osborne, Anthony D. (with Stuart, Allan E. G.) Separable solutions of the two-dimensional sine-Gordon equation. Phys. Lett. A 67 (1978), no. 5-6, 328-330. (A. Degasperis)

35Q20 (81C05) (with Stuart, Allan E. G.) On the separability of the sine-Gordon equation and similar quasilinear partial differential equations. II. Dependent- and independent-variable transformations. J. Math. Phys. 21 (1980), no. 4, 726-734.

(Authors' summary) 82g:35109 35Q20
Osborne, M. R. An analysis of the stabilized march. Codes for boundary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 144-150, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 82b:65074) 65I 10

An algorithmic approach to nonlinear approximation problems. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 705-710, Academic Press, New York, 1980. (G. Opfer) 82d:41033 41A50 (90C30)

(with Griewank, Andreas) Newton's method for singular problems when the dimension of the null space is >1. SIAM J. Numer. Anal. 18 (1981), no. 1, 145-149. (W. 65H10 (58C15, 90C30) F. Ames) 82c:65032

A finite algorithm for the rank regression problem. Essays in statistical science. J. Appl. Probab. 1982, Special Vol. 19A, 241-252. (Author's summary) 82m:62094

Osborne, Richard P. (with Zieschang, H.) Primitives in the free group on two generators. Invent. Math. 63 (1981), no. 1, 17-24. (D. E. Cohen) 82i:20042 20E05

Knots with Heegaard genus 2 complements are invertible. Proc. Amer. Math. Soc. 81

(1981), no. 3, 501–502. (S. Kinoshita) 82c:57004 57M25

Osetek, Jerzy On the order of n+3 hyperplanes in n-dimensional projective geometry.

Demonstratio Math. 13 (1980), no. 4, 883–891. (Dieter Jungnickel) 82j:51034 51M99

Osgood, Charles F. The approximation of solutions to linear homogeneous differential equations by rational functions. Monatsh. Math. 90 (1980), no. 2, 143-151. (Eugène 10F30 (12H05, 34A45)

Differential algebra and the simultaneous approximation by rational functions of power series solutions to algebraic functional equations. Amer. J. Math. 103 (1981), no. 3, 469-497. (Eugène Dubois) 82m:10055 10F10 (12H05)

Approximating convolution products better than the DFT while keeping the FFT. J. ut. Phys. 42 (1981), no. 2, 382-395. (Author's summary) 82i:65083 65T05 (10K05, 65D25, 65N20)

Shea, Donal (with Coleman, A. J.) Local characterization of phase diagrams. Phys. Rev. B (3) 22 (1980), no. 7, 3428-3442. (D. R. J. Chillingworth) 824:82029 82A25 (58E05)

Osher, Stanley Approximation par éléments finis avec décentrage de problèmes de perturbations singulières quasi linéaires et multidimensionnels. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 99-101. (Author's summary) 82c:65077 65N30

(with Engquist, Björn) One-sided difference approximations for nonlinear conservation laws. Math. Comp. 36 (1981), no. 154, 321-351. (J. R. Cannon) 82c:65056 65M10 (35L67, 65M05)

hiba, Takeshi A method for obtaining proof figures of valid formulas in the first order predicate calculus. Comment. Math. Univ. St. Paul. 30 (1981), no. 1, 49-62. (Henry Africk) 82m:03066 03F07 (03B10)

Oshima, Hiroshi (with Obata, Tsunehiro; Chiba, Jiro) A new geometrical gravitational theory. Gen. Relativity Gravitation 13 (1981), no. 4, 313-334. (Authors' summary) 83D05

Oshima, Kunio A computational aspect for the inclusion theorem in terms of Euclidean norm for a vector. TRU Math. 17 (1981), no. 1, 47-54. (Author's summary) 82h:65029

Oshima, Toshio Fourier analysis on semisimple symmetric spaces. Non harmonic analysis and Lie groups (Marseille, 1980), pp. 357-369, Lecture Notes in Math., 880, Springer, Berlin, 1981. (See 82m:22001) 22E46 (43A85)

Oshima, Yôichi A relation between an asymptotic probability and the maximal eigenvalue of a recurrent potential kernel. Kumamoto J. Sci. (Math.) 14 (1980/81), no. 1, 9-17. (François Bronner) 82b:60097 60J35

On stochastic differential equations characterizing some singular diffusion proc Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 3, 151-154. (D. Kannan) 82f:60173 60J60 (60H10)

Oshobi, E. O. (with Pym, J. S.) Banach algebras whose duals are multiplier algebras. Bull.

London Math. Soc. 13 (1981), no. 1, 66-68. (B. E. Johnson) 82i:46071

Osikawa, Motosige Construction of ITPFI with nontrivial uncountable T-set. C*-algebras and applications to physics (Proc. Second Japan-USA Sem., Los Angeles, Calif., 1977), pp. 186–188, Lecture Notes in Math., 650, Springer, Berlin, 1978. (R. Noebels (Zbl 407:28008)) 82e:46084 46L35

(with Oono, Yoshitsugu) Chaos in nonlinear difference equations. I. Qualitative study of (formal) chaos. Progr. Theoret. Phys. 64 (1980), no. 1, 54-67. (L. A.

movich) 82b:58080 58F40 (28D20, 39A10, 58F11)

(with Oono, Yoshitsugu) Chaos in C⁰-endomorphism of interval. Publ. Res. Inst. Math. Sci. 17 (1981), no. 1, 165-177. (Frederick R. Marotto) 82e:\$8068 58F13

enker, B. P. Weighted estimates for the majorant for linear means of Fourier series in orthogonal polynomials. (Russian) Uspehi Mat. Nauk 35 (1980), no. 5(215), 239-240. (W. R. Madych) 824:42024 42C10

Weight estimates of majorants of Cesaro means of Fourier series of l'-valued vector functions. (Russian) Funkcional. Anal. i Priložen. 15 (1981), no. 1, 80-81. (S. Baron)

42C15

- novskíi, M. E. (with Teslenko, O. A.) Global analysis of vacuum spaces of the third type admitting a two-dimensional commutative isometry group. (Russian) Gravitacija i Teor.

 Otnositel'nosti No. 16 (1980), 111-119. (A. K. Gue) 82j:83011 83C20 (53C50)

 Osipenko, G. S. On the problem of linearization in the neighborhood of invariant
- manifolds. (Russian) Differencial'nye Uravnenija 17 (1981), no. 4, 638-642, 764.
- (Snežana Hristova) 82g-34058 34C30
 Osipov, A. A. Propagation of three-dimensional acoustic perturbations in channels of variable cross-sectional area at frequencies near the cutoff frequency. Izv. Akad. Nauk SSSR Meh. Židk. Gaza 1980, no. 6, 149-159 (Russian); translated as Fluid Dynamics 15
- (1980), по. 6, 912–920 (1981), (Author's summary) 82k-76062 76(005)

 Osipov, A. I. (with Gordiec, B. F.; Šelepin, L. A.) ЖКинетические процессы в газах и молекулярные лазеры. (Russian) (Kinetic processes in gases and molecular lasers] "Nauka", Moscow, 1980. 512 pp. (K. Wódkiewicz) 82d-82048 82A40 (81К05)

 Osipov, Ju. S. (with Pimenov, V. G.) On the theory of differential games in systems with aftereffect. Prikl. Mat. Meh. 42 (1978), no. 6, 969–977 (Russian); translated as J. Appl.
- Math. Mech. 42 (1978), no. 6, 1061-1069 (1980). (Authors' summary) 82j:90090
- Osipov, L. V. A remark on the series of H. Cramér. (Russian. English summary) Problems of the theory of probability distributions, VI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 97 (1980), 181-185, 230, 237. (Gábor J. Székely) 82d:60050 60F10 (60B12)

On large deviations for sums of random vectors in Rt. J. Multivariate Anal. 11 (1981), no. 2, 115-126. (Jean Deshayes) 82g:60043 60F10

Osipov, V. A. (with Osipova, L. I.) Theoretical fundamentals of the carcass-kinematic guiding line method. Izv. Vysš. Učebn. Zaved. Aviacion. Tehn. 23 (1980), no. 4, 48-52 (Russian); translated as Soviet Aeronaut. 23 (1980), no. 4, 37-40. (Authors' summary)

82k:53016 53A17 (70B99)

Osipov, V. F. The pasting together of ideals of smooth functions in $A(\mathbb{R}^3)$. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 1, 47-51, 119. (A. G. Baskakov) 82d:43004 43A45 (53C40)

Osipov, V. Z. (with Sulikašvili, R. S.) Stability of steady-state motions of a balanced gyrostat. (Russian) Theory of stability and its applications (Russian), pp. 200–206, 302, "Nauka" Sibirsk. Otdel., Novosibirsk, 1979. (Q. K. Ghori) 82d:70006 70E05

Osipova, L. I. (with Osipov, V. A.) Theoretical fundamentals of the carcass-kinematic guiding line method. Izv. Vysš. Učebn. Zaved. Aviacion. Tehn. 23 (1980), no. 4, 48-52 (Russian); translated as Soviet Aeronaut. 23 (1980), no. 4, 37-40. (Authors' summary)

 82k:53016 53A17 (70B99)
 Oskolkov, A. P. On the theory of Maxwell fluids. (Russian) Questions in quantum field theory and statistical physics, 2. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 101 (1981), 119-127, 207-208. (Author's summary) 82h:76004

Oskolkov, K. I. The upper bound of the norms of orthogonal projections onto subspaces of polygonals. Approximation theory (Papers, VIth Semester, Stefan Banach Internat. Math. Center, Warsaw, 1975), pp. 177–183, Banach Center Publ., 4, PWN, Warsaw, 1979. (J. Németh) 82e:41013 41A10 (42C05)

kolkov, V. A. The basis property of certain systems of functions. (Russian) Mat. Zametki 26 (1979), no. 3, 389-398, 493. (Author's summary) 82k:30005

Necessary and sufficient conditions for the quasiexponential basis property of certain systems of regular functions. (Russian) Mat. Zametki 29 (1981), no. 2, 235-242, 317. (E. A. Trachtenberg) 82j:30005 30B60 (30H05)

Osłowski, Bogdan J. Subobjects, normal subobjects and duality in categories. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 9, 657-664. (Walter Tholen) 82e:18002 18A32 (18A20)

On the H- and K-radicals. Comm. Algebra 9 (1981), no. 3, 313-322. (N. Divinsky) 82g:16009 16A21

abu Osman, M. T. See Abu Osman, M. T.

nan, Mohamed Sayed Ali Qualitative analysis of basic notions in parametric convex programming with parameters in the objective function and in the constraints. Proceedings of the First World Conference on Mathematics at the Service of Man (Barcelona, 1977), Vol. I, pp. 286–298, Univ. Politec., Barcelona, 1980. (Author's summary) 82a:90121 90C25

(with Abouel-Nour, Abdel-Razek A.; Hassan, Said Aly) On the parametric transportation problem. Proceedings of the First World Conference on Mathematics at the Service of Man (Barcelona, 1977), Vol. 1, pp. 299–312, Univ. Politec., Barcelona, 1980. (Authors' summary) 82:e90899 90C08. (Authors' summary) 82a:90089 90008

matesku, P. K. See Symposium: Tiraspol, General Topology and its Applications

Ošmjan, V. G. (with Nazaikinskii, V. E.; Sternin, B. Ju.; Šatalov, V. E.) Fourier integral operators and the canonical operator. (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 81–140. (Alan Weinstein) 82h:58049 58G15 (35S05, 47G05, 81C15)

olovskii, N. P. (with Dmitruk, A. V.; Miljutin, A. A.) Ljusternik's theorem and the theory of the extremum. (Russian) Uspehi Mat. Nauk 35 (1980), no. 6(216), 11-46, 215. (Jiří V. Outrata) 82c:58010 58C99 (49B27)

nolovskii, V. G. (with Rivkind, V. Ja.) A method of separation of domains for elliptic equations with discontinuous coefficients. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 21

(1981), no. 1, 35-39, 252. (Ja. A. Roitberg) 824:35103

nont, Daniel (with Girard, Raoul) Formulations variationnelles mixtes et déplacement du problème de l'équilibre des plaques. Application aux éléments finis de plaques isoparamétriques. I. (English summary) Rech. Aérospat. 1979, no. 6, 387-394. (P. G. Ciarlet) 82h:73035 73K10 (49H05)

(with Simon, L.) Un algorithme d'itération sur le sous-espace pour le calcul des modes propres des "systèmes gyroscopiques". (English summary) Translated as Rech. Aérospat. (English) 1981, no. 3, 57-62. Rech. Aérospat. 1981, no. 3, 197-202. (Authors'

summary) 82h:73058 73K12 (65N30)
Osofsky, Barbara L. Remarks on the projective dimension of N-unions. Ring theory (Proc. Conf., Unio. Waterloo, Waterloo, 1978), pp. 223-235, Lecture Notes in Math., 734, Springer, Berlin, 1979. (L. A. Koifman) 82f:16029 16A60

Osokin, A. E. (with Suvorova, Ju. V). Nonlinear governing equation of a hereditary medium and a methodology of determining its parameters. Prikl. Mat. Meh. 42 (1978), no. 6, 1107–1114 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 6, 1214–1222 (1989). 1107-1114 (Russian); translated as s. opp... (1980). (Authors' summary) 82h:73040 73F20 (45G10, 73E99). ondu, Kevin E. Homogeneous quotients of semigroups. Semigroup Forum 16 (1978), 20M10 20M

The universal group of homogeneous quotients. Semigroup Forum 21 (1980), no. 2-3, 143-152. (Author's review) 82a:20070 20M10 (20M15)

Osorio Cordero, A. (with Mayne, D. Q.) Deterministic convergence of a self-tuning regulator with variable forgetting factor. Proc. IEE-D 128 (1981), no. 1, 19-23. (Authors'

summary) 82f:93043 93C40
serman, Robert Minimal surfaces, Gauss maps, total curvature, eigenvalue estimates, and stability. The Chern Symposium 1979 (Proc. Internat. Sympos., Berkeley, Calif., 1979), pp. 199-227, Springer, New York, 1980. (M. do Carmo) 82e:53013 53A10

(with Hoffman, David A.) The geometry of the generalized Gauss map. Mem. Amer. Math. Soc. 28 (1980), no. 236, iii + 105 pp. (K. Svoboda) 82h:53012 53A10 (53C40) nn (with Fahrmeir, Ludwig; Kaufmann, Heinz Leopold) *Stochastische Prozesse. (German) [Stochastic processes] Eine Einführung in Theorie und Anwendungen. [An introduction to theory and applications] Mathematische Grundlagen

für Mathematiker, Physiker und Ingenieure. [Mathematical Foundations for Mathematicians, Physicists and Engineers] Carl Hanser Verlag, Munich, 1981. xii + 366 pp. ISBN 3-446-13411-5 (From the preface) 82k:60004 60-01

V. (with Gasanenko, V. A.; Kozlik, G. A.; Protasov, I. V.) Planning the operational modes of a pumping station in irrigation systems using an automatic control system. (Russian) Automation of the control of industrial plants (Russian), pp. 35–48, 102, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (Authors' summary) 82e:93075

(with Kozerackaja, L. N.) Topological nilgroups of matrices. (Russian) Ukrain. Mat. Z. 32 (1980), no. 2, 175-180, 283. (S. Ju. Priščepionok) 82c:22001 22A05 (20G99)

Approximation of fundamental operators in differential approach-evasion ga (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 2, 81-84. (Author's summary) 82m:90184 90D26

A nonautonomous differential evasion game. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 3, 73-75, 96. (Author's summary) 82m:90185 90D26

Ostapko, Daniel L. (with Hong, Se June) Fault analysis and test generation for programmable logic arrays (PLAs). IEEE Trans. Comput. 28 (1979), no. 9, 617-627. (Authors' summary) 82k:94030 94C99

(Authors summary) выследования сложности выполнения програмы. (Russian) [Combinatorial methods of investigation of the complexity of program realization] Preprint 80-7. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 30 pp. (Author's summary) 82m:68088 68C25

One representation of the solution of a wave equation. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 10, 1204-1210 (Russian. English sum as Radiophys. and Quantum Electronics 23 (1980), no. 10, 799-803 (1981). (Author's summary) 82;78008 78A45

Ostasiewicz, Walenty A new approach to fuzzy programming. Fuzzy Sets and Systems 7 (1982), no. 2, 139–152. (Author's summary) 82mc68011 68B05 (03E72) Ostaszewski, Adam J. Monotone normality and G_{g} -diagonals in the class of inductively

generated spaces. Topology, Vol. II (Proc. Fourth Colloq, Budapest, 1978), pp. 905–930, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (D. J. Lutzer) 82g:54033 54D18 (54B99)

(with Telgársky, Rastislav) Topological games and analytic sets. II. The Proceedings of the 1980 Topology Conference (Univ. Alabama, Birmingham, Ala., 1980, Topology Proc. 5 (1980), 147–154 (1981). (M. R. Krom) 82m:54039 54H05 (03E15, 90D42)

Paracompactness in countable products via the Souslin operation. Fund. Math. 111 54D99 (1981), no. 2, 143-154. (C. M. Pareck) 82i:54047

hoffmann-Ostenhof, Maria See Hoffmann-Ostenhof, Maria hoffmann-Ostenhof, Thomas See Hoffmann-Ostenhof, Thom

Oster, George F. (with May, Robert M.) Period doubling and the onset of turbulence: a analytic estimate of the Feigenbaum ratio. Phys. Lett. A 78 (1980), no. 1, 1-3. (K. E. Swick) 82g:92036 92A15 (58F13, 76F99) ns in biology, 82b:92002 See also Some mathematical questi

Osterburg, James (with Goursaud, J.-M.; Pascaud, J. L.; Valette, J.) Points fixes des anneaux réguliers auto-injectifs à gauche. Comm. Algebra 9 (1981), no. 13, 1343-1394. (K. R. Goodearl (Zbl 438:16008)) 82à:16046 16A72 (16A52)

Central fixed rings. J. London Math. Soc. (2) 23 (1981), no. 2, 246-248. (Susan intgomery) 82e:16030 16A72 (16A70) Montgomery) 82e:16030

Osterheld, Albert (with Hedstrom, G. W.) The effect of cell Reynolds number on the computation of a boundary layer. J. Comput. Phys. 37 (1980), no. 3, 399-421. (William H. H. Banks) 82a:76023 76D05 (65M10)

Osterholz, D. Der Trägheitsschiefkörper. SK₁ of division algebras (Sem., Bielefeld/Göttingen, 1976) (German), pp. 33–42, Lecture Notes in Math., 778, Springer, Berlin, 1980. (See 82b:16014) 16A39 (12G05, 16A61)

Bertin, 1980. (See Sizh:16014) 16A39 (12G05, 16A61)
Österreicher, F. (with Thaler, Maximilian) Ein Beitrag zur Suche der Extremstelle einer strikt unimodalen Funktion. (English summary) Monatsh. Math. 90 (1980), no. 3, 237–248. (W. H. J. Fuchs) 82m:62093 62G05
Ostiamu, N. M. (with Evtulik, L. E.; Lumiste, Ü.; Sirokov, A. P.) Differential-geometric

structures on manifolds. (Russian). Problems in geometry, Vol. 9 (Russian), 248 pp., Akad. Nauk SSSR, Vsesojus. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (V. Mihova-Nehmer) 82k:536546 53C10

Miliova-Nehmer) 82a:53054b 53C10
(with Poljakov, N. D.) Submanifolds in differentiable manifolds provided with differential geometric structures. (Russian) Problems in geometry, Vol. 11 (Russian), pp. 3-63, 243, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (Adrian C. Albu) 82e:53084 53C40 (53C10, 53C15)

1980. (Adrian C. Albu) 32e:53084 53C40 (33C10, 53C15)

See also Problems in geometry, 82h:53002

thund, S. (with Halperin, B. I.) Dislocation-mediated melting of anisotropic layers. Phys.

Rev. B (3) 23 (1981), no. 1, 335-358. (From the summary) 824:82069 82A55 (82A25)

trand, P. A. (with Burns, David; Kapoor, S. F.) Edge cosymmetric graphs. Discrete

Math. 32 (1980), no. 2, 99-103. (R. I. Hemminger) 82h:68071 05C75

trand, Thomas J. (with Paull, Marvin C.; Weyuker, Elaine J.) Parsing regular grammars

with finite lookahead. Acta Inform. 16 (1981), no. 2, 125-138. (Authors' summary)

68F25

trjakov, V. M. (with Dolginov, A. Z.) Rayleigh-Taylor instability in the plasma of solar prominences. Astronom. Z. 57 (1980), no. 6, 1302-1309 (Russian); translated as Societ Astronom. 24 (1980), no. 6, 749-753 (1981). (Authors' summary) 82i:85007 85A20 (76E20)

a On integrability of trigono coefficients. Publ. Inst. Math. (Beograd) (N.S.) 28(42) (1980), 135-144. (Satoru Igari) 82mc42011 42A32 (42A16)

rom, T. G. (with Johnson, Norman Lloyd) Translation planes of characteristic two in which all involutions are Baer. J. Algebra 54 (1978), no. 2, 291-315. (W. M. Kantor)

Finite translation planes and group representation. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 469-471, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (W. M. Kantor) 82b:20018 20C99 (51A40)

(1980), no. 5, 1114-1125. (J. André) 82g:51006 51A40 (20H15, 51E15)

Translation planes of even order in which the dimension has only one odd factor.

Internat. J. Math. Math. Sci. 3 (1980), no. 4, 675-694. (R. J. Bumcrot) 82b:51011 51A40 (05B25, 20G99)

Conicoids: conic-like figures in non-Pappian planes. Geometry—von Staudt's point of view (Proc. NATO Adv. Study Inst., Bad Windsheim, 1980), pp. 175-196, NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci., 70, Reidel, Dordrecht, 1981. (J. Yaqub) 82j:51006 51A35

Elementary abelian 2-groups in finite translation planes. Arch. Math. (Basel) 36 (1981), no. 1, 21-22. (Chih-Han Sah) 82c:05031 05B25 (51E15)

(with Jha, Vikram) On u-groups acting on vector spaces and spreads with characteristic p. Arch. Math. (Basel) 37 (1981), no. 1, 78-84. (Claudio Bartolone) 82m:51009 51A40 (20H15)

rosablin, N. I. Uniformly stable opening in a plate in a nonhomogeneous stressed state. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1981, no. 2, 155-163, 179. (Author's summary)

73C40 ovec'kii, L. A. Application of an approximate method to the approximation of the solution of the Cauchy problem for linear equations of hyperbolic type with polynomial coefficients. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1981, no. 36, 32 pp. (Publisher's description) 82m:65085 65M15

rovskii, E. I. On the supports of probability measures in separable Banach spaces. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 6, 1319-1320. (A. Badrikian)

A characterization of probability measures in Banach space by two-dimensional cylindrical distributions. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 24 (1981), 114-119, 154. (D. Preiss) 82k:60011 60B11 (28C20)

wskii, I. V. (with Levin, B. Ja.) Small perturbations of the set of roots of sine-type functions. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 43 (1979), no. 1, 87-110, 238. (I. V. Ostrovskii) 82b:30022 30D15

Infinitely divisible distribution functions that coincide on a half axis. (Russian English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 3, 15–18, 93. (Author's summary) 821:60047 60E07

(with Gol'dberg, A. A.) The growth of entire Hermitian-positive functions of finite order. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 4, 6-9, 94. (A. I. Heific) 82j:30033 30D15

(with Blank, N. M.) On the growth of functions that are analytic in the disc and are connected by a linear relation. (Russian) Teor. Funkcii Funkcional. Anal. i Priložen. No. 35 (1981), 6-13, i. (W. H. J. Fuchs) 82k:30029 30D15 (30D35)
Ostrovskii, Ju. K. (with Barinova, M. F.; Ščukin, E. R.; Jalamov, Ju. I.) On the question of

peculiarities of a laminar flow of volatile binary gas mixtures in plane and coaxial channels. (Russian) Ž. Prikl. Meh. i Tehn. Fiz. 1980, no. 3, 50-56. (Simona Popp) 76N99 (80A20)

rovskii, L. A. (with Gorškov, K. A.; Papko, V. V.; Pikovskii, A. S.) On the existence of stationary multisolitons. Phys. Lett. A 74 (1979), no. 3-4, 177–179. (Authors' summary) 82e35090 35Q20

rovskii, V. N. (with Varsimašvili, K. V.; Demkov, Ju. N.) Inverse scattering problem in the eikonal approximation. Jadernaja Fiz. 31 (1980), no. 3, 816-820 (Russian); translated as Soviet J. Nuclear Phys. 31 (1980), no. 3, 421-424 (1981). (Authors' summary)

Quasiclassical expansion of a potential scattering amplitude. (Russian. English mary) Teoret, Mat. Fiz. 45 (1980), no. 3, 390-393, (Author's summary) 82h:81117

rovsky, L. A. See Ostrovskii, L. A.

Ostrowski, Alexander On the distribution function of certain sequences (mod l). Acta Arith. 37 (1980), 85-104. (O. P. Stackelberg) 824:10073 10K05 (60F99)

On the remainder term of the de Moivre-Laplace formula. (1980), no. 2-3, 263-277. (A. McD. Mercer) 82b:41035 41A60 (26A12) ence: Lévy, Paul, 82g:01034

oy, Joseph M. The no-surplus condition as a characterization of perfectly competitive uilibrium. Noncooperative approaches to the theory of perfect competition. J.

Econom. Theory 22 (1980), no. 2, 183-207. (See 82e:90023) 90A14 (90D45) Differentiability as convergence to perfectly con mpetitive equilibrium. J. Math. Econom. 8 (1981), no. 1, 59-73. (Author's summary) 82i:90015 90A14

Ostryakov, V. M. See Ostrjakov, V. M.
O'Sullivan, John J. (with Herring, John R.) Lie groups which admit flat left invariant metrics. Proc. Amer. Math. Soc. 82 (1981), no. 2, 257-260. (I. Vaisman) 82d:53025 53C20 (53C30)

wald, Peter Über Einbettungssätze für Funktionen aus $\varphi(L)$. Wiss. Z. Tech. Univ. Dresden 29 (1980), no. 6, 1311–1315. (Author's summary) 82e:46044 46E30 On a connectedness property of the complements of zero-neighbourhoods in

topological vector spaces. Comment. Ma Tweddle) 82h:46007 46A15 (54D05) nent. Math. Univ. Carolin. 22 (1981), no. 2, 351-356. (I.

Über die Konvergenz von Orthogonalreihen in $\varphi(L)$. [On the convergence of orthogonal series in $\varphi(L)$] Wiss. Z. Tech. Univ. Dresden 30 (1981), no. 4, 117–119. (L. Leindler) 82k:42019 42C15 (46E30)

Oswald, Urs Inequivalence of the fragments of New Foundations. Arch. Math. Logik Grundlag. 21 (1981), no. 1-2, 77-82. (Luiz Paulo de Alcantara) 82k:03086 03E70

Osyczka, A. Multicriterion network optimization problem. (German summary) Computing 25 (1980), no. 4, 363-368. (Author's summary) 82f:90091 90C31 (90B10, 90C35,

Ôta, Schòichi Closed derivations in C*-algebras. Math. Ann. 257 (1981), no. 2, 239-250.
(Ola Bratteli) 82m:46071 46L55 (46L05)

(with Inoue, Atsushi; Tomiyama, Jun) Derivations of operator algebras into spaces of unbounded operators. Pacific J. Math. 96 (1981), no. 2, 389-404. (Ola Bratteli) 82k:46093 46L10 (46L55, 47D40)

Decomposition of unbounded derivations in operator algebras. Tohoku Math. J. (2)

33 (1981), no. 2, 215-225. (Ola Bratteli) 82g:46104 46L10

Otake, Masanori Comparison of relative risk, attributable risk and logistic response procedures for 2×2×2 and c 2×2×2 contingency tables. Ann. Inst. Statist. Math. 33

(1981), no. 3, 475-486. (Author's summary) 82k:62105 62H17 (62P10) (1981), no. 3, 473—480. (Autnor's summary) 842502409 627117 (62870)
Otakulov, S. (with Israilov, I.) A class of differential inclusions. (Russian) Dokl. Akad.
Nauk UzSSR 1980, no. 12, 11–12. (From the text) 82k-49047 49E10 (49A10)
(with Jagubov, M. A.) Some properties of differential inclusions and their
applications to optimal control. (Russian. Azerbaijani and English summaries) Akad.

Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 4, 11-15. (J. Jarnik) 82i:34013

Otal, J. Central properties and varieties of groups. (Spanish. English summary) Rev. Acad.

Cienc. Zaragoza (2) 33 (1978), 33-41 (1981). (M. Greendlinger) 82h:20034 20E10
Otani, Mitsuharu (with Yamada, Yoshio) On the Navier-Stokes equations in noncylindrical domains: an approach by the subdifferential operator theory. J. Fac. Sci. Univ. Tokyo Sect. IA Math. 25 (1978), no. 2, 185-204. (Authors' review (Zbl 391:35053)) 82g:35092 35O10 (47H15, 76D05)

Otčík, V. S. (with Boguš, A. A.; Kuročkin, Ju. A.) The quantum-mechanical Kepler problem in three-dimensional Lobačevskii space. (Russian. English summary) Dokl. Akad. Nauk BSSR 24 (1980), no. 1, 19-22, 92. (I. Ju. Krivs'kii) 82a:81010 81C05 (with Berezin, A. V.; Boguš, A. A.; Fedorov, F. I.) Matrix elements of the principal

series of unitary representations of the de Sitter group in the $SO(4, 1) \supset E(3) \supset T_3$ basis. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 4, 857–859. (E. S. Krjačko) 82a:22013 22E43 (22E70, 81C40)

Otelbaev, M. O. On the theory of Vekua generalized analytic functions. (Russian) Application of the methods of functional analysis to problems of mathematical physics and numerical analysis (Russian), pp. 80-99, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1979. (Wazir Hasan Abdi) 82g:30077 30G20

(with Lizorkin, P. I.) Imbedding theorems for a class of weight spaces and their

applications. (Russian) Theory of cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 220-224, 255, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Authors' summary) 82m:46032 46E35
(with Oinarov, R.) A contractibility criterion for the Uryson operator. (Russian)
Dokl. Akad. Nauk SSSR 255 (1980), no. 6, 1316-1318. (N. A. Sidorov) 82c:45023

(with Lizorkin, P. I.) Imbedding and compactness theorems for Sobolev-type spaces with weights. II. (Russian) Mat. Sb. (N.S.) 112(154) (1980), no. 1(5), 56-85, 143. (O.

46E35 (with Kal'menov, T. S.) Regular boundary value problems for the Lavrent'ev-Bicadze

equation. (Russian) Differencial'nye Uravnenija 17 (1981), no. 5, 873-885, 957. (Megumi Saigo) 82j:35104 35M05 (with Levitan, B. M.) Conditions for selfadjointness of the Schrödinger and Dirac

operators. (Russian) Trudy Moskov. Mat. Obšč. 42 (1981), 142-159. (B. Hellwig) 47F05 (35P05, 81C10)

Othmer, Hans G. (with Aldridge, John A.) The effects of cell density and metabolite flux on cellular dynamics. J. Math. Biol. 5 (1977/78), no. 2, 169-200. (Authors' summary) 82m:92034 92A09 (34C99)

The analysis of nonlinear equations with symmetries. New approaches to no problems in dynamics (Proc. Conf., Pacific Grove, Calif., 1979), pp. 437-447, SIAM, Philadelphia, Pa., 1980. (Olusola Akinyele) 82b:34085 34G20 (80A20, 92A09)

Otrokov, N. F. See Dulac, H., 82k:34031 Otsu, Hideharu (with Watanabe, Tadashi) Vortices in two-dimensional anisotropic o-models. Progr. Theoret. Phys. 65 (1981), no. 1, 164-171. (Authors' summary)

81E10 (58E30, 82A15) Ôtsu, Tôzaburô (with Watanabe, Tadashi) Generating functions of two-time Green functions for simple systems. II. Phys. Rep. Kumamoto Univ. 4 (1979), no. 1, 37-44. (Martin Costabel) 82c:81056 81C99 (81N05)

Otsuki, Tominosuke A family of 2-dimensional Riemannian manifolds joining the non-Euclidean planes. TRU Math. 17 (1981), no. 1, 129-139. (J. Ferrand) 82i:53016

53A40 (34C25, 53C20) Ott, Edward (with Russell, David A.; Hanson, James D.) Dimension of strange attractors. Phys. Rev. Lett. 45 (1980), no. 14, 1175-1178. (D. L. Rod) 82a:58034

82A05) Ott, Udo Eine Bemerkung über Polaritäten eines verallgemeinerten Hexagons. Geom. Dedicata 11 (1981), no. 3, 341-345. (W. M. Kantor) 82k:51007 51E25 (05B25)

- Otter, Pieter W. Identification and estimation of discrete state-vector models with stochastic inputs. Automatica-J. IFAC 17 (1981), no. 2, 389-391. (Author's summary) 93E12 (93E10)
- mann, Thomas (with Six, H. W.; Wood, Derick) One-sided k-height-balanced trees. (German summary) Computing 22 (1979), no. 4, 283-290. (Authors' summary)
 - (with Maurer, Hermann A.) Dynamic solution of decomposable searching problems. Discrete structures and algorithms (Proc. Conf., Berlin, 1979), pp. 17-24, Hanser, Munich, 1980. (Authors' summary) 82j:68049 68E05 (90B40)
 - (with Stucky, W.) Higher order analysis of random 1-2 brother trees. BIT 20 (1980), no. 3, 302-314. (G. Berman) 82c:68040 68E05 (68E10)
 - (with Bentley, Jon Louis) The power of a one-dimensional vector of processors. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnel, 1980), pp. 80–89, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Authors' summary) 82i:68019 68C05
 - (with Six, H. W.; Wood, Derick) The analysis of search trees: a survey.
 - Graph-theoretic concepts in computer science (Proc. Sixth Internal. Workshop, Bad Honnef, 1980), pp. 234–249, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Authors' summary) 82h:68130 68H05 (68E05)
 - (with Culik, K., II; Wood, Derick) Dense multiway trees. ACM Trans. Database Systems 6 (1981), no. 3, 486-512. (Authors' summary) 82m:68038 68B15 (05C05)
- Otto, Christoph Approximation properties of locally convex spaces. Math. Nachr. 93 (1979), 279-292. (E. Dubinsky) 82d:46003 46A05 (46A12)
- o, Edward (with Otto, Franciszek) *Podręcznik geometrii wykreślnej. (Polish) [Textbook of descriptive geometry] Second edition. Państwowe Wydawnictwo Nauko (PWN), Warsaw, 1977. 416 pp. (101 plates). (Krzysztof Witczyński) 82k:51019
 - An elementary proof of Fourier's formula. Demonstratio Math. 13 (1980), no. 4,
- 1005-1008. (B. L. Gupta) 82f:42012 42A38
 Otto, Franciszek (with Otto, Edward) ★Podręcznik geometrii wykreślnej. (Polish) [Textbook of descriptive geometry] Second edition. Państwowe Wydawnictwo Naukowe (PWN), Warsaw, 1977. 416 pp. (101 plates). (Krzysztof Witczyński) 82k:51019 51N05 (51-01)
- ha, J. A (with Martinez Gadea, Pedro) On the cohomology of some Riemann manifolds with a parallel φ(4, 2)-structure. Tensor (N.S.) 34 (1980), no. 3, 286-294. (C. S. Houh) 82e:53059 53C15
 - (with Martinez Gadea, Pedro) On differentiable manifolds with $\varphi(4,2)$ -structure.
- Geom. Dedicata 10 (1981), no. 1-4, 393-402. (Kouei Sekigawa) 82h:53052 53C15

 Ouchi, Sunao An integral representation of singular solutions of linear partial differential equations in the complex domain. J. Fac. Sci. Univ. Tokyo Sect. IA Math. 27 (1980), no. 1, 37-85. (P. Schapira) 82e:35002 35A20 (32A25)
- n Ouden, L. W. J. (with Capel, H. W.; Perk, Jacques H. H.) Critical-exponent renormalization, first-order transitions and demagnetizing effects for Schofield's linear model. Phys. A 105 (1981), no. 1-2, 53-85. (Authors' summary) 82d:82033 82A25
- Oudjit, Aissa (with Mirchandani, Pitu B.) Localizing 2-medians on probabilistic and deterministic tree networks. Networks 10 (1980), no. 4, 329-350. (Authors' sum 90B05 (94C15)
- Ouellette, Diane Valérie Schur complements and statistics. Linear Algebra Appl. 36 (1981), 187-295. (Winston T. Lin) 82j:15005 15A09 (62J05)
- ibrahim, A. (with Lhuillier, D.) A thermodynamic model for solutions of deformable molecules. (French summary) J. Mécanique 19 (1980), no. 4, 725-741. (Authors'
- summary) 82b:76002 76A02 (82A35) shima, Shuzou (with Sudou, Kouzou; Tomita, Yukio; Takami, Toshihiro) Pulsating flow of liquid metals in a circular pipe under a transverse magnetic field. Bull. JSME 24 (1981), no. 187, 90-98. (Authors' summary) 824:76091 76W05
- sterelo Dominguez, E. (with Margalef Roig, J.) A note on paracompact spaces. (Spanish) Rev. Mat. Hisp.-Amer. (4) 39 (1979), no. 2-3, 87-98. (Richard Wilson) 82j:54029
- (with Margalef Roig, J.) Sufficient conditions for c-paracompactness. Application to
- a metrization theorem. (Spanish) Rev. Mat. Hisp.-Amer. (4) 39 (1979), no. 4-5, 166–172. (Sergio Salbany) 82k:54030 54D18 (54E35) Outram, Dorinda Politics and vocation: French science, 1793-1830. British J. Hist. Sci. 13
- (1980), no. 43, part 1, 27-43. (Joong Fang) 82:01189 01A80

 Outrata, Jiří V. (with Kříž, Otakar F.) An application of conjugate duality for numerical solution of continuous convex optimal control problems. Kybernetika (Prague) 16
- (1980), no. 6, 477-497. (Russell D. Rupp) 82b:49051 49D30 (with Schindler, Z.) An augmented Lagrangian method for a class of convex continuous optimal control problems. (Russian summary) Problems Control Inform. Theory/Problemy Upravlen. Teor. Inform. 10 (1981), no. 2, 67-81. (Werner Krabs)
- 82m:49045 49D30 (49A10, 65K10) van Ouwerkerk, Hendrik J. (with Tulp, Jan H.; Piceni, Hans A. L.; Roufs, Jacques A. J.; Blommaert, Frans J. J.) Instabilities in a continuous medium model for the retina. Biol.
- Cybernet. 39 (1980/81), no. 1, 11-14. (Authors' summary) 82j:92064 92A27 (92A09)
 Ouyang, Chang On a class of methods for solving problems of random boundary notches and/or cracks. I. Analytic method. (Chinese. English summary) Appl. Math. Mech. 1 (1980), no. 2, 159-166. (Author's summary) 82e:73077 73M05
- OuYoung, Kuong Lin Periodic solutions of conservation laws. J. Math. Anal. Appl. 75 (1980), no. 1, 180-202. (A. Pazy) 82a:34077 34G20 (35L65, 47H20)
- Ovčarov, L. A. (with Ventcel', E. S.) *Problemas de cálculo de probabilidades. (Spanish) [Problems of the calculus of probabilities] Con soluciones. [With solutions]. Translated from the Russian by Carlos H. Bode. With a foreword by Peter Franken. Paraninfo, Madrid, 1978. 454 pp. ISBN 84-283-0934-5 (Editors) 82g:60002
- Maaria, 1976. 434 pp. 15BN 84-263-1934-5 (Calitors) aegocome. 60-01
 Orbinnikov, S. V. (with Kuz'min, V. B.) Group decisions. I. In arbitrary spaces of fuzzy binary relations. Fuzzy Sets and Systems 4 (1980), no. 1, 53-62. (A. Jaeger) 82e:99013a 90A08 (03E72)
- (with Kuz'min, V. B.) Design of group decisions. II. In spaces of partial order fuzzy relations. Fuzzy Sets and Systems 4 (1980), no. 2, 153-165. (A. Jaeger) 82e:90013b 90A08 (03E72)
- Convexity in subsets of lattices. Stochastica 4 (1980), no. 2, 129-140. (Ki Hang Kim) 06B05 (06D05, 52A01) 821:06013

- Ovčinnikov, N. F. On the problem of the formation of Einstein's creative personality. (Russian. English summary) Voprosy Filos. 1979, no. 9, 70-84, 186. (Author's summary) 01A70
- Ověimikov, O. N. Steady-state flows of a viscous fluid through a rotating radial channel at small values of the Rossby number. (Russian) Ž. Prikl. Meh. i Tehn. Fiz. 1980, no. 1, 76–83, 173. (N. D. Kopačevski) 82j:76037 76D99 (76U05)
- 76-83, 173. (N. D. Kupacevsan) september of class ⊕ in Hilbert couples. (Russian) Mat.

 Ovčinnikov, V. I. Interpolation of operators of class ⊕ in Hilbert couples. (Russian) Mat. Zametki 27 (1980), no. 2, 273-282, 319. (Dumitru Gaspar) 82d:46098
- Ovelimikov, V. V. (with Mamedli, E. M.) Cascade procedures of packet-block coding. (Russian) Control of technical and organizational systems by application of computer technology (Russian), pp. 69–74, 227, "Nauka", Moscow, 1979. (V. A. Zinov'ev) R2b-94023 94B10 (94A24)
- Over, D. E. Game theoretical semi ntics and entailment. Studia Logica 40 (1981), no. 1.
- 67-74. (Robert P. McArthur) \$2k:63022 03B45 (90D99)

 Overdijk, D. A. (with Simons, F. H.; Thiemann, J. G. F.) A comment on unions of rings.

 Nederl. Akad. Wetensch. Indag. Math. 41 (1979), no. 4, 439-441. (V. Ficker) \$2e:28001 28A05 (04A99)
- m, Edward A., II (with Zabusky, Norman J.) Translation, interaction and scattering of Euler equation V-states via contour dynamics. Transactions of the Twenty-seventh Conference of Army Mathematicians (West Point, N.Y., 1981), pp. 667–685, ARO Rep. 82, 1, U. S. Army Res. Office, Research Triangle Park, N.C., 1982. (See 82k:00010) 76A60 (76D05)
- Overmars, Mark H. (with van Leeuwen, Jan) Further comments on A. Bykat's convex hull algorithm: "Convex hull of a finite set of points in two dimensions" [Inform. Process. Lett. 7 (1978), no. 6, 296-298; MR 80b:68041]. Inform. Process. Lett. 10 (1980), no. 4-5, 209-212. (D. T. Lee) 82a:68080 68C25 (52-04)
 - (with van Leeuwen, Jan) Two general methods for dynamizing decomposable
- searching problems. (German summary) Computing 26 (1981), no. 2, 155-166. (Authors' mmary) 82j:68050 68E05
- (with van Leeuwen, Jan) Some principles for dynamizing decomposable searching problems. Inform. Process. Lett. 12 (1981), no. 1, 49-54. (From the introduction) 97a-68063 68E05 (90B40)
- (with Mehlhorn, Kurt) Optimal dynamization of decomposable searching problems. Inform. Process. Lett. 12 (1981), no. 2, 93-98. 82d:68043 68E05
- General methods for "all elements" and "all pairs" problems. Inform. Process. Lett.
- 12 (1981), no. 2, 99-102. (From the introduction) 82d:68044 68E05
- Dynamization of order decomposable set problems. J. Algorithms 2 (1981), no. 3, 245-260. (Author's summary) 82i:68045 68E99 (52-04)

 Oversteegen, Lex G. (with Rogers, James T., Jr.) Tree-like continua as limits of cyclic graphs.
- graphs. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979). Topology Proc. 4 (1979), no. 2, 507-514 (1980). (Lee Mohler) 82e:54032 54F20 (54H25)
 - (with Rogers, James T., Jr.) An inverse limit description of an atriodic tree-like continuum and an induced map without a fixed point. Houston J. Math. 6 (1980), no. 4, 549-564. (Lee Mohler) 82j:54075 54F20 (54H25)
- (with Tymchatyn, E. D.) On atriodic tree-like continua. Proc. Amer. Math. Soc. 83 (1981), no. 1, 201-204. (James T. Rogers, Jr.) 82h:54058 54F20 (54B20, 54F50,
- Overton, Michael L. (with Murray, Walter) A projected Lagrangian algorithm for nonlinear minimax optimization. SIAM J. Sci. Statist. Comput. 1 (1980), no. 3, 345-370. (J. Mockus) 82c:90082 90C30
- Orsepjan, S. G. Extension of continuous mappings and epireflexivity of the category of H-closed spaces. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 2, 290-294. (M. Hušek) 82e:54029 54D35
 - Extension of mappings of spaces to continuous mappings of their extensions. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 72 (1981), no. 1, 6-13.
- (Aleksander Blaszczyk) 82k:54018 54C20 Pseudotopological spaces and their extensions. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 2, 170-190, 238. (M. Hušek) 82e:54003 54A05
- Ovsjannikov, L. V. Abstract form of the Cauchy-Kowalewski theorem and its application. (Russian) Partial differential equations (Proc. Conf., Nocosibirsk, 1978) (Russian), pp. 88–94, 250, "Nauka" Sibirsk. Otdel., Nocosibirsk, 1980. (J. Chrastina) 82b:35007 35A10 (58D25)
- See also Birthday: Ovsjannikov, L. V., 82i:01065 Ovuworie, Godwin C. Multichannel queues: a survey and bibliography. (Fren Internat. Statist. Rev. 48 (1980), no. 1, 49-71. (Jos H. A. de Smit) 82b:60123 Owa, Shigeyoshi A remark on new criteria for univalent functions. Kyungpook Math. J. 21 30C45 (1981), no. 1, 15-23. (S. Ruscheweyh) 82j:30019
- el-Owaidy, Hassan See El-Owaidy, Hassa
- Owen, D. R. J. (with Hinton, E.) ★Finite elements in plasticity: theory and practice. Pineridge Press Ltd., Swansea, 1980. xii+594 pp. ISBN 0-906674-05-2 (From the preface) 73Exx (73K25)
 - (with Martins, R. A. F.) Elastoplastic and geometrically nonlinear thin shell analysis by the semiloof element. Comput. & Structures 13 (1981), no. 4, 505-513. (Authors' mmary) 82e:73065 73K25
- See also Numerical methods in fracture mechanics, 82c:73005 and 82i:73003 Owen, David Ross (with Yin, Wan Lee) Plane irrotational flows of rigid-viscoplastic bodies. (German summary) Z. Angew. Math. Phys. 32 (1981), no. 4, 396-407. (Authors'
- mary) 82i:73018 73E99 (73F99) en, David Rudyard (with Sunderji, B.; Clarke, S.) An inverse method for the mapping of curves onto the real axis. Pure Appl. Math. Sci. 13 (1981), no. 1-2, 15-23. (Jacob Burbea)
- 30C20 (76S05) ren, Donald B. (with Odeh, Robert E.) *Tables for normal tolerance limits, plans, and screening. Statistics: Textbooks and Monographs, 32. Marcel Dekker, Inc., New York-Basel, 1980. ix+316 pp. ISBN 0-8247-6944-9 (Editors) 82x62039 62F25
- Owen, G. (with Littlechild, S. C.) An Austrian model of the entrepreneurial market process J. Econom. Theory 23 (1980), no. 3, 361-379. (From the introduction) 82d:90030
- Owens, D. H. (with Bell, D. J.; Bryant, G. F.; Cook, P. A.; Crossley, T. R.; Denham, M.

J.; Fallside, F.; Luntz, R.; MacFarlane, Alistair G. J.; Mayne, D. Q.; Munro, N.; Rosenbrock, H. H.; Storey, Colin) ★ Modern approaches to control system design. IEE Control Engineering Series, 9. Peter Peregrinus, Ltd., Stevenage; on behalf of the Institution of Electrical Engineers (IEE), London, 1979. xviii + 413 pp.

158N 0-906048-0-6 (Publishers' description) 8219-93060 9315 (15A99, 34H05) (with Boland, F. M.) On quantisation and other bounded nonlinearities in first-order discrete multivariable control. Proc. IEE-D 127 (1980), no. 2, 38-44. (Author's supmane) 820-531 (2022)

ary) 82a:93039 93C57 (93C35)

(with Field, A. D.) Nested-feedback-loop decomposition for reduction of linear litivariable systems. Proc. IEE-D 127 (1980), no. 3, 103-114. (Authors' summary)

Inversion of uniform rank multivariable systems. Proc 153-154. (Author's summary) 82a:93037 93C45 (65F05) Proc. IEE-D 127 (1980), no. 4,

(with Boland, F. M.) Linear multipass processes: a two-d onal interpretation.

Proc. IEE. D 127 (1980), no. 5, 189–193. (Authors' summary) 82a:93048 93D25
Some unifying concepts in multivariable feedback design. Internat. J. Control 33 (1981), no. 4, 701–711. (Author's summary) 82a:93042 93C45

(with Field, A. D.) Block-tridiagonal state-space representations for a class of square invertible systems. Proc. IEE-D 128 (1981), no. 1, 30-32. (From the introduction) 93B15 82j:93011

nbey-McLaughlin, Barbara (with Lambert, Joseph B.; McLaughlin, Charles D.) Maya arithmetic. Amer. Sci. 68 (1980), no. 3, 249-255. (M. P. Closs) 82f:01002 01A10 Owtscharow, L. A. See Ovčarov, L. A.

Oxford, Ed (with Walls, Gary) Endocyclic groups. Arch. Math. (Basel) 32 (1979), no. 2,

109-113. (Authors' introduction) 82k:20094 20K30
Oxley, James G. (with Brylawski, Thomas H.) Several identities for the characteristic polynomial of a combinatorial geometry. Discrete Math. 31 (1980), no. 2, 161-170. polynomial of a combinatorial geometry. Discrete Math. 31 (1980), no. 2, 161-170. (Curtis Greene) 82c05036 05B35 (05C10, 52A37)

On 3-connected matroids. Canad. J. Math. 33 (1981), no. 1, 20-27. (Thomas Inukai) 05B35 (05C40)

(with Brylawski, Thomas H.) The broken-circuit complex: its structure and factorizations. European J. Combin. 2 (1981), no. 2, 107-121. (András Recski) 82i:05025 05B35

On a matroid generalization of graph connectivity. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 2, 207-214. (C. St. J. A. Nash-Williams) 82j:05045 05B35 (05C40) 05B35 (05C40) On matroid connectivity. Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 126, 193–208. (J. M. S. Simões-Pereira) 82g:05040 05B35 (05C35)

On connectivity in matroids and graphs. Trans. Amer. Math. Soc. 265 (1981), no. 1, 47–58. (J. E. Graver) 82e-05052 05B35 (05C40)

(with Kelly, Douglas G.) Asymptotic properties of random subsets of projective aces. Math. Proc. Cambridge Philos. Soc. 91 (1982), no. 1, 119-130. (G. R. Grimmett) 05B35 (51E15, 60C05, 60D05)

ama, T. (with Giles, Rick; Trotter, L. E., Jr.) Related necessary conditions for completing partial Latin squares. *J. Combin. Theory Ser. A* 29 (1980), no. 1, 20–31. (Derbian F. Hsu) 82g:05024 05B15 (90C10)

maguchi, Michio (with Inagaki, Yasuyoshi; Honda, Namio) A real-time strictness test for deterministic pushdown automata. *Inform. and Control* 47 (1980), no. 1, 1–9. (Authors' summary) 82x68107 68D25 (68F10)

(with Inagaki, Yasuyoshi; Honda, Namio) A simplicity test for deterministic pushdown automata. Inform. and Control 47 (1980), no. 1, 10-36. (Authors' summary)

Oystaeyen, F. Graded Azumaya algebras and Brauer groups. Ring theory, Antwerp 1980 (Proc. Conf., Univ. Antwerp, Antwerp, 1980), pp. 158-171, Lecture Notes in Math., 825, Springer, Berlin, 1980. (From the introduction) 82d:13004 13A20 (16A16) (with Nauwelaerts, E.) Birational hereditary Noetherian prime rings. Comm.

Algebra 8 (1980), no. 4, 309-338. (J. C. Robson) 82a:16009 16A14

(with Nauwelaerts, E.) Zariski extensions and biregular rings. Israel J. Math. 37 (1980), no. 4, 315–326. (G. Michler) 822:16018 16A30 (with Verschoren, A.) Graded P.I. rings and noncommutative projective schemes. Comm. Algebra 9 (1981), no. 2, 149–177. (G. Krause) 822:16003 16A03 (14A15,

16A33, 16A38)

 (with Jespers, E.; Zeeuwts, K.) Control subgroups and localization of group rings.
 Comm. Algebra 9 (1981), no. 12, 1263–1284. (Donald S. Passman) 82j:16021 16A2.
 (with Verschoren, A.) Fully bounded Grothendieck categories. II. Graded modules. 16A27 J. Pure Appl. Algebra 21 (1981), no. 2, 189-203. (Jonathan Golan) 82j:16003 (18E40)

Öz, H. (with Meirovitch, Leonard) Active control of structures by modal synthesis. Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 505-521, North-Holland, Amsterdam, 1980. (See 82g:93003) 93B50

Ozaki, H. (with Fujimoto, H.; Ishii, J.) Multivariable Richards' transformations. 1979

onal Sympo sium on Circuits and Systems (Tokyo, 1979), pp. 501-504, IEEE, New

York, 1979. (See 82c-94002)
 York, 1979. (See 82c-94002)
 York, 1979. (Superscript of July)
 York, 1979. (Superscript

(1980), no. 4, 619-6.52. (Authors' summary) 82a:88132 68E:10 (68C.25)
Ozaki, T. (with Haggan, V.) Modelling nonlinear random vibrations using an amplitude-dependent autoregressive time series model. Biometrika 68 (1981), no. 1, 189-196. (Bert M. Steece) 82a:62128 62M10
Ozarow, L. On a source-coding problem with two channels and three receivers. Bell System Tech. J. 59 (1980), no. 10, 1909-1921. (Abbas A. El Gamal) 82a:94052 94A29 (94A34)

Ozawa, M. (with Yanai, H.; Kaneko, S.) Interpolation methods in one-dimensional optimization. (German summary) Computing 27 (1981), no. 2, 155-163. (Authors' nmary) 82m:65056 65K05

Ozawa, Masanao Hilbert B(H)-modules and stationary processes. Kodai Math. J. 3 (1980), no. 1, 26–39. (William Paschke) 82b:46086 46L50 (60G10)
Ozawa, Mitsuru On uniquely factorizable meromorphic functions. Kodai Math. J. 1 (1978),

no. 3, 339–353. (A. N. Kanatnikov) 82b:30029 30D30

Ozawa, Shin Surgery of domain and the Green's function of the Laplacian. Proc. Japa Acad. Ser. A Math. Sci. 56 (1980), no. 10, 459–461. (H. D. Fegan) 82c:58056 58Gi (49G05, 53C21)

Ozawa, Takao (with Kajitani, Yoji) Diagnosability of linear active networks. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 866–869, IEEE, New York, 1979. (See 82e:94002) 94C15

Planality testing for IC layout with constraints for pin order and congestion between

pins. Fourteenth Asilomar Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), p. 188–192, IEEE, New York, 1981. (See 824:93001) 94C15
Özdeğer, Abdülkadir Some functions of direction in a subspace of a Riemannian space.
(Turkish summary) İstanbul Tek. Üniv. Bül. 33 (1980), no. 2, 48–53 (1981). (T. Okubo)

A hexagonal 6-web on a surface whose asymptotic lines form a rhombic net. (Turkish nmary) *İstanbul Tek. Üniv. Bül.* 34 (1981), no. 1, 96-109. (Bernard Rouxel) 82j:53029 53A60 (53A05)

Ozeki, H. See Manifolds and Lie groups, 82m:53001
Ozeki, H. See Manifolds and Lie groups, 82m:53001
Ozeki, Kazuhiko A new definition of the entropy of general probability distributions based on the nonstandard analysis. Inform. and Control 47 (1980), no. 2, 94-106. (Ezio M. Biglieri) 82g;94009 94A17

Ozeki, Michio Generalized Hadamard matrices and related matrices and their applications to the construction of the positive definite integral Hermitian forms. J. Combin. Theory Ser. A 30 (1981), no. 3, 270-275. (Jennifer Seberry) 82:05018 05B20

Ozernoi, L. M. (with Gurzadjan, V. G.) Accretion and radiation spectrum of the gas debris of a star disrupted by the tidal forces of a massive black hole. Astronom. and Astrophys. **86** (1980), no. 3, 315-320. (From the summary) **82b:85002** 85A05

Ozerov, D. K. A means of constructive interference for Love waves in an anisotropic edium. (Russian) Questions in the dynamical theory of seismic wave propagation, No. XX, pp. 20-21, 213, "Nauka" Leningrad. Otdel., Leningrad, 1981. (See 82k:86002)

Özgüler, Bülent (with Hüseyin, Özay) On the inversion of multidimen matrices. IEEE Trans. Circuits and Systems 27 (1980), no. 3, 224-226. (From the introduction) 82f:68036 68C05 (15A09)

Oziašvili, T. S. (with Džanašija, G. A.) The uniqueness of the orthogonal decomposition of function rings on a circle. (Russian) Dokl. Akad. Nauk SSSR 248 (1979), no. 2, 286–289. (B. Korenblum) 82a:30659 30H05 (30B40, 46J15)

Ožigova, E. P. G. Mittag-Leffler and Russian mathematicians. (Russian. English summary) Voprosy Istor. Estestvoznan. i Tehn. 1979, no. 64-66, 43-44, 108, 119. (E. Stipanic) 01A55 (01A70)

See also Steklov, V. A.; et al., 82;:01073
Özkan, İ. R. On the uniform boundedness of a nonlinear system. Mech. Res. Comm. 8 (1981), no. 2, 67-82. (A. Halanay) 82d:34067 34D20

Ozmidov, R. V. (with Beljaev, V. S.) A model of vertical turbulent exchange in the ocean at intermittent turbulence. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 4, 995-998. (Jiří Nedoma) 82b:86002 86A05

Özok, Afet K. On related vector fields of capillary surfaces. Internat. J. Math. Math. Sci. 4 (1981), no. 3, 473–484. (F. J. Almgren, Jr.) 82g:53010 53A10 (35J99)

Ozols, K. D. (with Bergmanis, K. A.) Calculation of a mathematical model of a capacative transducer for the quality control of articles of cylindrical shape. (Russian. English summary) Latvijas PSR Zinātņ. Akad. Vēstis Fiz. Tehn. Zinātņ. Sēr. 1980, no. 5, 102–107, 128. (Authors' summary) 82d;78012 78A30

Ozrin, V. D. (with Barabanenkov, Ju. N.; Šelest, A. V.) On the kinetic theory of moderately dense gas. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 1, 80-92. (K. Kumar) 82b:82044 82A40

- P -

sánchez P., J. M. See Sánchez P., J. M. sánchez P., Javier See Sánchez P., Javier

mez P., Javier A. See Gomez P., Javier A. franco P., Maria de los Angeles See Franco P., Maria de los Angeles

Paatašvili, V. A. (with Kokilašvili, V. M.) Discontinuous problem of linear conjugation and singular integral equations. (Russian) Differencial'nye Uravnenija 16 (1980), no. 9, 1650-1659, 1726. (I. M. Spitkovskii) 82g:30073 30E25 (45E05)

on, Jean-François TT₃I est équivalent à l'arithmétique du second ordre. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 24, A1117-A1118. (Carlo Cellucci) 82f:03051 03F35 (03F25)

Pac, P. Y. (with Lee, Choonkyu) Heavy-particle-induced effective Lagrangian in spontaneously broken theories. I. The σ-model. Nuclear Phys. B 177 (1981), no. 1, 87-156. (Authors' summary) 82c:81065 81D20 (81G05)

Pacault, A. (with Marchand, A.) Evolution of systems. Time scaling and scaling factors. Pattern formation by dynamic systems and pattern recognition (Proc. Internat. Sympos. Synerget., Garmisch-Partenkirchen, 1979), pp. 289–303, Springer Ser. Synergetics, 5, Springer, Berlin, 1979. (See 82k:00028) 92A05 (00A69, 93A10)

Pačeva, S. I. (with Nisimov, E. R.) Bäcklund transformation in the classical massive Thirring model. C. R. Acad. Bulgare Sci. 32 (1979), no. 9, 1191-1194. (Yvette Kosmann-Schwarzbach) 82a:81036 81E99 (35Q20, 58A15, 58F07, 81M05)

(with Aref'eva, I. Ja.; Nisimov, E. R.) BPHZL renormalization of 1/N expan and critical behaviour of the three-dimensional chiral field. Comm. Math. Phys. 71 (1980), no. 3, 213-246. (Authors' summary) 82d:81089 81E15

(with Nisimov, E. R.) Phase transition and 1/N expansion in (2+1)-dimensional apersymmetric sigma models. Lett. Math. Phys. 5 (1981), no. 1, 67-73. (Nigel B. Backhouse) 82m:81081a 81G20 (81E99)

(with Nisimov, E. R.) Erratum to: "Phase transition and 1/N expansion in (2+1)-dimensional supersymmetric sigma models". Lett. Math. Phys. 5 (1981), no. 3,

255-256. (Nigel B. Backhouse) 82m:81081b 81G20 (81E99) Pach, A. J. (with Smith, M. A.; Turett, B.) Flat Orlicz spaces. Proc. Amer. Math. Soc. 81

(1981), no. 4, 528-530. (Y. Benyamini) 82f:46031 46E30 (46B25) (with van Dulst, D.) A renorming of Banach spaces. Rev. Roumaine Math. Pilres

Appl. 26 (1981), no. 6, 843–847. (J. Bourgain) 82;-46014 46B05 (46B15)

Pach, J. On the permeability problem. Studia Sci. Math. Hungar. 12 (1977), no. 3-4, 419-424 (1980). (Sanpei Kageyama) 82f:05028 05B45 (52A45)

(with Suranyi, L.) On graphs of diameter 2. Ars Combin. 11 (1981), 61-78. (S. F. Kapoor) 82k:05071 05C35 (05C38)

co-Santiago, N. (with Brockwell, Peter J.) Invariant imbedding and dams with Markovian input rate. J. Appl. Probab. 17 (1980), no. 3, 778-789. (Emlyn Lloyd) 820-60175 60K30

heva, S. J. See Pačeva, S. L.

1982

Pachl, Jan K. Two classes of measures. Collog. Math. 42 (1979), 331-340. (J. E. Huneycutt, Jr.) 82b:28012 28A35 (28-02)

(with Christensen, Jens Peter Reus) Measurable functionals on function spaces (French summary) Ann. Inst. Fourier (Grenoble) 31 (1981), no. 2, vi, 137-152. (J. B. 46E15 (28C20, 46E27)

Pachner, J. Analytical and numerical investigation of gravitational collapse. Gravitation, quanta and the universe (Proc. Einstein Centenary Sympos., Ahmedabad, 1979), pp. 132–153, Wiley, New York, 1980. (Basilis C. Xanthopoulos) 82i:83065

er, Udo Untersuchungen über die Dualität zwischen Schnitten und Submannigfaltigkeiten konvexer Polytope und allgemeinerer kombinatorischer Mannigfaltigkeiten. Abh. Math. Sem. Univ. Hamburg 50 (1980), 40-56. (R. Fritsch) 57Q15 (52A25)

(with Kleinschmidt, Peter) Shadow-boundaries and cuts of convex polytopes Mathematika 27 (1980), no. 1, 58-63. (D. Barnette) 824:52006

Über die bistellare Äquivalenz simplizialer Sphären und Polytope. Math. Z. 176 (1981), no. 4, 565-576. (E. Hertel) 82i:57018 57Q05 (52A25)

Pacholski, L. See Model theory of algebra and arithmetic, 82a:03003

Pacholski, L. See Model theory of algebra and arithmetic, 82a:03003

Pachpatte, B. G. On the generalization of Bellman's lemma. Math. Student 45 (1977), no. 4, 33-36 (1979). (Paul R. Beesack) 82h:26018 26D10

Preservation of stability and asymptotic behaviour of perturbed integro-differential equations in a Banach space. Proc. Indian Acad. Sci. Sect. A 87 (1978), no. 9, 189–200. (Author's summary) 82k:45014 45N05

Strict stability of finite difference equations. Bull. Calcutta Math. Soc. 71 (1979), no. 4, 266-272. (André Hautot) 82m:39005 39A10

On random nonlinear contractions and Itô-Doob type stochastic integral equations. J. Maulana Azad College Tech. 12 (1979), 77-89. (Georges A. Bécus) 82g:60088 60H25 (60H20)

On Wendroff type partial integral inequalities. Tamkang J. Math. 10 (1979), no. 2, 141-150. (B. Crstici) 82b:26022 26D15

On some fundamental nth order finite difference inequalities. An. Ştiinţ. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.) 26 (1980), no. 2, 361-367. (Miomir S. Stanković) 39C05 (26D20, 39A05)

(with Bondge, B. K.) On some fundamental integral inequalities in n independent variables. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 4, 553-560. (Paul R. Beesack) 26D10 (45M99)

A note on some new partial integral inequalities. Chinese J. Math. 8 (1980), no. 1,

13-17. (William N. Everitt) 82b:26019 26D10 (with Singare, V. M.) On certain partial integro-differential inequalities and their Chinese J. Math. 8 (1980), no. 2, 113-124. (E. F. Beckenbach) 82e:45012

45K05 (26D10) (with Bondge, B. K.) On some partial integral inequalities in two independent variables. Funkcial. Ekvac. 23 (1980), no. 3, 327-334. (Paul R. Beesack) 82h:26021

26D10 (45K05)

(with Singare, S. M.) On certain discrete inequalities of the Wendroff type. Indian J. Pure Appl. Math. 11 (1980), no. 6, 727-736. (B. Crstici) 821:26019 26D10

On some new integral inequalities for nonselfadjoint hyperbolic partial integro-differential equations. J. Math. Anal. Appl. 76 (1980), no. 1, 58-71. (Paul R. Beesack) 82a:45018 45K05 (26D10)

(with Bondge, B. K.) On two independent variable generalizations of certain integral inequalities. Tamkang J. Math. 11 (1980), no. 1, 37-47. (Paul R. Beesack) 82k:26011 26D10 (45K05)

A note on second order integro-differential inequalities of the Gronwall-Bellman type. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.

No. 678-715 (1980), 35-41 (1981). (A. Lupaş) 82g:26022 26D10 (45J05) Common fixed point theorems in uniformly convex Banach spaces. An. Ştiinţ. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.) 27 (1981), no. 1, 109-112. (M. M. Day) 47H10 82h:47054

(with Singare, V. M.) Lower bounds on some integral inequalities in n independent variables. Indian J. Pure Appl. Math. 12 (1981), no. 3, 318-331. (Paul R. Beesack) 82e:26016 26D10 (39C05)

Fixed point theorems for mappings satisfying a new functional inequality. J. Indian Acad. Math. 3 (1981), no. 2, 6-8. (Schie Park) 82m:54056 54H25

On some partial integral inequalities in n independent variables. J. Math. Anal. Appl. 79 (1981), no. 1, 256-272. (Paul R. Beesack) 82f:26018 26D10 (45M99) See also Rhoades, B. E., 82e:54057

Pachter, M. (with Jacobson, D. H.) A discretization of the cost functional in

linear-quadratic optimal control. Internat. J. Control 30 (1979), no. 2, 339-361. (Authors' 93C10 summary) 82k:93039

The linear-quadratic optimal control problem with positive controllers. Internat. J. Control 32 (1980), no. 4, 589-608. (N. Harris McClamroch) 82b:49033 49B34

(with Jacobson, D. H.) The stability of planar dynamical systems linear-in-cone IEEE Trans. Automat. Control 26 (1981), no. 2, 587-590. (Authors' summary) 82d:93055

(with Yavin, Yaakov) A stochastic homicidal chauffeur pursuit-evasion differential game. J. Optim. Theory Appl. 34 (1981), no. 3, 405-424. (Emmanuel Nicholas Barron) 93E05 (90D26)

(with Yavin, Yaakov) The homicidal chauffeur game—a stochastic model. Optimal Control Appl. Methods 2 (1981), no. 2, 145–163. (Authors' summary) 824:93059 93E05 (90D25, 90D26)

See also O'Reilly, John, 82a:93027

Pachut, Joseph F. (with Anstey, Robert L.) Fourier packing ordinate: a univariate J. Internat. Assoc. Math. Geol. 12 (1980), no. 2, 139–156. (T. F. Smith) 82a:92001 92A05 (52A45, 62P10)

Paciello, M. L. (with Falcioni, M.; Marinari, E.; Parisi, Giorgio; Taglienti, B.) Phase transition analysis in Z₂ and U(1) lattice gauge theories. Phys. Lett. B 105 (1981), no. 1, 51–54. (Authors' summary) 82j-82027 82A25 (81E25)

Pacifico, M. J. Structural stability of vector fields on 3-manifolds with boundary. An.

Acad. Brasil. Ciênc. 53 (1981), no. 1, 1-4. (J. W. Robbin) 82k:58060 58F10

Pacini, G. (with Callegarin, G.) About the implementability and the power of equationally defined data abstractions. Theoret. Comput. Sci. 14 (1981), no. 3, 305-315. (Authors' summary) 82e:68046 68C30 (08B05, 68B15)

Packard, Dennis J. Plausibility orderings and social choice. Synthese 49 (1981), no. 3, 415-418. (From the text) 82;90006 90A08 (92A25)

Packard, N. (with Crutchfield, J.; Farmer, D.; Shaw, Robert; Jones, G.; Donnelly, R. J.)

Power spectral analysis of a dynamical system. Phys. Lett. A 76 (1980), no. 1, 1-4. (J. S. Joel) 82e:58062 58F13 (76F99)

Packel, Edward W. *Functional analysis. A short course. Corrected reprint of the 1974 original. Robert E. Krieger Publishing Co., Inc., Huntington, N.Y., 1980. xvii+172 pp. ISBN 0-89874-019-3 (Editors) 82a:46001 46-01

(with Ferejohn, John A.; Fiorina, Morris P.) Nonequilibrium solutions for legislative systems. Behavioral Sci. 25 (1980), no. 2, 140-148. (Authors' summary) 82i:90006 90A08

Transitive permutation groups and equipotent voting rules. Math. Social Sci. 1 (1980/81), no. 1, 93-100. (R. D. Luce) 82e:90014 90A08 (20B25)

nilippe Espaces de Dirichlet et capacités fonctionnelles sur des triplets de Hilbert Schmidt. Séminaire Paul Krée, 4e année: 1977–1978. Équations aux dérivées partielles en dimension infinie, Exp. No. 5, 36 pp., Secrétariat Math., Paris, 1979. (A. F. Gualtierotti (Zbl 404:31008)) 82k:46073 46G99 (31C25, 46F25, 60J45)

(Col vov.) (100); (with Balas, Egon) Set partitioning —a survey. Combinatorial optimization (Lectures, Summer School, Urbino, 1977), pp. 151–210, Wiley, Chichester, 1979. (See 82a:90099)

Padet, Colette Sur une théorie informationnelle de l'observation pour des événements de nature probabiliste. (English summary) Ann. Inst. H. Poincaré Sect. A (N.S.) 33 (1980), no. 3, 319-343. (Author's summary) 82e:94036 94A17 (28D20, 94A05)

Padgett, W. J. (with Tsokos, Chris P.) Estimation of reliability for a class of life distributions with a stochastic parameter. Metron 34 (1976), no. 3-4, 333-359 (1979). (Authors' summary) 82e:62162 62N05

Comparison of Bayes and maximum likelihood estimators in the lognormal model for censored samples. Metron 36 (1978), no. 1-2, 79-98 (1980). (Author's summary)

82m:62064 62F10 (62N05)

Approximate solution of random nonlinear equations by random contractors. Approximate solution of random equations, pp. 211-221, North-Holland, New York, 1979.

(A. T. Bharucha-Reid) 82c:60117 60H25 (47H15)

(with Johnson, M. P.) Bayesian lower bounds for reliability in the lognormal failure model. Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs. 26 (1979), no. 2, 1-7. (Authors' summary) 82d:62154 62N05 (62F15)

(with Wei, L. J.) A Bayesian nonparametric estimator of survival probability assuming increasing failure rate. Comm. Statist. A-Theory Methods 10 (1981), no. 1, 49-63. (Authors' summary) 82d:62155 62N05 (62C10, 62G05)

Padhi, T. C. (with Hotta, G. C.) On $|\overline{N}, p_{-}|$ summability of an associated conjugate series of a Fourier series. Indian J. Pure Appl. Math. 12 (1981), no. 4, 452-458. (Shri Nivas Bhatt) 82g:42007 42A50 (42A28)

Padilla, Consuelo S. Dynamic game approach to the dual control problem. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 431-434, IEEE, New 90D26

York, 1979. (See 82e:94002) tilla, Rafael A. A model for price regulation in a partially controlled market economy 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 424-426, IEEE, New York, 1979. (See 82e:94002) 90A14

Paditz, Ludwig Über Wahrscheinlichkeiten mittlerer Abweichungen für gewichtete Summen. Math. Nachr. 98 (1980), 7-19. (J. Steinebach) 82i:60048 60F10

Bemerkungen zu einer Fehlerabschätzung im zentralen Grenzwertsatz. Wiss. Z. Hochsch. Verkehrswesen "Friedrich List" Dresden 27 (1980), no. 4, 829-837. (V. K. Rohatgi) 82c:60044 60F05 ma, K. (with Karunakaran, V.) Functions of bounded radius rotation. Indian J. Pure

Appl. Math. 12 (1981), no. 5, 621-627. (M. S. Robertson) 82j:30018 30C45

manabham, P. A. (with Munot, P. C.) On Lauricella's n-variable function $F_{i}^{(a)}$. J. Indian Inst. Sci. 62 (1980), no. 2, 17–23. (C. M. Joshi) 82a:33007 33A35 (with Munot, P. C.) Integrals involving the generalized Lauricella function. Indian J. Pure Appl. Math. 12 (1981), no. 3, 388-392. (C. L. Koul) 82c:33005 33A30 manabhan, A. R. Probabilistic aspects of von Neumann algebras. J. Funct. Anal. 31

(1979), no. 2, 139-149. (Author's review (Zbl 399:46048)) 82i:46100

manabhan, K. S. (with Parvatham, R.) Radius of convexity of partial sums of a certain power series. Indian J. Math. 17 (1975), no. 3, 133-138. (From the introduction) 82h:30011 30C45

in, R. A first order proof of a theorem of Frink. Algebra Universalis 13 (1981), no. 3, 397-400. (From the text) 82k:06015 06E05 (03G05) Imanabhan, T. (with Narlikar, Jayant V.) Quantum fluctuations in the conformally flat

and the Schwarzschild space-times. Gen. Relativity Gravitation 13 (1981), no. 7, 669-679. (Authors' summary) 82j:83027 83C45

(with Narlikar, Jayant V.) Stationary states in a quantum gravity model. Phys. Lett. A 84 (1981), no. 7, 361-363. (Authors' summary) 82h:83034

Padovan, Joseph (with Zeid, Ibrahim) On the transient solution of nondeterministic systems. J. Franklin Inst. 308 (1979), no. 5, 497-511. (Authors' summary) 82i:93065

Padučeva, E. V. Problems of logical analysis of pronouns. (Russian) Semiotics and information science, No. 15 (Russian), pp. 125-153, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (See 82a:68007) 68F20

hila, Liana Guercia (with Paracelli, Carmela) Classes of Rosenbrock-type A-stable multistep methods for the solution of a system of ordinary differential equations. (Italian. English summary) Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 2, 73-86 (1981). thors' summary) 82f:65078 65L05

es de Carvalho, Antonio (with Campos de Carvalho, Antonio Carlos) Phase plane analysis of uniform and nonuniform propagation of activity in a model of squid giant

- axon. (Portuguese summary) An. Acad. Brasil. Ciènc. 52 (1980), no. 4, 893–902. (Authors' summary) 82b:92011 92A09 (35K55)

 Lewe, P. J. (with Issaeson, David; Issaeson, Eli; Marchesin, Dan) Numerical analysis of spectral properties of coupled oscillator Schrödinger operators. I. Single and double well anharmonic oscillators. Math. Comp. 37 (1981), no. 156, 273–292. (Authors' summary) 82i:65068 65N25 (81C05)
- Paez, Jorge On the invariance of the Maxwell equations. (Span (1978), no. 1, 27-37. (Author's summary) 82br/8907 78a.25 (35020, 83A05)
- stochastically varying coefficients. J. Econometrics 13 (1980), no. 3, 341–363. (Winston T. Lin) 82x62094 62105 (62P20)
- (with Breusch, T. S.) The Lagrange multiplier test and its applications to model cification in econometrics. Rev. Econom. Stud. 47 (1980), no. 1, 239-253. (D. E. A. Giles) 82g:62139 62P20
- Pagan, G. (with Richards, P. J.) A bound for solutions of a fourth order dynamical system. Ordinary and partial differential equations (Proc. Sixth Conf., Univ. Dundee, Dundee, 1980), pp. 264-272, Lecture Notes in Math., 846, Springer, Berlin, 1981. (Authors' 70E10
- (with Richards, P. J.) A bound for solutions of a fourth-order dynamical system IMA J. Appl. Math. 27 (1981), no. 2, 229-235. (Authors' summary) 821:70032 70N05
- gani, Enrico (with Bruzzo, Ugo) Variational methods and the definition of energy in the linearized theory of general relativity. (Italian. English summary). Rio. Mat. Univ. Pa. (4) 6 (1980), 443–457 (1981). (Mauro Francaviglia) 82g:83005 83C25 (49C10, 58 83C25 (49C10, 58F05,
- ano, Marcello (with Luk, Franklin T.) Quadratic programming with M-matrices. Linea Algebra Appl. 33 (1980), 15-40. (N. I. Janev) 82e:90074 90C20
 - (with Hartley, Michael J.) On fitting distributed lag models subject to polynomial etrics 16 (1981), no. 2, 171-198. (Authors' summary) 82h:62158 62M10
- anoni, Luigi (with Paganoni Marzegalli, Stefania) Cauchy's functional equation on semigroups. Fund. Math. 110 (1980), no. 1, 63-74. (A. Smajdor) 82c:39009 39B50 (with Fenyő, István) On a system of functional equations. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 2, 109-112. (R. A. Rosenbaum) 82g:39007 39B40
- Paganoni Marzegalli, Stefania (with Paganoni, Luigi) Cauchy's functional equation on semigroups. Fund. Math. 110 (1980), no. 1, 63-74. (A. Smajdor) 82c:39009 39B50
- Page, Don N. A periodic but nonstationary gravitational instanton. Phys. Lett. B 100 (1981), no. 4, 313-315. (M. J. Perry) 82e:83020 83C45 (32L20, 53C55, 58E20) (with Geilker, C. D.) Indirect evidence for quantum gravity. Phys. Rev. Lett. 47 (1981), no. 14, 979–982. (Authors' summary) 82h:83005 83B05 (83C45)
- le Page, Émile See Le Page, Émile Page, S. S. Perfect and π-regular quotient rings. Indian J. Math. 19 (1977), no. 2, 93-98.
 - H. Tominaga) 82c:16003 16A08 (16A51)
 Orthogonality in modules. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 1-2, 173-179. (K. W. Roggenkamp) 82b:16004 16A12 (16A18, 16A53)
 Correction to: "Regular FPF rings" [Pacific J. Math. 79 (1978), no. 1, 169-176; MR
 - 80d:16012]. Pacific J. Math. 91 (1980), no. 2, 487-489. (Gertrude Ehrlich) 82i:16015 16A30 (16A52)
 - Correction to: "Regular FPF rings" [Pacific J. Math. 79 (1978), no. 1, 169-176; MR 80d:16012]. Pacific J. Math. 97 (1981), no. 2, 488-490. (Editors) 82k:16014 (16A52)
- Pagès, Alain (with Gondran, Michel) *Fiabilité des systèmes. (French) [Reliability of systems] With a preface by Maurice Magnien. Collection de la Direction des Études et Recherches d'Electricité de France [Collection of the Department of Studies and Research of Électricité de France], 39. Éditions Eyrolles, Paris, 1980. xxii + 323 pp. (Brian
- Pages, J. P. See Data analysis and informatics, 82f:62004
 Paget, D. F. A quadrature rule for finite-part integrals. BIT 21 (1981), no. 2, 212–220.
 (Author's summary) 82h:65020 65D32
- Pagli, L. (with Bongiovanni, G.; Luccio, F.) The problem of quasisorting. Calcolo 16 (1979), no. 4, 415–430 (1980). (G. P. Bhattacharjee) 82c:68038 68E05 (68E10)
 Pagliari, Carmen Approximate solution of a second-order ordinary differential equation.
- (Italian) Rend. Sem. Fac. Sci. Univ. Cagliari 49 (1979), no. 3-4, 513-533. (Rémi court) 82a:65048 65L05 Vaillan
- Paglietti, A. Can the theory of linear viscoelasticity be derived from the current
- thermodynamic theory of simple materials with fading memory? An objection. Internat. J. Solids and Structures 17 (1981), no. 2, 209-216. (R. R. Huilgol) 82g:73006 73B30 (73B20, 73F99, 76A10)
- uca Raugei, Anna Maria (with Tucci Scarselli, Sandra) Z-sequenceable groups. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), 20D99 no. 2, 97-102. (Franco Migliorini) 82g:20050
- Pagni, Mauro See Magenes, Enrico, 82a:01039
 Pagurova, V. I. (with Gurskii, V. V.) Confidence interval for the common mean of several
- normal distributions. (Russian. English summary) Teor. Verojatnost. i Primenen. 24 (1979), no. 4, 885-892. (G. Manija) 82b:62040 62F25 ēva, N. O. (with Antonova, A. M.; Gluščenko, A. A.; Gončarenko, V. M.; Kapšivii,
- О. О.; Čemeris, V. S.) ★Основы теория уравнений с частными производи 1. (Russian) [Foundations of the theory of partial differential equations. Part 1]
- Ocnomiuse задачи математической физики. [Fundamental problems of mathematical physics]. "Višča Škola", Kiev, 1977. 80 pp. (Editors) 82g:35001a 35-01 (with Antonova, A. M.; Gluščenko, A. A.; Gončarenko, V. M.; Kapšivii, O. O.; Čemeris, V. S.) ★Основы теории уравнений с частилым производильни. (Russian) [Foundations of the theory of partial differential equations] "Višča Škola", Kiev, 1978. 35-01
- 72 pp. (Editors) 82g:35001b dlings, Herbert Minimale Kerne von Darstellungen. Arch. Math. (Basel) 32 (1979), no. 5, 431-435. (Peter Landrock) 82a:20018 20C20
 - (with Laue, Reinhard) Sättigungseigenschaften lokal definierter Formationen. Arch. Math. (Basel) 35 (1980), no. 4, 305-312. (T. O. Hawkes) 82c:20043 2011/0
- Kerne und projektive Auflösungen. Mitt. Math. Sem. Giessen No. 149 (1981), 107-113. (Karin Erdmann) 82k:20018 20C20
- ske, K. (with Stucky, W.) A procedure for the common estimation of para

- ding to several treatment groups. (German: mary) Bio etrical J. 23 (1981). no. 6, 573-579. (Authors' summary) 82m:62065 62F10
- nutov, I. A. Lacunary splines with supplementary nodes. (Russian) Vyčisl. Sistemy No. 81 Metody Splain-Funkcii (1979), 21-30, 102. (S. D. Riemenschneider) 82f:41017 41A15 (41A25)
- Pai, D. V. (with Veeramani, P.) Fixed-point theorems for multimappings. Indian J. Pure Appl. Math. 11 (1980), no. 7, 891–896. (Authors' summary) 82k:54076 54H25 (54C60)
 - (with Veeramani, P.) Fixed point theorems for multimappings. Yokohama Math. J. 28 (1980), no. 1-2, 7-14. (R. E. Smithson) 82i:54079 54H25 (54C60, 54E15)
- Pai, M. A. Some mathematical aspects of power system stability by Lyapunov's method. Electric power problems: the mathematical challenge (Proc. Conf., Seattle, Wash., 1980), pp. 209-218, SIAM, Philadelphia, Pa., 1980. (Author's summary) 82b;34065 34D20
- assis, M. P. (with Issid, N. T.; Tsui, M.) Parametric resonance oscillations of flexible slender cylinders in harmonically perturbed axial flow. I. Theory. Trans. ASME Ser. E.J. Appl. Mech. 47 (1980), no. 4, 709-714. (Authors' summary) 82a:73025 73J06
- Paige, C. C. Accuracy and effectiveness of the Lanczos algorithm for the symmetric enproblem. Linear Algebra Appl. 34 (1980), 235-258. (L. Fox) 82b:65025 (15A18, 15A57, 65N99)
- (with Kourouklis, S.) A constrained least squares approach to the general Gauss-Markov linear model. J. Amer. Statist. Assoc. 76 (1981), no. 375, 620-625. (I. S. Alalouf) 82m:62147 62J05
- Paillard, L. (with Benazeth, J. C.) A "donor-element" method for convective heat transfer analysis. Numerical methods in thermal problems (Proc. First Internat. Conf., Univ. College, Swansea, 1979), pp. 1088–1102, Pineridge, Swansea, 1979. (See 82g:80001) 76R99 (65N10)
- orpe, B. A. (with Hughes, B. D.; White, L. R.) The translational and rotational drag on a cylinder moving in a membrane. J. Fluid Mech. 110 (1981), 349-372. (Authors summary) 82k:76081 76Z99 (92A09)
- nter, J. F. (with Meyer, Richard E.) New connection method across more general ing points. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 3, 335-338. (F. W. J. Olver) 82e:34060 34E20 (41A60)
- ter, J. W. (with Alcouffe, R. E.; Brandt, Achi; Dendy, J. E., Jr.) The multigrid method for the diffusion equation with strongly discontinuous coefficients. SIAM J. Sci. Statist.
- Comput. 2 (1981), no. 4, 430-454. (Authors' summary) 82k:65072 65N50

 Pais, Abraham Einstein on particles, fields, and the quantum theory. Some strangeness in the proportion (Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), 197-251, Addison-Wesley, Reading, Mass., 1980. (See 82d:83002) 01A60 (81-03)
- Paiva, M. Hypotheses underlying a continuous analysis of gas transport in a lung model. Bull. Inst. Math. Appl. 14 (1978), no. 1, 17-21. (Nadav Liron) 82e:92017
- imen, Seppo On primitive weird numbers. A collection of manuscripts related to the Fibonacci sequence, pp. 162-166, Fibonacci Assoc., Santa Clara, Calif., 1980. (Stanley J. 10A40 Benkoski) 82g:10029
 - On two theorems of Lenstra. Inform. Process. Lett. 11 (1980), no. 4-5, 224-228. (D. Lehmer) 82d:10015 10A25 (10-04) H. Lehmer) 82d:10015
- Pak, G. K. Filtration of the group of principal units of a local function field as a Galois module. (Russian) Modules and linear groups. Zap. Naučn. Sem. Leningrad. Ordel. Mat. Inst. Steklov. (LOMI) 103 (1980), 96-99, 158. (Neal Koblitz) 82g:12015 12B15 (12A45)
- Monotonicity of sums of some trigonometric series. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 12, 33-37. (V. Totik) 82e:42004 42A16 (42A32)
- Series in Bessel functions. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 4, 34-47. (F. Móricz) 82h:42033 42C10 (33A40)
- Pak, I. T. (with Akušskii, I. Ja.; Burcev, V. M.) Algorithms for multiplication using a kernel characteristic (Russian) Theory of coding and complexity of calculations (Russian), pp. 3-22, 218, "Nauka" Kazah. SSR, Alma-Ata, 1980. (M. I. Dehtjar) 82e:65048
 - (with Akušskii, I. Ja.; Burcev, V. M.) Principles for the construction of highly efficient and reliable processors in nonpositional number systems. (Russian) Theory of coding and complexity of calculations (Russian), pp. 23-38, 218, "Nauka" Kazah. SSR, Alma-Ata, 1980. (Vladimir Sleinikov) 82e:68025 68B20
 - (with Turmuhambetov, R. N.) The kernel in nonpositional quaternion arithmetic. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1980, no. 5, 74-77, 88. (Authors' ammary) 82b:94033 94B99
- Pak, Jin Suk (with Kang, Tae Ho) Generic submanifolds of a quaternionic projective space with parallel mean curvature vector. J. Korean Math. Soc. 17 (1980/81), no. 2, 175-192. (Franco Tricerri) 82g:53074 53C55 (53B35)
 - Note on antiholomorphic submanifolds of real codimension of a complex projective space. Kyungpook Math. J. 20 (1980), no. 1, 59-76. (M. Okumura) 82c:53038 (with Ki, U Hang; Kim, Young Ho) Generic submanifolds of complex projective nces with parallel mean curvature vector. Kodai Math. J. 4 (1981), no. 1, 137-151. (M. Okumura) 82k:53075 53C40
 - onic submanifolds of a quaternionic projective space. Kyungpook Math. J. 21 (1981), no. 1, 91-115. (M. Okumura) 82k:53058 53C15 (53C40)
- Pak, Namik K. (with Percacci, Roberto) On the topological equivalence of gauge and Higgs fields in the dyon sectors. Nuclear Phys. B 188 (1981), no. 2, 355-372. (Authors' summary) 82i:81094 81E10 (55P99)
- Pakes, Anthony G. Discrete dams with Markovian inputs. Stochastic Process. Appl. 11 (1981), no. 1, 57-77. (N. U. Prabhu) 82h:60192 60K30 (90B05)
- Paklina, E. P. (with Slitinskaja, S. K.) The origin of limit cycles in the Salzmann-Lorenz tem. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Na
- 1981, no. 1, 30-32, 102. (L. A. Bunimovich) 82g:58068 58F14 (70K20, 76E20, 86A10) Pakshirajan, R. P. (with Vasudeva, R.) A functional law of the iterated logarithm for a class of subordinators. Ann. Probab. 9 (1981), no. 6, 1012-1018. (Manfred Denker) 82k:60068 60F17
- Pal, M. (with Khan, T. K.) Some results on sets of positive measure. (Serbo-Croatian ary) Glas. Mat. Ser. III 16(36) (1981), no. 1, 29-37. (Detlef Plachky) 82k:28002

- Pal, Manoranjan Consistent moment estimators of regression coefficients in the presence of errors in variables. J. Econometrics 14 (1980), no. 3, 349-364. (R. W. Farebrother) 82a:62095 62J05 (62P20)
- Pal, R. B. (with Mishra, Ratan Shanker) Hypersurfaces of Riemannian manifold with

Muh.-Phys. 5 (1979), no. 1-2, 81-93. (K. Nomizu) 82t:53030 53B15

(with Mishra, Ratan Shanker) On generalized 3-structure manifolds. Ann. Fac. Sci. Univ. Nat. Zaïre (Kinshasa) Sect. Univ. Nat. Zaïre (Kinshasa) Sect. Math.-Phys. 5 (1979), no. 1-2, 95-108. (Jean-Marie Morvan) 82f:53052 53C15

irvan) 642-3002 53013 (with Mishra, Ratan Shanker) Hypersurfaces of almost hyperbolic Hermite nifolds. Indian J. Pure Appl. Math. 11 (1980), no. 5, 628-632. (Shigeru Ishihara)

821-53076 53C55

Pal, Satyabrata Some methods of construction of second order rotatable designs. Calcutta Statist. Assoc. Bull. 27 (1978), no. 105-108, 127-140 (1979). (Stratis Kounias) 82d:05035 05B15 (05B30, 62K15)

A note on partially efficiency balanced designs. Calcutta Statist. Assoc. Bull. 29 (1980), no. 115-116, 185-190 (1981). (B. C. Gupta) 82m:62177 62K10

Pal, T. K. See Singh, K. L., 82i:54082

Paladhi, Basudeb Ray The inverse problem associated with a pair of second-order differential equations. Proc. London Math. Soc. (3) 43 (1981), no. 1, 169–192. (H. Hochstadt) 82h:34015 34A55 (34B99) 34A55 (34B99)

Palais, Richard S. A topological Gauss-Bonnet theorem. J. Differential Geom. 13 (1978), no. 3, 385-398. (S. Ju. Piljugin) 82b:58002 58A05 (53C99)
 Palaiya, R. M. (with Srivastava, K. N.; Choudhary, Arati) Thermal stresses in bonded

ilar elastic half-spaces containing a penny-shaped crack at the interface. Indian J. Math. 20 (1978), no. 2, 173-186. (Authors' summary) 82b:73058 73U05 (73M05) (with Mujumdar, Prabha) Shear wave interaction with a pair of interface strips. J.

a Azad College Tech. 12 (1979), 91-99. (J. Miklowitz) 82h:73029 (45F10, 73M99)

Palamodov, V. P. Asymptotic behavior of oscillating integrals with an isolated stationary amount, V. F. Asymptotic behavior of oscillating integrats with all solutions phase point (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 6, 1321–1324. (Helmut Hamm) 82g:58083 58G15 (14B05, 32C40, 41A60)

Palanisamy, K. R. Analysis and optimal control of linear systems via single term Walsh series approach. Internat. J. Systems Sci. 12 (1981), no. 4, 443-454. (Author's summary) 93C05

(with Bhattacharya, D. K.) System identification via block-pulse functions. Internat. J. Systems Sci. 12 (1981), no. 5, 643–647. (Authors' summary) 82i:93029 93B30

wamy, V. I. (with Purushotham, C. M.) Stability of shear flow of stratified fluids with fine dust. Phys. Fluids 24 (1981), no. 7, 1224-1228. (Authors' summary) 82g:76019 76E99 (76E20, 76V05)

Palant, Ju. A. (with Bandura, V. N.) Design of an experiment with response in the form of a function. (Russian) Behavior of systems in random media (Russian), pp. 3-6, 92, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (H. Bandemer) 82e:62109 (with Beigel'zimer, Ja. E.; Kulesko, N. A.; Šiškova, N. E.) Investigation of the

properties and structure of the solution of the hydrostatic extrusion problem. (Russi English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 8, 34-36, 88. (Piero Bassanini) 82h:73042 73G99 (35Q20, 73F99)

areti, Aldopaolo The Kowai uvvoiai of Euclid and relative models in the light of abstract algebra. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 18 (1981), no. 1, 249-273. (A. G. Molland) 82m:01010 01A20 (03-03)

macroeconomic policy determination. Econometric modeling and policy design at the Federal Reserve, Part II. J. Econometrics 15 (1981), no. 1, 49-62. (See 82c:90003b)

On ideals in directed commutative BCK-algebras. Math. Sem. Notes

 Kobe Univ. 8 (1980), no. 2, 339–342. (Editors)
 82k:06014a
 06D99 (03G25)

 Some examples of commutative BCK-algebras.
 Math. Sem. Notes Kobe Univ. 8

 (1980), no. 2, 407–412. (From the text)
 82k:06015
 06D99 (03G25)

On ideals in directed commutative BCK-algebras. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 9 (1980), no. 3, 145-149. (Editors) 82h:06014b

An example of the commutative BCK-algebra. Polish Acad. Sci. Inst. Philos. Socio Bull. Sect. Logic 9 (1980), no. 4, 163-165. (From the text) 82i:06016 06D99 (03G25) with Workniskowska, Barbara) Finitely generated ideals in directed commutative BCK-algebras. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 9 (1980), no. 4,

166-169. (From the text) 82c:06024 06D99 (03G25) Ideals in BCK-algebras which are lower semilattices. Math. Japon. 26 (1981), no. 2, 245-250. (Author's summary) 82e:06011 06D99 (03G25)

(with Woźniakowska, Barbara) Finitely generated ideals in directed commutative BCK-algebras. Math. Japon. 26 (1981), no. 3, 267-269. (Authors' summary) 82g:06019 06D99 (03G25)

On ideal and congruence lattices of BCK-algebras. Math. Japon. 26 (1981), no. 5, 543-544. (Author's summary) 82m:06014 06D99 (03G25)
On a problem on BCK-algebras. Math. Japon. 26 (1981), no. 5, 545-546. (Editors)

06D99 (03G25)

Ideals in BCK-algebras which are lower semilattices. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 10 (1981), no. 1, 48-51. (Editors) 82f:06019 06D99 (03G25) Palata, Jan First-order necessary condition for the existence of optimal point in nonlinear

ning problem. (Czech summary) With a loose Russian summary. Apl. Mat. 25 (1980), no 4, 257-266 (M. Yamasaki) 82h-90105 90C30

Pal'cev, B. V. Convolution equation on a finite interval for a class of symbols having power asymptotic behavior at infinity. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 2, 322-394, 479. (V. B. Dybin) 82e:45006 45E10 (30E25, 47B35)
Generalization of the Wiener-Hopf method for convolution equations of a finite

interval with symbols having power asymptotic behavior at infinity. (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 3(11), 355-399, 495. (N. K. Karapetjanc) 82f:45005 45E10 (46F10)

ichik, M. Ya. See Pal'čik, M. Ja.

Pal'čik, E. M. p-factor groups of finite groups. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 2, 53-59, 141. (V. V. Kabanov) 82g:20044

- Pal'čik, M. Ja. (with Fradkin, E. S.) Recent developments in conformal invariant quantu field theory. Phys. Rep. 44 (1978), no. 5, 249-349. (Authors' summary) 82c/81070
- Paldus, J. (with Boyle, M. J.) Particle-hole formulation of the unitary group approach to the many-electron correlation problem. I. State construction and classification. Phys. Rev. A (3) 22 (1980), no. 6, 2299-2315. (Authors' summary) 82f:81095a 81H05 (22E70, 81C40)

(with Boyle, M. J.) Particle-hole formulation of the unitary group approach to th nany-electron correlation problem. II. Matrix element evaluation. Phys. Rev. A (3) 22

(1980), no. 6, 2316–2339. (Authors' summary) 82f:81095b 81H05 (22E70, 81C40) Differencial'nye Uravnenija 17 (1981), no. 1, 107-114, 198. (M. Ju. Vasil'čik) 82j:35054

sánchez-Palencia, Enrique See Sánchez-Palencia, Enrique
Palermo, P. C. (with Bartezzaghi, E.; Colorni, A.) A search tree algorithm for plant location problems. European J. Oper. Res. 7 (1981), no. 4, 371-379. (Authors' sums 82h:90033 90B05

Paley, Cavdar A trace formula for realizations of Lie superalgebras with creation and ihilation operators. C. R. Acad. Bulgare Sci. 33 (1980), no. 9, 1195-1197. (Hans Tilgner) 82:17004 17A70 (81D05)
Pally, Péter Pal (with Pudlák, Pavel) Congruence lattices of finite algebras and intervals in

subgroup lattices of finite groups. Algebra Universalis 11 (1980), no. 1, 22-27. (Ralph Freese) 82g:08003 08A30 (06B15, 08A60, 20E15)

Palis, Gilda de la Rocque Linearly induced vector fields and R²-actions on spheres. J. Differential Geom. 13 (1978), no. 2, 163-190. (Carmen Chicone) 82f:58050

Palis, J. (with de Melo, W.) Moduli of stability for diffeomorphisms. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 318-339, Lecture Notes in Math., 819, Springer, Berlin, 1980. (Carmen Chicone) 82b:58063 58F14 (58F10)

Palistrant, A. F. (with Zamorzaev, A. M.) Geometric classification of P-symmetries. 58F14 (58F10)

(Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 4, 856-859. (K. Burian) 82g:51019 51F15 (82A60)

Paljutin, E. A. Categorical Horn classes. I. (Russian) Algebra i Logika 19 (1980), no. 5, 582-614, 617. (M. A. Taïclin) 82k:03038

-614, 617. (M. A. Taiclin) 82k:03038 03C35 (03C45, 08C10)
A description of categorical positive Horn classes. (Russian) Algebra i Logika 19 (1980), no. 6, 683-700, 746. (M. A. Taïclin) 82k:03039 03C35 (08C10)

(with Seese, Detlef G.; Taïmanov, A. D.) A remark on the topologization of algebraic structures. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 4, 617-618. (Authors' summary) 82i:54083 54H99 (08A99)

Paljutkin, V. G. (with Berezans'kii, Ju. M.; Berezin, F. A.; Bogoljubov, N. N.; Vainerman, L. Ĭ.; Dalec'kii, Ju. L.; Kirillov, A. A.; Hacet, B. I.; Eldel'man, S. D.) Georgii Isaakovič Kac. (Russian) Uspehi Mat. Nauk 34 (1979), no. 2(206), 185-188. (Editors) 82d:01026

Asymptotic and analytic properties of a solution of the Sturm-Liouville equation. (Russian) Qualitative investigations of functional differential equations (Russian), pp. 100–111, 185, "Naukova Dumka", Kiev, 1980. (M. M. Skriganov) 82h:34026 34B25 (34E20)

On zeros of functions represented by series of simple fractions. (Russian) Ukrai Mat. Ž. 32 (1980), no. 6, 763-772. (R. P. Boas, Jr.) 82h:30006 30C15 (30D35)
Palka, Bruce (with Näkki, Raimo) Quasiconformal circles and Lipschitz classes. Con

Math. Helv. 55 (1980), no. 3, 485-498. (Donald K. Blevins) 82a:30029

Palka, Zbigniew (with Karoński, Michał) Addendum and erratum to the paper: "On the size of a maximal induced tree in a random graph" [Math. Slovaca 30 (1980), no. 2, 151-155; MR 81k:05093]. Math. Slovaca 31 (1981), no. 1, 107-108. (Editors) 82e:05082 05C35 (05C05, 60C05)

Palla, László (with Forgács, Peter; Horváth, Zalán) Exact multimonopole solutions in the Bogomolny-Prasad-Sommerfield limit. Phys. Lett. B 99 (1981), no. 3, 232-236. (D. I. Olive) 82f:81943a 81E10 (81G05, 83C99)

(with Forgacs, Peter; Horvath, Zalan) Errata: "Exact multimonopole solutions in the Bogomolny-Prasad-Sommerfield limit". Phys. Lett. B 101 (1981), no. 6, 457. (Editors) 81E10 (81G05, 83C99)

(with Forgács, Peter; Horváth, Zalán) Generating monopoles of arbitrary charge by Bäcklund transformations. Phys. Lett. B 102 (1981), no. 2-3, 131–135. (Masatsugu Minami) 82i:81080 81E10 (58A15)

dino, Dario An analysis of some models of set theory. (Italian. English s Mathematics review (Italian), pp. 49-62, Tilgher, Genoa, 1980. (E. Mendelson) 82d:03083 03E35 (03-02, 03E25)

See also Mathematics review, 82h:03005

eu-Pallas, Nicholas See Ionescu-Pallas, Nicholas

Pallaschke, Diethard On the existence of a representative household. Functional differential systems and related topics (Proc. First Internat. Conf., Błażejewko, 1979), pp. 238-243, Higher College Engrg., Zielona Góra, 1980. (Wilhelm Gehrig) 82b:90025 (with König, Hermann) On Khachian's algorithm and minimal ellipsoids. Num

Math. 36 (1980/81), no. 2, 211-223. (Authors' summary) 82c:65036 65K05 (90C05) eschi, Marino (with Lanteri, Antonio) On elliptic scrolls. (Italian. English s Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 87-94 (1980). (D. Gallarati) 82g:14038 14J25

(with Beltrametti, Mauro) On the vanishing of certain cohomology groups of a normal variety. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 3-4, 239-247 (1980). (F. Gherardelli) \$2m:14023 14J30

Remarks on the vanishing of the first irregularity index of a divisor. (Italian. English summary) Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur. 113 (1979), no. 5-6, 413–423. (Werner Kleinert) 82h:14005 14C20 (14F15)

Palló, Gábor Josef Diner-Dénes and Lenin's views of scientific revolution. (Czech) Recolutionary developments in the field of science and engineering (Conf., Liblice, 1979) (Czech), pp. 39-45, Prace Dějim. Přírod. Věd, 13, ČSAV, Prague, 1980. (See 82g:01002)

- Palm, Franz (with Zellner, Arnold) Rejoinder: "Large sample estimation and testing procedures for dynamic equation systems" [J. Econometrics 12 (1980), no. 3, 251–283; MR 81g:62156]. J. Econometrics 17 (1981), no. 1, 131–138. (Authors' summary) 62P20
 - nild, John Malcolm; et al., 82m:62245a
- m. G. On the storage capacity of an associative memory with randomly distributed storage elements. Biol. Cybernet. 39 (1980/81), no. 2, 125-127. (Author's summary) 68A05 (92A25)
- ma, Andre (with Lefevre, Claude) Simplification procedures for a probabilistic choice odel. J. Math. Sociol. 8 (1981/82), no. 1, 43-60. (Authors' summary) 82m:62004 62A99
- nik Drehzykliden 4. Ordnung (Typus I) des einfach isotropen Raumes. ad Serbo-Croatian summaries) Glas. Mat. Ser. III 15(35) (1980), no. 1, (English and Serbo-Croatian sur 133-148. (K. Strubecker) 82f:51010 51F10
- Plückersches Konoid und Stei ersche Fläche als Flächen des einfach isotropen s. (Serbo-Croatian summary) Rad Jugoslav. Akad. Znan. Umjet. No. 386 (1980), 73-87. (K. Strubecker) 82h:51034 51N20
- ne, Johannes Sinn, Bedeutung, Wert—grundlegende Elemente der Formalisierung von Sprachen. Begriffsschrift—Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 307-318, Friedrich-Schiller-Univ., Jena, 1979. (Ignacio Angelelli) 03A05 (03B65)
- er, John Complex structures and external fields. Arch. Ratio l Mech. Anal. 75 (1980/81), no. 1, 31-49. (John L. Challifour) 82h:81078 81E05 (22D25)
- Euclidean Fermi fields. J. Funct. Anal. 36 (1980), no. 3, 287–312. (Dietrich A. Uhlenbrock) 82b:81064 81E10 (47B25)
- Uhlenbrock) 32x83064 81E10 (4/B25)
 mer, Kenneth J. Reducibility of almost periodic linear systems. Ordinary and partial differential equations (Proc. Sixth Conf., Unio. Dundee, Dundee, 1980), pp. 273–279, Lecture Notes in Math., 846, Springer, Berlin, 1981. (J. Kato) 822:34044 34C20 mer, Philip L. Stability of contracting pancakes. Monthly Notices Roy. Astronom. Soc. 197 (1981), no. 1, 167–178. (Author's summary) 82:85002 85A05 (76E20) mgren, Juni The Fisher information matrix for log linear models arguing conditionally
- on observed explanatory variables. Biometrika 68 (1981), no. 2, 563-566. (Author's nary) 82h:62089 62H17 (62B10)
- Palmieri, Giuliana On nonlinear elliptic problems with "rapidly" or "slowly" increasing coefficients. (Italian. English summ nary) Ann. Mat. Pura Appl. (4) 126 (1980), 117-147 55 35J65 (1981). (Sadakazu Aizawa) 82i:35065
- Julian I. Relative equilibria of the n-body problem in E^4 . J. Differential Eq. 38 (1980), no. 2, 278-300. (Robert L. Devaney) 82c:70016 70F10 (58E05, 58F)
 Homographic solutions of the n-body problem in E⁴. J. Differential Equation 70F10 (58E05, 58F05)
 - (1981), no. 2, 279-290. (Donald G. Saari) 82j:70009a 70F10 (58F05) Central configurations of the restricted problem in E4. J. Differential East (1981), no. 2, 291-302. (Donald G. Saari) 82j:70009b 70F10 (58E05, 58F05)
- mov, V. A. Integral methods for investigating the vibration of comple systems. (Russian. English summary) Adv. in Mech. 2 (1979), no. 4, 3-24. (From the 73K12 (70K99, 73D99) text) 82a:73033
- esada Paloma, Vicente See Quesada Paloma, Vicente rcia Palomares, U. M. See Garcia Palomares, U. M.
- ous, Jan (with Fridman, A. M.; Paša, I. I.) Collisionless shock-waves in stellar systems.

 Monthly Notices Roy. Astronom. Soc. 194 (1981), no. 3, 705-710. (Authors' summary
- 85A05 (76E20) eams, Gavril A Stone-Weierstrass theorem for Lindenstrauss-Wulbert subspaces with weights. (Romanian. English summary) Stud. Cerc. Mat. 32 (1980), no. 5, 559-566. (J.
- nkö) 82m:41035 41A65 (46E10) mbo, Annunziata Wave propagation and breaking in electrically polarizable media. (German summary) Acta Mech. 40 (1981), no. 3-4, 141-146. (Author's summary) (German su
- 78A25 (35Q20) Sur les ondes non linéaires dispersives et dissipatives en relativité restreinte. (English
- summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 3, 231-234. (Author's summary) 82i:83005 83A05 (35B99)

 Pan, Cheng Biao A simplification of the proof of Levinson's theorem. (Chinese. English ry) Acta Math. Sinica 22 (1979), no. 3, 344-353. (Editors) 82e:10070
 - (30C15) On the upper bound of the nun ber of ways to represent an even integer as a sum of two primes. Sci. Sinica 23 (1980), no. 11, 1368-1377. (W. Schwarz) 82j:10078
- (10J15) Pan, Cheng Dong A new mean value theorem and its applications. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 1, 149-160. (Author's summary) 82a:10050
- 10H25 (10H32) (with Chen, Jing Run) The exceptional set of Goldbach numbers. I. Sci. Sinica 23
- (1980), no. 4, 416-430. (H. L. Montgomery) 822:10060 10115

 Pan, Ching Tsai (with Chao, K. S.) Multiple solutions of a class of nonlinear equations 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 577–580, IEEE, New York, 1979. (See **82e:94002**) 65H10
- Pan, H. H. (with Hohenstein, R. M.) A method of solution for an ordinary differential equation containing symbolic functions. Quart. Appl. Math. 39 (1981/82), no. 1, 131–136. (Vlajko Lj. Kocić) 82d:34004 34A05 (34A30) 131-136. (Vlajko Lj. Kocić) 82d:34004
- V. Ya. (with Miranker, Willard L.) Methods of aggrega Linear Algebra Appl. 29 (1980), 231-257. (L. Berg) 82d:65036 65F10 (15A06, 65B05)
 - Trilinear aggregating with implicit canceling for a new acceleration of matrix multiplication. Comput. Math. Appl. 8 (1982), no. 1, 23-34. (Author's summary) 82m:65038 65F99 (68C25)
- Pan, Zhong Xiong Error estimates for schemes of one-dimensional MHD equations with Lagrangian coordinate. (Chinese: English summary) Numer. Math. J. Chinese Univ. 3 (1981), no. 2, 149–164. (Author's summary) 82m:65114 65P05 (76W05)
- agiotopoulos, P. D. Optimal control of unilateral structural analysis problems.

 Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 545–562, North-Holland, Amsterdam, 1980. (See 82g:93003) 49A29
 - Dynamic and incremental variational inequality principles, differential inclusions and their applications to co-existent phases problems. (German summary) Acta Mech. 40 (1981), no. 1-2, 85–107. (P. G. Ciarlet) 32;73014 73C50 (49A29)

- Nonconvex superpotentials in the sense of F. H. Clarke and applications. Mech. Res.
- Comm. 8 (1981), no. 6, 335-340. (W. Velte) 82m:73029 73205 (58C20)

 ahov, É. S. Inverse problem in two spectra for a differential operator with a singularity at zero. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 10, 6-10. (Alexander Alenicyn) 82f:34011
- s, J. A characterization of a general class of multivariate discrete distributions. Analytic function methods in probability theory (Proc. Colloq. Methods of Complex Anal. in the Theory of Probab. and Statist., Kossuth L. Univ. Debrecen, Debrecen, 1977), pp. 243-252, Colloq. Math. Soc. János Bolyai, 21, North-Holland, Amster
- (Author's introduction) 82g:62077 62H05 ustjuk, L. S. (with Mināllenko, V. E.; Anpilogova, V. A.; Kovalev, S. N.; Levina, Ž. G.; Malinovskaja, V. L; Oleščuk, T. Ju.; Puhov, I. K.; Sedleckaja, N. I.) ★Сборим задач по начетательной теометрии с едементами программирования. (Russian) [A collection of problems in descriptive geometry with elements of programming] Second edition, revised and augmented. "Višča Škola", Kiev, 1980. 208 pp. (E. Otto) 82e:51004
- 51-01 (00A07) asjuk, V. V. (with Andreikiv, A. E.; Dubeckii, S. A.) A mixed problem of elasticity theory for a half-space with several piecewise-smooth lines of separation of boundary conditions. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 10, 41-45, 94. (M. O. Bašeleišvili) 82e:73018 73035
 - (with Savruk, M. P.; Nazarčuk, Z. T.) Diffraction of a plane electromagnetic wave by a periodic system of curvilinear screens (H-polarization). (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 3, 57-60, 95. (Authors' summary) 78A45
 - (with Savruk, M. P.; Nazarčuk, Z. T.) Diffraction of electromagnetic waves on an arbitrary profile cylinder containing a system of curvilinear screens. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 4, 61-65, 97. (Authors' summary) 82e:78018 78A45
- ovič, V. O. Estimate of the remain nder of a cubature formula with fixed nodes for functions of a low order of differentiability. (Russian) Questions of the theory of the approximation of functions (Russian), pp. 128–133, 198, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (H. M. Möller) 82m:65020 65D32 (41A55)
 - Estimate of the remainder of a cubature formula of Markov type in terms of the best approximation for functions of a low order of differentiability. (Ukrainian. English and approximation in functions at a 57 of an extra section of a first sect
- ayiotopoulos, J.-C. Recherche des collections spéciales maximales du groupe $G=G(2)\times G(k)$, k pair. Arch. Math. (Brno) 16 (1980), no. 1, 45–50. (J. D. Dixon) 20B25 (05B15)
- Solving linear programs in polynomial-time. J. Inform. Optim. Sci. 2 (1981), no. 2,
- 161-168. (Author's summary) 82j:90042 90C05 Probabilistic analysis of solving the assignment problem for the traveling salesman lem. European J. Oper. Res. 9 (1982), no. 1, 77-82. (Author's summary) 82m:90072 90B10 (90C08)
- Panayotounakos, D. E. (with Theocaris, P. S.) Large elastic deformations in thin cantilever rods due to concentrated loadings. (French and German summaries) Internat. J. Non-Linear Mech. 16 (1981), no. 1, 53-63. (Authors' summary) 82d:73039 (73G05)
- (with Theocaris, P. S.) Nonlinear elastic analysis of planar curved beams loaded by co-planar concentrated forces. (German summary) J. Elasticity 11 (1981), no. 4, 429-437. (Authors' summary) 82k:73045 73K05
- (Authors summary) 8a2:3905 (3NO)

 Pančev, S. (with Evtimov, S. N.) An example of topographical solitary waves over a sinusoidal relief. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 10, 1353–1355. (A. S. Alekseev) 82i:86003 86A05 (35Q20)
- Panchanakesan, N. (with Khanal, U.) Perturbation of the de Sitter-Schwarzschild universe with massless fields. Phys. Rev. D (3) 24 (1981), no. 4, 829-834. (Authors' summary) 82i:83036a 83C47
- (with Khanal, U.) Production of massless particles in the de Sitter-Schwarzschild universe. Phys. Rev. D (3) 24 (1981), no. 4, 835-838. (Authors' summary) 82i:83036b
- nčiškin, A. A. Dirichlet series connected with modular forms of integral and half-integral weight. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 43 (1979), no. 5, 1145-1158, 1198. (K.-B. Gundlach) 82a:10031 10D24 (10D12)
- a, B. B. (with Babu, A. C.) Remarks on a fixed point theorem. Math. Ed. (Siwan) 14 (1980), no. 4, 71-73, (Sehie Park) 82c:54039
- a, Rekha See Srivastava, Rekha
- nde, G. N. Numerical modelling of rocks-possibilities and problems. Numerical methods in geomechanics, Aachen 1979 (Proc. Third Internat. Conf., Aachen, 1979), Vol. IV, pp. 1341-1356, Balkema, Rotterdam, 1980. (R. D. Bhargava) 82d:73075 73N99
- wde, H. D. (with Singh, Baldau) Bianchi identities and the projectively flat special Kawaguchi space. (Turkish summary) İstanbul Üniv. Fen Fak. Mecm. Ser. A 41 (1976), 77-86 (1981). (M. Yoshida) 82f:53039 53B40
 - (with Khan, T. A.) The commutation formulae in n-dimensional special Kawaguchi space. (Turkish summary) İstanbul Üniv. Fen Fak. Mecm. Ser. A 41 (1976), 87-97 (1981). (M. Yoshida) 82f:53040 53B40
 - (with Gupta, K. K.) On an R-⊕ recurrent Finsler space of second order with mmetric connection. Acta Cienc. Indica 6 (1980), no. 1, 1-6. (S. S. Singh) 53B40
 - (with Gupta, K. K.) An R-⊕ recurrent Finsler space of third order. Acta Cienc. Indica 6 (1980), no. 3, 177-183. (I. Ghinea) 82g:53036 53B40
 - (with Dwivedi, B. D.) Decomposition of curvature tensor of second kind in a birecurrent areal space. Publ. Math. Debrecen 28 (1981), no. 1-2, 53-57. (R. Miron) 53B40
- Pandei, G. S. On convergence factors of Fourier series in ultraspherical functions on a sphere. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 4, 561-566. (N. T. Anisimova) 42C05 (42C10)
- Pandey, A. (with Brody, T. A.; Flores, J.; French, J. B.; Mello, P. A.; Wong, S. S. M.) Random-matrix physics: spectrum and strength fluctuations. Rev. Modern Phys. 53 (1981), no. 3, 385-479. (Authors' summary) 82f:81090 81G35

- Pandey, B. D. (with Sharma, Rishi Ram; Rai, Arisudan) On the global behaviour of sonic waves of arbitrary shape in gas flows with vibrational relaxation. Acad. Roy. Belg. Bull. Cl. Sci. (5) 66 (1980), no. 3, 256-264. (Tai Ping Liu) 824:76066 76N15 (35L67)
- ndey, B. M. (with Tiwary, A. K.; Paramhans, S. A.) Generalizations of quasi-injectivity, Progr. Math. (Allahabad) 13 (1979), no. 1-2, 31-40. (K. A. Byrd) 82c:16022 16A5.
- Pandey, B. N. (with Singh, Padmakar) On estimation of common scale in exponential distributions. Calcutta Statist. Assoc. Bull. 28 (1979), no. 109-112, 151-155. (I. A. Melamed) 82b:62034 62F11
- Pandey, Ghan Shyam Product-cum-power estimators. Calcutta Statist. Assoc. Bull. 29 (1980), no. 113-114, 103-108. (Chien-Pai Han) 82d:62030 62D05
- ndey, H. B. (with Mishra, Ratan Shanker) Integrability of a manifold equipped with a certain structure. Bull. Calcutta Math. Soc. 70 (1978), no. 5, 327-329. (K. L. Duggal) 82a:53044 53C15 (53C10)
 - Cartesian product of two manifolds. Indian J. Pure Appl. Math. 12 (1981), no. 1,
- 55-60. (V. C. Gupta) 82g:53043 53C15

 Pandey, J. P. (with Kumar, Awdhesh) On the existence of special projective affine motion in a recurrent Finsler space. (Turkish summary) İstanbul Üniv. Fen Fak. Mecm. Ser. A 41 (1976), 107-118 (1981). (B. B. Sinha) 82k:53043 53B40
- Pandey, Kanti (with Mishra, Ratan Shanker) Gradients behind three-dimensional pseudostationary shock-waves in radiating gases. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 3, 193-200. (Authors' summary) 82f:76021 76L05 (35L67, 53A05)
- ndey, M. (with Singh, Jokhan) Estimation of variance of a normal population. Comm. Statist. A—Theory Methods 10 (1981), no. 18, 1879–1884. (Authors' summary) 82j:62018
- Pandey, P. N. Groups of conformal transformations in conformally related Finsler manifolds. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 65 (1978), no. 6, 269-274 (1979). (F. Brickell) 82a:53032 53B40
 - A recurrent Finsler manifold admitting special recurrent transformations. Progr.
- Math. (Allahabad) 13 (1979), no. 1-2, 85-98. (I. Ghinea) 82f:53041 53B40

 adey, R. B. (with Kumar, D.; Barma, M.) Critical properties of diluted anisotropic magnets near percolation threshold. Phys. Rev. B (3) 23 (1981), no. 5, 2269-2277. (Authors' summary) 82c:82069 82A42
- Pandey, Ram Nakshatra (with Singh, O. P.) Some properties and expan polynomial set $(M_{n,n}(x,y))$. (Turkis summary) Istanbul Tek. Ünio. Bül. 33 (1980), no. 1, 1–13. (R. C. Varma) 82d:33022 33A65
- (with Singh, O. P.) Generalized polynomial set (M_{a,n}(x,y)). Bull. Inst. Math. Acad. Sinica 9 (1981), no. 1, 75–92. (C. L. Parihar) 82g:33032 33A65 (33A35) dey, S. B. (with Mishra, Ratan Shanker) On almost contact metric manifolds (Nijenhuis
- tensor). Ganita 30 (1979), no. 1-2, 20-26. (S. S. Singh) 82h:53051 53C15
- Pandey, S. K. (with Ray, S. K.) On the distribution of sample mean from a mixture of probability distributions. Pure Appl. Math. Sci. 13 (1981), no. 1-2, 31-34. (Authors' summary) 824:62039 62E15
- Pandey, S. N. (with Tiwari, Ramji) Conformally flat spherically symmetric charged perfect fluid distribution in general relativity. Indian J. Pure Appl. Math. 12 (1981), no. 2, 261-264. (Authors' summary) 82d:83039 83C55
- dian, V. S. Soundara Construction of partially balanced n-ary designs using difference sets. Ann. Inst. Statist. Math. 32 (1980), no. 3, 445-464. (A. K. Nigam) 82d:05029 05B05 (05B10)
 - Some properties for balanced n-ary designs. Estadistica 35 (1981), no. 124, 77-86. (Sanpei Kageyama) 82m:62178 62K10 (05B05)

 dit, R. (with Forgacs, G.; Ruján, P.) Finite-size calculations for the kinetic Ising model.
- Phys. Rev. B (3) 24 (1981), no. 3, 1576-1578. (Authors' summary) 82g:82035 (82A25, 82A68)
- dit, S. G. On differential systems containing measure. (Italian summary) Boll. Un. Mat.
 - Ital. A (5) 17 (1980), no. 3, 451–457. (S. Leela) 82e:34012 34A30 (34A34)
 Differential systems with impulsive perturbations. Pacific J. Math. 86 (1980), no. 2, 553-560. (S. Leela) 82e:34053 34D20 (34D10)
 - Systems described by differential equations containing impulses: existence and cness. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 6, 879-887. (John R. Graef)
- 82;34006 34A10 34A10 All Phys. Sci. 15 (1981), 12 Math. Phys. Sci. 15 (1981), 12 Math. Phys. Sci. 15 (1981), 13 Math. Phys. Sci. 15 (1981), 14 Math. Phys. Sci. 15 (1981), 15 Math. Phys. Phys. Phys. Phys. Phys. Phys. Phys. Phys. Phys. Phys. Phys. Ph no. 3, 209-224. (Authors' summary) 82i:90032
- Idolfi, Luciano Canonical realizations of systems with delayed controls. Ricerch Automat. 10 (1979), no. 1, 27–37 (1980). (Author's summary) 82e:93023 931
- Output stabilization of a class of boundary value control systems. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 421-430, Lecture Notes in Control and Information Sci., 22, Springer, Berlin, 1980. (A. J. Pritchard) 82c:93018
- Controllability and stabilization for linear systems of algebraic and differential equations. J. Optim. Theory Appl. 30 (1980), no. 4, 601-620. (Angelo Favini) 82e:93011 93B05 (93D15)
- On the regulator problem for linear degenerate control systems. J. Optim. Theory Appl. 33 (1981), no. 2, 241-254. (Stefan Mirică) 82f:49002 49A10
- Pandov, V. (with B"čvarov, S.; Paraskov, C.) Sufficiency of the moment condition for an equilibrium of an arbitrary system of forces. (Bulgarian. Russian and English summaries) Godišnik Visš. Učebn. Zaced. Tehn. Meh. 10 (1975), no. 2, 51-60 (1978). (Authors' summary) 82b:70001 70A05 (51N05)
- dres, Dave, Jr. Quantum unified field theory from enlarged coordinate transformation oup. Phys. Rev. D (3) 24 (1981), no. 6, 1499-1508. (Author's summary) 82h:83071 83E99 (81G25)
- Paneitz, S. M. (with Segal, I. E.) Quantization of wave equations and Hermitian structures in partial differential varieties. Proc. Nat. Acad. Sci. U.S.A. 77 (1980), no. 12, part 1, 6943-6947. (Authors' summary) 82g:81040 81D25 (35L70, 58D25, 58F06, 81E05) (with Segal, I. E.; Jakobsen, Hans Plesner; Ørsted, B.; Speh, Birgit) Covariant chronogeometry and extreme distances: elementary particles. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 9, part 1, 5261-5265. (Authors' summary) 82i:81150
- (22E70, 83D05, 83F05) ejah, B. P. On the theory of the solvability of the oblique derivative problem. (Rus Mat. Sb. (N.S.) 114(156) (1981), no. 2, 226-268, 335. (V. A. Kondrat'ev) 82i:35055

- Panek, Carl (with Kalker, J. J.) Three-dimensional contact of a rigid roller traversing a viscoelastic half space. J. Inst. Math. Appl. 26 (1980), no. 3, 299-313. (Authors summary) 822:73054 73T05 (73F15) 73T05 (73F15)
- A thermomechanical example of auto-oscillation. Trans. ASME Ser. E J. Appl.
- Mech. 47 (1980), no. 4, 875–878. (Author's summary) 82c:80010 80A20 (73U05)
 Panférov, B. A. Nilpotent groups with lower central factors of minimal ranks. (Russian)
 Algebra i Logika 19 (1980), no. 6, 701–706, 746. (S. M. Vovsi) 82j:20077 20F18
- Panfilov, N. G. On multipoint boundary value problems for linear systems of differential singularly perturbed equations. (Russian) Ukrain. Mat. Z. 32 (1980), no. 2, 234-239, 286. (A. M. Il'in) 82b:34024 34B10 (34E15)
- 250. (A. B. II III) and a second of the seco
 - A new and efficient algorithm for a class of portfolio selection problems. Oper. Res. 28 (1980), no. 3, part 2, 754-767. (R. Chandrasekaran) 82b:90014
 - A parametric linear complementarity technique for optimal portfolio selection with a risk-free asset. Oper. Res. 28 (1980), no. 4, 927-941. (Author's summary) 82g:90016 90A09 (90C33)
 - A column generation technique for the computation of stationary points. Math. er. Res. 6 (1981), no. 2, 213–224. (Author's summary) 82k:90102 90C30 Oper. Res. 6 (1981), no. 2, 213-224. (Author's summary) 82k:90102
 - (with Lee, Patrick S. C.) A parametric linear complementarity technique for the computation of equilibrium prices in a single commodity spatial model. Math.

 Programming 20 (1981), no. 1, 81-102. (Ikuyo Kaneko) 82a:90171 90C33 (90A14)
 - An equivalence between two algorithms for quadratic programming. Math. Programming 20 (1981), no. 2, 152–165. (Author's summary) 82b:90068 900'20
- igratz, Heinrich (with Weinrichter, Hans) Pseudorandom number generator based on binary and quinary maximal-length sequences. IEEE Trans. Comput. 28 (1979), no. 9, 637-642. (Authors' summary) 82j:65002 65C10 (10K10)
- Panin, I. A. Rationality of nets of conics with a curve of degeneration of degree five and even theta-characteristic. (Russian) Modules and linear groups. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 103 (1980), 100-105, 158-159. (I. Dolgachev) 82g:14040 14J30
- Pankov, A. A. Expandability of holomorphic Noetherian operator-valued functions. Russian. Georgian and English summaries) Soobië. Akad. Nauk Gruzin. SSR 97 (1980), no. 3, 549–551. (Jürgen Leiterer) 82e:47026 47A68 (32E25, 47A53)
- Solutions of evolution variational inequalities that are almost periodic in the sense of Besicovitch. (Russian) Ukrain. Mat. Z. 33 (1981), no. 1, 91-96. (Françoise Berquier)
- 82с:49022 49A29 (35К85)

 Ранкоv, Р. S. ★Доказательные вычисления на электронных вычислительных манинах. (Russian) [Demonstrative calculations on a computer] "Ilim", Frunze, 1978. 179 pp. (RŽMat 1978:9 B694) 82a:65003 65-04
 - An algorithm of conclusive search for the extremum using the domain minorant. (Russian) Izv. Akad. Nauk Kirgiz. SSR 1979, no. 6, 12-13, 85. (M. Vlach) 82j:65041
- (with Imanaliev, M. I.) Generalized solutions of integral equations of the first kind and their representation by Fourier series. (Russian) Izv. Akad. Nauk Kirgiz. SSR 1980, no. 4, 3-8, 101. (C. Corduneanu) 82c:45005 45B05
- Pankratova, N. D. (with Grigorenko, Ja. M.; Vasilenko, A. T.) Solution of problems of statics of laminated shells in a three-dimensional formulation. (Russian. English summary) Vyčisl. Prikl. Mat. (Kiev) No. 43 (1981), 123-132, 160. (Authors' summary)
- 73L99 Panofsky, Wolfgang K. H. Special relativity theory in engineering. Some strangeness in the proportion (Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979).
- 94-105, Addison-Wesley, Reading, Mass., 1980. (See 824:83002) Pant, R. P. (with Singh, S. L.) A common fixed point theorem in a space with two metrics. Pure Appl. Math. Sci. 14 (1981), no. 1-2, 35-37. (Silvio Massa) 82e:54059
- Pantaleo, Mario See Relativity, quanta, and cosm thought of Albert Einstein, 82b:83002 logy in the development of the scientific
- Pantano, P. (with Brugarino, T.) The integration of Burgers and Korteweg-de Vries equations with nonuniformities. Phys. Lett. A 80 (1980), no. 4, 223-224. (Authors' 35020
 - (with Brugarino, T.) Two-dimensional solitons in shallow water of variable depth. Phys. Lett. A 86 (1981), no. 9, 478-479. (Authors' summary) 82m:76009 76B25
- pev, A. D. (with Litvinov, V. G.) Optimization problem for plates of variable thickness. Izv. Akad. Nauk SSSR Meh. Toerd. Tela 15 (1980), no. 2, 174-181 (Russian); translated as Mech. Solids 15 (1980), no. 2, 140-146. (Vadim Komkov) 82f:49036 49D30 (49A22, 73K40)
- n, David M. Mathematical reconstruction techniques in computer axial tomography. Math. Sci. 6 (1981), no. 2, 87-102. (Author's summary) 82h:92008 92A07 (44A20)
- Panwalkar, S. S. (with Smith, M. L.; Woollam, C. R.) Counterexamples to optimal permutation schedules for certain flow shop problems. Naval Res. Logist. Quart. 28 (1981), no. 2, 339-340. (Authors' summary) 821:90050 90B35
 nzarella, A. (with Compagno, G.; Persico, F.) A new phase transition in the Dicke
- Hamiltonian. Phys. Lett. A 80 (1980), no. 2-3, 125-128. (Authors' summary) 82h:81153 81K05 (82A25)
- Panzeca, T. (with Mazzarella, C.) On work-hardening adaptation of discrete structures subjected to dynamic forces in the presence of second-order geometric effects. J. actural Mech. 9 (1981), no. 1, 29-49. (Authors' summary) 82i:73042
- one, Rafael (with Benedek, Agnes Ilona) An example of Bessel expansion arising from an anomalous boundary differential problem. Null series: two applications, pp. 32–4.
 Notas Algebra Anal., 8, Univ. Nac. del Sur, Bahia Blanca, 1979. (Editors) 82g:35019 35C10
 - (with Benedek, Agnes Ilona) *On inverse eigenvalue problems for a second-order differential equation with parameter contained in the boundary conditions. Notas de Algebra y Análisis [Notes on Algebra and Analysis], 9. Universidad Nacional del Sur, Instituto de Matemática, Bahía Blanca, 1980. 13 pp. (S. J. Lee) 82c:34023 34B25
- Pao, C. V. Asymptotic behavior of neutron transport in a slab with moving boundaries. Integral Equations 2 (1980), no. 4, 281-298. (Edward W. Larsen) 82c82111 82A

ptotic stability of reaction-diffusion systems in chemical reactor and in theory. J. Math. Anal. Appl. 82 (1981), no. 2, 503-526. (Author's st Asymp 80A30 (35K35, 92A09)

Coexistence and stability of a competition-diffusion system in population Math. Anal. Appl. 83 (1981), no. 1, 54-76. (O. Diekmann) 82m:35077 (92A15, 92A17)

ola, Robert A. See Di Pac da, Robert A.

 Producci, S. (with Leibovich, S.) The instability of the ocean to Langmuir circulations. J. Fluid Mech. 102 (1981), 141-167. (Authors' summary) 824:86002 86A05
 Pap, Endre (with Pilipović, Stevan) A sequential theory of some semigroups in special spaces of generalized functions. Mat. Vesnik 3(16)(31) (1979), no. 3, 315-326. (Ioana escu) 82i:47067 47D05 (46F10)

An application of J. Mikusiński's lemma on convergence. (Serbo-Croatian su Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 59-65 (1980). (R. K. Bose) 46F05 (44A40)

On the ZED-integral. (Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 67-73 (1980). (M. Z. Berkolaiko) 821:28012 28B10

Integration of functions with values in complete semivector space. Measure theory, Oberwolfach 1979 (Proc. Conf., Oberwolfach, 1979), pp. 340-347, Lecture Notes in Math., 794, Springer, Berlin, 1980. (L. Ja. Savel'ev) 82a:28011 28B15

Mappings on a family of sequences. Proceedings of the Conference on Convergence Structures (Cameron Univ., Lawton, Okla., 1980), pp. 103-112, Cameron Univ., Lawton, Okla., 1980. (Author's summary) 82b:54010 54A20 (54C99)

On the continuous functions with the values in a semigroup. Topology, Vol. II (Proc. Fourth Colleg., Budapest, 1978), pp. 931-938, Colleg. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (Piotr Antosik) 82b:46004 46A32 (54A20)

akis, John S. (with Lee, Ding) Numerical solutions of the parabolic wave equation: an ordinary-differential-equation approach. J. Acoust. Soc. Amer. 68 (1980), no. 5, 1482-1488. (L. Debnath) 32a:76069 76Q05 (65M25) (with Lee, Ding; Botseas, George) Finite-difference solution to the parabolic wave

ion. J. Acoust. Soc. Amer. 70 (1981), no. 3, 795-800. (Authors' sum 82h:65068 65M05

triou, Christos H. (with Yannakakis, Mihalis; Kung, H. T.) Locking policies: salety and freedom from deadlock. 20th Annual Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 286-297, IEEE, New York, 1979. (See 68C15 (68A05) 82a:68004)

(with Kanellakis, Paris C.) Flowshop scheduling with limited temporary storage. J. Assoc. Comput. Mach. 27 (1980), no. 3, 533–549. (Luigi Fratta) 82a:90070 90B35 (68C15, 68C25)

(with Lipski, Witold, Jr.) A fast algorithm for testing for safety and detecting deadlocks in locked transaction systems. J. Algorithms 2 (1981), no. 3, 211–226. (Authors' summary) 82i-68021 68C05 (68B15)

thors' summary) 82i:68021 68C05 (68B15)
Worst-case and probabilistic analysis of a geometric location problem. SIAM J. Comput. 10 (1981), no. 3, 542-557. (Author's summary) 82h:90039 90B05 (68C05,

adopoulos, Demetrios (with Witten, Louis) Covariant boundary conditions in gravitational radiation theory: a new covariant definition of spatially asymptotically flat ce-times. Phys. Rev. D (3) 23 (1981), no. 2, 267-271. (Authors' sum

(with Stewart, Bob; Witten, Louis) Some properties of a particular static, axially symmetric space-time. Phys. Rev. D (3) 24 (1981), no. 2, 320-326. (Colin B. G. McIntosh) 82h:83021 83C20

Papagaki-Papoulias, A. (with Dempster, M. A. H.) Computational experience with an approximate method for the distribution problem. Stochastic programming (Proc. nat. Conf., Univ. Oxford, Oxford, 1974), pp. 223-243, Academic Press, London, 1980.

(F. Szidarovszky) 82bc56335 65Gl0 (65K05, 90C05)

ageorgiou, H. (with Cacoullos, T.) On some bivariate probability models applicable to traffic accidents and fatalities. (French summary) Internat. Statist. Rev. 48 (1980), no. 3, 345-356. (M. G. Akritas) 82j:62080 62P99 (60E99) (with Charalambides, Ch. A.) On bivariate generalized binomial and negative

binomial distributions. Metrika 28 (1981), no. 2, 83-92. (Authors' summary) 82m:62112 62H05 (62E10)

eorgiou, M. (with Schmidt, Gunther) On the hierarchical solution of nonlinear optimal control problems. Large Scale Systems 1 (1980), no. 4, 265-271. (Guy Cohen) 82m:49042 49D20 (93A13, 93C55)

(with Cremer, M.) Parameter identification for a traffic flow model. Auton IFAC 17 (1981), no. 6, 837–843. (Authors' summary) 82k:90054 90B20 (90 aghiue, Neculai Varietės différentiables modelées sur des espaces de Fréchet;

l'intégration des champs de vecteurs. An. Științ. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.) 26 (1980), no. 1, 141-145. (J. P. Holmes) 824:58006 58B10 (58C20)

ons différentielles linéaires dans les espaces de Fréchet. Rev. Ro Pures Appl. 25 (1980), no. 1, 83-88. (Sadakazu Aizawa) 824:34086 34G10

Sur la topologie raffinée d'un espace localement convexe. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 2, 247-251. (K. Sundaresan) 82d:46004 46A05

(with Bejancu, Aurel) Semi-invariant submanifolds of a Sasakian manifold. An. nt. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.) 27 (1981), no. 1, 163-170. (Kouei Stiint. Univ. Sekigawa) 82i:53037 53C25

ou, G. Minimal modulo-2 expressions of switching functions with five variables. Internat. J. Electron. 50 (1981), no. 3, 211-214. (Author's summary) 82d:94078 94C10

cas, L. C. (with Jannussis, A. D.; Siafarikas, P. D.) Eigenfu of the q-differential operators. *Hadronic J.* 3 (1979/80), no. 6, 1622–1632. (R. C. Gilbert) 82g:81029 81C99 (34B25, 47B38, 47E05)

(with Jannussis, A. D.; Patargias, N.) Connection between generalized Glas operators and two-photon coherent states of the radiation field. Lett. Nuovo Cimento (2) 29 (1980), no. 3, 87-91. (From the text) 82h:81022 81C05 (81D30, 81K05)

(with Jannussis, A. D.; Filippakis, P.) Commutation relations and coherent states. Lett. Nuovo Cimento (2) 29 (1980), no. 15, 481-484. (F. R. Halpern) 82b:81045 81D05 (22E27, 22E45)

pamichael, N. (with Worsey, A. J.) A class of C² piecewise quintic polynomials. J. Comput. Math. 8 (1980), no. 4, 357-372. (A. K. Varma) 82ac41006 41A05

(with Kokkinos, C. A.) Two numerical methods for the conformal mapping of (with Kokkinos, C. A.) Iwo numerical methods for the communical mapping, or simply-connected domains. Comput. Methods Appl. Mech. Engrg. 28 (1981), no. 3, 285-307. (Jacob Burbea) 82k:30009 30C30 (30C40)

(with Behforooz, G. H.) End conditions for interpolatory quintic splines. IMA J. Numer. Anal. 1 (1981), no. 1, 81-93. (D. D. Stancu) 82j:41012 41A15 (41A05,

65D07)

(with Worsey, A. J.) A cubic spline method for the solution of a linear fourth-order two-point boundary value problem. J. Comput. Appl. Math. 7 (1981), no. 3, 187–189. (Authors' summary) 82j:65056 65L10

(with Hough, D. M.) The use of splines and singular functions in an integral equation method for conformal mapping. Numer. Math. 37 (1981), no. 1, 133-147. (D. Gaier) 82e:30012 30C30 (41A15)

angelou, F. On the convergence of interacting particle systems to the Poisson process.
Z. Wahrsch. Verw. Gebiete 52 (1980), no. 3, 235-249. (F. L. Spitzer) 82d:60193 60K35 (60G57)

u, George C. (with Bensoussan, Alain; Lions, Jacques-Louis) *Asymptotic analysis for periodic structures. Studies in Mathematics and its Applications, 5. nd Publishing Co., Amsterdam-New York, 1978. xxiv + 700 pp. North-Holle ISBN 0-444-85172-0 (Carlo Sbordone) 82h:35001 35-02 (35B40, 49D50, 60H99)

Remarks on limit theorems for partial differential equations with random coefficients. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 468-470, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (Mark Pinsky) 82e:6005 60H15 (35R60, 60F15)

(with Kesten, Harry) A limit theorem for stochastic acceleration. Comm. Math. Phys. 78 (1980/81), no. 1, 19-63. (D. W. Stroock) 82c:82013 82A05 (60J60, 60K35)

anicolaou, N. Inverse method for a generalized spin chain. Phys. Lett. A 73 (1979),
 no. 2, 134-136. (Author's summary) 82x82013 82A15 (58F07, 81F99)
 Pseudospin and classical correspondence for Fermi fields. Ann. Physics 136 (1981),

no. 1, 210-225. (Author's summary) 82m:81065 81E99

ni-Kazakos, P. (with Kazakos, Dimitri) Spectral distance measures between Gaussian processes. IEEE Trans. Automat. Control 25 (1980), no. 5, 950-959. (M. Arató) 62H30 (60G15, 94A17)

The Vasershtein distance as the stability criterion in robust estimation. IEEE Trans. Inform. Theory 26 (1980), no. 5, 620-625. (André Antille) 82e:62057 62F35

Sliding block encoders that are rho-bar continuous functions of their input. IEEE Trans. Inform. Theory 27 (1981), no. 3, 372-376. (Author's summary) 82e:94042

Papapetrou, A. Le champ gravitationnel créé par la matière possédant des spin intrinsèques Bull. Soc. Math. Belg. Sér. A 31 (1979), no. 2, 151–155. (D. K. Sen) 82g/83028 83E10 82g:83028

Papastarridis, John G. (with Lianis, G.) On the gravitational wave induced oscillations of viscoelastic bodies. Gen. Relativity Gravitation 12 (1980), no. 9, 743-766. (Gerard A. 83C35 (73F99, 83B05) Maugin) 82f:83037

Papastavridis, Stavros Killing rational characteristic classes by surgery. Glasgow Math. J. 21 (1980), no. 2, 209-212. (Ian Hambleton) 82a:57028 57R65 (57R20)

ou, Maro C. Une notion de continuité dans l'ancienne pensée parabolique grecque. Eleutheria 1979, no. 2, 220-226. (Livia Giacardi) 82j:01012

theodorou, Theodore S. Error bounds for Galerkin approximation to nonlinear parabolic and hyperbolic problems. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977, pp. 20–25, IMACS, New Brunswick, N.J., 1977. (Author's summary) 82b:65135

(with Houstis, Elias N.; Mitchell, W. F.) A C1-collocation method for mildly nonlinear elliptic equations on general 2-D domains. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 18-27, IMACS, New Brunswick, N.J., 1979. (See 82a:65005)

Papatheou, V. (with Jannussis, A. D.; Vlachos, K.) Statistical mechanics and the quantum friction. Phys. Lett. A 77 (1980), no. 2-3, 112-114. (Authors' summary) 82b:82040 82A35 (35O20)

sis, A. D.; Leodaris, A.; Patargias, N.; Vlachos, K.) Quantum friction in a periodic potential. Phys. A 106 (1981), no. 3, 611-621. (From the summary) 81C05 (82A60)

Papavassilopoulos, G. P. (with Cruz, J. B., Jr.) A control problem with structural choices. J. Franklin Inst. 309 (1980), no. 3, 135-145. (Authors' summary) 82i:49013 49A99 (with Cruz, J. B., Jr.) Sufficient conditions for Stackelberg and Nash strategies with mory. J. Optim. Theory Appl. 31 (1980), no. 2, 233-260. (Authors' summary) 90D25

Papentin, Frank On order and complexity. I. General considerations. J. Theoret. Biol. 87 (1980), no. 3, 421-456. (Michael Conrad) 82k:92005 92A05 (68G10, 82A05)

ck, Ira J. Coherent pairs. (Italian summary) Boll. Un. Mat. Ital. B (5) 18 (1981), no. 1, 275-284. (Stephen McAdam) 82i:13010 13B99

(with Huckaba, James A.) A localization of R[x]. Canad. J. Math. 33 (1981), no. 1, (With Huckatos, James A.) Remarks on module-finite pairs. Proc. Edinburgh Math.

Soc. (2) 24 (1981), no. 2, 137-139. (David E. Dobbs) 82k:13018 13E05 (13B02,

Papin, A. A. A priori estimates of solutions of degenerate quasilinear parabolic equations. (Russian) Dinamika Splošn. Sredy No. 46 Dinamika Židkosti so Svobod. Granicami (1980), 107-121, 174. (Author's summary) 82m:35088 35K65

Papini, G. (with Gregorash, D.) Weyl-Dirac theory with torsion. (Italian and Russian summaries) Nuovo Cimento B (11) 55 (1980), no. 1, 37-51. (B. N. Frolov) 82b:83067a 83E10 (49H05, 53A15, 53B50)

(with Gregorash, D.) Weyl-Dirac theory with torsion. II. Foundations and conservation equations. (Italian and Russian summaries) Nuovo Cimento B (11) 56 (1980), no. 1, 21-38. (B. N. Frolov) 82b:83067b 83E10 (49H05, 53A15, 53B50)

(with Gregorash, D.) Weyl-Dirac theory and superconductivity. Nuovo Cimento B (11) 63 (1981), no. 2, 487-509. (Authors' summary) 82i:83066 83E10 (81J05)

- (with Gregorash, D.) A unified theory of gravitation and electromagnetism for charged superfluids. Phys. Lett. A 82 (1981), no. 2, 67-69. (Authors' summary) 82c:81170 81J05 (83E99)
- Papini, P. L. Increasing the distance from the points of a set. Approximation theory, III (Proc. Conf., Unic. Texas, Austin, Tex., 1980), pp. 711–714, Academic Press, New York, 1980. (D. E. Wulbert) 82i:41043 41A65 (46B20)

- (with Franchetti, Carlo) Approximation properties of sets with bounded appearents. Proc. Roy. Soc. Edinburgh Sect. A 89 (1981), no. 1-2, 75-86. (G. Godini) 46016 46B20 (41A65)
- Papko, V. V. (with Gorškov, K. A.; Ostrovskii, L. A.; Pikovskii, A. S.) On the existence of stationary multisolitons. Phys. Lett. A 74 (1979), no. 3-4, 177-179. (Authors' summary)
- ojan, S. O. (with Makarjan, V. S.) On a contact problem for an elastic half-space with a semi-infinite cylindrical cavity. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Meh. 33 (1980), no. 1, 3-11, 78. (L. Jentsch) 82c:73082
- ojan, V. V. (with Avetisjan, A. K.; Minasjan, M. H.) Magnetodipole configurations in general relativity. Astrophys. and Space Sci. 69 (1980), no. 1, 71-77. (Authors' summary) 83C50 (83C25)
- on, Eric Inducing nontrivial programs from examples. GI-10. Jahrestagung (Saarbrücken, 1980) (German), pp. 442–456, Informatik-Fachber., 33, Springer, Berlin, 1980. (Author's summary) 82e:68097 68G10

pagaki-Papoulias, A. See Papagaki-Papoulias, A.

- oulis, Athanasios Maximum entropy and spectral estimation: a review. IEEE Trans.

 Acoust. Speech Signal Process. 29 (1981), no. 6, 1176–1186. (Author's summary) 82m:94028 94A17
- outsakis, Eleftherios (with Ramkrishna, Doraiswami; Lim, Henry C.) The extended Graetz problem with prescribed wall flux. AIChE J. 26 (1980), no. 5, 779-787. (Authors' summary) 82b:80010 80A20 (35K55)

apoyan, Vladimir V. See Papojan, V. V.

- Papp, F. J. Comments on the definition of a Tikhonov semifield homomorphism. Portugal. Math. 37 (1978), no. 1-2, 157-160 (1981). (Saraswathi Subbiah) 82m:54040 54H13 Characterization of the normal probability density function in all dim Internat. J. Math. Ed. Sci. Tech. 12 (1981), no. 4, 429-436. (D. N. Shanbhag) 82m:62034 62E10 (60E05)
- Papp, Zoltán (with Erdős, Paul; Győry, Kálmán) On some new properties of functions $\sigma(n)$, $\varphi(n)$, d(n) and $\nu(n)$. (Hungarian English summary) Mat. Lapok 28 (1980), no. 1-3, 125-131. (A. J. Zajta) 82a:10004 10A20

ences of stability. Comm. Algebra 9 (1981), (with Damiano, Robert F.) On consequent no. 7, 747-764. (Wolfgang Grölz) 82h:16032 16A90 (13E05)

pas, M. Improved methods for large scale structural synthesis. AIAA J. 19 (1981), no. 9, 1227–1233. (Author's summary) 82h:73069 73K40 (65K05, 90C30)

Pappinghaus, Peter A version of the Σ₁-reflection principle for CFA provable in PRA. Arch. Math. Logik Grundlag. 20 (1980), no. 1-2, 27-40. (Herman R. Jervell) 82b:03105

Was ist konstruktive Mathematik? On the philosophy of mathematical knowledge (Collog., Univ. Münster, Münster, 1978/79) (German), pp. 27-48, usen + Neumann, Würzburg, 1981. (Horst Luckhardt) 82g:03104

(00A25, 03A05, 03F65) quet, Luc Semi-groupes holomorphes en norme du sup. Séminaire de Théorie du

Potentiel, No. 4 (Paris, 1977/1978), pp. 194-242, Lecture Notes in Math., 713, Springer, Rerlin, 1979. (Alberto Guzman) 82s:47040 47D05 (35199, 47F05)

Semi-groupes généralisés et équations d'évolution. Séminaire de Théorie du Potentiel, No. 4 (Paris, 1977/1978), pp. 243-263, Lecture Notes in Math., 713, Springer, Berlin, 1979. (Pavel Doktor) 82i:47068 47D05 (35K22)
Méthode de séparation des variables et calcul de spectre d'opérateurs sur les formes

différentielles. (English summary) C. R. Acad. Sci. Paris Sér. A-B 289 (1979), no. 2, A107-A110. (Author's summary) 82e:58099 58G25 (35P05)

Méthode de séparation des variables et calcul du spectre d'opérateurs sur les formes différentielles. (English summary) Bull. Sci. Math. (2) 105 (1981), no. 1, 85-112. (Akira Asada) 82e:58100 58G25 (35P05, 58A10)

Paracelli, Carmela (with Padula, Liana Guercia) Classes of Rosenbrock-type A-stable multistep methods for the solution of a system of ordinary differential equations. (Italian. English summary) Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 2, 73-86 (1981). (Authors' summary) 82f:65078 65L05

ameswaran, Mangalam R. A converse product theorem in summability. Co.
Math. Prace Mat. 22 (1980), no. 1, 131-134. (Gokulananda Das) 82d:40008 40D25 ns, S. A. (with Tiwary, A. K.; Pandey, B. M.) Generalizations of quasi-injectivity

Progr. Math. (Allahabad) 13 (1979), no. 1-2, 31-40. (K. A. Byrd) 82c:16022 16A52 amonor, Ju. M. Unbiased quasi-Bayes estimation. (Russian) Prediction of the reliability of semiconducting devices (Russian), pp. 84-103, 138, "Zinatne", Riga, 1979. (B. Ja. Levit) 82a:62055 62F15

uk, S. D. Calculations in permutation groups that are prescribed by invariant relations. (Russian) Computations in algebra, number theory and combinatorics (Russian). pp. 73-83, 88, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (Ja. G. Berkovič)

20B10 shar, Vinod K. (with Ahmad, Z. U.) A note on total regularity of the Riemann-Cesaro summability. Jñānabha 8 (1978), 13-16. (From the text) 82k:40002 40G05

(with Ahmad, Z. U.) On $|R,p|_k$ and $|A|_k$ summability methods. Bull. Inst. Math. Acad. Sinica 7 (1979), no. 2, 201-210. (Authors' summary) 82m:40008

esjuk, O. S. (with Vladimirov, V. S.; Erugin, N. P.; Mitropol'skii, Ju. A.) Nikolai Nikolaevič Bogoljubov (on the occasion of his 70th birthday). (Russian) Differencial'nye Uravnenija 15 (1979), no. 8, 1347-1359. (Editors) 82f:01152 01A70 (34-03) (with Vladimirov, V. S.; Mitropol'skii, Ju. A.) A survey of the major papers of N. N.

Bogoljubov in mathematics and theoretical physics. (Russian) Ukrain. Mat. Z. 31 (1979), no. 4, 341-350, 476. (Editors) 82k:01036 01A70

See also Bogoljubov, N. N.; et al., 82m:01055 askevopoulos, P. N. (with Mertzios, B. G.) Transfer function matrix of 2-D systems. IEEE Trans. Automat. Control 26 (1981), no. 3, 722-724. (Authors' summary) 82j:93038 (with Kosmidou, O. I.) Eigenvalue assignment of two-dimensional systems using PID controllers. Internat. J. Systems Sci. 12 (1981), no. 4, 407-422. (Authors' summary)

(with Stavroulakis, Peter) Reduced-order feedback law implementation for 2D digital systems. Internat. J. Systems Sci. 12 (1981), no. 5, 525-537. (Authors' summary)

(with Stavroulakis, Peter) Decoupling of linear multivariable two-dimensional systems via state feedback. Proc. IEE-D 129 (1982), no. 1, 15-20. (Authors' sun 93B15

- raskov, C. (with B"čvarov, S.; Pandov, V.) Sufficiency of the moment condition for an equilibrium of an arbitrary system of forces. (Bulgarian. Russian and English summaries) Godišnik Visš. Učebn. Zaved. Tehn. Meh. 10 (1975), no. 2, 51-60 (1978). (Authors' summary) 82b:70001 76A05 (51N05)
- Pardoux, Étienne Backward and forward stochastic partial differential equations associated with a nonlinear filtering problem. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 166-171, IEEE, New York, 1979.

(A. F. Gualtierotti) 82h:60074 60G35 (60H15, 93E11)

Paré, Robert Indexed categories and generated topologies. J. Pure Appl. Algebra 19 (1980), 385–400. (Gavin Wraith) 82c:18008 18B25 (14F20, 18F10, 18F20)

redaens, J. (with Janssens, Dirk Marcel) Decompositions of relations: a comprehensive approach. Advances in data base theory, Vol. 1 (Proc. Workshop, Toulouse, 1979), pp. 73-100, Plenum, New York, 1981. (See 82a:68040) 68B15

Pareja Heredia, Diego Historical account of some problems in the theory of numbers. (Spanish) Mat. Enseñanza Univ. No. 18 (1981), 12-27. (E. Grosswald) 82h:10001 10-01 (01-01, 10-03)

Parenti, C. (with Rodino, Luigi) Parametrices for a class of pseudodifferential operators. I, Ann. Mat. Pura Appl. (4) 125 (1980), 221-254, 255-278. (Ju. V. Egorov) 82i:35175 35S05 (35H05)

(with Rodino, Luigi) On general pseudodifferential operators. Comm. Partia Differential Equations 5 (1980), no. 6, 561-594. (A. S. Dynin) 82b:35156

(with Segàla, Fausto) Propagation and reflection of singularities for a class of evolution equations. Comm. Partial Differential Equations 6 (1981), no. 7, 741-782. (G. Albinus) 82j:35141 35S05 (58G17)

Parfenov, O. G. The asymptotic behavior of singular numbers of imbedding operators of some classes of analytic functions. (Russian) Mat. Sb. (N.S.) 115(157) (1981), no. 4, 632-641, 656. (A. G. Ramm) 82i:47028 47B05 (30E20, 46E35)

Parhi, N. On oscillatory solutions of a forced second order nonlinear differential equation. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 5, 357-360. (W. Allegretto) 82g:34039 34C10

nov, L. G. (with Rau, V. G.; Iljuhin, V. V.; Belov, N. V.) On the number of possible Patterson cyclotomic sets. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 4, 859-862. (J. B. Roberts) 82e:10023 10A45 (05B05, 12C20)

(with Rau, V. G.; Iljuhin, V. V.; Belov, N. V.) On the calculation of Patterson cyclotomic sets. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 5, 1110–1113. (J. B. Roberts) 82i:10016 10A45 (05B05, 12C20)

Paria, G. (with Ahmed, G.) Stochastic vibration of beam with the effect of shear deformation. J. Indian Acad. Math. 2 (1980), no. 2, 63-74. (Authors' summary) 73K35 (73K12) 82b:73042

Parigi, Giuliano Sur la simplification par les tores complexes. J. Reine Angew. Math. 322 (1981), 42-52. (A. L. Oniščik) 82c:32031 32L05

Parihar, C. L. See Srivastava, Hari M., 82j:33008

Parihar, J. S. (with Bhagwandas) Some new group divisible designs. J. Statist. Plann. Inference 4 (1980), no. 3, 321-323. (A. E. Brouwer) 82b:05045 05B30 (62K10)

Pariiskii, B. S. (with Abramov, A. A.; Ditkin, V. V.; Konjuhova, N. B.; Ul'janova, V. I.) The calculation of eigenvalues and eigenfunctions of ordinary differential equations with singularities. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 5, 1155-1173, 1358. (Authors' summary) 82a:65062 65L15

Parikh, Rohit (with Harel, David; Kozen, Dexter) Process logic: expressiveness,

decidability, completeness. 21st Annual Symposium on Foundations of Computer Science (Syracuse, N.Y., 1980), pp. 129-142, IEEE, New York, 1980. (P. Ecsedi-Toth) 82m:68058 68C01 (03B45)

(with Kozen, Dexter) An elementary proof of the completeness of PDL. Comput. Sci. 14 (1981), no. 1, 113-118. (G. E. Minc) 82d:03028 03B45 (68B10)

- Parimala, Raman Quadratic forms over polynomial rings over Dedekind domains. Amer. J Math. 103 (1981), no. 2, 289-296. (Thomas C. Craven) 82g:10041 10C02 (13F20) Nonextended quadratic forms over polynomial rings over power series rings. Proc. Amer. Math. Soc. 83 (1981), no. 3, 453-454. (Maurice Flamant) 82m:15029 15A63
- ro (with Volzone, Gaetano) Generators of the group of automorphisms of a de Paris, Genn class of finite incidence structures. (Italian. English summary) Rend. Mat. (6) 12 (1979), no. 3-4, 477-491 (1980). (From the introduction) 82a:20007 20B25 no. 3-4, 477-491 (1980). (From the introduction) 82a:20007
- Paris, J. B. Some independence results for Peano arithmetic. J. Symbolic Logic 43 (1978), no. 4, 725-731. (Hisao Tanaka) 82d:03095 03F30 (03C62, 05A17, 10A45) (with Wilkie, A. J.) Models of arithmetic and the rudimentary sets. Proceedings of

the Model Theory Meeting (Univ. Brussels, Brussels/Univ. Mons, Mons, 1980). Bull. Soc. Math. Belg. Sér. B 33 (1981), no. 1, 157-169. (Leonard Lipshitz) 82k:03074 03D55 (03C62, 03H15)

Paris, Quirino The method of least squares and its dual problem. (Italian. French and English summaries) Statistica (Bologna) 40 (1980), no. 1, 117–121. (Adolfo Gili) 824:62114 62J05

Parisi, E. (with Catalano, G.; Eilbeck, J. C.; Monroy, A.) A mathematical model for formation in biological systems. Phys. D 3 (1981), no. 3, 439-456. (John J. Tyson) 82j:92020 92A09 (80A20)

Parisi, Giorgio Field-theoretic approach to second-order phase transitions in two- and ensional systems. J. Statist. Phys. 23 (1980), no. 1, 49-82. (J. Fernando Perez) 82c:82033 82A25 (81E99)

Some remarks on the electronic states in disordered materials. J. Phys. A 14 (1981),

no. 3, 735-743. (Author's summary) 82c82073 82A42
(with Martinelli, G.) A systematical improvement of the Migdal recursion formula. Nuclear Phys. B 180 (1981), no. 2, FS 2, 201-220. (Nicolae Angelescu) 82h:82017

Correlation functions and computer simulations. Nuclear Phys. B 180 (1981), no. 3,

Correlation functions and computer simulations. Nuclear Phys. B 180 (1981), no. 3, FS 2, 378-384. (Author's summary) 82k81112 81E99 (65C2), 81-04) (with Falcioni, M.; Marinari, E.; Paciello, M. L.; Taglienti, B.) Phase transition analysis in Z, and U(1) lattice gauge theories. Phys. Lett. B 105 (1981), no. 1, 51-54. (Authors' summary) 82j:82027 82A25 (81E25) (with Sourlas, Nicolas) Critical behavior of branched polymers and the Lee-Yang edge singularity. Phys. Rev. Lett. 46 (1981), no. 14, 871-874. (Authors' summary) 874A26 (2021)

82A42 (82A25)

(with Wu, Yong Shi) Perturbation theory without gauge fixing. Sci. Sinica 24 81), no. 4, 483–496. (Authors' summary) 82ic81075 81E99

(1981), no. 4, 483—496. (Authors' summary) 82k:81075 81E99

k, Chong Jin On the distribution of the number of unobserved elements when m samples of size n are drawn from a finite population. Comm. Statist. A—Theory Methods 10 of size n are drawn from a finite population. Comm. Statist. A—I neory Methods 10 (1981), no. 4, 371–383. (Endre Csáki) 82g-66022 60C05 (60F05) nk, Chall Representations of Gaussian processes by Wiener processes. Pacific J. Math. 94 (1981), no. 2, 407–415. (T. Hida) 82j:66062 60G15 (60J65) nk, S. Y. (with O'Raifeartaigh, L.; Wali, K. C.) On the long-range interaction of

topologically charged monopoles. Geometrical and topological methods in gauge theories (Proc. Canad. Math. Soc. Summer Res. Inst., McGill Univ., Montreal, Que., 1979). pp. 89-95, Lecture Notes in Phys., 129, Springer, Berlin, 1980. (D. I. Olive) 82f:81083 81G10 (81E99)

Park, Sehie (with Rhoades, B. E.) Some general fixed point theorems. Acta Sci. Math. (Szeged) 42 (1980), no. 3-4, 299-304. (Silvio Massa) 82a:54089 54H25

On general contractive-type conditions. J. Korean Math. Soc. 17 (1980/81), no. 1, 131-140. (Chi-Song Wong) 82e:54055 54H25

A general principle of fixed point iterations on compact intervals. J. Korean Math. Soc. 17 (1980/81), no. 2, 229-234. (B. E. Rhoades) 824:54054 54H25 (47H10)

(with Rhoades, B. E.) Meir-Keeler type contractive conditions. Math. Japon. 26 (1981), no. 1, 13-20. (Silvio Massa) 82e:54056 54H25

(with Rhoades, B. E.) Extension of some fixed point theorems of Hegedüs and Kasahara. Math. Sem. Notes Kobe Univ. 9 (1981), no. 1, 113-118. (Silvio Massa) 82m:54057 54H25

Park, Sung H. Collinearity and optimal restrictions on regression parameters for estimating es. Technometrics 23 (1981), no. 3, 289-295. (Author's summary) 82i:62095 62305

Park, Yong Moon (with Fröhlich, Jürg) Correlation inequalities and the thermodynamic limit for classical and quantum continuous systems. II. Bose-Einstein and Fermi-Dirac statistics. J. Statist. Phys. 23 (1980), no. 6, 701-753. (Authors' summary) 82g:82006 82A05 (60K35, 81C35, 81J05, 82A15)

Park, Young L. (with Fraga, Robert J.) On hyper-real rings of quotients. (Arabic s Res. J. Natur. Sci. 7 (1980), no. 1, 137-142. (Giuseppe DeMarco) 82i:54034 54C40 (13B30)

Park, Young Soo (with Kim, W. J.) On structures of left bipotent near-rings. Kyungpook Math. J. 20 (1980), no. 2, 177–181. (Günter Pilz) 82f:16040 16A76

Parkash, K. A queueing system with two types of service interruptions and a standby. Cahiers Centre Études Rech. Opér. 21 (1979), no. 3, 289-297. (Author's summary) 60K25 (90B22)

(with Murari, K.) A queue with correlated interarrival time distributions. Cahiers Centre Études Rech. Opér. 23 (1981), no. 1, 73-80. (Stig I. Rosenlund) 82j:60176

Parke, William C. (with Lehman, D. R.; Maximon, L. C.) Numerical evaluation of integrals containing a spherical Bessel function by product integration. J. Math. Phys. 22 (1981), no. 7, 1399–1413. (C. W. Clenshaw) 82:65014 65D30

Parker, Barry R. (with Huerta, Robert) Magnetic monopole in variations on Einstein's nonsymmetric unified field theory. *Phys. Rev. D* (3) **24** (1981), *no.* 8, 2077-2081. (Authors' summary) **82**;**83057** 83E10 (81G25)

Parker, D. Stott, Jr. Conditions for optimality of the Huffman algorithm. SIAM J. Comput. 9 (1980), no. 3, 470–489. (M. C. Golumbic) 82e:68064 68E05 (68C05, 90C50)

Correction to: "Combinatorial merging and Huffman's algorithm" [IEEE Trans. Comput. 28 (1979), no. 5, 365-367; MR 80g:94111]. IEEE Trans. Comput. 30 (1981), no. 6, 454. (Editors) 82g:94032 94C30 (94A17)

relational database dependencies and a fragment of propositional logic. J Comput. Mach. 28 (1981), no. 3, 435-453. (Authors' summary) 82h:68025 (03805) (with Sagiv, Yehoshua; Delobel, Claude; Fagin, Ronald) An equivalence between

Parker, Don (with Hawkes, Trevor) On subgroups like Hall's. Bull. London Math. Soc. 13 (1981), no. 5, 385-391. (Peter Förster) 82m:20020 20D10

Parker, E. T. (with Brown, John Wesley) A search for non-Desarguesian planes of prime orders. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 709-711. (From the text) 82b:05040 05B25

ker, George D. A metric model of plane Euclidean geometry. Amer. Math. Monthly 87 (1980), no. 7, 567-572. (R. A. Melter) 82e:51023 51F99 (51M05)

Parker, Leonard (with Bekenstein, Jacob D.) Path-integral evaluation of Fevnn propagator in curved spacetime. Phys. Rev. D (3) 23 (1981), no. 12, 2850-2869. (Authors' summary) 82f:81024 81C35 (58D30, 81N05, 83E99)

Parks, Harold R. (with Krantz, Steven G.) Distance to C^k hypersurfaces. J. Differential Equations 40 (1981), no. 1, 116-120. (Jean-Marie Morvan) 82h:58005 58C07 (53A07) The Gauss map of a three-dimensional minimal surface. J. Differential Geom. 16 (1981), no. 1, 75–81. (Klaus Steffen) 82m:53007 53A10 (49F20)

A comment on: "A note on Routh-Hurwitz determinants and integral square Parks, P. C. errors" [Internat. J. Control 31 (1980), no. 4, 807-810; MR 81h:93076] by D. J. Allwright. Internat. J. Control 33 (1981), no. 1, 191-192. (Author's summary) 82b:93027

Stability and convergence of adaptive controllers—continuous systems. Proc. IEE-D 128 (1981), no. 5 Nonlinear Systems, 195-200. (Author's summary) 82k:93043 93C40 lange, J.-Y. (with Braddock, R. D.) A note on some similarity solutions of the diffusion equation. (French summary) Z. Angew. Math. Phys. 31 (1980), no. 5, 653-656. (C. V.

Paol 82c:35837 35K55 (76R99, 80A30)

Parlar, Mahmut (with Vickson, R. G.) An optimal control problem with piecewise quadratic cost functional containing a "dead-zone". Optimal Control Appl. Methods 1 (1980), no. 4, 361–372. (Giovanni Resta) 82c:49025 49D37 (90C30)

Stochastic control of a pension fund model with first-order Markov-dependent parameters. Optimal Control Appl. Methods 2 (1981), no. 2, 175-189. (Author's summary) 93E25 (90C15, 90C39)

Parlett, B. N. (with Reid, J. K.) Tracking the progress of the Lanczos algorithm for large symmetric eigenproblems. IMA J. Numer. Anal. 1 (1981), no. 2, 135–155. (Authors' summary) 82e:65039 65F15

(with Berman, Abraham; Plemmons, Robert J.) Diagonal scaling to an orthogonal matrix. SIAM J. Algebraic Discrete Methods 2 (1981), no. 1, 57-65. (Authors' summary) 65F35 (15A21)

(with Simon, H.; Stringer, L. M.) On estimating the largest eigenvalue with the czos algorithm. Math. Comp. 38 (1982), no. 157, 153-165. (Authors' summary) 65F15

menter, R. H. The quantum-lattice-gas model applied to the case of finite superfluid flow in 4He. Collect. Phenom. 3 (1980), no. 2, 115-132. (Author's summary) 82i:81170 81J05

Parmigiani Bedogna, Daniela The SH formulas in reduced generalized powers. (Italian. ary) Riv. Mat. Univ. Parma (4) 6 (1980), 189-199 (1981). (Anna Labella) 82h:03023 03C20 (18C10)

Parnami, J. C. (with Agrawal, M. K.; Rajwade, A. R.) On some trigonometric Diophantine equations of the type $\theta_1 = c_1 \cos \pi d_1 + \cdots + c_k \cos \pi d_k$. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 4, 423–432. (Ming-Chit Liu) 82j:10034 10B25 (10B35) (with Agrawal, M. K.; Rajwade, A. R.) A congruence relation between the

coefficients of the Jacobi sum. Indian J. Pure Appl. Math. 12 (1981), no. 7, 804-806. (R. 10G05 (12C20) J. Evans) 82g:10054

Parnas, Hanna (with Bard, Jonathan L. B.; Ghozlan, Aline; Goldbeter, Albert; Hardt, Shoshana; Levitzki, Alexander; Liron, Nadav; Odell, Garrett M.; Perelson, Alan S.; Rapp, P. E.; Rubinow, Sol I.; Segel, Lee A.; Tolkovsky, Aviva M.; Wehrhahn, Christian; Yagil, Gad; Zeigler, Bernard P.) *Mathematical models in molecular and cellular biology. Cambridge University Press, Cambridge-New York, 1980. x+757 pp. ISBN 0-521-22925-1 (John J. Tyson) 82c:92001 92-01 (92A09)

odi, Franco The category of universes of devices and the category of T-algebras. (Italian) Rend. Sem. Mat. Univ. Padova 62 (1980), 1-15. (Ioan Tofan) 82a:18004a Some properties of the category of T-algebras. (Italian) Rend. Sem. Mat. Univ.

Padova 62 (1980), 75-94. (Ioan Tofan) 82a:18004b 18B99

Paroush, Jacob (with Nitzan, Shmuel) The characterization of decisive weighted majority rules. Econom. Lett. 7 (1981), no. 2, 119-124. (Authors' summary) 82k:90007 (92A25)

rravicini, G. See Mathematical problems in the quantum theory of irreversible processes. 82j:82003

rreau, François (with Host, Bernard) Sur les mesures dont la transformée de Fourier-Stieltjes ne tend pas vers 0 à l'infini. Colloq. Math. 41 (1979), no. 2, 285-289. (I. Glicksberg) 82a:43001 43A10

(with Host, Bernard; Graham, Colin C.) The interior of the Silov boundary of M(G)is trivial. J. Funct. Anal. 38 (1980), no. 3, 342-353. (William Moran) 82h:43002 43A10 (46I20)

Parring, A.-M. Calculation of the asymptotic characteristics of sampling functions (Russian. English summary) Tartu Riikl. Ül. Toimetised No. 492 (1979), 86-90. (L. B. Klebanov) 82j:62035 62H10 (62E20)

Estimation of the linear regression function and its asymptotic properties. (Russian. English summary) Tartu Riikl. Ül. Toimetised No. 492 (1979), 91-99. (Lubomir Kubáček) 82a:62096 62J05

General asymptotic distribution of incomplete multiple correlation coefficients. (Russian. English summary) Tartu Riikl. Ül. Toimetised No. 541 Trudy Mat. Meh. (1980), 18-26. (Author's summary) 82e:62085 62H20 (62E20)

The limit distribution of sam pling k-moments of a random vector. Trudy Vyčisl. Centra Tartu. Gos. Univ. No. 46 (1981), 50-59. (R. J. Tomkins) 82k:60050

Parrini, Carla (with Dini, Gilberto) Extending CR-distributions. (Italian st Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 68 (1980), no. 1, 42-43. (Authors' summary) 82h:32021 32D20 (46F20)

Parrott, David Characterizations of the Fischer groups. I, II, III. Trans. Amer. Math. Soc. 265 (1981), no. 2, 303-347. (Leo J. Alex) 82d:20018 20D05 Parrott, Mary E. Convergence of solutions of differential equations with infinite delay.

Integral and functional differential equations (Proc. Conf., West Virginia Univ., Morgantown, W. Va., 1979), pp. 221-231, Lecture Notes in Pure and Appl. Math., 67, Dekker, New York, 1981. (Bhagat Singh) 82h:34099 34K15

Convergence of solutions of infinite delay differential equations with an underlying

space of continuous functions. Ordinary and partial differential equations (Proc. Sixth Conf., Univ. Dundee, Dundee, 1980), pp. 280–289, Lecture Notes in Math., 846, Springer, Berlin, 1981. (J. Kato) 821:34106 34K25

rry, Gareth P. On phase transitions involving internal strain. Internat. J. Solids and Structures 17 (1981), no. 4, 361-378. (Author's summary) 82e:73009 73B99 (82A25) Parsadanišvili, E. (with Hmaladze, E. V.) Rank tests for the hypotheses concerning

unidentifiable objects. Mathematical statistics, pp. 179-182, Banach Center Publ., 6, PWN, Warsaw, 1980. (A. N. Pettitt) 82c:62064 62G10

Parshall, Brian (with Friedlander, Eric M.) Étale cohomology of reductive groups.

Algebraic K-theory, Evanston 1980 (Proc. Conf., Northwestern Univ., Evansto pp. 127-140, Lecture Notes in Math., 854, Springer, Berlin, 1981. (K. F. Lai) 82m:14008 14F20 (18G99, 20G10, 22E41)

Parshina, N. A. See Parsina, N. A.

Parsian, Ahmad (with Ghosh, Malay) Admissible and minimax multiparameter estimation in exponential families. J. Multivariate Anal. 10 (1980), no. 4, 551-564. (Arthur Cohen) 62C15 (62H12)

Paršin, A. N. (with Aleksandrov, P. S.; Gnedenko, B. V.; Demidov, S. S.; Kolmogorov, A. N.; Petrova, S. S.; Juškevič, A. P.) Izabella Grigor'evna Bašmakova (on the occasion of

her 60th birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 5(221), 211-214. (Editors) 01A70

Paršina, N. A. Synthesis of easily testable combination circuits using the method of factorization of prime DNF. Automat. i Vyčisl. Tehn. (Riga) 1980, no. 4, 68-74, 99 (Russian); translated as Automat. Control Comput. Sci. 14 (1980), no. 4, 64-70. (Author's summary) 82a:94118 94C10

arsons, Torrence D. Circulant graph imbeddings. J. Combin. Theory Ser. B 29 (1980), no. 3, 310-320. (Jonathan L. Gross) 82f:05036 05C10 (with Khoury, Sarkis J.) ★Mathematical methods in finance and economics.

North-Holland Publishing Co., New York-Amsterdam, 1981. xiv + 295 pp. ISBN 0-444-00425-4 (From the preface) 82g:90001 90-01 (00A06)

(with Jackson, Brad; Pisanski, Tomaž) A duality theorem for graph embeddings. J. Graph Theory 5 (1981), no. 1, 55-77. (Jonathan L. Gross) 82f:95034 05C10

Partčevskii, O. See Kadomcev, B. B., 82k:76079

Parter, Seymour V. (with Steuerwalt, Michael) On k-line and $k \times k$ block iterative schemes for a problem arising in 3-D elliptic difference equations. Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 233–265, ARO Rep. 80, 3, U. S. Army Res. Office, Research Triangle Park, N.C., 1980. (Authors' summary) 82e:65032 65F10 (68K05)

(with Steuerwalt, Michael) On k-line and $k \times k$ block iterative schemes for a problem arising in three-dimensional elliptic difference equations. SIAM J. Numer. Anal. 17

(1980), no. 6, 823-839. (Authors' summary) 82a:65084 65N20 (65F10) (with Kopell, Nancy) A complete analysis of a model nonlinear singular

perturbation problem having a continuous locus of singular points. Adv. in Appl. Math. 34E20 (34B15, 58F30, 2 (1981), no. 2, 212-238. (Frederick A. Howes) 82g:34086 92A09, 92A15)

separable graphs. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 3, 307-320. (B. Manvel) 82:05076 05C60 (05C25) thasarathy, K. R. (with Krishnamoorthy, V.) On the reconstruction conjecture for

Parthasarathy, P. R. (with Sankaranarayanan, G.) Age-dependent branching processes with immigration when interarrival times are correlated. J. Indian Statist. Assoc. 16 (1978),

83-96. (From the introduction) 82m:60105 60J80 (with Krishnamoorthy, A.) Markov branching processes with varying growth rates. Bull. Math. Biol. 41 (1979), no. 4, 607-610. (D. R. Grey) 82k:60166 60J80

Parthasarathy, R. (with Reddy, Sudhakar M.) A testable design of iterative logic arrays. IEEE Trans. Circuits and Systems 28 (1981), no. 11, 1037-1045. (Authors' summary) 94C30 (68B20)

rhasarathy, Rajagopalan Criteria for the unitarizability of some highest weight modules.

Proc. Indian Acad. Sci. Sect. A Math. Sci. 89 (1980), no. 1, 1–24. (S. I. Gel'fand) 820-22020 22E47

Parthasarathy, T. (with Himmelberg, C. J.; Van Vleck, F. S.) On measurable relations. Fund. Math. 111 (1981), no. 2, 161-167. (J. C. Oxtoby) 82c:28011 28A20 (58C06)

Partington, J. R. Subspaces of certain Banach sequence spaces. Bull. London Math. Soc. 13 (1981), no. 2, 163-166. (Y. Benyamini) 82h:46036 46B25 (46A45)

Hadamard-Landau inequalities in uniformly convex spaces. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 2, 259–264. (F. F. Bonsall) 82h:47037 47B55

Parton, V. Z. (with Perlin, P. I.) *Методы математической теории упругости. (Russian) [Methods of the mathematical theory of elasticity] "Nauka", Moscow, 1981. 688 pp. (Petr Procházka) 82i:73002 73-02 (35-01, 73Cxx)

Partovi, M. Hossein (with Mashhoon, Bahram) On the gravitational motion of a fluid

obeying an equation of state. Ann. Physics 130 (1980), no. 1, 99-138. (P. C. Vaidya)

82c83041 83C50 (83C55)
Parusnikov, V. I. The Jacobi-Perron algorithm and simultaneous approximation of functions. (Russian) Mat. Sb. (N.S.) 114(156) (1981), no. 2, 322-333, 336. (H. Ĭ. Kučmins'ka) 82h:41027 41A28 (10F20)

Parvatham, R. (with Padmanabhan, K. S.) Radius of convexity of partial sums of a certain power series. Indian J. Math. 17 (1975), no. 3, 133-138. (From the introduction)

(with Blambert, M.) On the singularities of analytic functions defined by L-Dirichletian elements. J. Math. Anal. Appl. 82 (1981), no. 1, 292-294. (J. R. Shackell) 82i:30001 30B40 (30B50)

Paryani, Kioumars Applications of game theory in industrial engineering. (Persian) Bull. Iranian Math. Soc. 8 (1980/81), no. 1, 60-36. 82k:90149 90D45
 Parzen, Emanuel Time series modeling, spectral analysis, and forecasting. Directions in time

series (Proc. Meeting, Iowa State Univ., Ames, Iowa, 1978), pp. 80-111, Inst. Math. Statist., Hayward, Calif., 1980. (Author's summary) 82h:62159 62M10 (62M15)

Statist., Hayward, Cailf., 1980. (Author's summary) 82h:62159
 62M10 (62M15)
 Pasa, Gelu I. (with Policyevschi, Dan A.) The macroscopic behavior of a heterogeneous elastic medium. (Romanian. English summary) Stud. Cerc. Mat. 32 (1980), no. 4, 445-449. (Authors' summary) 82j:73011
 73C40
 Paša, I. I. (with Fridman, A. M.; Palouš, Jan) Collisionless shock-waves in stellar systems. Monthly Notices Roy. Astronom. Soc. 194 (1981), no. 3, 705-710. (Authors' summary)

85A05 (76E20)

Pašaev, H. H. On the solution of a mixed problem from oscillation theory. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 5, 17-19. (From the text) 82m:35042 35J40 (35K35)

Pasaev, O. K. (with Mahan'kov, V. G.; Mahaldiani, N. V.) On the integrability and isotopic structure of the one-dimensional Hubbard model in the long wave approximation. Phys. Lett. A 81 (1981), no. 2-3, 161-164. (Authors' summary) 82a-82045 82A67 (58F07)

Pašaeva, E. E. (with Maksudov, F. G.) Multiple expansion in eigenfunctions of a one-dimensional nonselfadjoint differential operator of even order on the half axis. (Russian) Spectral theory of operators, No. 3 (Russian), pp. 34-101, "Elm", Baku, 1980.

47E05 (34B25, 47A70) (M. Otelbaev) 82i;47081 Pascal, Blaise See Lützen, Jesper, 82c:01022 and Mesnard, Jean, 82d:01011

A note on the correspondence between Mathieu's transformations as redundant variables in Lagrangian mechanics. (French summary) Celestial Mech. 24 (1981), no. 1, 53-61. (Author's summary) 82g:70039 70H15 (58F05)

Pascali, Dan On nonlinear divergence equations. Theory of nonlinear operators (Proc. Fifth Internat. Summer School, Central Inst. Math. Mech. Acad. Sci. GDR, Berlin, 1977), pp. 205–213, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1978, 6,

Akademie-Verlag, Berlin, 1978. (Christian G. Simader) 82e:35036 35J60 (47H15) (with Macovei, Doina) Variational inequality techniques in free boundary problems. Proceedings of the International Symposium on Applications of Mathematics in System Theory (Univ. Brazov, Brazov, 1978), II, pp. 357-363, Univ. Brazov, Brazov, 1979. (Mario

Primicerio) 82e:76066 76S05 (35R35, 49A29)
On variational methods for Hammerstein equations. Romanian-Finnish Seminar on Complex Analysis (Proc., Bucharest, 1976), pp. 621-626, Lecture Notes in Math., 743, Springer, Berlin, 1979. (M. Joshi) 82a:47060 47H15 (47H05) Springer, Berlin, 1979. (M. Joshi) 82a:47060

Variational inequalities with obstacles. Variational inequalities and optimization problems (Proc. Summer School, Constanța, 1979), pp. 63-103, Minist. Ed.

Învățămiîntului, Constanța, 1979. (M. Biroli) 82b:49014 49A29 (47H15) Holquininium, Constanța, 1975. (M. Biron) 820-89014 49/229 (4/115)
Elliptic variational problems on unbounded domains. (Romanian. English sum Stud. Cerc. Mat. 32 (1980), no. 4, 435–444. (Stefan Balint) 821:35035 35J65

Pascali, Eduardo A criterion of existence for functional equation systems. (Italian) Matematiche (Catania) 31 (1976), no. 2, 215-227 (1977). (Michele Mininni) 82e:47083 47H15 (47H10)

Pascaud, J. L. (with Goursaud, J.-M.; Osterburg, James; Valette, J.) Points fixes des anneaux réguliers auto-injectifs à gauche. Comm. Algebra 9 (1981), no. 13, 1343-1394. (K. R. Goodearl (Zbl 438:16008)) 82k:16046 16A72 (16A52) Two results on fixed rings. Proc. Amer. Math. Soc. 82 (1981), no. 4, 517-520. (Susan

Montgomery) 82e:16032 16A74 (16A20)

Pasch, Moritz Eine Selbstschilderung. Mitt. Math. Sem. Giessen No. 146 (1980), 1–19. (E. W. Ellers) 82b:01058 01A70

Über den Bildungswert der Mathematik. Mitt. Math. Sem. Giessen No. 146 (1980),

20-39. (E. W. Ellers) 82c:01038 01A60 (01A70)

Paschke, William L. (with Salinas, Norberto) C*-algebras associated with free products of groups. Pacific J. Math. 82 (1979), no. 1, 211-221. (Jonathan M. Rosenberg) 82c:22010 22D25 (46L05)

K-theory for actions of the circle group on C*-algebras. J. Operator Theory 6 (1981), no. 1, 125-133. (Claude Schochet) 82m:46074 46M20 (46L05)

K-theory for commutants in the Calkin algebra. Pacific J. Math. 95 (1981), no. 2,

427-434. (Claude Schochet) 82k:46101 46M20 (46L05)

Paschos, E. A. Some current issues in gauge theories. Quarks and leptons as fundamental particles (Proc. Eighteenth Internat. Universitätswochen Kernphysik, Karl-Franzens-Univ. Graz, Schladming, 1979), pp. 485-558, Acta Phys. Austriaca Suppl., XXI, Springer, Vienna, 1979. (See 82f:81003) 81G05

Pasciak, Joseph The penalty correction method for elliptic boundary value problems. SIAM J. Numer. Anal. 16 (1979), no. 6, 1046-1059. (Author's sum 65N30

Pascolini, A. (with Milani, N.: Minelli, T. A.) An extension of Kato's perturbation theory to resonant states. (Italian summary) Nuovo Cimento A (11) 61 (1981), no. 1, 12-27. (K. Kumar) 82h:81033 81C12 (47A55, 81F05)

Pascu, Anca (with Bucurescu, Irina) On the languages generated by context-sensitive fuzzy grammars. Internat. J. Comput. Math. 9 (1981), no. 4, 277-285. (Authors' summary) 68F05

Pascu, Eugen (with Flondor, Paul) Some invariants on real-analytic spaces. (Italian summary) Boll. Un. Mat. Ital. A (5) 17 (1980), no. 3, 466-473. (A. Tognoli) 82g:32016

Pascu, N. (with Blezu, D.; Rotaru, P.) Alpha-starlike functions of order β . (Romanian. English summary) Bul. Univ. Braşov Ser. C 21 (1979), 41-44. (P. T. Mocanu) 82j:30017

Pascu, Vasile Considerations on the optimization of almost vertical trajectories of rockets moving in a resisting medium with variable constraints on the magnitude of the thrust. (Romanian) Stud. Cerc. Mec. Apl. 39 (1980), no. 2, 183-193. (Simona Popp) 82g:70011

ann, F. B. General vector field representations of local Heisenberg systems Differential geometric methods in mathematical physics (Proc. Internat. Conf., Tech. Univ. Clausthal, Clausthal-Zellerfeld, 1978), pp. 38-48, Lecture Notes in Phys., 139, Springer,

Berlin, 1981. (Author's summary) 82g:81045 81D99
Pasenčenko, Ju. A. (with Pavljuk, I. A.) Calculation of multipliers of second-order linear periodic systems. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 2, 257-262. (A. Halanay) 82d:34058 34D05

Pasenčuk, A. E. (with Dybin, V. B.) Discrete convolutions in the quarter plane with a vanishing symbol. II. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk. 1979, no. 4, 11-14, 109. (Authors' summary) 82c:47035 (39A12)

Pasha, I. I. See Paša, I. I.

ev, O. K. See Pašaev, O. K.

Pasicki, Lech Three fixed point theorems. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 3-4, 173-175 (1981). (Sehie Park) 82i:54080 On the measures of noncompactness. Comment. Math. Prace Mat. 21 (1980), no. 1,

203-205. (J. M. Aarts) 82f:54036 54D99 (28A10, 47H09) On the Cellina theorem of nonempty intersection. Rev. Roumaine Math. Pures Appl.

25 (1980), no. 7, 1095-1097. (Mau-Hsiang Shih) 82g:54044 54E35 (46B99) A fixed point theory for multivalued mappings. Proc. Amer. Math. Soc. 83 (1981), no. 4, 781-789. (R. E. Smithson) 82k:54077 54H25

Pasikov, V. L. A problem of encounter of motions for integral equations. (Russia

Differencial'nye Uravnenija (Ryazan) No. 13 (1979), 82-100. (E. G. Al'breht) 82d:90140 90D25 (45D05, 49A45) Paškovskii, V. I. A new method for calculating electromagnetic fields in fine-grained and

continuous media. (Russian) Differencial'nye Uravnenija 17 (1981), no. 2, 345-353, 391. 78A25 (35J10) (K. Wódkiewicz) 82g:78005

de Pasquale, F. (with Tartaglia, P.; Tombesi, P.) Transient behavior of nonequilibrium phase transitions. Phys. Lett. A 78 (1980), no. 2, 129-132. (Authors' summary) 82h:80022 80A30 (58F13, 92A40)

Pasmini, Lionello (with Lo Cascio, Maria Laura) Construction of a system of orthonormal functions, of one or more variables, with zeros in a prescribed set. (Italian. English nary) Rend. Mat. (6) 13 (1980), no. 2, 321-336. (F. M. Arscott) 82e:42020

Passi, I. B. S. (with Gupta, Narain) The Fox modules of a finite group. Indian J. Pure

- Appl. Math. 12 (1981), no. 4, 430-439. (Thaddeus C. Hurley) 82k:20047 D. S. (with Lorenz, Martin) Prime ideals in crossed products of finite groups
- January J. Math. 33 (1979), no. 2, 89-132. (J. E. Roseblade) 82h:16042a 16A66 (with Lorenz, Martin) Addendum: "Prime ideals in crossed products of finite groups". Israel J. Math. 35 (1980), no. 4, 311-322. (J. E. Roseblade) 82h:16042b 16A66
- The radical of the center of a group algebra. Proc. Amer. Math. Soc. 78 (1980), no. 3, 323–326. (Author's summary) 82g:20016 20C05

- 323-326. (Author's summary) 82g-20016 20C05 (with Smith, P. F.) Units in integral group rings. J. Algebra 69 (1981), no. 1, 213-239. (F. C. Polcino Milies) 82h-20099 20C05 (12A57) asy, Ury (with Feigin, Paul D.) The geometric programming dual to the extinction probability problem in simple branching processes. Ann. Probab. 9 (1981), no. 3, 498-503. (Seren Asmussen) 82f-50183 60J80 (92A15) (with Yutav, S.) Pseudoduality and saddle points. J. Optim. Theory Appl. 33 (1981), no. 3, 325-347. (Authors' summary) 82j-50066 90C30 stermack, Bernard (with Shohoji, Taxloo) Fitting a Gompertz curve to adolescent standing height growth data. Essays in probability and statistics, pp. 559-577, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 82b62143 62P10 (62F10, 92A07, 92A10) stermak, V. E. (with Ilykanov, A. A. Ialamov, II.) L. Construction of the Bhatmagar.
- k, V. E. (with Juškanov, A. A.; Jalamov, Ju. I.) Construction of the Bhatnag Gross, and Krook model in the case of moderate density gases. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1979, no. 11, 12-15. (Authors' summary) 82g:82029 82A40
- ti, P. (with Bonora, L.; Tonin, M.) Geometric description of extended BRS symmetry in superfield formulation. (Italian and Russian summaries) Nuovo Cimento A (11) 63 (1981), no. 3, 353-364. (Jiří Niederle) 821:81057 81G20 (53C80)
- tijn, Francis (with Hardy, Darel W.) The greatest regular lucai of the binary relations. Proceedings of a Symposium on Regular Semigroups (Northern Illinois Univ., De Kalb, Ill., 1979), pp. 83–91, Northern Illinois Univ., DeKalb, Ill., 1979. (See is (with Hardy, Darel W.) The greatest regular ideal of the semigroup of
 - Structure theorems for pseudo-inverse semigroups. Proceedings of a Symposium on Regular Semigroups (Northern Illinois Univ., De Kalb, Ill., 1979), pp. 128–138, Northern ois Univ., DeKalb, III., 1979. (See 82j:20120) 20M10
 - Regular locally testable semigroups as semigroups of quasi-ideals. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 161–166. (Karl Byleen) 82e:20072 20M10 Uniform lattices. Acta Sci. Math. (Szeged) 42 (1980), no. 3-4, 305–311. (T. S. Blyth)
 - 06B99 (06A12)
 - (with Byleen, Karl; Meakin, John) Building bisimple idempotent-generated
 - semigroups. J. Algebra 65 (1980), no. 1, 60-83. (T. E. Hall) 82c:20103 20M10 The biorder on the partial groupoid of idempotents of a semigroup. J. Algebra 65 (1980), no. 1, 147-187. (T. E. Hall) 82c:20107 20M10
 - (with De Bodt, A.) A class of rectangular bands of inverse semigroups. Semigroup 20M10
 - Forum 21 (1980), no. 1, 9-11. (Phullendu Das) 82a:20067 Biordered sets and complemented modular lattices. Semigroup Forum 21 (1980),
 - no. 2-3, 205-220. (C. J. Maxson) 82b:20090 20M10 (06C15, 20M25, 20M30) (with Meakin, John) The structure of pseudosemilattices. Algebra Universalis 13
 - (1981), no. 3, 355–372. (S. M. Goberstein) 82k:20100 20M10 (06A12) (with Hardy, Darel W.) The maximal regular ideal of the semigroup of binary relations. Czechoslovak Math. J. 31(106) (1981), no. 2, 194–198. (Eckehart Hotzel)
 - Rectangular bands of inverse semigroups. (Dutch) Med. Konink. Acad. Wetensch. België 43 (1981), no. 1, 13-31. (B. H. Neumann) 82e:20073 20M10 (06A12)
 - (with Graczyńska, Ewa) Proofs of regular identities. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 10 (1981), no. 1, 35-37. (Editors) 82e:08008 08B05
- store, G. (with Senatore, G.; Tosi, M. P.) Short-range correlations in multicomponer plasmas. Phys. Lett. A 84 (1981), no. 7, 369-370. (Authors' summary) 82k:82032
- tre, Dominique Observation du mathématicien: aide à l'enseignement et à la démonstration automatique de théorèmes. Ed. Stud. Math. 9 (1978), no. 4, 461-502. stre, Domin
- tuhov, D. I. A problem with shift for a fourth-order equation of mixed-composite type. (Russian) Kuibyšev. Gos. Ped. Inst. Naučn. Trudy 232 (1979), Differencial. Uravnenija i Mat. Fiz. No. 1, 70–77. (K. A. Jagdžjan) 82c:35050 35M05
- athy, J. (with Singh, Virendra) Higher order JWKB expressions for the energy levels and the wavefunction at the origin. Z. Phys. C 10 (1981), no. 1, 23-27. (Authors' summary) 82:81034 81C12 (34E20, 81G05)
- hy, S. (with Hirt, W.) Suboptimal reception of binary CPSK signals. Proc. IEE-F 128 (1981), no. 3, 125-134. (Authors' summary) 82e:94026
- Pasynkov, B. A. (with Fedorčuk, V. V.; Filippov, V. V.) Dimension theory. (Russian) Algebra. Topology. Geometry, Vol. 17 (Russian), pp. 229-306, 308, Akad. Nauk SSSR, ojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (N. Hadžiivanov) 82d:54038
 - On the dimension of topological products and limits of inverse sequences. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1332-1336. (Y. Kodama) 82c:54035 54F45 (55M10)
 - Factorization theorems in dimension theory. (Russian) Uspehi Mat. Nauk 36 (1981), no. 3(219), 147-175, 256. (R. Engelking) 82g:54061 54F45
- Paszkiewicz, Tadeusz See Mathematical aspects of quantum field theory, 82i:81004a Patadia, J. R. (with Patel, G. B.) On the absolute convergence of lacunary Fourier series.
- ian J. Math. 21 (1979), no. 2, 81-87. (H. Burkill) 82c:42011 42A28 Patai, Z. F. The multiplicative group of a group ring. (Ukrainian. Russian Studies in the qualitative theory of differential equations and its applications (Ukrainian), pp. 47–48, 75, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Author's summary) 826:20021 20C07 (16A27, 20C05)
- Pataraja, K. T. (with Maistrenko, V. E.; Avaliani, G. V.) Density of probability distribution of values of the square of the distance between two points. (Russian) Theoretical cybernetics (Russian), pp. 155-158, "Mecniereba", Tbilisi, 1980. (From the text) 82h:60027 60D05
- ngigs, N. (with Janussis, A. D.) Wigner operator and Wigner distribution. Serdica 3 (1977), no. 4, 281–286. (Authors' summary) 82e-81015 81C20 (47A55) (with Jannussis, A. D.; Brodimas, G.) Phase space and the Wigner equation

- Serdica 3 (1977), no. 4, 287-291. (Authors' summary) 82e:81016 81C20 (47A55)
- (with Jannussis, A. D.; Papaloucas, L. C.) Connection between generalized Glauber trators and two-photon coherent states of the radiation field. Lett. Nuovo Cimento (2) 29 (1980), no. 3, 87-91. (From the text) 82h:81022 81C05 (81D30, 81K05)
- (with Jannussis, A. D.; Leodaris, A.; Papatheou, V.; Vlachos, K.) Quantum friction periodic potential. Phys. A 106 (1981), no. 3, 611-621. (From the sum 81C05 (82A60)
- on P. (with Konstantinov, Mihail M.; Petkov, Petko Hr.; Hristov, Nikolai arinski, Simeon P. (with Konstantinov, Minail M.; Fetkov, Fetko III.; Hilstov, Ivakou. D.) Stabilization of linear differential delayed systems via the Ljapunov direct method. Functional differential systems and related topics (Proc. First Internat. Conf., Blażejewko, 1979), pp. 193–196, Higher College Engrg., Zielona Góra, 1980. (M. K. Grammatikopoulos) 82a:34094 34K35 (34K20)

 - Grammaukopoulos) Augustus (with Konstantinov, Mihail M.; Petkov, Petko Hr.; Hristov, Nikolaï D.)
 Stabilization of linear differential delayed systems via the Ljapunov direct method.
 - (Wolfdietrich Müller) 82g-34108 34K20 (34K35, 93D15)
 Synthesis of optimal discrete-time model-following systems. (Bulgarian. Russian and English summaries) Problemi Tehn. Kibernet. 11 (1981), 29–33. (Author's summary) 93B50
 - (with Konstantinov, Mihail M.: Petkov, Petko Hr.: Hristov, Nikolai D.) Synthesis of discrete systems with guaranteed quality. (Bulgarian. Russian and English summaries) Problemi Tehn. Kibernet. 11 (1981), 34-40. (Authors' introduction) 82i:93032 93B50
- Pate, Thomas H. A direct iterative method for an abstract Cauchy-Kowalewsky theorem. Indiana Univ. Math. J. 30 (1981), no. 3, 415-425, (S. S. Titov) 82k:35005 35A10 An extension of an inequality involving symmetric products with an application to manents. Linear and Multilinear Algebra 10 (1981), no. 2, 103-105. (John Chollet)
- 82i:15019 15A45 (15A15) Patefield, W. M. Corrigendum: " m: "On the maximized likelihood function" [Sankhyā Ser. B 39 (1977), no. 1, 92-96; MR 58 #31482]. Sankhyā Ser. B 39 (1978), no. 4, 409. (Editors) 82a:62010 62A10
- Patel, C. M. (with Agrawal, S. R.) On the mean convergence of a Fourier-Bessel series. Indian J. Math. 19 (1977), no. 3, 149-156. (Prem Chandra) 82g:42021 42C10 (42C15) (with Agrawal, S. R.) On convergence and Riesz means of a series of Bessel functions. Comment. Math. Prace Mat. 22 (1980), no. 1, 1-16. (D. P. Gupta) 82i:42019
 - (with Puri, V. K.) On the degree of approximation of partial sums of Fourier-Bessel series. Mat. Vesnik 4(17)(32) (1980), no. 3, 339-348. (S. Masood) 82i:42003 42A16
- Patel, D. M. Symbols for 1, 2, 3, 4, 5, 6, 7, 8, 9 & 0 in Sanskrit and English langu Math. Ed. (Siwan) 15 (1981), no. 1, B1-B3. (Brij Mohan) 82h:01080 01A99 (01A32)
- Patel, G. B. (with Patadia, J. R.) On the absolute convergence of lacunary Fourier series. in J. Math. 21 (1979), no. 2, 81-87. (H. Burkill) 82c:42011 42A28
- Patel, H. I. (with Khatri, C. G.) Analysis of incomplete data in experiments with repeated measurements in clinical trials using a stochastic model. Comm. Statist. A—Theory Methods 10 (1981), no. 22, 2259-2277. (Authors' summary) 82k:62197 62P10
- Patel, I. C. (with Akabari, R. P.; Patel, L. K.) Two Kerr-NUT type solutions of Einstein's equations. Acta Phys. Acad. Sci. Hungar. 48 (1980), no. 2-3, 187-195. (Authors' mmary) 82h:83017 83C15
- sh K. (with Kingston, Joseph V.) Interval estimation of the largest reliability of k Weibull populations. Comm. Statist. A—Theory Methods 10 (1981), no. 22, 2279–2298. (Authors' summary) 82k:62185 62N05 (62F25)
- Patel, L. K. (with Patel, I. C.; Akabari, R. P.) Two Kerr-NUT type solutions of Einstein's equations. Acta Phys. Acad. Sci. Hungar. 48 (1980), no. 2-3, 187-195. (Authors' summary) 82b:83017 83C15
- Patel, L. M. (with Meher, F. M.) Projective motion in a PS-F_n. (Italian summary) Boll. Un. Mat. Ital. A (5) 16 (1979), no. 3, 554-559. (I. Ghinea) 82g:53035 53B40
- Patel, Rajnikant V. Computation of matrix fraction descriptions of linear time-invariant systems. IEEE Trans. Automat. Control 26 (1981), no. 1, 148-161. (Author's summary) 65F30 (93B10, 93B15)
- Patel, S. M. Joint normaloidity of operators. (Serbo-Croatian summary) Glas. Mat. Ser. III
- 15(35) (1980), no. 2, 373-376. (A. T. Dash) 82j:47035

 **RED (47A10, 47A12)

 Patel, S. R. Mimimum variance unbiased estimation of generalized logarithmic series distribution. Pure Appl. Math. Sci. 11 (1980), no. 1-2, 79-82. (R. P. Gupta) 82a:62050 62F10
- Patera, Anthony T. (with Orszag, Steven A.) Transition and turbulence in planar channel flows. Seventh International Conference on Numerical Methods in Fluid Dynamics (Stanford Univ., Stanford, Calif.; NASA/Ames Res. Center, Moffett Field, Calif., 1980), pp. 329-335, Lecture Notes in Phys., 141, Springer, Berlin, 1981. (Authors' summary) 82i:76037 76E05 (65P05, 76-04, 76F99) 76E05 (65P05, 76-04, 76F99)
 - (with Orszag, Steven A.) Subcritical transition to turbulence in planar shear flows. Transition and turbulence (Madison, Wis., 1980), pp. 127-146, Publ. Math. Res. Center Univ. Wisconsin, 46, Academic Press, New York, 1981. (See 82k:76002) 76E05 (58F13, 76F10)
 - (with Orszag, Steven A.) Finite-amplitude stability of axisymmetric pipe flow. J. Fluid Mech. 112 (1981), 467-474. (Authors' summary) 82m:76021 76D05 (76-04,
- Patera, J. (with Winternitz, P.; Zassenhaus, Hans) On the maximal abelian subgroups of the linear classical algebraic groups. C. R. Math. Rep. Acad. Sci. Canada 2 (1980), no. 5, 231-236. (From the text) 82a:20051 20G15
 - (with Lemire, F. W.) Congruence number, a generalization of SU(3) triality. J. Math. Phys. 21 (1980), no. 8, 2026-2027. (Authors' summary) 82j:22019 (81C40)
 - (with McKay, W. G.) *Tables of dimensions, indices, and branching rules for representations of simple Lie algebras. Lecture Notes in Pure and Applied Mathematics, 69. Marcel Dekker, Inc., New York, 1981. v+317 pp. ISBN 0-8247-1227-7 (Bernard 17B10 (22E70, 81C40)
 - (with Miller, Willard, Jr.; Winternitz, P.) Subgroups of Lie groups and separation of variables. J. Math. Phys. 22 (1981), no. 2, 251-260. (Anthony J. Bracken) 82h:81055
 - (with Sharp, R. T.) Generating functions for SU(2) plethysms with fixed exchange

J. Math. Phys. 22 (1981), no. 2, 261-266. (Nigel B. Backhouse) 82k:81027 81C40 (22E46)

erson, Michael S. (with Fischer, Michael J.) The fast skew-closure algorithm. Enseign. Math. (2) 26 (1980), no. 3-4, 345-360 (1981). (Authors' summary) 82m:68065a 68C05 (15A99, 65F30)

(with Fowler, Robert J.; Tanimoto, Steven L.) Optimal packing and covering in the plane are NP-complete. Inform. Process. Lett. 12 (1981), no. 3, 133-137. (From the introduction) 82e:05112 05C99 (05B40, 52-04, 52A45, 68C25, 68G10) (with Fischer, Michael J.) The fast skew-closure algorithm. Logic and algorithmic

(Zurich, 1980), pp. 145–160, Monograph. Enseign. Math., 30, Univ. Genève, Geneva, 1982. (Authors' summary) 82m:68065b 68C05

Pathak, Pramod K. (with Zimmer, William J.; Williams, Raymond E.) Nonparametric Pathais, Pramod E. (with Zimmer, William J.; Williams, Raymond E.) Nonparametric estimation of an acceleration parameter. Comm. Statist. A—Theory Methods 8 (1979), no. 4, 367–383. (Z. Govindarajulu) 82h:62070 62G05 (62N05)

Pathaik, R. S. Expansion of distributions in terms of heat polynomials. Aligarh Bull. Math. 7 (1977), 81–90 (1980), (D. T. Haimo) 82t;33019 33A65 (53K05)

(with Debnath, Lokenath) Expansions of distributions in terms of generalized heat

polynomials and their Appell transforms. Internat. J. Math. Math. Sci. 3 (1980), no. 4, 773-787. (J. N. Pandey) 82b:46051 46F12 (44A15)

Erratum: "Dual series equations involving heat polynomials" [Nederl. Akad. Wetensch. Indag. Math. 41 (1979), no. 4, 455-463; MR 80k:45008]. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 3, 269-270. (Editors) 82a:45014

The reduced Poisson-Hankel transform of generalized functions. Progr. Math. 44A15 (46F12) (Allahabad) 14 (1980), no. 1-2, 35-47. (D. T. Haimo) 82i:44003

hak, Vijay D. (with Cambern, Michael Isometries of spaces of differentiable functions.

Math. Japon. 26 (1981), no. 3, 253–260. (Peter Dierolf) 82h:46043

46E15 Isometries of C(n)[0,1]. Pacific J. Math. 94 (1981), no. 1, 211-222. (N. V. Rao)

46E15 Pathan, M. A. (with Srivastava, Hari M.) Some bilateral generating functions for extended Jacobi polynomials. II. Comment. Math. Univ. St. Paul. 29 (1980), no. 2, 105-114. (Ram Kishore Saxena) 82g:33009 33A30 (33A65)

Pathiaux, Martine Familles fermées de n-uples de nombres algébriques. Séminaire Delange-Pisot-Poitou, 20e année: 1978/1979. Théorie des nombres, Fasc. 1 (French), Exp. No. 5, 7 pp., Secrétariat Math., Paris, 1980. (Marthe Grandet) 82e:12001

Pathria, R. K. (with Karmeshu) A stochastic model for highway traffic. Transportation Res. Part B 15 (1981), no. 4, 285-294. (Authors' summary) 82h:90051

Pati, Raj (with Prasad, Y. N.) Basic properties of modified multidimensional integral transform. (Hindi. English summary) Vijnana Parishad Anusandhan Patrika 24 (1981), no. 1, 9-22. (K. M. Saksena) 82k:44007 44A30

Patil, D. A. (with Thakare, N. K.) On univalence of certain integrals. Indian J. Pure Appl.

Math. 11 (1980), no. 12, 1626-1642. (E. P. Merkes) 82f:30011 30C45
Patil, Ganapati P. (with Taillie, C.) Diversity as a concept and its implications for random communities. (French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 2. With discussion. Bull. Inst. Internat. Statist. 47 (1977), no. 2, 497-515, 551-558. (Howard B. Stauffer) 82k:92066 (with Ratnaparkhi, M. V.) On additive and multiplicative damage models and the characterizations of linear and logarithmic exponential families. (French summary)

Canad. J. Statist. 7 (1979), no. 1, 61-64. (Authors' summary) 82f:62036 62E10 (with Kapur, Bharat D.) On multivariate size allometry. Professor Huzurbazar felicitation volume. J. Indian Statist. Assoc. 17 (1979), 69-82. (Yasuko Chikuse)

82f:92005 92A05 (62H30) (with Taillie, C.) On a variant of the Rao-Rubin theorem. Sankhyā Ser. A 41 (1979), no. 1-2, 129–132. (A. N. Philippou) 82k:62037 62E10

See also Enviro 82i:92001

Patil, H. P. (with Kulli, V. R.) Graph equations for line graphs, middle graphs and entire graphs. J. Karnatak Univ. Sci. 23 (1978), 25-28. (L. W. Beineke) 82b:05105 (with Kulli, V. R.) Graphs with minimally nonouterplanar squares. J. Karnatak Univ. Sci. 23 (1978), 29-37. (A. Altshuler) 82b:05106 05C75

Patil, K. R. (with Thakare, N. K.) Operational formulas and generating functions in the unified form for the classical orthogonal polynomials. Math. Student 45 (1977), no. 1, 41-51 (1978). (TITLE) 82c:33020 33A65 (42C05)

(with Karande, B. K.) Note on Konhauser biorthogonal polynomials. Indian J. Pure Appl. Math. 12 (1981), no. 2, 222-225. (H. M. Srivastava) 82b:33018 33A65

(with Karande, B. K.) Expansion formulas for Srivastava paday-3016 337616 (with Karande, B. K.) Expansion formulas for Srivastava polynomials in series of the Konhauser biorthogonal polynomials. Indian J. Pure Appl. Math. 12 (1981), no. 9, 1124–1128. (N. K. Thakare) 82i:33016 33A65 (42B05)

Patil, P. T. (with Achari, J.) A note on pair of generalized contraction type mappings in 2-metric space. Math. Ed. (Siwan) 15 (1981), no. 2, A33–A35. (Schie Park) 82m:54058

Patil, S. A. (with Uppuluri, V. R. Rao) Sampling proportional to random size. Proceedings of the Second International Conference on Mathematical Modelling (St. Louis, Mo., 1979), Vol. 1, 11, pp. 501-510, Univ. Missouri-Rolla, Rolla, Mo., 1980. (Authors' summary) 62E15 82a:62031

santucci Patini, Lia See Santucci Patini, Lia
Patino-Leal, Hugo (with Reilly, Park M.) A Bayesian study of the error-in-variables model. metrics 23 (1981), no. 3, 221-231. (Authors' summary) 82i:62055

Paton, B. E. See History of the Academy of Sciences of the Ukrainian SSR, 82h:01072
Patra, Nishith Kumar (with Chatterjee, Shoutir Kishore) Asymptotically minimal multivariate tolerance sets. Calcuta Statist. Assoc. Bull. 29 (1980), no. 113-114, 73-93. (I. Guttman) 82a:62056 62F25 (62G15)

(with Basu, Sujit K.) On certain generalizations of results on probabilities on moderate deviations. Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs. 27 (1980), no. 1, 16–23. (J. E. A. Dunnage) 82h:60053

(with Dutta, Kalyan; Basu, Sujit K.) On certain generalizations of results on probabilities of moderate deviations under dependence. Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs. 27 (1980), no. 2, 18-25. (Adolfo Gili) 82g:60042 60F10

Patrascioiu, Adrian More about the fermion determinant in two-dimensional QED. Phys.

Rev. D (3) 22 (1980), no. 12, 3142-3144. (Author's summary) 82h:81065a

Patria, Maria Cristina (with Borrelli, Alessandra) Some results in the dynamics of inextensible elastic solids. (Italian. English summary) Ann. Univ. Ferrara Sez. VII (N.S.) 26 (1980), 41-59 (1981). (Authors' summary) 82f:73014

(with Borrelli, Alessandra) Variational principles of the mechanics of inextensible elastic solids. (Italian. English summary) Boll. Un. Mat. Ital. Suppl. 1 (1981), 1-31. (Authors' summary) 82m:73015 73C60 (49H05)

do Patrocinio, António Carlos Nonembedding in sphere bundles. Bol. Soc. Brasil. Mat. 10 (1979), no. 2, 1-14. (V. Oproiu) 82e:57015 57R40 (55R25)

rone, F. (with Lucchetti, R.) On Nemytskii's operator and its application to the lower semicontinuity of integral functionals. Indiana Univ. Math. J. 29 (1980), no. 5, 703-713.
(B. T. Poljak) 82:47104 47H99 (49A50)

(with Lucchetti, R.) A characterization of Tyhonov well-posedness for mini problems, with applications to variational inequalities. Numer. Funct. Anal. Optim. 3 (1981), no. 4, 461-476. (Michele Matzeu) 82m.49036 49B50 (49A29, 49B27)

ilk, Prasanta K. (with Sengupta, Manimay) Restricted preferences and strategy-proofness of a class of group decision functions. Rev. Econom. Stud. 47 (1980),

satisfy-proteiness of a class of group accession functions. Rev. Econom. Stud. 47 (1980), no. 5, 965–973. (Donald E. Campbell) 82i:90025 90A69.

Patten, B. C. (with Auble, G. T.) Systems approach to the concept of niche. Conceptual ues in ecology. Part I. Synthese 43 (1980), no. 1, 155-181. (Authors' introduction) R2i-92035 92A17 (93A10)

Patterson, C. The extended energy method for mixed mode fracture problems. Numerical methods in fracture mechanics (Swansea, 1978), pp. 292-301, Univ. College Swansea, 73M05 (73K25) Swansea, 1978. (Author's summary) 82k:73068

Patterson, E. M. The greatest happiness of the greatest number. Bull. Inst. Math. Appl. 17 (1981), no. 10, 196-201. (Editors) 82m:00006 00A05

A class of critical Riemannian metrics. J. London Math. Soc. (2) 23 (1981), no. 2, 349-358. (J. R. Vanstone) 82m:58022 58E11 (53C25, 83C05)

Patterson, H. D. (with Preece, D. A.; Bailey, R. A.) A randomization problem in formi designs with superimposed treatments. Austral. J. Statist. 20 (1978), no. 2, 111-125.

(Authors' summary) 82k:62153 62K99

Patterson, John (with Gupta, Manjul; Kamthan, P. K.) Duals of generalized sequence spaces. J. Math. Anal. Appl. 82 (1981), no. 1, 152-168. (N. De Grande-De Kimpe) 46A45

Pattipati, Krishna R. (with Kleinman, David L.) Priority assignment using dynamic programming for a class of queueing systems. IEEE Trans. Automat. Control 26 (1981), no. 5, 1095-1106. (Authors' summary) 82i:90049 90B22 (68C15)

Patton, C. M. On representations in cohomology over pseudo-Hermitian symmetric spaces. Bull. Amer. Math. Soc. (N.S.) 5 (1981), no. 1, 63-66. (R. O. Wells, Jr.) 82j:81035 81D25 (22E46, 32M15, 46E20)

Patula, William T. (with Atkinson, F. V.; Grimmer, R. C.) Nonoscillatory solutions of forced second-order linear equations. II. Ann. Mat. Pura Appl. (4) 126 (1980), 299-317 (1981). (C. Corduneanu) 82i:34032 34C10 (34C11)

(with Hooker, John W.) Riccati type transformations for second-order linea difference equations. J. Math. Anal. Appl. 82 (1981), no. 2, 451-462. (B. G. Pachpatte) 39A10

uwo, B. E. (with Thomas, R. S. D.; Wang, Chung Lie) The triangle inequality of Lessells and Pelling. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 45-47 (1981). (S. R. Mandan) 82i:51034 51N20

twardhan, M. D. Bornological properties of the space of integral functions. Indian J. Pure Appl. Math. 12 (1981), no. 7, 865-873. (H. Hogbe-Nlend) 820:46041 46E10 46F10

Patyi, Károly (with Prékopa, András; Ganczer, Sándor; Deák, István) The STABIL stochastic programming model and its experimental application to the electrical energy sector of the Hungarian economy. Stochastic programming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 369-385, Academic Press, London, 1980. (Authors' summary) 90C50 (90C15) 82d:90131

Patzak, E. (with Mikeska, H. J.) On the dynamics of impure classical Heisenberg chains. Z. Phys. B 42 (1981), no. 4, 317-322. (Authors' summary) 82i:82072 82A68

Pau, L. F. Research on optimal control adapted to macro- and microeconomics: a survey. J. Econom. Dynamics Control 1 (1979), no. 3, 243-269. (From the introduction) 90Axx (90-02)

See also Models and decision making in national economies, 82m:90001

Pauer, Franz Normale Einbettungen von G/U. [Normal embeddings of G/U] Math. Ann. 257 (1981), no. 3, 371-396. (Wim H. Hesselink) 82k:14050 14L30 (20G30) Paukowitsch, Hans Peter Die Schmiegkegelschnitte einer Klothoide. Elem. Math. 35

(1980), no. 6, 129-137. (O. Bottema) 82a:53005 53A17 (51N05) Eine Kennzeichnung der Regel- und Gesimsflächen. (English summary) J. Geom. 15 (1980), no. 2, 182–194. (Z. Nádeník) 82j:53007 53A05

Paul, B. B. (with Krori, K. D.; Chaudhury, T.; Bhattacharjee, R.) A solution of the stationary axially symmetric Brans-Dicke-Maxwell equations. Phys. Lett. A 85 (1981),

no. 6-7, 316-318. (B. K. Nayak) 82m:83043 83D05 Paul, H. (with von Borzeszkowski, Horst-Heino) On caustics and singularities in general

relativity. (German summary) Ann. Physik (7) 37 (1980), no. 2, 102-108. (Muppinaiya Nagaraj) 82f:83059 83C99 (58C27, 58D25) The Einstein-Podolsky-Rosen paradox and local hidden-variables theories. Fortschr.

Phys. 28 (1980), no. 12, 633-657. (Author's summary) 82:81009 81B05
Paul, Indraneel (with Stark, Henry; Woods, John W.; Hingorani, Rajesh) Direct Fourier reconstruction in computer tomography. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 2, 237-245. (Avraham A. Melkman) 82e:68099 68G10 (94A12)

Paul, Jerome L. Path length chromatic numbers of Z*. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 713-715. (J. Mitchem) 82i:05035 05C15 (05C38)

(with Graham, Ronald L.; Li, Wen Ch'ing Winnie) Homogeneous collinear sets in partitions of Zⁿ. J. Combin. Theory Ser. A 31 (1981), no. 1, 21-32. (P. L. Buzyckil)

82;10077 10H26 (05A17, 10125)

Paul, Michael E. (with Markley, Nelson G.) Matrix subshifts for Z' symbolic dynamics.

Proc. London Math. Soc. (3) 43 (1981), no. 2, 251-272. (Pierre Michel) 82:54073 54H20 (28D05)

R. Time-depend e and autocorrelation functions within the Moyal dyr tion. Phys. Rev. A (3) 23 (1981), no. 3, 999-1007. (Author's summary) 82c:82051 82A35 (81C20)

(with Wagstaff, K.) Application of Pade approxi

tion. Phys. Rev. A (3) 24 (1981), no. 1, 476-487. (Authors' ry) 82k:82053 82A70 (82A50)

mil, S. K. (with Roy, Susanta) On an aspect of optimum exploitation of renewable resources: a competitive economy. J. Indian Acad. Math. 3 (1981), no. 2, 26–31. (Authors' summary) 82m:92064 92A15 (90A30)

al, Surinder (with Singh, Vikramaditya) Constrained extremal problems for symmetric functions with real part positive. Indian J. Pure Appl. Math. 12 (1981), no. 4, 492-512. (M. S. Robertson) 82g:30039 30C70 (30C45)

(M. S. Robertson) 82g-30039 30C70 (30C45)

ul, Wolfgang J. (with Reischuk, Rüdiger) A graph-theoretic approach to determinism versus nondeterminism. Theoretical computer science (Fourth GI Conf., Aachen, 1979), pp. 222-232, Lecture Notes in Comput. Sci., 67, Springer, Berlin, 1979. (Claus-Peter Schnorr) 82x:68081 68C25

(with Galil, Zvi) Effizienz paralleler Rechner. GI—10. Jahrestagung (Saarbrücken, 1980) (German), pp. 54–64, Informatik-Fachber., 33, Springer, Berlin, 1980. (From the

text) 82g:68024 68B20

(with Prauß, Ernst-fürgen; Reischuk, Rüdiger) On alternation. Acta Inform. 14 (1980), no. 3, 243–255. (Ryszard Janicki) 82e:68048a 68C40 (03D10) (with Reischuk, Rüdiger) On alternation. II. A graph-theoretic approach to

nism versus nondeterminism. Acta Inform. 14 (1980), no. 4, 391-403. (Ryszard

68C40 (03D10)

(with Seiferas, Joel I.; Simon, Janos) An information-theoretic approach to time bounds for on-line computation. J. Comput. System Sci. 23 (1981), no. 2, 108–126. (Authors' summary) 82m:68089 68C25

skas, Vygantas The rates of convergence in the central limit theorem in Banach spa Probability theory on vector spaces, II (Proc. Second Internat. Conf., Blażejewko, 1979), pp. 234-243, Lecture Notes in Math., 828, Springer, Berlin, 1980. (Adhir K. Basu)

Estimate of the rate of convergence in the central limit theorem in l_p spaces (Russian. Lithuanian and English summaries) Litoesk. Mat. Sb. 21 (1981), no. 1, 109–119. (J. H. Kučkarov) 82g:60014 60B12

Jauskas, Celestinas (with Kazlauskas, Kazys; Kaminskas, Vitautas) Simultaneous

identification and optimization of a dynamical extremal system in experimental investigation. (Russian. Lithuanian and English summaries) Statist. Problemy mija—Trudy Sem. Processy Optimal. Upravlenija V Sekcija No. 45 (1980), 23-47, thors' summary) **82g:49005** 49A10 (93B30) 99. (Authors' summary) 82g:49005

lauskas, V. I. (with Račkauskas, A.) Infinitely divisible and stable laws in separable Banach spaces. II. (Russian. Lithuanian and English summaries) Litosek. Mat. Sb. 20 (1980), no. 4, 97–113, 210. (S. A. Čobanjan) 82h:60016 60B12 (46B99, 60B11) uli, Wolfgang See Richter, Steffen, 82i:01060 ulin, Jeannine Saint Jean Homogénéisation et perturbations. (English summary) C. R.

Acad. Sci. Paris Sér. A-B 291 (1980), no. 1, A23-A26. (Moscariello Gioconda) 82c:35004 35B20 (49D50, 49E20)

Paull, Marvin C. (with Ostrand, Thomas J.: Wevuker, Elaine J.) Parsing regular grammars with finite lookahead. Acta Inform. 16 (1981), no. 2, 125-138. (Authors' summary) 68F25

Paulos, John A. Probabilistic, truth-value, and standard semantics and the primacy of predicate logic. Notre Dame J. Formal Logic 22 (1981), no. 1, 11-16. (David W. Miller) 82h:03051 03B48 (03B10, 60A99)

draia, P. (with Balakrishnan, R.) Graphs whose squares are chordal. Indian J. Pure Appl. Math. 12 (1981), no. 2, 193-194. (J. Sedláček) 82j:05092a 05C99 (05C38)

(with McGovern, Richard; Salinas, Norberto) A classification theorem for sentially binormal operators. J. Funct. Anal. 41 (1981), no. 2, 213-235. (Claude

(with Loebl, Richard I.) Some remarks on C*-convexity. Linear Algebra Appl. 35

(1981), 63–78. (J. W. Bunce) 82b-66077 46L05 (with Hopenwasser, Alan; Moore, Robert L.) C*-extreme points. Trans. Math. Soc. 266 (1981), no. 1, 291-307. (Richard I. Loebl) 82f:46065 46L05 (47D20)

son, A. S. (with Kumar, K. D.; Nicklin, E. H.) Comment on: "Estimating mixtures of normal distributions and switching regressions" [J. Amer. Statist. Assoc. 73 (1978), no. 364, 730-752; MR 80a:62040] by R. E. Quandt and J. B. Ramsey. With a rejoinder by Quandt and Ramsey. J. Amer. Statist. Assoc. 74 (1979), no. 365, 52-56. (N. Giri) 62F10

ents on characteristic function-based estimators (with Bryant, John L.) Some com Sankhyā Ser. A 41 (1979), no. 1-2, 109-116. (Kesar Singh) 82g:62047

er, Jean-Claude Une méthode numérique pour le calcul des points de retournement. Application à un problème aux limites non-linéaire. I. Étude théorique et

expérimentation de la méthode. (English summary) Numer. Math. 37 (1981), no. 3, 433-444. (Author's summary) 82i:65034a 65H10

Une méthode numérique pour le calcul des points de retournement. Application à un problème aux limites non-linéaire. II. Analyse numérique d'un problème aux limites non-linéaire. (English summary) Numer. Math. 37 (1981), no. 3, 445-452. (Author's summary) 82i:65034b 65H10

Päun, Gheorghe On the generative capacity of tree controlled grammars. (German summary) Computing 21 (1978/79), no. 3, 213-220. (Author's summary) 82e:68085

Two infinite hierarchies of languages defined by branching grammars. Kybernetika (Prague) 14 (1978), no. 6, 397-407. (Author's summary) 82m:68123 68F05

On the generative capacity of parallel matrix grammars. Bull. Math. Soc. Sci. Math. mie (N.S.) 23(71) (1979), no. 4, 367-371. (B. Brainerd) 82c:68049 Some further remarks on the family of finite index matrix languages. (French amary) RAIRO Inform. Théor. 13 (1979), no. 3, 289-297. (B. Brainerd) 82c:68050

A new generative device: valence grammars. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 6, 911-924. (Manfred Armbrust) 82b:68067 68F05

subintervals. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 715-720, Academic Press, New York, 1980. (Z. Ditzian) 82&41030 41A44

van der Pauw, L. J. A rigorous set of shell equations derived from the law of conservation of energy. *Philips J. Res.* 36 (1981), no. 1, 31–39. (Author's summary) 82d:73063 73L15

melussen, J. P. Failure of nerve impulse propagation for nonuniform nerve axons.
Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ.
Nijmegen, Nijmegen, 1980), pp. 339-344, North-Holland Math. Studies, 47,
North-Holland, Amsterdam, 1981. (Gail A. Carpenter) 82g:33055 35K55 (92A09)
(with Peletier, L. A.) Clines in the presence of asymmetric migration. J. Math. Biol.

11 (1981), no. 2, 207-233. (Piero de Mottoni) 82j:35086 35K55 (92A10, 92A15) Pavel, Monique Algebraic, topological and categorical aspects of pattern recognition: a survey. Pattern Recognition 14 (1981), no. 1-6, 117-120. (Author's summary) 82k:68053

68G10 (92A05) Pavel, Nicolae H. (with Vrabie, Ioan I.) Flow-invariance for differential equations

associated to nonlinear operators. An. Ştiinţ. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 25 (1979), suppl., 125-132. (G. S. Ladde) 82e:34067 34G20 inlinear evolution equations governed by f-quasidissipative operators. Nonlinear Anal. 5 (1981), no. 5, 449-468. (Robert H. Martin, Jr.) 82i:34073 34G20 (47H20)

Pavel, Paraschiva On an extension of Newton's quadrature formula. (Romanian. French

nmary) Studia Univ. Babeş-Bolyai Math. 25 (1980), no. 1, 8-11. (Gh. Adam) 65D32

Paveri-Fontana, S. L. (with Capasso, V.) Some results on linear stochastic multicompartmental systems. Math. Biosci. 55 (1981), no. 1-2, 7-26. (Robert J. Mulholland) 82i:92003 92A07 (93E03)

Pavinskii, P. P. (with Kuznecov, V. G.) Calculation of higher harmonics for the Coulomb potential of a crystal. I. Spherical functions of the symmetry O_b. (Russian. English summary) Vestnik Leningrad. Univ. Fiz. Him. 1980, vyp. 2, 23-27, 122. (Authors' summary) 82c:82087 82A60 See also Quantum mechanics and the theory of relativity, 82g:81003

Pavlenišvili, G. D. (with Berikelašvili, G. K.) Approximate solution of certain systems of nonlinear Volterra integral equations of the second kind. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 99 (1980), no. 2, 313-316. (R. K. Radeva) 45L05 (45D05)

Pavliašvili, N. R. An approach to the solution of pattern recognition problems. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 19 (1979), no. 1, 216-222, 271. (Author's summary) 82a:68170 68G10

Pavljuk, I. A. (with Pasenčenko, Ju. A.) Calculation of multipliers of second-order linear periodic systems. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 2, 257-262. (A. Halanay) 82d:34058 34D05

Pavljukevič, N. V. (with Leïcina, V. G.; Rudin, G. I.) On the calculation of the barodiffusion constants of binary gas mixtures (McCormack model). Inž.-Fiz. Ž. 38 (1980), no. 6, 1077-1083 (Russian); translated as J. Engrg. Phys. 38 (1980), no. 6, 671-676 (1981). (S. L. Kalla) 82d:80015 80A20 (80A15, 82A70)

Pavlov, A. I. The number of solutions of the equation $x^k = a$ in the symmetric group S_n . (Russian) Mat. Sb. (N.S.) 112(154) (1980), no. 3(7), 380-395, 475. (W. H. Simons) 82d:10063 10H25 (05A05, 05A10, 20B05)

Limit distribution of the number of cycles and of the logarithm of order of a class of permutations. (Russian) Mat. Sb. (N.S.) 114(156) (1981), no. 4, 611-642, 655. (Mauro

Cerasoli) 82h:60025 60C05 (10K10, 60F05) Pavlov, E. A. Some properties of permutations of functions. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 4, 125-129, 237. (J. Musielak) 82c:46036 46E30

Pavlov, E. V. (with Vasileva, M.) Sectional curvature in a space over a Clifford algebra. (Bulgarian, Russian and English summaries) Ploydio, Univ. Naučn. Trud. 16 (1978).

no. 1, 417-431 (1980). (M. C. Chaki) 82j:50/78 53(25)

Pavlov, Hristo Conditions for the input flow in the system GI/M/1/1 to be Poisson. (Russian, English summary) Godišnik Visš. Ped. Inst. Sumen Prirod.-Mat. Fak. 4 (1979).

5-10 (1980). (M. A. Fedotkin) 82k-60197 60K25

On the proximity of the input flow and the flow of customers not lost. (Russian. German summary) Godišnik Visš. Ped. Inst. Sumen Prirod.-Mat. Fak. 4 (1979), 11-16 (1980). (M. A. Fedotkin) 82k:60198 60K25

Pavlov, I. V. A fiducial approach in the estimation of the characteristics of complex systems for the results of tests. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 4, 102-109, 221 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 4, 73 (1981). (Author's summary) 82k:62188 62N05 (62F25)

Extreme rays and integral representation in the cone of martingales. (Russian. English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 3, 602-605. (M. P. Eršov) 60G44 (60J45)

Pavlov, K. B. (with Pokrovskii, L. D.; Taranenko, S. N.) Temperature waves in an ideal gas with nonlinear heat conduction. (Russian) Differencial nye Uravnenija 15 (1979), no. 11, 2034-2038, 2109-2110. (From the summary) 82d:76065 76N15 (65P05, 80A20)

(with Romanov, A. S.) On the change in the region of localization of perturbations in nonlinear transport processes. Izv. Akad. Nauk SSSR Meh. Židk. Gaza 1980, no. 6, 57-62 (Russian); translated as Fluid Dynamics 15 (1980), no. 6, 839-843 (1981). (C. V. Pao) 82m:35078 35K55 (76A05, 82A70)

(with Romanov, A. S.; Fedotov, I. A.) Propagation of perturbations in nonlinear transport processes described by an equation of turbulent filtration. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1981, no. 4, 83–88, 175. (Authors' summary) 82k:82059 82A70 (76805)

Pavlov, R. D. The problem of recognizing group properties in restricted alphabets. (Russian) Serdica 5 (1979), no. 3, 252–271. (V. A. Roman'kov) 82a:20043 20F10

On the problem of recognizing homomorphisms of finitely presented groups. (Russian) Serdica 5 (1979), no. 4, 370-373. (V. A. Roman'kov) 82d:20034 (03D40)

Pavlov, V. G. (with Boreckii, I. F.) Uniqueness of decomposition in the linear optimal control problem with a quadratic performance criterion. Avtomat. i Telemeh. 1979, no. 11, 10-15 (Russian. English summary); translated as Automat. Remote Control 40 (1979),

no. 11, part 1, 1563–1568 (1980). (Authors' introduction) 82b:49046 49D27 (20C35) Pavlov, V. I. An approach to the description of small-scale self-focusing. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 104, 20 pp. (Author's summary) 78A25 (82A99)

- Pavlov, V. M. (with Gusev, A. A.) On the possibility of reconstruction of movements in the center of a deep earthquake from far-field body waves. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 4, 824-828. (M. Mişicu) 82e:86005 86A15
- Pavlova, M. F. An iteration method of realization of an implicit difference scheme for two-dimensional filtration problems with variable gradient. (Russian) Computational methods and computer software, No. 2 (Russian), pp. 102-107, Kazan. Gos. Univ., Kazan, 1980. (See 82b:76001) 65N05 (76S05)
- 1980. (See 82k:76001) 65N05 (76S05)
 Pavlovec, G. A. (with Ivanteeva, L. G.; Konovalov, S. I.) Calculation of aerodynamic characteristics of a profile near a baffle for specific values of its geometric parameters. (Russian) Učen. Zap. CAGI 11 (1980), no. 2, 1-9. (Authors' summary) 82h:76009
- Pavlović, Gordana Solution of a first-order differential equation in the neighborhood of a given function and the stability of the solution of this equation. (Serbo-Croatian. French mmary) Mat. Vesnik 3(16)(31) (1979), no. 4, 475-492. (J. Muszyński) 82g:34043 34C11
- Pavlović, Milica (with Hendeković, Josip; Sokolić, Franjo) Generalization of Wick's corem. Chem. Phys. Lett. 77 (1981), no. 2, 382-386. (Authors' summary) 82b:81142 81G50 (22E70, 81H99)
- Pavlović, Miroslav A theorem on metrization of a locally convex space. (Russian) Mat. Vesnik 3(16)(31) (1979), no. 3, 327-330. (M. M. Day) 82e:46006 46A06 Two three-dimensional characterizations of a scalar product. (Russian) Mat. Vesnik
- 3(16)(31) (1979), no. 4, 493-495. (M. M. Day) 82j:46028 46C10 Pavlovskii, D. S. Spaces of continuous functions. (Russian) Dokl. Akad. Nauk SSSR 253
- (1980), no. 1, 38-41. (S. V. Kisljakov) 82c:54014 54C40 (46E10)
- Pavlyukevich, N. V. See Pavljukevič, N. V.
 Pavon, M. (with Wets, Roger J.-B.) A stochastic variational approach to the duality between estimation and control: discrete-time. Analysis and optimisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 347-360, Academic Press, London, 1980. (Michiel Hazewinkel) 82g:49014 49A60 (93E12, 93E20)
- Unified kinematics of bradyons and tachyons in six-dimensional space-time. J. Phys. A 14 (1981), no. 12, 3217-3228. (Author's summary) 82m:83050 Pawar, Y. S. (with Thakare, N. K.) On prime semilattices. Canad. Math. Bull. 23 (1980), no. 3. 291-298. (J. Karásek) 82a:06006 06A12
- Pawlak, Mirosław (with Greblicki, Włodzimierz) Classification using the Fourier series estimate of multivariate density functions. IEEE Trans. Systems Man Cybernet. 11 (1981), no. 10, 726-730. (Authors' summary) 82m:62091 62G05 (62H30)
- tow, Irena Finite-difference approximations to parabolic free boundary value problems arising in modelling of underground gas reservoir. I. Algorithms. (Polish and Russian summaries) Control Cybernet. 8 (1979), no. 2, 101-120. (Author's summary) 82k:65051a 65M05 (76S05)
 - Finite-difference approximations to parabolic free boundary value problems arising in modelling of underground gas reservoir. II. Convergence proof. Numerical results (Polish and Russian summaries) Control Cybernet. 8 (1979), no. 3, 191-212. (Author's mmary) 82k:65051b 65M05 (65M10, 76S05)
 - (with Niezgódka, Marek) Optimal control for parabolic systems with free boundaries. Existence of optimal controls, approximation results. Optimization Dodanaries, Existence of optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 412–420, Lecture Notes in Control and Information Sci., 22, Springer, Berlin, 1980. (L. Longdon) 82e:49032 49B22
- Pawlowski, Tadeusz *On concepts and methods in the humanities and the social sciences. Conferenze e Studi Accademia Polacca delle Scienze, Biblioteca e Centro di Studi a Roma [Lectures and Courses of the Polish Academy of Sciences, Library and Study Center of Rome], 80. Zakład Narodowy im. Ossolińskich-Wydawnictwo Polskiej Akademii Nauk (Ossolineum), Wrocław, 1980. 52 pp. ISBN 83-04-00180-2 (A. Rapoport) 82k:92001 92-01 (00A05)
- Paxson, Thomas D., Jr. Decision theoretic epistemology. Noûs 14 (1980), no. 4, 605-617.
 (A. A. Mullin) 82k:03007 03A05 (90A05)
- Payan, C. (with Cockayne, E. J.; Favaron, O.; Thomason, Andrew) Contributions to the theory of domination, independence and irredundance in graphs. Discrete Math. 33 (1981), no. 3, 249-258. (W.-K. Chen) 82b:05081 05C35
- Payan, Jean-Jacques Remarques sur la structure galoisienne des unités des corps de ombres. [Remarks on the Galois structure of the units of number fields] Acta Arith. 39 (1981), no. 1, 77-82. (Colin D. Walter) 82k:12005 12A45
- Payatakes, A. C. Dynamics of oil ganglia during immiscible displacement in water-wet porous media. Annual review of fluid mechanics, Vol. 14, pp. 365–393, Annual Reviews, Palo Alto, Calif., 1982. (See 82m:76001) 76S05
- Payne, Anthony N. (with Polak, Elijah) An interactive rectangle elimination method for biobjective decision making. IEEE Trans. Automat. Control 25 (1980), no. 3, 421-432. (A. Aganbegjan) 82c:90006 90A05 (49D99)
- Payne, Fred R. (with Wadia, Aspi Rustom) Application of the method of integral relations to unsteady fluid flow problems with shocks. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ.
 - Bethlehem, Pa., 1979), pp. 205-213, IMACS, New Brunswick, N.J., 1979. (Authors' nmary) 82c:76076 76L05 (65N30)
- (with Wadia, Aspi Rustom) A boundary value technique for the analysis of laminar boundary layer flows. Internat. J. Comput. Math. 9 (1981), no. 2, 163-172. (Authors' summary) 82b:65073 65L10 summary) 82b:65073
- Payne, L. E. (with Philippin, G. A.) On maximum principles for a class of nonlinear second-order elliptic equations. J. Differential Equations 37 (1980), no. 1, 39–48. (Carlo Sbordone) 82a:35040 35J60 (35B50)
- Bounds for solutions of a class of quasilinear elliptic boundary value problems in terms of the torsion function. Proc. Roy. Soc. Edinburgh Sect. A 88 (1981), no. 3-4, 251-265. (N-rl. Protter) 82;35064 35J65 (35P30)
- Payne, Philip W. Analytic construction of Hartree-Fock density matrices. Proc. Nat. Acad. Sci. U.S.A. 77 (1980), no. 11, part 1, 6293-6297. (G. Fonte) 82c:81057 (81G55, 81H10)
- Payne, R. W. (with Preece, D. A.) Identification keys and diagnostic tables: a review. With cussion. J. Roy. Statist. Soc. Ser. A 143 (1980), no. 3, 253-292. (I. R. Savage) 68128 68E10 (62P10, 92A05, 94A99) Selection criteria for the construction of efficient diagnostic keys. J. Statist. Plann.

- Inference 5 (1981), no. 1, 27-36. (Author's summary) 82j:92010 92A05 (62H30,
- Payne, S. E. (with Thas, Joseph A.) Moufang conditions for finite generalized quadrangles. Finite geometries and designs (Proc. Conf., Chelwood Gaie, 1980), pp. 275-303, London Math. Soc. Lecture Note Ser., 49, Cambridge Univ. Press, Cambridge, 1981. (Ference 05B25 (51A40)
 - (with Thas, Joseph A.) Generalized quadrangles and the Higman-Sims techni European J. Combin. 2 (1981), no. 1, 79-89. (Alessandro Bichara) 82i:05020 05B25
- Payton, Robert G. (with Musgrave, M. J. P.) Head wave contributions to elastic wave fields in a transversely isotropic half-space. Quart. J. Mech. Appl. Math. 34 (1981), no. 2, 235-250. (Authors' summary) 82g:73017 73D25
 - Epicenter and epicentral-axis motion of a transversely isotropic elastic half-space. SIAM J. Appl. Math. 40 (1981), no. 3, 373-389. (Author's summary) 82j:73025 73D99 (73C30)
- Paz, A. (with Moran, Shlomo) Nondeterministic polynomial optimization problems and their approximations. *Theoret. Comput. Sci.* 15 (1981), no. 3, 251-277. (Authors' ry) 82i:68029 68C25
- zalez de Paz, R. B. See Gonzalez de Paz, R. B.
- azderski, Gerhard Prime power groups which are cyclic extensions of elementary abelian groups. Math. Nachr. 97 (1980), 57-67. (Gary L. Walls) 82a:20033 20D15 (20E99)
- Pázman, Andrej Some features of the optimal design theory—a survey. Math. Operationsforsch. Statist. Ser. Statist. 11 (1980), no. 3, 415-446. (Friedrich Pukelsheim) 62K05 (90C25) 82a:62114
- Pazner, Elisha A. Individual rationality and the concept of social welfare. Methodological developments in social sciences. Theory and Decision 10 (1979), no. 1-4, 281-292. (Author's summary) 82b:90008 90A08 (90A10, 92A25)
- Pazy, A. Semigroups of nonlinear contractions and their asymptotic behaviour. Nonlinear analysis and mechanics: Heriot-Watt Symposium, Vol. III (Heriot-Watt Univ., Edinburgh), pp. 36-134, Res. Notes in Math., 30, Pitman, London, 1979. (J. Kisyński) 82f:47078
- Pčelin, B. K. Basic formula for representation of a subharmonic function in the general case of arbitrary entire order in the whole domain. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 2, 294-296. (J. Veselý) 82b:31013 31B30
- Pčelincev, S. V. On the variety generated by a free algebra of type (-1, 1) rank 2. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 3, 162-178, 238. (J. Löhmus) 82j:17003 17A30
- eacock, George See Becher, Harvey W., 82i:01027 Peacocke, Christopher Are vague predicates incoherent? Synthese 46 (1981), no. 1, 121-141.

 (John Bacon) 82j:03005 03A05 (03B52)
- acocke, Richard (with Mylopoulos, John) A region-based formalism for picture processing. Pattern Recognition 82m:68095 68C99 (68G10) tion 13 (1981), no. 6, 399-416. (Authors' summary)
- Peák, István (with Dang Huu Dao) A note on the characteristic semigroups of Mealy-automata. Selected papers on mathematics, pp. 26-34, DM 80, 1, Karl Marx Univ. Econom., Budapest, 1980. (Howard Straubing) 82h:68077 68D15 (20M35)
- Peano, A. (with Fanelli, M.; Riccioni, R.; Sardella, L.) Self-adaptive convergence at the crack tip of a dam buttress. Numerical methods in fracture mechanics (Swansea, 1978), pp. 268-280, Univ. College Swansea, Swansea, 1978. (See 82i:73003) (73K25)
- Peano, Giuseppe See Kennedy, Hubert C., 82b:01051
 Pearce, David Is there any theoretical justification for a nonstatement view of theories? Synthese 46 (1981), no. 1, 1-39. (From the introduction) 82h:03019 03A05
- Pearce, Kent New support points of S and extreme points of MS. Proc. Amer. Math. Soc.
- 821 (1981), no. 3, 425-428. (W. E. Kirwan) 82b:30012 30C45

 arce, P. A. An inequality for spin-s X-Y ferromagnets. Phys. Lett. A 70 (1979), no. 2, 117-118. (V. Z. Enol'skii) 82b:82018 82A05 (82A67)
- Pearcy, Carl See Topics in operator theory, 82c:47001
- Pearl, Judea Capacity and error-estimates for Boolean classifiers with limited complexity. Proceedings of the Fourth International Joint Conference on Pattern Recognition (Kyoto, 1978), pp. 475-479, IEEE, New York, 1979. (Peter W. Day) 82e:68098
 - (with Huyn, Nam; Dechter, Rina) Probabilistic analysis of the complexity of A*. Artificial Intelligence 15 (1980), no. 3, 241-254. (S. Amarel) 82g:68090
 - (with Crolotte, Alain) Storage space versus validity of answers in probabilistic question-answering systems. IEEE Trans. Inform. Theory 26 (1980), no. 6, 633-640. (M. Terrenoire) 82a:94063 94A50 (94A34)

 - The solution for the branching factor of the alpha-beta pruning algorithm.

 Automata, languages and programming (Akko, 1981), pp. 521-529, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (Author's summary) 82m:68071 68C05 (68E10, 90D99)
- Pearl, Martin H. (with Goldman, Alan J.) A game-theoretic model of inspection-resource allocation. J. Res. Nat. Bur. Standards 86 (1981), no. 2, 193-215. (Authors' summary) 90D45
- Pearle, Philip M. (with Herrmann, Douglas J.) The proper role of clusters in mathematical models of continuous recall. J. Math. Psych. 24 (1981), no. 2, 139-162. (Authors' 92A25 summary) 82m:92085
- Pearlman, William A. See Meiri, A. Zri, 82a:94051
 Pears, David The function of acquaintance in Russell's philosophy. Bertrand Russell's early philosophy, Part II. Synthese 46 (1981), no. 2, 149-166. (Stewart Shapiro) 82;01058 01A60 (00A25, 03-03, 03A05)
- Pearson, A. E. (with Kwon, W. H.) Feedback stabilization of linear systems with delayed control. IEEE Trans. Automat. Control 25 (1980), no. 2, 266-269. (M. Q. Jacobs)
- 82a:49045 49E20 (93D15)

 Pearson, Carl E. Dual time scales in a wave problem governed by coupled nonlinear equations. SIAM Rev. 23 (1981), no. 4, 425-433. (Author's summary) 82a:76013 76B15 (35O20, 76N15)
- urson, D. B. (with Amrein, W. O.; Wollenberg, M.) Evanescence of states and asymptotic completeness. Helv. Phys. Acta 53 (1980), no. 3, 335–351 (1981). (Lawrence E. Thomas) 82i:81124 81F05 (47A40, 81C12)
- nan, Jerzy. 82b:01057; David, Herbert Aron, 82b:01045 and rson, Egon S. See Neyr Pearson, Karl, 82::01023

Proc. London Math. Soc. (3) 42 (1981), no. 3, 559-576. (G. Michler) 82j:16058 16A6

(16A05, 16A21)

m, Karl *The history of statistics in the 17th and 18th centuries against the changing background of intellectual, scientific and religious thought. Lectures given at University College, London, during the academic sessions 1921-1933. Edited and with a preface by Egon S. Pearson. Macmillan Co., New York, 1978. xix+744 pp. ISBN 0-02-850120-9 (E. eta) 82i:01023 01A50 (01A45, 62-03)

See also Ando, Hiromi, 82f:01073

Ralah G. Semiclassical model for atoms. Proc. Nat. Acad. Sci. U.S.A. 78 (1981),

181645

181645 n, Ralph G. Semicla no. 7, part 1, 4002-4005. (Author's summary) 82:81164 81G45
rson, Robert B. Number theory and critical exponents. Phys. Rev. B (3) 22 (1980),
no. 7, 3465-3470. (Author's summary) 82a:82018 82A25 (12B40)

(with Kogut, John B.; Shigemitsu, Junko; Sinclair, D. K.) Z_N and N-state Potts lattice gauge theories: phase diagrams, first-order transitions, β functions, and 1/N expansions. Phys. Rev. D (3) 22 (1980), no. 10, 2447–2464. (Gheorghe Nenciu) 82A25 (82A67, 82A68)

An introduction and review of lattice gauge theories. (French summary) Statphys 14 (Proc. Fourteenth Internat. Conf. Thermodynamics and Statist. Mech., Univ. Alberta, onton, Alta., 1980). Phys. A 106 (1981), no. 1-2, 159-174. (Author's summary) 81E25

rson, T. L. (with Ceder, J.) On typical bounded Durboux Baire one functions. Ac Math. Acad. Sci. Hungar. 37 (1981), no. 4, 339-348. (Jaroslav Smital) 82j:26005

ult, Hervé (with Chauvat, Danièle; Coelho, Michel; Corolleur, Annick; Delin, Danièle; Demars, Suzanne; Faucher, Alain; Gaud, Dominique; Gauyacq, Ginette; Guillement, Sylvie; Lacombe, Hélène; Le Coutaller, Fernande; Le Lay, Colette; Le Poche, Gabriel; Toupin, Janick) ★Nombres entiers naturels. (French) [Natural numbers] Éléments de réflexion pour une approche à l'école élémentaire. [Reflections toward a pedagogical approach for elementary schools]. Nanta Iremica, 18. Université de Nantes, I.R.E.M. de tes, Nantes, 1979. 165 pp. ISBN 2-86300-003-9 (M. Kline) 82c:00001

g, Edmund R. Connectedness in a general model for valued networks. Social Networks 2 (1979/80), no. 4, 385-410. (Manfred Kochen) 82h:92053 92A20 (05C40) Peay, Edn

Pecar, J. (with Kubáček, L.; Bartalošová, L.) Designing of free levelling traverses. Optimization of design and computation of control networks (Proc. Internat. Sympos., Sopron, 1977), pp. 265–271, Akad. Kiadó, Budapest, 1979. (Authors' summary) 82m:62168 62K05

SZERZEJOS Eznic, Josig E. On an inequality of T. Popoviciu. I, II. Bul. Ştiinţ. Tehn. Inst. Politehn. "Traiam Vuia" Timişoara 24(38) (1979), no. 2, 9–15, 44–46. (Paul R. Beesack) 82m:26020 26D15 (15A69)

(with Vasić, Petar M.) On the Jensen inequality for monotone functions. II. An. Univ. Timişoara Ser. Ştiinţ. Mat. 18 (1980), no. 1, 95-104. (Paul R. Beesack) 82j:26020 26D15 (26A48, 26A51)

On the Fuchs's generalization of the majorization theorem. Bul. Ştiinţ. Tehn. Inst. Politehn. "Traian Vuia" Timişoara 25(39) (1980), no. 1, 10-11 (1981). (E. F. Beckenbach) 82m:26021 26D15

(with Vasić, Petar M.) Notes on some inequalities for convex sequences and for -convex functions. Mat. Vesnik 4(17)(32) (1980), no. 1, 133-138. (D. C. Russell) 824:26014 26D15 (26A51)

On some inequalities analogous to Grüss' inequality. Mat. Vesnik 4(17)(32) (1980), 2, 197-202. (B. G. Pachpatte) 82e:26018 26D15

no. 2, 197-202. (B. G. Pachpatte) 82e:26018

Notes on some inequalities of P. M. Vasic. Publ. Inst. Math. (Beograd) (N.S.) 27(41) (1980), 189-194. (D. C. Russell) 821:26021 26D15

On an inequality of P. M. Vasić and R. R. Janić. Publ. Inst. Math. (Beograd) (N.S.) 28(42) (1980), 145-149. (E. F. Beckenbach) 82m:26022 26D15

On an inequality of N. Levinson. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 71-74 (1981). (Peter Bullen)

82i:26014 26D20 (26B25) Note on: "An integral inequality" [Amer. Math. Monthly 61 (1954), 626-631; MR 16, 342] by K. Fan and G. G. Lorentz. Amer. Math. Monthly 88 (1981), no. 4, 275-276.

(Editors) 824:26013 26D15 staings, F. (with Ladevèze, Jean; Ladevèze, P.; Pelle, J.-P.) Sur les fondements de la théorie linéaire des poutres élastiques. II. Théorie linéaire de la flexion des poutres droites nogènes et isotropes. (English summary) J. Mécanique 19 (1980), no. 1, 33-98. (H. J.

Weinitschke) 82e:73055 73K05 Weimischke) 828:13005 13AU5
Pécaut-Tison, Françoise (with Breuneval, Jacques) Actions libres et isométriques sur les variétés à géodésiques toutes fermées de même longueur. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 12, 587-590. (Authors' summary) 82e:58034

58E10 (57S15) Pecelli, G. (with Churchill, Richard C.; Rod, David L.) Stability transitions for periodic orbits in Hamiltonian systems. Arch. Rational Mech. Anal. 73 (1980), no. 4, 313-347. (Robert L. Devaney) 824:58028 58F05 (34C25)

hanec-Drahoš, Jaroslav Sheaves of Fréchet spaces. *Math. Nachr.* 93 (1979), 139–149. (J. Wick Pelletier) 82d:46097 46M20 (46A06)

Functional separation of inductive limits and representation of presheaves by

sections. IV. Representations of presheaves by sections. With a loose Russian summary. Czechoslovak Math. J. 30(105) (1980), no. 4, 511-538. (Author's introduction) 82d:54009

Equivalences in presheaves, functional separation of their inductive limits and representation by sections. (Russian summary) Math. Slovaca 30 (1980), no. 4, 363-367.

(Jacob Kofner) 82b:54019 54B40 (18F20)
henick, Kay R. (with Cohen, Jeffrey M.) Inverse scattering—exact solution of the Gel'fand-Levitan equation. J. Math. Phys. 22 (1981), no. 7, 1513–1516. (I. Kay) 78A40 (65P05, 86A99)

(with Kearney, M. W.; Cohen, Jeffrey M.) Electromagnetic and gravitational perturbations of the Kerr metric. (Italian summary) Nuovo Cimento B (11) 64 (1981), no. 2, 453-470. (Authors' summary) 82k:83032 83C50 (83C15) (with Cohen, Jeffrey M.) Exact class of inverse scattering solutions. Phys. Lett. A 82 (1981), no. 4, 156-160. (Authors' summary) 82h:81121 81F99 (34B25) inkin, A. V. (with Solov'ev, A. D.; Jaškov, S. F.) A system with servicing discipline

whereby the order of minimum remaining length is serviced first. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 5, 51-58, 220 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 5, 38-45 (1980). (Carl M. Harris) 82c:60170 60K25

(with Zaïcev, V. A.) Optimal control of servicing in a multichannel system. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 6, 57-63, 219 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 6, 36-42 (1980). (O. J. Boxma) 82d:90061 90B22

(with Belov, E. G.) A limit theorem for sums of a random number of random term (Russian) Math. Operationsforsch. Statist. Ser. Statist. 10 (1979), no. 3, 461-467. (B. Komekov) 82b:60012 60F05

Stationary probabilities in a system with discipline of advantageous distribution of a process. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1990, no. 5, 73-77, 219 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 5, 52-56 (1981). (Author's summary) 821:60199 60K25

Peck, G. W. Erdős conjecture on sums of distinct numbers. Stud. Appl. Math. 63 (1980),

ca, c. W. Erdős conjecture on sums of distinct numbers. Stud. Appl. Math. 63 (1980), no. 1, 87–92. (G. O. H. Katona) 82x=10996 101.10 (05A05)
Hamiltonian cycles of adjacent triples. Stud. Appl. Math. 63 (1980), no. 3, 275–278.
(S. F. Kapoor) 82g-85062 05C45 (05C38)
k, N. Tenney (with Kalton, N. J.) Twisted sums of sequence spaces and the three space problem. Trans. Amer. Math. Soc. 255 (1979), 1–30. (Authors' summary) 82g-46021 46A45

(with Kalton, N. J.) A re-examination of the Roberts example of a compact convex set without extreme points. Math. Ann. 253 (1980), no. 2, 89-101. (Ka Sing Lau) 821:46055 46E40 (46A50, 52A07)

Banach-Mazur distances and projections on p-convex spaces. Math. Z. 177 (1981), no. 1, 131–142. (D. J. H. Garling) 82i:46005 46A06

Peck, S. N. Canonical Schwartz spaces and generalized operators. J. Math. Phys. 20 (1979), no. 2, 336–343. (Author's introduction) 82i:46065 46F99 (46L99, 81D05)

Peckover, R. S. (with Agrawal, A. K.) Coordinate transformation methods for boundary layers in arbitrary geometries. Boundary and interior layers-computational and asymptotic methods (Proc. Conf., Trinity College, Dublin, 1980), pp. 392-396, Boole, Dún Laoghaire, 1980. (Authors' summary) 82ac65073 65N05
(with Gimblett, C. G.) A simple electromagnetic catastrophe. Bull. Inst. Math. Appl.
17 (1981), no. 4, 73–78. (Zdeněk Ertinger) 82j:58024 58C28 (78A25)

Pecora, Louis M. On the partition function as a functional integral over the eigenspace of an elliptic operator. *Phys. Lett. A* **72** (1979), *no.* 2, 97–100. (Author's summary) **82**::**83036** 83C45 (58D30, 58G10, 81C35)

Pedas, A. On the smoothness of the solution of an integral equation with a weakly singular kernel. (Russian. English summary) Tartu Riikl. Ül. Toimetised No. 492 (1979), 56–68. (D. Przeworska-Rolewicz) 82b:45010 45E99 (45M99)

Piecewise linear approximation of the solution of an integral equation with a logarithmic singularity in the kernel. (Russian. English summary) Tartu Riikl. Ül. Toimetised No. 500 Trudy Mat. i Meh. No. 25 (1979), 33-42. (D. Przeworska-Rolewicz) 45E99 (45L05, 65R20)

(with Vainikko, G.) The properties of solutions of weakly singular integral equations. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 4, 419-430. (Martin Costabel) 82i:45014 45M05 (45E10)

Pedersen, Bo V. (with Barndorff-Nielsen, Ole) The bivariate Hermite polynomials up to order six. Scand. J. Statist. 6 (1979), no. 3, 127-128. (Authors' summary) 82f:62088 62H10 (33A65)

A comparison of the Efron-Hinkley ancillary and the likelihood ratio ancillary in a particular example. Ann. Statist. 9 (1981), no. 6, 1328-1333. (Author's summary) 82j:62002 62A30

Pedersen, Erik Kjær (with Ray, Nigel) A fibration for Diff Σ^n . Topology Symposium

Siegen 1979 (Proc. Sympos., Unio. Siegen, Siegen, 1979), pp. 165–171, Lecture Notes in Math., 788, Springer, Berlin, 1980. (Francis Clarke) 82c:57019 57R50 (55Q45)

Smoothing H-spaces. II. Math. Scand. 46 (1980), no. 2, 216-222. (Albert O. Shar) 82h:57014 57R10 (55P45, 57R15)

Universal geometric examples for transfer maps in algebraic K- and L-theory.

Pure Appl. Algebra 22 (1981), no. 2, 179–192. (A. A. Ranicki) 82i:57028 57R6 (18F25)

Pedersen, Franklin D. (with Sizer, Walter S.) Certain semigroups of complexes of an abelian group. Proceedings of the Conference on Semigroups in Honor of Alfred H. Clifford (Tulane Univ., New Orleans, La., 1978), pp. 215-221, Tulane Univ., New Orleans, La., 1979, (R. S. Pierce) 82c:20111 20M15

(with Sizer, Walter S.) Subsemigroups of the finite complexes of a group. Semigroup 20M15 (20K20) Forum 20 (1980), no. 4, 285-292. (R. S. Pierce) 82i:20082

Pedersen, Gert Kjaergard (with Cuntz, Joachim) Equivalence and KMS states on periodic C*-dynamical systems. J. Funct. Anal. 34 (1979), no. 1, 79-86. (Authors' summary)

Remarks on the Connes spectrum for C*-dynamical systems. J. Operator Theory 3 (1980), no. 1, 143-148. (R. C. Busby) 82d:46094 46L55

The linear span of projections in simple C*-algebras. J. Operator Theory 4 (1980),

no. 2, 289-296. (Jun Tomiyama) 82b:46078 46L05 (46L40) Pedersen, J. Boiden (with Sibani, Paolo) A perturbation solution of the Smoluchowski

equation in the weak potential region. J. Chem. Phys. 74 (1981), no. 12, 6934-6942. (Authors' summary) 82h:82054 82A70

Pedersen, Jean (with Hilton, Peter) Casting out nines revisited. Math. Mag. 54 (1981), no. 4, 195-201. (From the text) 82k:10007 10A05

See also Polya, G., 82f-00002

Pedersen, Kirsti Moller See Andersen, Kirsti

Pedersen, Olaf The decline and fall of the theorica planetarum. Science and history, pp. 157-185, Studia Copernicana, XVI, Ossolineum, Wrocław, 1978. (See 82e:01003) 01A40

The introduction of relativity into Denmark: a case study. The impact of modern scientific ideas on society (Munich/Ulm, 1978), pp. 100-121, Reidel, Dordrecht, 1981. (See 01A60 82k:01046)

The origins of the Theorica planetarum. J. Hist. Astronom. 12 (1981), no. 2, 113-123. (F. V. Pohle) 82m:01022 01A35

See also Toom er, G. J., 82h:01011

1982

Pedicchio, M. Cristina Relations between K-morphisms and lax algebras. (Italian, English mary) Rend. Istit. Mat. Univ. Trieste 11 (1979), no. 1-2, 91-108 (1980). (Marta C. Bunge) 82h:18002 18A40 (18C15, 18D05)

Pedler, P. J. Effect of dependence on the occupation time in a two-state stationary Markov chain. J. Amer. Statist. Assoc. 75 (1980), no. 371, 739-746. (Steffen Lauritzen) 82e:62159

Pedley, T. J. Physiological fluid mechanics. Theoretical and applied mechanics (Proc. 15th Internat. Congr., Univ. Toronto, Toronto, Ont., 1980), pp. 151-161, North-Holland, Amsterdam, 1980. (Author's summary) 82j:92029 92A09 (76Z05)

Pedlosky, Joseph (with Frenzen, Christopher) Chaotic and periodic behavior of finite-amplitude baroclinic waves. J. Atmospheric Sci. 37 (1980), no. 6, 1177-1196. (Authors' summary) 82i:76040 76E20 (58F20)

rult, E. P. D. (with Zucker, S. W.; Muresan, L. V.) On the independence assumption underlying subjective Bayesian updating. Artificial Intelligence 16 (1981), no. 2, 213-222. (Authors' summary) 82h:68126 68G20 (62F15, 62H30, 92A25)

De, Dan On geometrical matters. H. G. Forder 90th birthday volume. Math. Chronicle 9 (1980), 67-73. (H. B. Griffiths) 82c:00011 00A25 (51-01)

freixa i Pedrals, Enric See Freixa i Pedrals, Enric

Pedraza, Juan (with Boya, Luis J.) Invariants of the compact simple algebras A₁. (Spanish) Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 403-407, Consejo Sup. Inv. Cient., Madrid, 1977. (Bernard Kolman) 17B10

retti, Annetta Epistemology, semantics, and self-reference. *J. Cybernet.* **10** (1980), *no.* 4, 313–339. (Louis H. Kauffman) **82j:92062** 92A20 (00A05, 03A05)

Pedrycz, Witold (with Czaja-Pośpiech, Dorota; Czogała, Ernest) The multiple implications and compositional rules of inference in multivalued logic (fuzzy logic). (Polish. Russian and English summaries) Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 31 (1980), 31-47. (Milan Mareš) 82m:03037 03B52 (94D05)

(with Czogala, Ernest) On identification in fuzzy systems and its applications in control problems. Fuzzy Sets and Systems 6 (1981), no. 1, 73-83. (Authors' summary) 82f:93079 93F12

An approach to the analysis of fuzzy systems. Internat. J. Control 34 (1981), no. 3, 403-421. (Author's summary) 82i:93003 93A10 (03E72, 68D99, 92A25)

(with Czogała, Ernest) Methods of multivalued logics and fuzzy set theory in computer-aided decision making in diagnostic and therapeutic processes. (Polish and Russian summaries) Postepy Cybernet. 4 (1981), no. 1, 61-67. (Editors) 82i:92004 92A07 (03B52)

Peel, M. H. (with Farahat, H. K.) On the representation theory of the symmetric groups. J. Algebra 67 (1980), no. 2, 280-304. (Jürgen Tappe) 82c:20026 20C30

(with al-Aamily, E.; Morris, A. O.) The representations of the Weyl groups of type J. Algebra 68 (1981), no. 2, 298-305. (Jürgen Tappe) 82f:20029a On one-dimensional submodules and hyperoctahedral groups. J. Algebra 68 (1981), no. 2, 468-470. (Jürgen Tappe) 82f:20029b 20C30

Duality and left ideals in a group ring. J. Algebra 71 (1981), no. 2, 524-526. (From the text) 82i:20009 20C07 (16A26, 20C30)

Peers, H. W. (with Harris, P.) The local power of the efficient scores test statistic.

Biometrika 67 (1980), no. 3, 525-529. (Takesi Hayakawa) 82c:62025 62E15 (62H15 62E15 (62H15)

Peetre, Jaak On Hadamard's variational formula. J. Differential Equations 36 (1980), no. 3, 335-346. (Daniel M. Burns, Jr.) 82f:58037 58E20 (35J99) (with Cwikel, Michael) Abstract K and J spaces. J. Math. Pures Appl. (9) 60 (1981),

no. 1, 1-49. (Bernard Beauzamy) 82h:46092 46M35
Peeva, K. (with Topenčarov, Vladimir V.) Mathematical automata theory: a categorical approach. (Russian. English summary) With a loose English translation. Problems Control Inform. Theory/Problemy Upravien. Teor. Inform. 9 (1980), no. 2, 141-161. (David C. Rine) 82a:68106 68D30

Pegoraro, F. (with Schep, T. J.) Low-frequency modes with high toroidal mode numbers: a general formulation. Phys. Fluids 24 (1981), no. 3, 478-497. (Authors' summary) 82a:76094 76X05

erstorfer, Franz Characterization of positive quadrature formulas. SIAM J. Math. Anal. 12 (1981), no. 6, 935-942. (Author's summary) 82m:65021 65D32

Pei, Ding Yi (with Feng, Ke Qin) A note on the independence of units of cyclotomic fields. (Chinese) Acta Math. Sinica 23 (1980), no. 5, 773-778. (S. Yuan) 82j:12010 12A45

Pei, Soo Chang (with Wu, Ja Ling) Fast biased polynomial transforms for two-dimensional convolutions. Electron. Lett. 17 (1981), no. 15, 547-548. (Authors' summary) 82h:94005 94A05 (12C20, 65R10)

Peiffer, K. (with Rouche, N.) La représentation mathématique des forces et les principes de la mécanique. Ann. Soc. Sci. Bruxelles Sér. I 95 (1981), no. 1, 45-68. (T. Erber) 70A05 (58E30)

Peil, H. Stability of some stochastic difference equations with piecewise constant coefficients. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 9, 1411-1416. (V. G. Kolomicc) 82m:60077 60H25 (39A10)

(with Schmerling, S.) Empirical regression as a conditional expected value of a special distribution-mixture for a modelfree quantitative recording of stochastical relations. (German summary) Biometrical J. 22 (1980), no. 6, 487-495. (A. L. Nagar)

82g:62098 62J05 (62G05) martin Peinador, E. See Martin Peinador, E.

Peitgen, Heinz-Otto (with Jürgens, Hartmut; Saupe, Dietmar) Topological perturbations in the numerical study of nonlinear eigenvalue and bifurcation problems. Analysis and computation of fixed points (Proc. Sympos., Math. Res. Center Univ. Wisconsin, Madison, Wis., 1979), pp. 139–181, Publ. Math. Res. Center Univ. Wisconsin, 43, Academic Press, New York, 1980. (Kurt Georg) 82e:65063 65H15 (58C40, 58E07, 90C30)

(with Schmitt, Klaus) Perturbations topologiques globales des problèmes non linéaires aux valeurs propres. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 4, A271-A274. (Authors' introduction) 82a:58019 58E07 (35B32)

(with Saupe, Dietmar; Schmitt, Klaus) Nonlinear elliptic boundary value problems versus their finite difference approximations: numerically irrelevant solutions. Angew. Math. 322 (1981), 74-117. (W. F. Ames) 82h:65076 65N20 (34B15, 58E07,

wicz, Jacobo (with Conti, Giuseppe) Fixed point theorems for multivalued

weighted maps. Ann. Mat. Pura Appl. (4) 126 (1980), 319-341 (1981). (Christian Fenske) 826-55002 55M20 (54C60, 54H25)

Pekalski, Andrzej (with Komoda, A.) Critical temperature for a system with

Heisenberg-like nearest neighbour and Ising-like next nearest neighbour interactions. Phys. A 108 (1981), no. 1, 164–168. (Authors' summary) 82k82025 82A25 (82A68)

See also Mathematical aspects of quantum field theory, 82k81004a and

Mathematical aspects of quantum field theory, 82k81004b

arskii, A. A. Estimates of higher derivatives of rational functions and their applications.

(Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 5, 21-28, 139. (J. Szabados) 82a:41016 41A17 (41A27)

Pekker, M. S. (with Volosov, V. I.) On numerical methods for solving the two-dimensional problem for Fokker-Planck equations. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 5, 1341-1346, 1360. (V. P. Kalašnikov) 82d:82064 82A45 (65P05)

fraile Peláez, J. M. See Fraile Peláez, J. M.

Pelant, Jan (with Balcar, Bohuslav; Simon, Petr) The space of ultrafilters on N covered by nowhere dense sets. Fund. Math. 110 (1980), no. 1, 11-24. (Andrzej Szymański) 54A25 (03E35, 03E50)

(with Ptak, Pavel) The complexity of σ-discretely decomposable families in uniform es. Comment. Math. Univ. Carolin. 22 (1981), no. 2, 317-326. (T. L. Hicks) 82k:54047 54E15 (54H05)

(with Reiterman, Jan) Complements in the lattice of uniformities. Comment. Math. Univ. Carolin. 22 (1981), no. 2, 399-412. (O. Frink) 82h:54042 54E15 (06C15)

Pelcovits, Robert A. Spin-spin correlation function in the high-temperature Villain model. J. Phys. A 14 (1981), no. 7, 1693-1699. (Author's summary) 82h:82047 82A68

Pelczar, Andrzej (with Górecki, Henryk) The scientific activity of Professor Andrzej Turowicz. (Polish) Wiadom. Mat. (2) 21 (1978), no. 1, 15-24 (1 plate). (Editors) 01A70

Pełczewski, Władysław *Teoria sterowania. (Polish) [Control theory] Ciągle stacjonarne układy liniowe. [Continuous time-invariant linear systems] Podręczniki Akademickie: Elektrotechnika. [Academic Textbooks: Electronics] Wydawnictwa Naukowo-Techniczne (WNT), Warsaw, 1980. 579 pp. (loose errata). ISBN 83-204-0187-9 (Editors) 82k:93002

Pełczyński, Aleksander Geometry of finite-dimensional Banach spaces and operator ideals. Notes in Banach spaces, pp. 81–181, Univ. Texas Press, Austin, Tex., 1980. (A. Pietsch) 46B20 (47B10, 47D30, 52A07)

Peled, Uri N. Threshold graph enumeration and series-product identities. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 735–738. (E. M. Palmer) 82i:05047 05C30 (05A15, 05C99)

Peleg, Shmuel Labeling evaluation in probabilistic networks. Inform. Sci. 21 (1980), no. 3, 213–220. (Author's summary) 825:68095 68G10

Peleh, Ja. M. (with Bodnarčuk, P. I.) Some methods of solution of differential equations. (Ukrainian. Russian summary) Studies in the qualitative theory of differential equations and its applications (Ukrainian), pp. 11-12, 71, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Authors' summary) 82g:65034 65L05

Peletier, L. A. (with Fife, Paul C.) Clines induced by variable migration. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 276-278, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (Editors) 82g:92023 92A10 (92A15)

inger, Berlin, 1980. (Editors) 82g:92023 92A10 (92A15) (with Bertsch, M.) Nonstationary filtration in partially saturated media. Analytical

and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ. Nijmegen, Nijmegen, 1980), pp. 205-212, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (Pierre-Louis Lions) 82c:76096 76S05 (35K65)

(with Aronson, Donald G.) Large time behaviour of solutions of the porous medium equation in bounded domains. J. Differential Equations 39 (1981), no. 3, 378-412. (J. R. Ockendon) 82g:35047 35K30 (76S05)

(with Pauwelussen, J. P.) Clines in the presence of asymmetric migratic Biol. 11 (1981), no. 2, 207-233. (Piero de Mottoni) 82j:35086 35K55 (92A10, 92A15) Peletminskii, S. V. (with Plohov, S. S.; Prihod'ko, V. I.) Kinetics of fluctuations with large radius of correlations. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 6, 1365-1368. (R. A. Minlos) 82f:82030 82A35

The quantum principle of action. (Russian) Problemy Jadern. Fiz. i Kosm. Lučei No. 12 (1980), 16-31, i. (Author's summary) 82c:81114 81E99 (49H05)

(with Plohov, S. S.; Prihod'ko, V. I.) On statistical theory of nonequilibrium fluctuations with long radius of correlations. (Russian. English summary) Teoret. Mat. Fiz. 46 (1981), no. 2, 263-278. (V. P. Kalašnikov) 82j:82036 82A35

Peligrad, C. Reflexive operator algebras on noncommutative Hardy spaces. Math. Ann. 253 (1980), no. 2, 165-175. (Richard I. Loebl) 82b:47031 47B35 (46L55, 47D30)

Peligrad, Magda Invariance principles for dependent variables. Proceedings of the Sixth Conference on Probability Theory (Braşov, 1979), pp. 327–330, Ed. Acad. R.S. România, Bucharest, 1981. (From the text) \$2k:60070 60F17 (60G05)
 An invariance principle for dependent random variables. Z. Wahrsch. Verw. Gebiete
 57 (1981), no. 4, 495-507. (H. Vishnu Hebbar) \$2k:60069 60F17

Correctness of the formulation of the Cauchy problem for the Einstein equations and the theory of systems of reference. (Ukrainian. Russian summary) Studies in the qualitative theory of differential equations and its applications (Ukrainian), pp. 52-54, 75, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1978. (Author's summary) 821:83009 83C05 (58D25)

Pelikán, Emil (with Vošvrda, Miloslav) On covariance coefficients estimates of finite order moving average processes. Kybernetika (Prague) 17 (1981), no. 2, 169-174. (Authors' summary) 82h:62160 62M10

Pelissier, R. Stability of pseudoperiodic flow. (French summary) Z. Angew. Math. Phys. 30 (1979), no. 4, 577-585. (Author's summary) 82a:76034 76E10 (65M10)

witz, Lionel Frequency domain analysis of wraparound error in fast convolution algorithms. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 3, part 1, 413-422. (Author's summary) 82e:94011 94A05 (94A12, 94C99) (Author's summary) 82e:94011

Pell, Richard Support point functions and the Loewner variation. Pacific J. Math. 86 (1980), no. 2, 561-564. (Louis Brickman) 82a:30014 30C45 (30C55)
Pelland, S. (with Haurie, A.; Berger, C.) Optimal control of discrete time population

processes. Optimal Control Appl. Methods 2 (1981), no. 1, 47-57. (Richard F. Serfozo) 92A15 (90C39, 90C50)

But, R. (with Asseo, E.; Cesarsky, C. J.; Lachieze-Rey, M.) Energy principle and the interstellar medium. II. Curved equilibria. Astrophys. J. 237 (1980), no. 3, part i, 752-764. (Authors' summary) 82±85001 85A05 (76E20)

Busmall, Jean (with Métivier, Michel) ★Stochastic integration. Probability and Mathematical Statistics. Academic Press [Harcourt Brace Jouanovich, Publishers], New York-London-Toronto, Ont., 1980. xii + 196 pp. ISBN 0-12-491450-0 (Jean-Yves Ouvrard) 821:60060 60H05 (60G44, 60G46, 60H10)

(with Ladevèze, Jean; Ladevèze, P.; Pécastaings, F.) Sur les fondements de la homogènes et isotropes. (English summary) J. Mécanique 19 (1980), no. 1, 33-98. (H. J. Weinitschke) 82e:73055 73K05

Weininger-Pellé, Jacqueline See Fleckinger-Pellé, Jacqueline legrino, Consolato (with Quattrocchi, Pasquale) Latin rectangles and "transversal designs" with parallelism. (Italian. English summary) Atti Sem. Mat. Fis. Univ. Modena 28 (1979), no. 2, 441-449 (1980). (Giordano Gallina) 820:05035 05B15

Construction of the subobject classifier for a class of comma categories. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 16 (1979), no. 2, 533-542. (Author's 18A25 (05C20)

(with Michelotti, Margherita) A theorem on the creation of limits for a eneralization of the comma categories. (Italian. English summary) Atti Sem. Mat. Fis. Iniv. Modena 29 (1980), no. 1, 95-100. (G. M. Kelly) 82m:18001 18A25 (18A30) (with Vaona, G. L.) A method for estimating the parameters of models of monobi-exponential type. (Italian. English summary) Riv. Mat. Univ. Parma (4) 6 (1980), 167-176 (1981). (J. Tiago de Oliveira) 82kc2049 62F10

legrinotti, A. (with Marchioro, C.; Pulvirenti, M.) On the dynamics of infinite anharmonic systems. J. Math. Phys. 22 (1981), no. 8, 1740-1745. (J. Fritz) 82k:82008 82A05

Peller, V. V. Hankel operators of class @, and their applications (rational approximation, Gaussian processes, the problem of majorization of operators). (Russian) (N.S.) 113(155) (1980), no. 4(12), 538-581, 637. (D. Sarason) 82g:47022 4 (30D55, 46J15, 60G15)

Analogue of J. von Neum nn's inequality, isometric dilation of contractions and approximation by isometries in spaces of measurable functions. (Russian) Spectral theory of functions and operators, II. Trudy Mat. Inst. Steklov. 155 (1981), 103-150, 185. (Radu Nicolae Gologan) 82k:47012 47A20 (47B38)

etier, Donald H. The partition property for certain extendible measures on

ercompact cardinals. Proc. Amer. Math. Soc. 81 (1981), no. 4, 607-612. (F. R. Drake) 03E55 (04A10, 04A20)

(with Mekler, Alan H.; Taylor, Alan D.) A note on a lemma of Shelah concerni stationary sets. Proc. Amer. Math. Soc. 83 (1981), no. 4, 764-768. (A. Kanamori) 04A20

Pelletier, Francis Jeffry Sameness and referential opacity in Aristotle. Noûs 13 (1979), no. 3, 283-311. (Douglas Walton) 82a:01004 01A20 (03-03, 03A05)

no. 3, 283-311. (Douglas watten) statement of the Pelling, M. J. (with Rogers, D. G.) Some (2, n) combinatorial Stein groupoids. Aequationes Math. 21 (1980), no. 2-3, 225-235. (Ferenc Fenyves) 82i:20101 20N05 (05B05) Generalisation of a classical theorem on series. (Serbo-Croatian summary) Univ

Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 95-98 (1981). (H. P. Dikshit) 82g:40005 40D05 Pelzer, H. Criteria for the reliability of geodetic networks. Optimiza

computation of control networks (Proc. Internat. Sympos., Sopron, 1977), pp. 553-562, Akad. Kiadó, Budapest, 1979. (Author's summary) 82j:86007 86A30 (62N05) elli, F. (with Boiti, M.) Nonlinear Schrödinger equation, Bäcklund transform and Painlevé transcendents. (Italian and Russian summaries (1980), no. 1, 40-58. (Hélène Airault) 82g:35098 35Q20 naries) Nuovo Cimento B (11) 59

(with Boiti, M.; Laddomada, C.) An equivalent real form of the nonlinear

Schrödinger equation and the permutability for Bäcklund transformations. (Italian and Russian summaries) Nuovo Cimento B (11) 62 (1981), no. 2, 315-326. (F. A. E. Pirani) 81C05 (35Q20, 58F99)

(with Boiti, M.; Laddomada, C.) The theorem of permutability for the nonlinear Schrödinger equation. Phys. Lett. A 83 (1981), no. 5, 188-190. (Woodford W. Zachary) 82g:35099 35020 (81C05)

de la Peña, Luis *Introducción a la mecánica cuántica. (Spanish) [Introduction to quantum mechanics] Compañia Editorial Continental S.A. (CECSA), Mexico City, 1979. 750 pp. ISBN 968-26-0110-X (Steven M. Moore) 82i:81002 81-01 (81C20)

arrate Peña, Manuel See Arrate Peña, Manuel
Pence, Dennis D. Best mean approximation by splines satisfying generalized convexity constraints. J. Approx. Theory 28 (1980), no. 4, 333-348. (H. Werner) 82d:41013

nchev, I. (with Radev, S.; Rakadjiev, R.; Gospodinov, P.) Numerical method for heat and mass transfer problems for a laminar jet in immiscible liquid-liquid systems. Numerical methods in thermal problems (Proc. First Internat. Conf., Univ. College, Swansea, 1979), pp. 893-902, Pineridge, Swansea, 1979. (See 82g:80001) (80A20)

Penco, Maria Anto ietta (with Fenaroli, Giuseppina) From prediction to forecasting: the formalization of the concept of expectation. (Italian. English summary) Physis-Internaz. Storia Sci. 22 (1980), no. 1, 121-131. (P. Bockstaele) 82j:01031 (60-03)

engo, Piero (with Borello, Laura; Ferraro, Mario; Rossotti, Maria Lia) A model of visual perception. Biol. Cybernet. 39 (1980/81), no. 2, 79-85. (Authors' summary) 92A25 (68G10) 82b-92043

nko, V. V. See Math ds for the design of experiments, 82f:62147

Peng, Huan Wu Quantum mechanical treatment of a damped harmonic oscillator. (Chinese. English summary) Acta Phys. Sinica 29 (1980), no. 8, 1084-1089. (Author's sum

A kind of high-performance RLLC constructed by an adaptive coding. (Chinese: English summary) J. Huazhong Inst. Tech. 7 (1979), no. 4, 9, 71-81. (Shyue Ching Lu) 82f:94016 94B60 Ching Lu) 82f:94016

Xiong On the recognizability of pattern sets. (Chinese. English summary) J. Huazhong Inst. Tech. 7 (1979), no. 4, 8-9, 62-70. (Author's summary) 82a:68171

Peng, Song Tsuen (with Oliner, Arthur A.) Guidance and leakage properties of a class of open dielectric waveguides. I. Mathematical formulations. IEEE Trans. Microwave Theory Tech. 29 (1981), no. 9, 843-854. (Authors' summary) 82h:78026

Pengra, R. W. (with Casazza, P. G.; Sundberg, Carl) Complemented ideals in the disk algebra. Israel J. Math. 37 (1980), no. 1-2, 76-83. (V. P. Havin) 82d:30029 30D55 Penkov, B. Il'ja Nestorovič Vekua (1970-1977). (Bulgarian) Fiz.-Mat. Spis. B"lgar. Akad. Nauk. 21(54) (1978), no. 3, 236–237. (Editors) 82e-01098 01A70

See also Anniversary: Death of Maxwell, James Clerk, 82f:01160; Arago, D. F., 82g:01038 and Ore, Oystein, 82h:01064

ov, I. B. The Penrose transform on general Grassma annians. C. R. Acad. Bulgare Sci. 33 (1980), no. 11, 1439-1442. (R. O. Wells, Jr.) 82j:14013 14F05 (32G13, 32L05,

81E10) Pen'kov, V. B. (with Tolokonnikov, L. A.) Application of the Riemann boundary value problem with a discontinuous matrix coefficient to mechanics. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 12, 55-59. (N. K. Karapetjanc) 82h:30048 30E25 (73C03)

Penna, Michael A. Total torsion. Amer. Math. Monthly 87 (1980), no. 6, 452-461. (Wolfgang Kühnel) 82d:53005 53A04

Euler classes of combinatorial manifolds. Canad. J. Math. 32 (1980), no. 4, 783-803. 55R65 (57O99) (T. Banchoff) 82i:55018

(T. Banchott) 82E:5018 | S2RCO (3/(27)) |
Penner, P. Hyperidentities of lattices and semilattices. Algebra Universalis 13 (1981), no. 3, 307-314. (Ralph Freese) 82E:60008 | 08B99 (06B20) |
Penny, D. (with Hendy, M. D.; Foulds, L. R.) Proving phylogenetic trees minimal with I-clustering and set partitioning. Math. Biosci. 51 (1980), no. 1-2, 71-88. (K. R.) Parthasarathy) 82h:05017 05C05 (92A10)

Peron, Jaques Infinitésimaux et intuitionnisme. Third Colloquium on Categories (Amiens, 1980), Part II. Cahiers Topologie Géom. Différentielle 22 (1981), no. 1, 67–72. (Gavin Wraith) 82m:51021 51K10 (03G30, 18B20, 58A05)

Penot, Jean-Paul On the existence of Lagrange multipliers in nonlinear programming in Banach spaces. Optimization and optimal control (Proc. Conf., Math. Res. Inst., Oberwolfach, 1980), pp. 89-104, Lecture Notes in Control and Information Sci., 30, Springer, Berlin, 1981. (Author's summary) 82m:90141 90C30 (58C20)

A characterization of tangential regularity. Nonlinear Anal. 5 (1981), no. 6, 625-643. 41A65 (46B99, 58C20, 90C48) (A. B. Németh) 82k:41030

nrose, O. (with Goldstein, Sheldon) A nonequilibrium entropy for dynamical systems. J. 28D20 (82A35) Statist. Phys. 24 (1981), no. 2, 325-343. (Peter Walters) 82e:28024

Penrose, Roger Gravitational collapse: a review. Physics and astrophysics of neutron stars and black holes (Proc. Internat. School Phys. "Enrico Fermi", Course LXV, Varenna, 1975), pp. 566-582, North-Holland, Amsterdam, 1978. (From the introduction) 82d:83017 83C15 (83C99)

Twistor functions and sheaf cohomology. Advances in twistor theory, pp. 25-36, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81D25 (83A05)

Massless fields and sheaf cohomology. Advances in twistor theory, pp. 57-64, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) (83A05)

Local H1's and propagation. Advances in twistor theory, pp. 88-92, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81D25 (83A05)

Twistors as helicity raising operators. Advances in twistor theory, pp. 93-96, Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002)

(with Sparling, G. A. J.) The twistor quadrille: a line bundle based on the Coulomb field. Advances in twistor theory, pp. 136–141, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81D25 (83A05)

The googly photon. Advances in twistor theory, pp. 152-161, Res. Notes in Math., 37, man, San Francisco, Calif., 1979. (See 82e:83002) 81D25 (81G25)

A googly graviton? Advances in twistor theory, pp. 168–176, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 83C45

(with Sparling, G. A. J.) A note on the n-twistor internal symmetry group. Advances in twistor theory, pp. 228–229, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81G20

The universal bracket factor. Advances in twistor theory, pp. 248-249, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002)

Some elementary twistor integrals with boundary. Advances in twistor theory, pp. 252-253, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See

82e:83002) 81C30

The twisted camel (or, how to get through the eye of a singularity). Advances in twistor theory, pp. 272-278, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. 81C30

Combinatorial quantum theory and quantized directions. Advances in twistor theory, pp. 301-307, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See

81B05

(with Ward, Richard Samuel) Twistors for flat and curved space-time. General relativity and gravitation, Vol. 2, pp. 283-328, Plenum, New York, 1980. (Arthur Greenspoon) 82j:83001 83-02 (32L99, 53C55, 81E20)

(with Smith, Cedric A. B.) A quadratic mapping with invariant cubic curve. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 1, 89-105. (E. Morgantini) 82c:51027

attonen, Martti NP-completeness of combinatorial problems with unary notation for integers. Fund. Inform. (4) 3 (1980), no. 3, 397-400. (Author's summary) 82a:68082

Peper, C. (with Strehmel, Karl) Numerische Lösung von Anfangswertaufgaben gewöhnlicher Differentialgleichungen n-ter Ordnung mittels Einschrittverfahren. (English summary) Computing 22 (1979), no. 2, 125–139. (Authors' summary) 821:65083

Pera, Marcello A priori principles and canons of scientific rationality. (Italian. English summary) Physis-Riv. Internaz. Storia Sci. 22 (1980), no. 2, 261-278. (Evandro Agazzi) 00A25 (03A05)

Pera, Maria Patrizia (with Furi, Massimo) On the existence of an unbounded connected set of solutions for nonlinear equations in Banach spaces. (Italian summary) Atti Accad.

Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 31-38 (1980). (P. S.

Milojevic) 82j:47082 47H15
(with Massabo, I.; Nistri, P.) A result on the existence of infinitely many solutions of a nonlinear elliptic boundary value problem at resonance. (Italian summary) Mat. Ital. A (5) 17 (1980), no. 3, 523-530. (Michele Mininni) 82a:35043

(with Furi, Massimo) An elementary approach to boundary value problems on on ance. Nonlinear Anal. 4 (1980), no. 6, 1081–1989. (Jean Mawhin) 82a:47058 47H15 (34G20)

(with Amaral, Luis) A note on periodic solutions at resonance. (Italian summary) Boll. Un. Mat. Ital. C (5) 18 (1981), no. 1, 107-117. (Ch. G. Philos) 82k:34044 (34C27)

Peral, Juan C. See Peral Alonso, Juan C.

Peral Alonso, Ireneo Results on certain maximal operators by the method of rotation. (Spanish) Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 163-167, Consejo Sup. Inv. Cient., Madrid, 1977. (José L. Rubio de Francia) 82e:42018 42B25 (26B05)

Peral Alonso, Juan C. L. Pe stimates for the wave equation. Harmonic analysis in Euclidean spaces (Proc. Sympos. Pure Math., Williams Coll., Williamstown, Mass., 1978), Part 2, pp. 171–174, Proc. Sympos. Pure Math., XXXV, Part 2, Amer. Math. Soc., Providence, R.I., 1979. (See 80f:42001b) 35L05 (35A25)

Percacci, Roberto Global definition of nonlinear sigma model and some consequences. J. Math. Phys. 22 (1981), no. 9, 1892-1895. (Bernard S. Kay) 82j:81050 81E99 (58E20) (with Pak, Namik K.) On the topological equivalence of gauge and Higgs fields in the dyon sectors. Nuclear Phys. B 188 (1981), no. 2, 355-372. (Authors' summary) 82i:81094 81E10 (55P99)

Percell, Peter (with Wheeler, Mary Fanett) A C1 finite element collocation method for elliptic equations. SIAM J. Numer. Anal. 17 (1980), no. 5, 605-622. (Wolfgang Moldenhauer) 82c:65081 65N35

Percival, Ian C. Variational principles for invariant tori and cantori. Nonlinear dyna and the beam-beam interaction (Sympos., Brookhaven Nat. Lab., New York, 1979), pp. 302-310, AIP Conf. Proc., 57, Amer. Inst. Physics, New York, 1980. (Author's 58F13 (58F05, 70K50) summary) 82m:58040

(with de Kertanguy, A.; Richards, Derek) Classical theory of the static Stark effect weak fields. J. Phys. B 14 (1981), no. 4, 641-656. (Authors' summary) 82c:81161 81G45 (58G15, 78A25)

(with Greene, John M.) Hamiltonian maps in the complex plane. Phys. D 3 (1981), no. 3, 530-548. (Authors' summary) 82m:70022 70H99 (58F05) lefèvre-Percsy, Christiane See Lefèvre-Percsy, Christiane Percsy, Nicolas Une condition nécessaire et suffisante de plongeabilité pour les treillis

semi-modulaires. (English summary) European J. Combin. 2 (1981), no. 2, 173-177. (G. Szász) 820:06013 06C10

Finite Minkowski planes in which every circle-symmetry is an automorphism. Geom. Dedicata 10 (1981), no. 1-4, 269-282. (W. R. Heise) 82j:51023 51E25 (51B20)

Percus, J. K. Shielded distribution approximation for a wall-bounded classical fluid. J. Statist. Phys. 23 (1980), no. 6, 657-699. (A. A. Arsen'ev) 821:82050 82A50 (82A40,

(with Childress, Stephen) Modeling of cell and tissue movements in the developing embryo. Some mathematical questions in biology (Toronto, Ont., 1981), pp. 59-88, Lectures Math. Life Sci., 14, Amer. Math. Soc., Providence, R.I., 1981. (Authors' 92A09 (73P05) summary) 82k:92022

(with Percus, O. E.) One-dimensional random walk with phase transition. SIAM J. Appl. Math. 40 (1981), no. 3, 485–497. (Aart J. Stam) 82e:60108 60J15 Percus, O. E. (with Percus, J. K.) One-dimensional random walk with phase transition.

SIAM J. Appl. Math. 40 (1981), no. 3, 485-497. (Aart J. Stam) 82e:60108 Perdang, J. (with Blacher, S.) Chaotic solar oscillations? Monthly Notices Roy. Astronom. Soc. 196 (1981), no. 3, 109P-113P. (J. S. Joel) 82j:85002 85A20 (58F13, 70K20,

(with Blacher, S.) The power of chaos. Phys. D 3 (1981), no. 3, 512-529. (Authors'

summary) 82k:70025 70K50 (58F13, 70-04) on, A. M. (with Conte, G.) On polynomial matrices and finitely generated torsion K[z]-modules. Algebraic and geometric methods in linear systems theory (AMS-NASA-NATO Summer Sem., Harvard Univ., Cambridge, Mass., 1979), pp. 27-36,

Lectures in Appl. Math., 18, Amer. Math. Soc., Providence, R.I., 1980. (From the introduction) 82i:93023 93B20 (93B15)

(with Conte, C.) On canonical form for completely reachable dynamical systems. Systems analysis (Conf., Bordeaux, 1978), pp. 67-75, Astérisque, 75-76, Soc. Math. France, Paris, 1980. (Christopher I. Byrnes) 82b-93015 93B15 (14D20, 93B50)

medina Perea, Alberto See Medina Perea, Alberto
Peregrine, D. H. The fascination of fluid mechanics. 25th anniversary issue: editorial reflections on the development of fluid mechanics. J. Fluid Mech. 106 (1981), 59-80. (See 82g:76002) 76B10 (00A69, 76D05)

Peregudov, A. N. Asymptotic behavior of the solution of the second boundary value problem for a quasilinear parabolic system of chemical kinetics. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 45 (1981), no. 1, 227-238, 240. (Wolfgang Alt) 82m:35079 35K55 (35B40, 80A30)

Peregudov, S. A. Conservative coverings of topological spaces by finite subspaces. (Russian) Mat. Zametki 26 (1979), no. 5, 785-790, 815. (Bogdan Koszela) 82h:54028

Pereira, B. de B. Addendum: "Tests and efficiencies of separate regression models" [Biometrika 65 (1978), no. 2, 319-337; MR 80h:62017]. Biometrika 68 (1981), no. 1, 345. (Editors) 82f:62047 62F05

(1981), no. 5, 1064–1074. (M. Carmeli) 82g:83017 83C55 (53B50, 83C45)

Pereira, Fernando C. N. (with Warren, David H. D.) Definite clause grammars for language analysis-a survey of the formalism and a comparison with augmented transition networks. Artificial Intelligence 13 (1980), no. 3, 231-278. (Authors' summary) 82g:68073 68F05

s-Pereira, J. M. S. See Simões-Pereira, J. M. S.

Pereira da Silva, Clóvis What are quasigroups? (Portuguese) Bol. Soc. Paran. Mat. (2) 1 (1980), no. 2, 43-48. (Editors) 820:20105 20N05

Perelli, A. (with Salerno, S.) On the average order of multiplicative functions. (Italia summary) Boll. Un. Mat. Isal. A (5) 17 (1980), no. 3, 490-497. (Aleksandar Ivić)

(with Zannier, U.) On a theorem of Pólya. (Italian. English summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 2, 305-307. (A. Edrei) 82i:30042 30D15 (10A20,

nan, Ch. Logic and rhetoric. Modern logic-a survey, pp. 457-463, Synthese Library, 03A05

149, Reidel, Dordrecht, 1981. (See 82f:03002) 03A05
Perelman, Lewis J. Time in system dynamics. System dynamics, pp. 75–89, Stud. Management Sci., 14, North-Holland, Amsterdam, 1980. (See 82j:90021) (93A10)

Perel'man, N. F. (with Kovarskil, V. A.; Averbuh, I. S.; Baranov, S. A.; Tordirašku, S. S.) ★ Неадвабатические переходы в сильном электромагинтном ноле. (Russian)
[Nonadiabatic transitions in a strong electromagnetic field] "Štiinca". Kishinev. 1980. 175 pp. (Publisher's description) 82f:81098 81K05 (76X05, 82A35)

elomov, A. M. (with Degasperis, A.; Ol'Saneckii, M. A.) Group-theoretical approach to a class of Lax equations including those solvable by the spectral transform. Nuovo Cimento A (11) 59 (1980), no. 3, 245-262. (B. A. Kupershmidt) 82c:58027 58F07 (35A30, 81C05)

(with Ol'saneckil, M. A.) The Toda chain as a reduced system. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 1, 3-18. (B. A. Kupershmidt) 82e:58049 58F07 (82A67)

Some remarks on the integrability of the equations of motion of a rigid body in an ideal fluid. (Russian) Funkcional. Anal. i Priložen. 15 (1981), no. 2, 83-85. (B. V. Loginov) 82j:58066 58F07 (70E99, 76B99)

Perel'roizen, E. Z. (with Levin, Vitali I.) Logical methods in the field of computer vision. (Russian) Vyčisl. Sistemy No. 82 Arhitektura Vyčisl. Sistem s Programmiruei (1980), 95-109, 112. (Authors' summary) 82m:68131 68G10 (03B50, 92A25)

elson, Alan S. (with Bard, Jonathan L. B.; Ghozlan, Aline; Goldbeter, Albert; Hardt, Shoshana; Levitzki, Alexander; Liron, Nadav; Odell, Garrett M.; Parnas, Hanna; Rapp, P. E.; Rubinow, Sol I.; Segel, Lee A.; Tolkovsky, Aviva M.; Wehrhahn,

ristian; Yagil, Gad; Zeigler, Bernard P.) *Mathematical models in molecular and cellular biology. Cambridge University Press, Cambridge-New York, 1980. x+757 pp. ISBN 0-521-22925-1 (John J. Tyson) 82c:92001 92-01 (92A09)

(with Wiegel, Frederik W.) Configurations of a polymeric antigen adsorbed to a B-cell membrane. J. Theoret. Biol. 88 (1981), no. 3, 533-568. (B. F. Dibrov) 82m:92039 92A09 (92A07)

Receptor clustering on a cell surface. III. Theory of receptor cross-linking by multivalent ligands: description by ligand states. Math. Biosci. 53 (1981), no. 1-2, 1-39. (Author's summary) 82e:92008 92A07 (34C11)

Peres, Clovis A. Testing the effect of blocking in a randomized complete block design

(RCBD). Comm. Statist. A-Theory Methods 10 (1981), no. 23, 2447-2459. (Author's summary) 82k:62137 62J05 (62K10)

Peresypkin, E. N. (with Galtova, L. M.) A variational problem in creep theory in calculation for bend of a reinforced concrete girder plate with allowance for shrinkage of the concrete. (Russian. Armenian summary) Izv. Akad. Nauk Armjan. SSR Ser. Tehn Nauk 34 (1981), no. 1, 23-30, 50. (Authors' summary) 82g:73033 73K15 (73E25.

A theory with three countable models. (Russian) Algebra i Logika 19 (1980), no. 2, 224-235, 251. (O. V. Belegradek) 82g:63048 03C15 Example of an ω₁-categorical complete finitely axiomatizable theory. (Russian)

Algebra i Logika 19 (1980), no. 3, 314-347, 382-383. (M. A. Taïclin) 821:03035

Pereyra, Benito See Giacobbe, Giulio Cesare, 82m:01025

Pereyra, V. PASVA3: an adaptive finite difference FORTRAN program for first order nonlinear, ordinary boundary problems. Codes for boundary-value problems in ordin differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 67-88, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 820:65074)

garcia Pérez, Alfonso See Garcia Pérez, Alfonso
Perez, Dottie Union conditions in r-lattices. Algebra Universalis 11 (1980), no. 1, 127-129. 06C05 (06F10) (Joel Berman) 82a:06012

(with Johnson, Johnny A.) Two multiplicative lattice examples. Algebra Universalis 12 (1981), no. 1, 132-133. (From the text) 82i:06007 06A23

barja Pérez, J. M. See Barja Pérez, J. M.

Pérez Carreras, Pedro (with Valdivia, Manuel) On totally barreled spaces. Math. Z. 178 (1981), no. 2, 263-269. (T. Husain) 82m:46002 46A07

Perez-Garcia, C. (with Lebon, G.) Study of surface tension effects in thermal convection by

variational methods. Acad. Roy. Belg. Bull. Cl. Sci. (5) 66 (1980), no. 6, 520-542. (Authors' summary) 824:76039 76E15 (49H05)

Pérez-Hernández, W. (with Blum, Lesser) Explicit solution of the mean spherical model for ions and dipoles. J. Statist. Phys. 24 (1981), no. 3, 451-454. (Authors' summary) 82A05

Perez-Mendez, V. (with Tam, K. C.) Tomographical imaging with limited-angle input. J. Opt. Soc. Amer. 71 (1981), no. 5, 582-592. (Brian DeFacio) 82i:78017 78A35

Perez-Mercader, Juan (with Haymaker, Richard W.) Closed-form bound-state effective potential and exact solutions for dynamical symmetry breaking in a 4D gauge theory Phys. Lett. B 106 (1981), no. 3, 201-206. (Authors' summary) 82k:81035 (81D20, 81E10)

Pérez Monasor, Francisco New properties of 5-constrained groups. (Spanish) Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 348-353, Consejo Sup. Inv. Cient., Madrid, 1977. (Editors) 82c:20044 20D10

Perez-Rendon, A. See Differential geometrical methods in mathematical physics, 82a:81003
Perfect, Hazel (with Bryant, Victor) ★Independence theory in combinatorics. An introductory account with applications to graphs and transversals. Chapman and Hall Mathematics Series. Chapman & Hall, London-New York, 1980. xii + 144 pp. ISBN 0-412-16220-2, 0-412-22430-5 (E. Keith Lloyd) 82d:05001 05-01 (05A05, 05B35)

lence theory and matroids. Math. Gaz. 65 (1981), no. 432, 103-111. (András Recski) 82k:05041 05B35
Perfilov, S. N. A method for solution of a linear operator equation. (Russian) Issled. Prikl.

- Mat. No. 8 (1980), 23-28. (I. K. Marek) 82i:65037 65J10 (47A50)
- riè, V. (with Dašić, V.) D-Kommutativität der Fastringe mit Distributivitätsdefekt D. (English and Serbo-Croatian summaries) Glas. Mat. Ser. III 15(35) (1980), no. 1, 25-31. 16A76 (16A70)
- co, A. (with Battezzati, M.) An exact model calculation of the diffusion controlled intramolecular rate constant. J. Chem. Phys. 74 (1981), no. 8, 4527-4532. (Authors' summary) 82g-80015 80A30
- miramorecular rate constant. 2. Chem. Pays. 14 (1961), no. 6, 4522–4532 (valuous summary) 822,80015 80A30

 (Blo, E. (with Rosato, E.; Vigilante, M.; De Cesare, N.; Spadaccini, G.) Weighted fit by orthonormal polynomials. Comput. Phys. Comm. 22 (1981), no. 2-3, 311–315. (Authors' introduction) 82h:65031 65F25
- Perina, J. (with Pieczonková, A.) Statistical properties of Brillouin scattering. Czechoslovak
 J. Phys. B 31 (1981), no. 8, 837–856. (Authors' summary) 82j:81075
 Perjes, Z. (with Sparling, G. A. J.) The twistor structure of hadrons. Advances in twistor theory, pp. 192–197, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 81G20
 - (with Lukács, B.; Sebestyén, Ákos) Null Killing vectors. J. Math. Phys. 22 (1981), no. 6, 1248–1253. (John Wainwright) 82i:83014 83C15 (83C40, 83C50)
- Perk, Jacques H. H. Equations of motion for the transverse correlations of the one-dimensional XY-model at finite temperature. Phys. Lett. A 79 (1980), no. 1, 1-2. (Author's summary) 82a:82049 82A67
 - Quadratic identities for Ising model correlations. Phys. Lett. A 79 (1980), no. 1, 3-5. (Author's summary) 82e82024 82A67

 - (Author's summary) 82e82024 82A67
 (Author's summary) 82e82024 82A67
 (with den Ouden, L. W. J.; Capel, H. W.) Critical-exponent renormalization, first-order transitions and demagnetizing effects for Schofield's linear model. Phys. A 105 (1981), no. 1-2, 53-85. (Authors' summary) 82e82033 82A25
 (with Schultz, Cherie L.) New families of commuting transfer matrices in q-state vertex models. Phys. Lett. 4 84 (1981), no. 2 407, 409. (Authors') constants of the state vertex models. Phys. Lett. 4 84 (1981), no. 2 407, 409. (Authors') constants of the state vertex models. Phys. Lett. 4 84 (1981), no. 2 407, 409. (Authors') constants of the state vertex models.
 - vertex models. Phys. Lett. A 84 (1981), no. 8, 407-410. (Authors' summary) 82j:82014 82A05 (82A68)
 - (with McCoy, Barry M.; Wu, Tai Tsun) Ising field theory: quadratic difference actions for the n-point Green's functions on the lattice. Phys. Rev. Lett. 46 (1981), no. 12, 757-760. (Authors' summary) 82b:82077 82A67 (39A10)
- orkel, Manley (with Morley, Larry J.) The nilpotency class of extensions of certain p-groups. Comm. Algebra 8 (1980), no. 11, 1053-1069. (S. E. Stonchewer) 82d:20024 20D15 (22E25)
- kins, Edwin A global intrinsic characterization of Brownian local time. Ann. Probab. 9 (1981) no 5 800-817 (Barthel W. Huff) 82k-60158 60165 (03H05)
- (1981), no. 3, 300-817. (Barthet W. Hutt) 82x360188 60065 (03H05)
 On the iterated logarithm law for local time. Proc. Amer. Amts. Soc. 81 (1981), no. 3, 470-472. (Robert Kertz) 82c:60138 60155 (60F15, 60165)
 On the uniqueness of a local martingale with a given absolute value. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 2, 255-281. (Jean Mémin) 82m:60056 60C48 (60H05) (with Chacon, R. V.; Le Jan, Yves; Taylor, Samuel James) Generalised arc length
- for Brownian motion and Levy processes. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 2, 197-211. (Mou-Hsiung Chang) 82j:60152 60165 (60G17, 60145)
- Perkins, W. R. (with Cruz, J. B., Jr.; Looze, D. P.) Sensitivity analysis of nonlinear J. Franklin Inst. 312 (1981), no. 3-4, 199-215. (Authors' summary) 93B35 (93C10) 82k:93029
- Perko, L. M. A class of superquadratic boundary value problems of capillary type. Arch. Rational Mech. Anal. 74 (1980), no. 4, 355-377. (Lubor Malina) 82c:34021 34B15 (35J65, 49F22)
- Second species solutions with an $O(\mu^{\nu})$, $0 < \nu < 1$, near-Moon passage. Celestial 70F07 (58F14, Mech. 24 (1981), no. 2, 155-171. (Ram Krishan Sharma) 82j:70008 70F15)
 - Periodic orbits in the restricted problem: an analysis in the neighborhood of a 1st species-2nd species bifurcation. SIAM J. Appl. Math. 41 (1981), no. 1, 181-202. (Donald G. Saari) 82j:70010 70F15 (34C25, 58F14, 58F22, 70F07)
- Perko, R. Der Beweis als Verschleierungsinstrument des paradigmatischen Charakters der mathematischen Entwicklung unter Zugrundelegung des epistemologischen Kuhnschen Konzeptes. Proof in the teaching of mathematics (Proc. Second Internat. Sympos. Teaching Math., Klagenfurt, 1978) (German), pp. 335-347, Schriftenreihe Didaktik Math., 2, Hölder-Pichler-Tempsky, Vienna, 1979, (Thomas Mormann) 82m:00021 00A25
- Perkolab, L. V. A numerical solution of a periodic Korteweg-de Vries problem. (Russian) Vestnik Har'kov. Gos. Univ. No. 177, vyp. 44 (1979), 58-66, 96. (Author's summary)
 82e:35073 35Q20 (65P05, 76B15)
 Perkowski, J. (with Travis, Curtis C.; Post, Wilfred M.; DeAngelis, D. L.) Analysis of
- compensatory Leslie matrix models for competing species. Theoret. Population Biol. 18 (1980), no. 1, 16-30. (Ju. I. Ljubič) 82f:92040 92A15 (15A48)
- wski, Marek (with Krasiński, Andrzej) ORTOCARTAN-a new computer program for analytic calculations in general relativity. Gen. Relativity Gravitation 13 (1981), no. 1,
- 67-77. (Authors' summary) 82h:83003 83-04

 Perks, A. J. (with Burrows, B. L.) Complementary variational principles and variational-iterative principles. J. Phys. A 14 (1981), no. 4, 797-808. (Vadim Komkov) 49H05 (78A25, 81G25, 81G45)
- Perktold, Karl Lösung der instationären Navier-Stokes-Gleichungen mittels der Methode der finiten elemente. Ber. Math.-Statist. Sekt. Forsch. Graz No. 133 (1980), 80 pp. (P. Gordon) 82h:76026 76D05 (65N30)
- Perl, Jürgen Reachability homomorphisms on graphs. (German summary) Discrete structures and algorithms (Proc. Conf., Berlin, 1979), pp. 105-113, Hanser, Munich, 1980. (Marianne Gardner) 82h:68093 68E10 (03B40, 05C20, 68B10). Perl, Terl Hoch The Ladies' Diary or Woman's Almanack, 1704-1841. (German and French summaries) Historia Math. 6 (1979), no. 1, 36-53. (Richard L. Francis) 82i:01024
- - Women and mathematics in the late 18th century: a query. Historia Math. 7 (1980), no. 2, 188-189. (Editors) 82e:01054 01A50
- ecka-Perl, Urszula See Zandecka-Perl, Urszula
- Perl, Yehoshua (with Becker, Ronald I.; Schach, Stephen R.) A shifting algorithm for min-max tree partitioning. Automata, languages and programming (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 64-75, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (G. P. Bhattacharjee) 82c:68018 68C05 (05C05, 68E10) (with Golumbic, M. C.) The edge inducibility of graphs. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 3-4, 393-398. (David M. Berman) 82ac05053 05C30

- (with Shiloach, Yossi) Efficient optimization of monotonic functions on trees (with Shioach, Yoss) Efficient optimization of monotonic functions on trees.

 CAAP '81 (Proc. Sixth Colloq., Genoa, 1981), pp. 332–339, Lecture Notes in Comput. Sci.,

 112, Springer, Berlin, 1981. (Authors' summary) 82k-68068 68C25 (68E10, 90C39)

 (with Zaks, S.) Deficient generalized Fibonacci maximum path graphs. Discrete

 Math. 34 (1981), no. 2, 153–164. (M. C. Golumbic) 82k-05027 05C20 (05C35, 05C38)
- (with Yesha, Yaacov) Mean flow scheduling and optimal construction of a treelike mication network. Networks 11 (1981), no. 1, 87-92. (Authors' summary)
- 82b:68036 68C25 (68C15, 90B35, 94C15) Perles, M. A. (with Altshuler, Amos) Quotient polytopes of cyclic polytopes. I. Structure and characterization. Israel J. Math. 36 (1980), no. 2, 97-125. (P. McMullen) 82i:52015 52A25 (05B25)
- Perlin, P. I. (with Parton, V. Z.) ★Методы математической теории упругости. (Russian) [Methods of the mathematical theory of elasticity] "Nauka", Moscow, 1981. 688 pp. (Petr Procházka) 82i:73002 73-02 (35-01, 73Cxx)
- nan, H. S. (with Troup, G. J.) Coherent states and Fock states at very high average photon numbers. Austral. J. Phys. 34 (1981), no. 4, 357-360. (Authors' summary) 82i:81182 81L05 (81D30)
- erlman, Michael D. (with Olkin, Ingram) Unbiasedness of invariant tests for MANOVA and other multivariate problems. Ann. Statist. 8 (1980), no. 6, 1326-1341. (Takeaki Kariya) 82c:62081 62H15
- Perlmutter, Paul (with Mycielski, Jan) Model completeness of some metric completions of absolutely free algebras. Algebra Universalis 12 (1981), no. 2, 137-144. (M. A. Taïclin) 82k:03037 03C35 (08B20)
- Perlow, J. Stationary densities for frequency-dependent selection. Theoret. Popular
- 20 (1981), no. 3, 356–362. (Author's summary) 82m:92051 92A10 (60J70)
 Peristadt, Marci Sampling schemes for Fourier transform reconstruction. SIAM J Algebraic Discrete Methods 2 (1981), no. 2, 176-191. (Olga M. Košeleva) 82m:85004 85A45 (65R10)
- rminov, O. N. Mechanical programming procedures. Programmirovanie 1980, no. 6. 56-61, 95 (Russian); translated as Programming and Comput. Software 6 (1980), no. 2, 93-97 (1981). (Author's summary) 82m:68012 68B05
- Permjakov, P. P. (with Gavrilov, G. P.; Liskovec, V. A.; Selivanov, B. I.) Some tendencies in the theory of enumeration (supplement-survey). (Russian) Enumeration problems of storial analysis (Russian), pp. 336-362, "Mir", Moscow, 1979. (See 82b:05018) 05A15 (01A65, 05-02)
- Permjakov, V. I. (with Božko, A. E.) On the determination of periodic solutions by the method of Taylor transforms. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 2, 3–6, 95. (V. Šeda) 82j:34036 34C25
- Perne, R. (with Kröger, Helmut) An N-body scattering equation approach using a pole decomposition of the Green's function. Lett. Nuovo Cimento (2) 27 (1980), no. 13, 406-408. (From the text) 82c:81129 81F10
- Pernebo, Lars An algebraic theory for the design of controllers for linear multivariable systems. I. Structure matrices and feedforward design. IEEE Trans. Automat. Control 26
 - (1981), no. 1, 171-182. (Author's summary) 82h:93017a 93B20 (12D05)

 An algebraic theory for the design of controllers for linear multivariable systems. II.
 Feedback realizations and feedback design. IEEE Trans. Automat. Control 26 (1981),
- no. 1, 183-194. (Author's summary) 82b;93017b 93B20 (12D05)
 Peroche, Bernard The path-numbers of some multipartite graphs. Combinatorics 79 (Proc. Colloq., Univ. Montréal, Montreal, Que., 1979), Part II. Ann. Discrete Math. 9 (1980), 195-197. (Guy Chaty) 82h:69034 05C38
- (with Habib, Michel) A construction method for minimally k-edge-connected graphs (French summary) Combinatorics 79 (Proc. Colloq., Univ. Montreal, Montreal, Que., 1979), Part II. Ann. Discrete Math. 9 (1980), 199-204. (Guy Chaty) 82h:05035 05C40
- Perold, André F. Extreme points and basic feasible solutions in continuous time linear programming. SIAM J. Control Optim. 19 (1981), no. 1, 52-63. (Chanchal Singh) 82k;90079 90C05 (90C30)
- Perov, A. I. Variational methods of proof of the existence of periodic solutions. (Russian) Asymptotic Methods in Nonlinear Mech., Katsiveli, 1977) (Russian), pp. 151–156, 276, "Naukova Dumka", Kiev, 1979. (V. G. Zadorožnii) 82g:34054 34C25
- Perov, V. L. (with Marčuk, G. I.; Dymnikov, V. P.; Zalesnyĭ, V. B.; Lykosov, V. N.; Bobyleva, I. M.; Galin, V. Ja.) A mathematical model of the general circulation of the atmosphere and ocean. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 3, 577-581. (From the text) 82f:86001 86A05 (86A35)
- rov, V. P. (with Gorškov, I. S.) Adaptive estimation in the orthogonal basis. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 1, 53-56. (T. Tobias) 82a:93056 93E10
 Perram, J. W. (with de Leeuw, S. W.; Smith, Edgar Roderick) Simulation of electrostatic
- systems in periodic boundary conditions. I. Lattice sums and dielectric constants. Proc. Roy. Soc. London Ser. A 373 (1980), no. 1752, 27-56. (From the summary) 82f:82055a 82A60 (81H05)
 - (with de Leeuw, S. W.; Smith, Edgar Roderick) Simulation of electrostatic systems in periodic boundary conditions. II. Equivalence of boundary conditions. Proc. Roy. Soc. London Ser. A 373 (1980), no. 1752, 57-66. (From the summary) 821:82055b 82A60
- Perraud, Jean r le problème des mots des quotients de groupes et produits libres. (English summary) Bull. Soc. Math. France 108 (1980), no. 3, 285-331. (Andreas Blass) 20F10 (03D40, 05C25)
- Sur la condition de petite simplification C'(1/6) dans un produit libre amalgan (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 4, A247-A250. (A.
 M. W. Glass) 82c:20068 20F10 (03D40, 20E06, 20F06)
- Perrin, D. (with Blanchard, F.) Relèvement d'une mesure ergodique par un codage (German summary) Z. Wahrsch. Verw. Gebiete 54 (1980), no. 3, 303-311. (U. Krengel) 94A15 (28D99)
 - (with Petrot, J.-F.) A propos des groupes dans certains monoïdes syntactiques. Semigroups (Proc. Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 82–91, Lecture Notes in Math., 855, Springer, Berlin, 1981. (From the introduction) 82g:20107 20M35
- Perrin, Guy-René Conception, écriture et vérification de programmes parallèles. (English summary) [Formulation, writing and verification of parallel programs] RAIRO Inform. 15 (1981), no. 3, 235-253. (Author's summary) 82k:68010 68B10

dette Plongement d'une extension diédrale dans une extension diédrale ou quaternionienne. Ann. Inst. Fourier (Grenoble) 30 (1980), no. 4, 19-33. (J. Browkin) 82k:12002 12A35 (12B20)

Groupe de Selmer à 2 variables des courbes elliptiques à multiplication complexe. [Selmer group with 2 variables of elliptic curves with complex multiplication] Seminar on Number Theory, Paris 1979-80, pp. 237-244, Progress in Math., 12, Birkhäuser, Boston, Mass., 1981. (See 82):10004) 14K07 (12A65)

Mass., 1981. (See 82]:10004) 14K07 (12A65) erron, Bernard Le nœud "huit" est algébrique réel. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 14, 679-682. (Author's summary) 82f:14005 14B05

co Spectrum and Lipschitz-Killing curvature in dimension 4. (Italian. English summary) Rend. Sem. Mat. Univ. Politec. Torino 37 (1979), no. 1, 71-79. (Author's summary) 821:53056 53C20 (58G25)

Spectrum and Lipschitz-Killing curvature in dimension 6. (Italian. English summary) Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 1, 59-65. (Francesco Mercuri) 82k:58096 58G25 (53C25)

**Tros. H. G. (with Foster, F. G.) On the blocking process in queue networks. **European J. Oper. Res. 5 (1980), no. 4, 276–283. (Ralph L. Disney) **82a:60140 60K25 (68C15, 90B22)

A symmetrical exponential open queue network with blocking and feedback. IEEE Trans. Software Engrg. 7 (1981), no. 4, 395-402. (Author's summary) 82k:60184 60K20 (68C15, 90B22)

A two-level open queue network with blocking and feedback. (French summary) RAIRO Rech. Opér. 15 (1981), no. 1, 27-38. (B. W. Stuck) 82c:60171 60K25 (68C15 60K25 (68C15.

Perrot, B. (with Colombeau, Jean-François) Reflexivity and kernels in infinite-dimensional holomorphy. Portugal. Math. 36 (1977), no. 3-4, 291-300 (1980). (G. Cocuré) 82e:46063

(with Colombeau, Jean-François) The $\hat{\theta}$ equation in DFN spaces. J. Math Appl. 78 (1980), no. 2, 466–487. (Jacques Vauthier) 82c:32019 32F20 (35N15, (with Colombeau, Jean-François; Dwyer, T. A. W., III) On the solvability of 32F20 (35N15, 46G20)

differential equations of infinite order in nonmetrizable spaces. Functional analysis, holomorphy, and approximation theory (Proc. Sem., Univ. Fed. Rio de Janeiro, Rio de Janeiro, 1978), pp. 187-194, Lecture Notes in Math., 843, Springer, Berlin, 1981. (Angelo Favini) 82m:34011 34A35 (34G99, 46F99)

(with Colombeau, Jean-François; Gay, Roger) Division by holomorphic functions and convolution equations in infinite dimension. Trans. Amer. Math. Soc. 264 (1981), no. 2, 381-391. (Jorge Mujica) 82e:46060 46F25 (32A15, 46G20)

Perrot, J.-F. (with Perrin, D.) A propos des groupes dans certains mone Semigroups (Proc. Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 82-91, Lecture Notes in Math., 855, Springer, Berlin, 1981. (From the introduction) 82g:20107 20M35

Perrott, J. C. B. Transfinite duals of Banach spaces and ergodic super-properties equivalent to super-reflexivity. Quart. J. Math. Oxford Ser. (2) 30 (1979), no. 117, 99–111. (D. J. H. Garling) 82b:46015 46B10

Perry, Malcolm J. (with Hasslacher, Brosl) Spin networks are simplicial quantum gravity. Phys. Lett. B 103 (1981), no. 1, 21-24. (Authors' summary) 82f:83046 83C45 (58D30) (with Lapedes, Alan S.) Type-D gravitational instantons. Phys. Rev. D (3) 24 (1981), no. 6, 1478-1483. (S. M. Christensen) 82k:83024 83C45 (53C55)

Perry, W. L. (with Flagg, R. C.; Luning, C. D.) Implementation of an iterative technique for the solution of generalized Emden-Fowler eigenproblems. Codes for boundary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 318-324, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 76N15 (65L15)

(with Luning, C. D.) Convergence of Berryman's iterative method for some Emden-Fowler equations. J. Math. Phys. 22 (1981), no. 8, 1591–1595. (Authors' summary) 82h:34032 34B30 (82A45)

(with Luning, C. D.) Positive solutions of negative exponent generalized Emden-Fowler boundary value problems. SIAM J. Math. Anal. 12 (1981), no. 6,

R74-R79, (J. S. W. Wong) 82m:34025 34B30

Perryman, Marlin Ray See Time series analysis, 82k:62005

Persek, Stephen C. Asymptotic stability on slow time scales for periodic systems. SIAM J. Appl. Math. 41 (1981), no. 1, 16-28. (J. M. Cushing) 82j:34055 34E10 (34C25, 92A15)

Hierarchies of iterated averages for systems of ordinary differential equations with a small parameter. SIAM J. Math. Anal. 12 (1981), no. 3, 413-420. (James A. Murdock) 824:34056 34C29 (34C15, 34E10)

Persic, D. B. (with Nikanorov, S. P.) A direction in the development of systems theory and its value for applications. (Russian) Energetics approach to systems research. Voprosy Kibernet. (Moscow) No. 32 (1977), 74-89. (Jerzy Jaroń) 82e:93003 93A05

Persico, F. (with Compagno, G.; Panzarella, A.) A new phase transition in the Dicke Hamiltonian. Phys. Lett. A 80 (1980), no. 2-3, 125-128. (Authors' summary) 82b:81153 81K05 (82A25)

Persson, Jan Partial hyperbolicity and partial Gevrey classes. J. Differential Equation (1981), no. 3, 283-324. (Jean Leray) 82m:35020 35E15 (35A99, 35L30)
 Persson, Ulf (with Pinkham, Henry Charles) Degeneration of surfaces with trivial canon

bundle. Ann. of Math. (2) 113 (1981), no. 1, 45-66. (M. H. Gizatullin) 82f:14030 14J10 (14E05, 14J25)

Pert, G. J. Efficient integration of the time dependent collisional-radiative equ Comput. Phys. 39 (1981), no. 2, 251-271. (T. Kahan) 82e:76083 76X05 (65L05)
Physical constraints in numerical calculations of diffusion. J. Comput. Phys. 42 (1981), no. 1, 20-52. (Author's summary) 82h:76036 76R99 (65P05)

Pervozvanskii, A. A. (with Gaicgori, V. G.) Perturbation method in the optimal control problems. (Russian summary) Systems Sci. 5 (1979), no. 1, 91–102. (H. Mukai) 82c:49016 49B50

(with Gaïcgori, V. G.) Optimization of weakly controllable stochastic systems. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 2, 268-271. (H.-J. Engelbert) 93F20

Pervušin, V. N. Quantum chromodynamics as a microscopic superfluidity theory. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 394-406. (Author's summary) 82i:81138 81G05

Peržan, A. V. On a pointwise estimate of a generalized solution to the Dirichlet problem for an elliptic equation in divergence form. (Russian) Boundary value problems for partial differential equations. Mat. Issled. No. 63 (1981), 107-115, 183. (Enrico Obrecht) 35J25

Perzyna, Piotr Stability phenomena of dissipative solids with internal defects and imperfections. Theoretical and applied mechanics (Proc. 15th Internat. Congr., Unio. Toronto, Toronto, Ont., 1980), pp. 369-376, North-Holland, Amsterdam, 1980. (See 73B05

Pescatore, C. (with Cole, R. J.) A method for predicting the stability characteristics of three-term homogeneous recurrence relations. J. Comput. Appl. Math. 6 (1980), no. 3, 197-199. (Shigeru Haruki) 82b:39005 39A11 (65Q05)

Präferenz, Referenz, Konvexität und Effizienz-Grundbegriffe für Entscheidungsprozesse mit mehrfacher Zielsetzung. Wiss. Z. Tech. Hochsch. Ilmenau 26 (1980), no. 6, 135–145. (Roy Gardner) 82a:90015 90A06 (52A10)

Pescheux, Jean-Michel (with Mairesse, Jacques) Fonction de production et mesure du capital: la robustesse des estimations. (English and Spanish summaries) Production functions and factor demand functions. Ann. I.N.S. É. E. No. 38-39 (1980), 63-75. (See 62P20 (90A11)

Peschl, Ernst. See Colloquium: Peschl, Ernst, 824:30001
Pesenti, Danielle (with Bros, Jacques) Fredholm theory in complex manifolds with complex parameters: analyticity properties and Landau singularities of the resolvent. J. Math. Pures Appl. (9) 59 (1980), no. 3, 375-401. (Jean Leray) 82c:81039 45B05, 81E05)

Pesin, Ja. B. Stability and periodic solutions of some systems of differential equations with lag, (Russian) Qualitative investigations of functional differential equations (Russian), pp. 115-129, 186, "Naukova Dumka", Kiev, 1980. (Tadeusz Dłotko) 82f:34093 34K15 (34C25)

Geodesic flows with hyperbolic behavior of trajectories and objects connected with them. (Russian) Uspehi Mat. Nauk 36 (1981), no. 4(220), 3-51, 247. (A. Morimoto) 821:58095 58F17 (58F15)

Peskin, C. S. (with McCracken, M. F.) A vortex method for blood flow through heart valves. J. Comput. Phys. 35 (1980), no. 2, 183-205. (Nadav Liron) 82c:76117 (65P05, 76D05, 92A09)

skov, N. V. On the Green functions of classical dynamical systems. (Russian) Vestnik Moskov. Univ. Ser. III Fiz. Astronom. 21 (1980), no. 6, 17-22, 109. (Gheorghe Nenciu) 82A05 (34G20)

Pesotan, H. (with Raktoe, B. L.; Federer, Walter T.) On aliasing and generalized defining relationships of factorial arrangements. (French summary) Canad. J. Statist. 8 (1980), no. 1, 65-77. (U. B. Paik) 82a:62124 62K15

(with Raktoe, B. L.) Further results on invariance and randomization in fractional replication. Ann. Statist. 9 (1981), no. 2, 418-423. (U. B. Paik) 82g:62111

queux, Yvon (with Chrétienne, Philippe; Grandjean, Jean-Claude) *Algorithmes et pratique de programmation linéaire. (French) [Algorithms and the practice of linear programming] Collection Langages et Algorithmes de l'Informatique. Éditions Technip, Paris, 1980. xviii+332 pp. ISBN 2-7108-0364-X (Markku Kallio) 82a:99083 90C05

Pessa, Eliano A new unified field theory based on the conformal group. Gen. Relativity Gravitation 12 (1980), no. 10, 857-862. (Author's summary) 82a:83052 83E15

Pessoa, Franquiberto dos Santos (with Langrand, Claude) Une approche de l'entropie de Shannon d'une densité de probabilité par rapport à une mesure positive e-finie. Seminar on Mathematical Statistics. Publ. U. E. R. Math. Pures Appl. IRMA 1 (1979), no. 4, Exp. No. IV, 13 pp. (Authors' summary) 82g:94010 94A17

Approximation of some information measures. J. Combin. (1980), no. 3, 215-219. (C. T. Ng) 82f:94009 94A17 (94A15) ures. J. Combin. Inform. System Sci. 5

Sur l'estimation de l'erreur d'une fonction de décision. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 12, 603-605. (Author's summary) 82e:94637 94A17

Pestov. A. B. (with Leonovič, A. A.) Fields of Yang-Mills-type in tensor wave equation theory. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 10, 892-895,

957. (B. Geyer) 822:881055 81E10 (53B50)
Pestrjakov, A. K. Numerical solution of economic convex dynamic problems. Automat. i
Telemeh. 1980, no. 3, 135-144 (Russian. English summary); translated as Automat.
Remote Control 41 (1980), no. 3, part 2, 399-407. (Author's summary) 82m:50054 90A16 (90C25)

Petcher, D. N. (with Weingarten, D. H.) Monte Carlo integration for lattice gauge theories with fermions. Phys. Lett. B 99 (1981), no. 4, 333-338. (Authors' summary) 82c:81045 81C35 (81-04, 81E99)

Petcu, Alexandru Axial normed ordered spaces. (Romanian, English summary) Stud. Cerc. Mat. 33 (1981), no. 1, 131-140. (R. Cristescu) 82f:46043 46E40

Petek, Peter Iterative calculation of square roots. (Slovenian. English summary) Obzornik Mat. Fiz. 28 (1981), no. 5, 142-145. (Author's summary) 82m:65013 65D20

Péter, Rózsa *Recursive functions in computer theory. Translated from the German by I. Juhász. With a foreword by András Hajnal. Ellis Horwood Series in Computers and their Applications, 9. Ellis Horwood Ltd., Chichester, Halsted Press [John Wiley & Sons, Inc.], New York, 1981. 179 pp. ISBN 0-85312-164-8 (Editors) 82m:68013 68B05 (03D80) Peterka, V. Bayesian system identification. Automatica-J. IFAC 17 (1981), no. 1, 41-53.

(Editors) 82b:93046 93F12

Peter of Ailly See d'Ailly, Pierre
Peters, C. A. F. See Gauß, Carl Friedrich, 82e:01124a; 82e:01124b and 82e:01124c

Peters, C. F. Numerical integration of the satellites of the outer planets. Astronom. and

Astrophys. 104 (1981), no. 1, 37-41. (Author's summary) 82m:70014 70F15

Peters, Chris On automorphisms of compact Kähler surfaces. Journées de Géometrie
Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers, 1979, pp. 249-267, Sijthoff
& Noordhoff, Alphen aan den Rijn, 1980. (Norman Goldstein) 82e:32029 3215

(with Looijenga, Eduard) Torelli theorems for Kähler K3 surfaces. Con

Math. 42 (1980/81), no. 2, 145-186. (Norman Goldstein) 82a:32035 3215 (14110)
Peters, Galen R. A computer solution of the three-dimensional Navier-Stokes equations in potential-function/vorticity form. Advances in computer methods for partial differential

ivalent form of Benford's law. Fibonacci Quart. 19 (1981), no. 1,

74-76. (L. E. Clarke) 823:50024 60:005 (10K l0, 60-01)
ers, Michael H. (with Oliva, Terence A.; Murthy, H. S. K.) A preliminary empirical test of a cusp catastrophe model in the social sciences. Behavioral Sci. 26 (1981), no. 2, 153-162. (Authors' summary) 82d:90047 90A30 (58C28)

ters, N. (with Williams, F. A.) Coherent structures in turbulent combustion. The role of coherent structures in modelling turbulence and mixing (Proc. Internat. Conf., Madrid, 1980), pp. 364–393, Lecture Notes in Phys., 136, Springer, Berlin, 1981. (See 82c:76062) 86A25 (76F99)

ters, Stephen C. (with Kadane, Joseph B.; Dickey, James M.; Winkler, Robert L.; Smith, Wayne S.) Interactive elicitation of opinion for a normal linear model. J. Amer. Statist. Assoc. 75 (1980), no. 372, 845-854. (D. V. Lindley) 82a:62092 62J05 (62A15)

resean, Age Abstract mechanics and abstract quantization. Quantum theory and the structures of time and space, Vol. 2 (Second Conf., Tutzing, 1976), pp. 174–192, Hanser, Munich, 1977. (A. Crumeyrolle) 82c81061 81D05 (58F06) tersen, Bjørn Investigating solvability and complexity of linear active networks by means of matroids. IEEE Trans. Circuits and Systems 26 (1979), no. 5, 330–342. (Author's

94C15 (05B35)

Summary) 822-84029 94(1) (2353)

Petersen, Dieter Ein Beitrag zur nichtlinearen Stabtheorie. Z. Angew. Math. Mech. 59 (1979), no. 5, T205-T206. (From the text) 82a:73028 73K05 (73106)

Petersen, Karl (with Kakutani, Shizuo) The speed of convergence in the ergodic theorem. Monatsh. Math. 91 (1981), no. 1, 11-18. (M. I. Brin) 82g:28022 28D05

sterson, Arthur V., Jr. (with Kronmal, Richard A.) A variant of the acceptance-rejection method for computer generation of random variables. J. Amer. Statist. Assoc. 76 (1981), no. 374, 446-451. (Authors' summary) 82h:62037 62E30 (65C10, 68J05)

erson, Bo Å. (with Lisak, M.; Wilhelmsson, H.) Coupled nonlinear Schrödinge equations including growth and damping. Phys. Lett. A 66 (1978), no. 2, 83–85. (Authors' summary) 82c:81022 81C05 (35Q20) erson, Brian Extensions of pro-affine algebraic gr

Peterson, Brian Extensions of pro-affine algebraic groups. II. Pacific J. Math. 86 (1980), no. 1, 277–285. (H. Yanagihara) 82h:14032 14L25
 Peterson, Dale H. (with Kac, Victor G.) Affine Lie algebras and Hecke modular forms.

Bull. Amer. Math. Soc. (N.S.) 3 (1980), no. 3, 1057-1061. (F. van der Blij) 82b:10028 10D12 (17B65)

(with Kac, Victor G.) Spin and wedge representations of infinite-dimensional Lie ebras and groups. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 6, part 1, 3308–3312. (H. de Vries) 82j:17019 17B65 (58F06, 81C40)

Peterson, E. Ja. Matching of control object and parameters of control computer system.

Automat. i Vyčisl. Tehn. (Riga) 1980, no. 2, 3-7, 95 (Russian); translated as Automat

Control Comput. Sci. 14 (1980), no. 2, 1-5. (Author's summary) 82ac68083 68C25

Peterson, Eric L. (with Saunders, David S.) The circadian eclosion rhythm in Sarcophaga a: a limit cycle representation of the pacemaker. J. Theoret. Biol. 86 (1980), no. 2, 265-277. (Authors' summary) 82b:92018 92A09

Peterson, F. P. (with Li, Bang He) On immersions of k-manifolds in (2k-1)-manifolds. Proc. Amer. Math. Soc. 83 (1981), no. 1, 159-162. (Edgar H. Brown, Jr.) 82k:57022

erson, Gary L. (with Reif, John H.) Multiple-person alternation. 20th Annual Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 348-363, IEEE, New York, 1979. (Authors' summary) 82h:90099 90D

erson, James Lyle *Petri net theory and the modeling of systems. Prentice-Hall, Inc., Englewood Cliffs, N.J., 1981. x+290 pp. ISBN 0-13-661983-5 (Dorothy Bollman) 68B20 (68-01, 68D90)

Peterson, Karl M. See Gray, Jeremy, 82k:01023

Peterson, Roger L. (with Costello, Daniel J., Jr.) Comments on: "Convolutional tree codes for multiple access channels" [IEEE Trans. Inform. Theory 23 (1977), no. 3, 397–399; MR 58 #4616] by M. Ohkubo. IEEE Trans. Inform. Theory 26 (1980), no. 5, 627–628.

(Editors) 82x94048 94A24 (with Costello, Daniel J., Jr.) Error probability and free distance bounds for two-user tree codes on multiple-access channels. *IEEE Trans. Inform. Theory* **26** (1980), no. 6, 658–670. (G. Dueck) **82g:94012** 94A24 (94B70)

Peterson, William (with Verhoff, Frank) Properties of an integral equation describing enzyme activity. Integral and functional differential equations (Proc. Conf., West Virginia ., Morgantown, W. Va., 1979), pp. 233-240, Lecture Notes in Pure and Appl. Math., 67, Dekker, New York, 1981. (J. P. Kernevez) 82j:92030 92A09 (45H05, 80A30)

Petersson, B. (with Kluberg-Stern, H.; Morel, A.; Napoly, O.) Spontaneous chiral

symmetry breaking for a U(N) gauge theory on a lattice. Nuclear Phys. B 190 (1981), no. 3, FS 3, 504-518. (Authors' summary) 82i:81105 81E25 (81D20, 82A25)

Petersson, Holger P. The isotopy problem for Jordan matrix algebras. Trans. Amer. Math. Soc. 244 (1978), 185-197. (Author's introduction) 82e:17018 17C50 (17D05) 244 (1978), 185-197. (Author's introduction) 82e:17018 17CS0 (17D05)
On linear and quadratic Jordan division algebras. Math. Z. 177 (1981), no. 4,

541-548. (Robert Lewand) 82h:17013 17C05 Pethe, P. V. (with Thakare, N. K.) Convex sums of orthogonal projections on a Banach space. Math. Student 45 (1977), no. 4, 49-52 (1979). (A. R. Sourour) 82i:47056

Pethő, A. (with Győry, Kálmán) Über die Verteilung der Lösungen von Normformen

Gleichungen. III. Acta Arith. 37 (1980), 143-165. (O. H. Körner) 82e:10031 Petit, Jean-Pierre Le modèle central fermé de Bernard Morin. (English summary) C. R. Acad. Sci. Paris Sér. A-B 289 (1979), no. 8, A471-A473. (Author's summary) 82f:57023 57R40 (57N35, 57N37)

Petit, Pascal (with Boyer, Robert P.) L'estimation de fonctions d'emploi pour trois secteurs industriels dans six pays européens: leur stabilité après 1973. (English and Spanish summaries) Production functions and factor demand functions. Ann. I.N.S. É. É. No. 38-39 (1980), 177-192. (See 82e:90019) 90A17

Petit, Roger A tutorial introduction. Electromagnetic theory of gratings, pp. 1–52, Topics Current Phys., 22, Springer, Berlin, 1980. (See 82a:78001) 78A45

(with Maystre, D.; Nevière, M.) Experimental verifications and applications of the theory. Electromagnetic theory of gratings, pp. 159–225, Topics Current Phys., 22, Springer, Berlin, 1980. (See 82a:78001) 78A45

(with Hugonin, J. P.) Theoretical and numerical study of a locally deformed stratified medium. J. Opt. Soc. Amer. 71 (1981), no. 6, 664-674. (Authors' sur 78A45 (65P05, 78A50)

See also Electromagnetic theory of gratings, 82a:78001
Petit Bols, G. See Davenport, J. H., 82j:26003

Petitjean, Alexis Homomorphismes de distributions formelles. J. Differential Geom. 14 (1979), no. 3, 385-400 (1980). (Alexandre M. Rodrigues) 82e:58105 58H05 (58A30)

Petkančin, Bojan L. Pairs of families of straight lines with a common moving tetrahedron in biaxial geometry. (Bulgarian. German summary) Annuaire Univ. Sofia Fac. Math. Méc. 69 (1974/75), 31-45 (1979). (Vladislav Goldberg) 82a:53011 53A35 (53A25)

Petkau, A. John (with Olkin, Ingram; Zidek, James V.) A comparison of n estimators for the binomial distribution. J. Amer. Statist. Assoc. 76 (1981), no. 375, 637-642. (Authors' summary) 82i:62050 62F10

Petkov, Petko Hr. (with Konstantinov, Mihail M.; Patarinski, Simeon P.; Hristov, Nikolai D.) Stabilization of linear differential delayed systems via the Ljapunov direct method. Functional differential systems and related topics (Proc. First Internat. Conf., Bld 1979), pp. 193–196, Higher College Engrg., Zielona Góra, 1980. (M. K. Grammatikopoulos) 82a:34094 34K35 (34K20) (with Konstantinov, Mihail M.; Patarinski, Simeon P.; Hristov, Nikolai D.)

Stabilization of linear differential delayed systems via the Ljapunov direct method. (Polish and Russian summaries) Arch. Automat. Telemech. 25 (1980), no. 3, 315–318. (Wolfdietrich Müller) 82g:34108 34K20 (34K35, 93D15) (with Konstantinov, Mihail M.; Patarinski, Simeon P.; Hristov, Nikolai D.) Synthesis of discrete systems with guaranteed quality. (Bulgarian. Russian and English

aries) Problemi Tehn. Kibernet. 11 (1981), 34-40. (Authors' introduction)

82i:93032 93B50

Petkov, R. Numerical solution of nonstationary processes in pressure systems by means of fast oscillation integral equations. (Bulgarian. Russian and English summaries) Teoret. nary) 82j:76058 Prilož. Meh. 11 (1980), no. 3, 6, 9, 54-60. (Author's summ (65P05, 76A60)

Petkov, Vesselin The parametrix of the Cauchy problem for nonsymmetrizable hyperbolic systems with characteristics of constant multiplicity. (Russian) Trudy Moskov. Mat. Obšč. 37 (1978), 3-47, 270. (Rėmi Vaillancourt) 82d:35060 35L45 (58G07)

Asymptotics of the scattering amplitude for nonconvex bodies. C. R. Acad. Bulgare Sci. 32 (1979), no. 5, 573-576. (Gerd Grubb) 82d:35079 35P25 (35B40)

Propagation des singularités pour le problème de transmission et application au problème inverse de la diffusion. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 16, A753-A755. (F. Cardoso) 82d:35066 35L99

Représentation de l'opérateur de diffusion pour des systèmes hyperboliqu dissipatifs. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A95-A98. (Author's summary) 82a:35089 35P25 (35L40)

High frequency asymptotics of the scattering amplitude for nonconvex bodies.

Partial Differential Equations 5 (1980), no. 3, 293-329. (James S. Howland) 161 35P25 (35L05, 58G17)

(with Popov, Georgi St.) Asymptotique de la phase de diffusion pour des domaines non convexes. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 4, 275-277. (Authors' summary) 82b:35123 35P25

Petković, Miodrag S. (with Milovanović, Gradimir V.) On some modifications of a third order method for solving equations. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 63-67 (1981), (J. D. Lambert)

On a generalisation of the root iterations for polynomial complex zeros in circular interval arithmetic. (German summary) Computing 27 (1981), no. 1, 37-55. (Thomas McCoy) 82g:30068 30E10 (30C15, 65G10, 65H05)

Petô, J. (with Bokor, J.) Minimal realisation procedure from partial fraction representation of a rational transfer matrix. (Russian summary) Problems Control Inform Theory / Problemy Upravlen. Teor. Inform. 10 (1981), no. 6, 403-415. (Authors' summary)

Peton, A. Principe cosmologique, principe variationnel et théorie des groupes. (English summary) Astrophys. and Space Sci. 69 (1980), no. 2, 377-392. (Author's summary) 82:85008 85A40 (58D30, 83F05)

Petrašen', G. I. See Questions in the dyna ical theory of seismic wave propagation,

Petrašen', M. I. See Obituary: Petrašen', M. I., 82d:01035

Petrenjuk, A. Ja. (with Petrenjuk, L. P.) Intersection of perfect 1-factorizations of complete aphs. Kibernetika (Kiev) 1980, no. 1, i, 6-8, 149 (Russian); translated as Cybernetics 16 (1980), no. 1, 6-9. (V. K. Bulitko) 82c:05076 05C70 (05C25, 05C45)

Petrenjuk, L. P. (with Petrenjuk, A. Ja.) Intersection of perfect 1-factorizations of complete graphs. Kibernetika (Kiev) 1980, no. 1, i, 6-8, 149 (Russian); translated as Cybernetics 16

(1980), no. 1, 6-9. (V. K. Bulitko) 82c:05076 05C70 (05C25, 05C45)

Petrenko, A. I. (with Tetel'baum, A. Ja.; Šramčenko, B. L.) Algebraic formulation of circuit design problems. Kibernetika (Kiev) 1981, no. 2, ii, 49-55, 150 (Russian. English ry); translated as Cybernetics 17 (1981), no. 2, 210-219. (From the conclusion) 94C05

(with Matrosova, G. A.) Forming mathematical models of electrical circuits by applying analytic transformations. Kibernetika (Kiev) 1981, no. 2, ii, 60-64, 150 (Russian. English summary); translated as Cybernetics 17 (1981), no. 2, 223-229. (From 94C05 (68J10)

Petrenko, V. L. (with Mirzoahmedov, F.) A dynamic problem of inventory planning with random demand. (Russian) Methods in operations research and reliability theory in systems of analysis (Russian), pp. 89–94, 103, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. (Authors' summary) 82h:90045 90B05 (90C15)

Petrenko, V. P. Growth and distribution of values of algebroid functions. (Russian) Mat. Zametki 26 (1979), no. 4, 513-522, 653. (I. N. Baker) 82h:30032 30D35

The growth of Q-pseudomeromorphic solutions of difference equations. (Russian) Metric questions of the theory of functions (Russian), pp. 99-106, 161, "Naukova Dumka", Kiev, 1980. (Doru Ştefānescu) 82f:39003 39A10 (30C15, 30D05) (with Šimša, Ja.) A class of entire curves. (Russian. Armenian sum

Nauk Armjan. SSR Dokl. 70 (1980), no. 2, 92-95. (A. N. Kanatnikov) 82c:32003

Regularity of growth of algebroid solutions of algebraic differential equations. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 4, 194-205, 239. (Shlomo Strelitz) 82c:34008

Asymptotic properties of meromorphic functions and entire curves. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 6, 773–780. (A. È. Eremenko) 82i:30048 30D35 On the growth of meromorphic solutions of algebraic differential equations.

(Russian) Differencial'nye Uravnenija 17 (1981), no. 5, 820-827, 955. (Shlomo Strelitz) 34A20 (30D35)

On the growth and distribution of values of minimal surfaces. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 1, 40-42. (R. N. Abdulaev) 82i:30049 30D35 (49F10)

Petrenyuk, A. P. See Petrenjuk, L. P.
Petrenyuk, A. Ya. See Petrenjuk, A. Ja.
Petreschi, Rossella (with Simeone, Bruno) A switching algorithm for the solution of quadratic Boolean equations. Inform. Process. Lett. 11 (1980), no. 4-5, 193-198. (From the introduction) 82e:68044a 68C25 (03G05, 90C20, 94C10)

(with Simeone, Bruno) Erratum: "A switching algorithm for the solution of quadratic Boolean equations". Inform. Process. Lett. 12 (1981), no. 2, 109. (Editors) 82e:68044b 68C25 (03G05, 90C20, 94C10)

Petrescu, Ioana Existential morphisms and existentially closed models of logical categories. Z. Math. Logik Grundlag. Math. 27 (1981), no. 4, 363-370. (A. Preller) 82k:03104 03G30 (03C90, 18B25)

Petri, C. A. Concurrency as a basis of systems thinking. Proceedings from 5th Scandinavian Logic Symposium (Aalborg, 1979), pp. 143–162, Aalborg Univ. Press, Aalborg, 1979.
 (Author's summary) 82m:68056 68B20 (93A05)
 Introduction to general net theory. Net theory and applications (Proc. Adv. Course General Net Theory Processes Systems, Hamburg, 1979), pp. 1–19, Lecture Notes in Comput. Sci., 84, Springer, Berlin, 1980. (Lutz Priese) 82b:68050 68D90

Congruin, Seri, or, springer, Bertin, 1960. (Lutz Priese) 644000000 681090
Concurrency. Net theory and applications (Proc. Ado. Course General Net Theory Processes Systems, Hamburg, 1979), pp. 251–260. Lecture Notes in Comput. Sci., 84, Springer, Berlin, 1980. (Author's summary) 82e:68061 68D90 (05C99)
Petri, Winfried Moving reference systems in the Aryabhatiya. Proceedings of the Symposium on the 1500th Birth Anniversary of Aryabhatia I (New Delhi, 1976). Indian J. Hist. Sci. 32 (1977), no. 2, 114, 116, 64, 78, pp. 870-87010 (1622).

Hist. Sci. 12 (1977), no. 2, 114-119. (A. K. Bag) 82h:01021 01A32

rich, Mario (with Reilly, Norman R.) Idempotent congruences classes in bisimple inverse semigroups. Proceedings of a Symposium on Regular Semigroups (Northern Illinois Univ., De Kalb, Ill., 1979), pp. 139-145, Northern Illinois Univ., DeKalb, Ill., 1979. (See 20M10

(with Reilly, Norman R.) Varieties of groups and of completely simple semigroups and of completely simple semigroups and of completely simple semigroups. Bull. Austral. Math. Soc. 23 (1981), no. 3, 339-359. (G. Čupona) 82j:20107 2010.

(with Gerhard, J. A.) The word problem for orthogroups. (1981), no. 4, 893-900. (André Lentin) 82m:20063 20M05 (03D40)

Extensions normales de demi-groupes inverses. (English summary) Fund. Math. 112

(1981), no. 3, 187-203. (D. R. LaTorre) 82k:20101 20M10 (with Reilly, Norman R.) Certain Rees matrix semigroups with universal properties.

Semigroup Forum 22 (1981), no. 2, 101–118. (G. B. Preston) 824:20055 20M05 (20M07)

See also Semigroups, 82f:20009
Petridis, Nicholas C. Generalizations of Picard's first theorem. Eleutheria 1978, 202–208.
(Samuel I. Goldberg) 82g:53047 53C20 (30C60, 32H25)

Distance and volume decreasing theorems for quasiconformal mapping Amer. Math. Soc. 83 (1981), no. 1, 93–98. (Brad G. Osgood) 82j:32055 conformal mappings. (30C60, 53C20)

Petridis, Vassilios On the convergence properties of some cautious controllers. IEEE Trans. Automat. Control 26 (1981), no. 2, 554-556. (Author's summary) 82e:93123

Petrie, Ted Three theorems in transformation groups. Algebraic topology, Aarhus 1978 (Proc. Sympos., Univ. Aarhus, Aarhus, 1978), pp. 549-572, Lecture Notes in Math., 763, Springer, Berlin, 1979. (R. Schultz) 82b:57031 57817 (55P99, 57R67, 57825)

(with tom Dieck, Tammo) The homotopy structure of finite group actions on spheres. Algebraic topology, Waterloo, 1978 (Proc. Conf., Univ. Waterloo, Waterloo, Ont., 1978), pp. 222-243, Lecture Notes in Math., 741, Springer, Berlin, 1979. (R. Schultz) 57S17 (20J99, 55P99)

Transformation groups and representation theory. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 621-631, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (From the text) 82a:20024 20C30 (20G05)

Petrillo, Gino A. (with Glass, Leon; Graves, Carl; Mackey, Michael C.) Unstable dynamics of a periodically driven oscillator in the presence of noise. J. (1980), no. 3, 455-475. (Andris Abakuks) 82j:92021 92A09 (58F14)

Petrina, D. Ja. (with Gerasimenko, V. I.; Mališev, P. V.; Piljavs'kii, A. I.) The reversed osmosis problem as a boundary value problem in a domain with a fine structure. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 75-78. (L. I. Rubinstein) 82e-92018 92A09 (35K99, 80A30)

Petrišin, R. I. (with Golec', B. I.; Golec', V. L.) On the question of conditionally periodic

motions in nonlinear systems. (Ukrainian. English and Russian summaries) Visnik Kilv. Unio. Ser. Mat. Meh. No. 20 (1978), 13-21, 163. (V. G. Zadorožnii) 82g.34057 34C28 (with Golec', B. L.; Golec', V. L.) Averaging in oscillatory systems with variable frequencies (Ukrainian. English and Russian summaries) Visnik Kiiv. Univ. Ser. Mat. Meh. No. 21 (1979), 23–28, 162. (V. G. Zadorožnii) 82j:34045 34C29

(with Golec', B. Î.; Golec', V. L.) On averaging in some nonlinear systems. (Russian) Analytic methods for investigating nonlinear oscillations (Russian), pp. 20–25, 178, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (V. G. Zadorožnii) 82j:34046 34C29

On the question of invariant manifolds of some nonlinear systems. (Russian. English mmary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 2, 23-26, 97. (L. M. Kuks) 82h:34059 34C30

Averaging with account taken of relations between frequencies in oscillatory systems. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 2, 262-267. (Ju. E. Gliklih) 82f:34049

Petrosian, L. A. (with Imbert, J. E.) A game-theoretic model with rhomboidal control

90D40 structure. (Spanish) Investigación Oper. 1 (1980), no. 1, 3-20. 82m:90189

Petrosjan, A. I. Uniform approximation by polynomials on special Weil polyhedra with real nondegenerate skeleton in the space C². (Russian. Armenian summary) Akad. Nauk n. SSR Dokl. 70 (1980), no. 5, 261-265. (Harold P. Boas) 82c:32018 (32A07)

Petrosjan, L. A. (with Sirjaev, V. D.) Group pursuit game with several evaders and one pursuer. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom.

1980, oyp. 3, 50-57, 130. (Authors' summary) 82c:90115 90D26 (with Zaharov, V. V.) A game-theoretic approach to the problem of protection of the environment. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 1, 26-32, 119-120. (Authors' summary) 82h:92051 (90D45)

Petrov, B. N. (with Ulanov, G. M.; Ul'janov, S. V.) Dynamical systems with random and fuzzy structure. (Russian) Engineering cybernetics, Vol. 11 (Russian), pp. 3–76, 192, Akad. Nauk SSSR, Vessojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (V. Ja. Kreinovič) 82h:93063 93E03 (60H99, 80–02)

(with Ulanov, G. M.; Ul'janov, S. V.) Complexity of finite objects and informational control theory. (Russian) Engineering cybernetics, Vol. 11 (Russian), pp. 77-147, 192, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (V. Ja. Kreinovič) 82h:93064 93E03 (03D15, 68C25)

(with Rutkovskii, V. Ju.; Zemljakov, S. D.) ★Адантивное

координатно-параметрическое управление нестационарными объектами. (Russian) [Adaptive coordinate-parametric control of nonstationary objects] "Nauka", Moscow, 1980. 244 pp. (Publisher's description) 82i:93046 93C40

(with Ulanov, G. M.; Ul'janov, S. V.) Informativeness of signals and compression of controlled information processes. (Russian) Engineering cybernetics, Vol. 13 (Russian), pp. 3-120, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (I. S. Joel) 82e:94003 94A15 (62B10, 62B20, 68C20, 93E10, 93E11, 94A05)

(with Krut'ko, P. D.; Popov, E. P.) Nonlinear algorithms for the control of with Krut ko, F. D.; Popov, E. F.) Nonlinear algorithms for the control of rotational motions of dynamical objects. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 5, 1079–1081. (A. A. Zlatkin) 82e-93055 93C15

See also Engineering cybernetics, 82d:93005 and Obituary: Petrov, B. N., 82f:01172

Petrov, E. E. Classes of conjugate elements of the group SL(2, Z/p^λZ), p≠2. (Russian)

Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 8, 85-88. (J. L. Brenner) 82h:20064 20G35 (20H25)

Petrov, E. G. Kinetic equations for quantum subsystems with a finite number of degrees of freedom in a condensed medium. (Russian. English summary) Teoret. Mat. Fiz. 46

(1981), no. 1, 99-110. (A. K. Vidybida) 82≥82057 82A77 (82A15, 82A35)
Petrov, I. (with Genov, A.) Quenching of oscillations in a nonlinear hyperbolic system.
(Russian) Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. II (Prague, 1978), pp. 825-830, Academia, Prague, 1979. (See 82k:70002b) 35B37 (35L99, 73D25)

Petrov, Kalin P. Bornology of polynormed algebras. (Russian) Serdica 6 (1980), no. 3, 211–218. (Z. Słodkowski) 82k:46074 46H05 (46A09)
Petrov, Nikola T. Finite groups with a maximal dihedral subgroup. (Russian) PLISKA Stud. Math. Bulgar. 2 (1981), 23–29. (S. S. Leviščenko) 82k:20032 20D06 Some maximal subgroups of the group $G_2(F)$. I, II. (Russian) PLISKA Stud. Math.

Bulgar. 2 (1981), 83-88, 89-94. (S. S. Leviščenko) 82k:20033 20 Petrov, S. V. (with Gusev, L. A.; Smirnova, I. M.; Tenenbaum, L. A.) 20D06 (20G40) Collateral-hierarchical graphs and graph substitution operations. Automat. i Telemeh. 1980, no. 6, 142-151 (Russian. English summary); translated as Automat. Remote Cont

41 (1980), no. 6, part 2, 854-861. (Authors' summary) 82h:68128 68H05 (05C99, 93A13) Petrov, V. A. Composite formulas for the approximate calculation of Gaussian integrals of

functionals of type F(:x":). (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 5, 117-119, 142. (Author's summary) 82m:81030 81C35

Petrov, V. Ju. (with Danilov, G. S.; Djatlov, I. T.) A calculation of the evolution operator and of the quark structure of states in two-dimensional massless electrodynamics. Z. Eksper. Teoret. Fiz. 78 (1980), no. 4, 1314-1331 (Russian); translated as Soviet Phys. JETP 51 (1980), no. 4, 663-670. (Tuan W. Chen) 82d:81187 81L05 (81E10)

Petrov, V. M. See Number and thought, 82e:00007
Petrov, V. V. (with Ageev, V. M.; Zaporožec, A. V.; Kort'ev, A. V.; Kostjukov, V. M.; Medvedev, S. B.; Poljakov, I. N.) Information theory of complex systems functions under conditions of incomplete information. (Russian) Engineering cybernetics, Vol. 13 (Russian), pp. 121–151, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (Authors' summary) 821:90674 90C15 (92A20) (with Martikainen, A. I.) On a theorem of Feller. (Russian. English summary) Teor.

Verojatnost. i Primenen. 25 (1980), no. 1, 194-197. (G. I. Ivčenko) 82b:60030 On the law of the iterated logarithm for sequences of dependent random variables. (Russian. English summary) Problems of the theory of probability distributions, VI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 97 (1980), 186-194,

230-231, 237. (G. K. Eagleson) 82e:60051 60F15 On the upper limit of a sequence of random variables. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 1, 115-116, 123. (From the text) 82i:60051 60F15

Petrov, V. Yu. See Petrov, V. Ju.

trova, E. N. (with Malyšev, V. A.) Duality transformations of Gibbs random fields. (Russian) Probability theory. Mathematical statistics. Theoretical cybernetics, Vol. 18 (Russian), pp. 3-51, 188, Akad. Nauk SSSR, Vzesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. (J. Fritz) 22;93012 82A05 (58A99, 60G60, 60K35)

Petrova, F. S. The origin of linear operator theory in the works of Servois and Murphy. (Russian. English summary) History and methodology of the natural sciences, No. XX (Russian), pp. 122-128, Moskov. Gos. Univ., Moscow, 1978. (I. Grattan-Guinness) 01A55 (47-03)

(with Romanowska, D. A.) On the history of the discovery of Taylor series (Russian) Istor.-Mat. Issled. No. 25 (1980), 10-24, 378. (E. Stipanić) 82f:01033 01A45 (01A50, 26-03, 40-03)

(with Demidov, S. S.; Juškevič, A. P.) Isabella Grigoryevna Bashmakova: on the

(with Aleksandrov, P. S.; Gnedenko, B. V.; Demidov, S. S.; Kolmogorov, A. N.; Parlin, A. N.; Juškevič, A. P.) Izabella Grigor'evna Bašmakova (on the occasion of her 60th birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 5(221), 211-214. (Editors)

vskaja, I. G. TM-equivalence and classification of non dynamical systems. (Russian) Differencial nye Uraonenija 17 (1981), no. 2, 233-240, 388. (M. I. Brin) 82m:54844 54H20 (34C35, 34D20, 58F10, 58F99)

criterion for instability of an invariant set of a dynamical system. (Russian. English ary) Dokl. Akad. Nauk BSSR 25 (1981), no. 5, 396-398, 475. (R. K. Thomas) Criterion for instability of an ir 54H20 (34C35)

royskaja, M. S. Solution of continuous and discrete boundary value problems. English sammary) *Bjull. Inst. Teoret. Astronom.* 14 (1980), no. 9(162), 557-570. (Author's summary) 82m:86008 86A30 (31B20, 35C99)

Petrovskii, G. N. Matrices that commute with their partial derivatives. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1979, no. 4, 45-47, 140. (G.

R. Belickii) 82i:58007 58A17 (15A99, 58C27) rovskii, I. G. See Aleksandrov, P. S.; et al., 82c:01067 and Oleinik, O. A.; et al.,

truccelli, Joseph D. Best-choice problems involving uncertainty of selection and recall of observations. J. Appl. Probab. 18 (1981), no. 2, 415-425. (Robert Kertz) 82h:62135 62L15 (60G40)

trušev, Penčo P. Lower bounds for best rational approximations in the Hausdorff metric. (Russian) Serdica 6 (1980), no. 2, 120-127. (J. Reif) 82g:41015 41A20 (41A65) nded variation in the Hausdorff and Rational approximations of functions with bour integral metric. (Russian) Serdica 6 (1980), no. 3, 202-210. (Bl. Sendov) 82:41019 41A20

ry, Herbert-Rainer Electron scattering on magnetic monopoles. Differential geometrical methods in mathematical physics (Proc. Conf., Aix-en-Provence/Salamanca, 1979), pp. 406–419, Lecture Notes in Math., 836, Springer, Berlin, 1980. (Nicholas M. J. Woodhouse) 22:81141b 81G10 (58F06) Petry, Herbert-Rai

Scattering on magnetic monopoles. Z. Naturforsch. A 35 (1980), no. 12, 1276–1284.
(Nicholas M. J. Woodhouse) 82k81141a 81G10 (58F06)
On the confinement of magnetic poles. Differential geometric methods in mathematical physics (Proc. Internat. Conf., Tech. Univ. Clausthal, Clausthal-Zellerfeld, 1978), pp. 77-86, Lecture Notes in Phys., 139, Springer, Berlin, 1981. (Author's summary) 82p:81102 81F99 (81C10)

Petry, K. H. (with Neunzert, H.) Ein Existenzsatz für die Vlasov-Gleichung mit selbstkonsistentem Magnetfeld. (English summary) Math. Methods Appl. Sci. 2 (1980), no. 4, 429-444. (Reinhard Illner) 82c:76114 76X05 (35O20, 45K05)

no. 4, 429—444. (Reinhard liner) 84c; 7014 [70,10] (39(20, 49.05))
Petry, Walter Elektrodynamik mit Spin. (English summary) Math. Methods Appl. Sci. 2 (1980), no. 4, 457—470. (Author's summary) 82b;81126 [81G10 (78A25)]
Gravitation in flat space-time. Gen. Relativity Gravitation 13 (1981), no. 9, 865—872. (Author's summary) 82b;81126 [81G10 (78A25)]
Petryshyn, W. V. (with Fitzpatrick, P. M.) Some applications of A-proper mappings.

near Anal. 3 (1979), no. 4, 525-532. (Henry Berestycki) 82f:35080 (47H09) On the solvability of $x \in Tx + \lambda Fx$ in quasinormal cones with T and F

k-set-contractive. Nonlinear Anal. 5 (1981), no. 5, 585-591. (Norman Dancer) 82f:47074 47H15 (58C40)

See also Narang, T. D.; et al., 82i:47089 ttet, Martin R. (with Gagola, Stephen M., Jr.; Garrison, S. C.) On a vanishing product in the integral group ring. Amer. Math. Monthly 88 (1981), no. 3, 195-196. (Editors) 82i:20006 20C05

Nilpotent partition -inducing automorphism groups. Canad. J. Math. 33 (1981).

no. 2, 412–420. (T. O. Hawkes) 82h:20003 20B10 (16A76)

Pettini, Giovanna Boschi Some extensions and sharpenings of the W.K.B. method. (Italian. English summary) Rend. Mat. (6) 13 (1980), no. 4, 555–592 (1981). (W. Wasow) 34E20 (81C15)

ttis, B. J. On the Radon-Nikodým theorem. Vector space measures and application Proc. Conf., Unio. Dublin, Dublin, 1977), I, pp. 340–355, Lecture Notes in Math., 644, Springer, Berlin, 1978. (W. Strauss (Zbl 387:28010)) 821:28010 28B05 (46G10)

Pettit, M. Edward, Jr. Properties of H_r-rings. Ann. Mat. Pura Appl. (4) 121 (1979), 1–23.
(Evan G. Houston) 82c:13009 13B20 (13C15)

tiit, A. N. (with Siskind, V.) Effect of within-sample dependence on the Mann-Whitney-Wilcoxon statistic. Biometrika 68 (1981), no. 2, 437-441. (Authors' summary) 82h:62075 62G10

ssi, Alberto Derivation of an $O(k^2 \log n)$ algorithm for computing order-k Fibonacci numbers from the $O(k^3 \log n)$ matrix multiplication method. Inform. Process. Lett. 11 (1980), no. 4-5, 172–179. (Henry S. Warren, Jr.) 82ac68084 68C25

w, O. A. (with Nikolaev, V. I.; Hodorovskii, L. A.) A family of relation-manipulation operations that extends the class of operations in relational algebra. Programmirovanie 1980, no. 3, 52-56, 94 (Russian); translated as Programmin and Comput. Software 6 (1980), no. 3, 150-153 (1981). (Authors' summary) 824:68014 68B15 (04A05)

tunin, Ju. I. Mathematical modeling of synaptic transmission. Proceedings of the First International Conference on Mathematical Modeling (St. Louis, Mo., 1977), Vol. II, pp. 809-817, Univ. Missouri-Rolla, Rolla, Mo., 1977. (Uwe an der Heiden) 820:92019 92A09 (35K55)

(with Sul'desoy, G. A.) Pattern recognition with Fisher linear discriminant functions Kibernetika (Kiev) 1979, no. 6, 134–137 (Russian); translated as Cybernetics 15 (1979), no. 6, 926–930 (1980). (G. Della Riccia) 82a:68172 68G10 (62H30) (with Vinokurov, V. A.; Pličko, A. M.) Measurability and regularizability of

mappings that are inverses of continuous linear operators. (Russian) Mat. Zametki 26 (1979), no. 4, 583-591, 654. (A. Alexiewicz) 82g/47002. 47A05 (46A99, 65110) (with Bysočanskii, D. F.) Proof of the 3σ rule for unimodal distributions. (Russian.

English summary) Teor. Verojatnost. i Mat. Statist. 21 (1979), 23–35, 163. (Paul Deheuvels) 82m:60029 60E15 (62E10)

(with Min'ko, A. A.; Stognii, B. S.) Confidence boundaries for the extremal value of

a specific function. (Russian) Ukrain. Mat. Z. 33 (1981), no. 4, 453-458. (L. B. Klebanov) 82j:62022

A; Deines The class of compact spaces. (Hungarian) Mat. Lapok 28 (1977/80), no. 4, 319-322. (Z. Balogh) 82j:54036 54D30 (54B30)

A characterization of the class of compact Hausdorff spaces. Studia Sci. Math. Hungar. 12 (1977), no. 3-4, 407-408 (1980). (H. Herrlich) 82j:54031 54D30 (54B30) On (E,k)-compact spaces. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 945-955, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (A. Sostak) 821-54037 54D99 (54B3)

On box products of syntopogenous spaces. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 91-97. (Anne K. Steiner) 82j:54004 54A15 (54B10)
On center-valued states of von Neumann algebras. Acta Sci. Math. (Szeged) 43 (1981), no. 1-2, 219-228. (\$. Strătilà) 82m:46065 46L10

A characterization of the canonical centre-valued trace in finite von Neumann algebras. J. London Math. Soc. (2) 23 (1981), no. 2, 329-331. (Jun Tomiyama) 821:46068

Petzeltová, Hana Remark on a Newton-Moser type method. Comment. Math. Univ. Carolin. 21 (1980), no. 4, 719-725. (M. Z. Nashed) 82b:58016 58C15 (65J15, 90C30)

Petzold, Linda R. An efficient numerical method for highly oscillatory ordinary differential equations. SIAM J. Numer. Anal. 18 (1981), no. 3, 455-479. (J. C. Butcher) 82h:65059

Petzsche, H.-J. Some results of Mittag-Leffler-type for vector valued functions and spaces of class &. Functional analysis: surveys and recent results, II (Proc. Second Conf. Functional Anal., Unio. Paderborn, Paderborn, 1979), pp. 183-204, North-Holland Math. Studies, 38, North-Holland, Amsterdam, 1980. (D. J. Patil) 82a:46043 46G99 (46F05)

Pevac, Lazar Characterization of Hilbert spaces by means of best N-nets. (Serbo-Croatian. English summary) Mat. Vesnik 4(17)(32) (1980), no. 1, 73-76. (Author's summary) 82g:51018 51F10

Percova, T. A. Completely integrable dynamical systems in orbits of the coadjoint representation of algebra of upper nil-triangular matrices. (Russian) Geometric methods in problems of algebra and analysis, No. 2 (Russian), pp. 7–13, 160, Jaroslav. Gos. Univ., Yaroslavl', 1980. (A. Morimoto) 82g:58044 58F07

Pevzner, L. V. (with Nikitin, A. S.; Skrigan, N. I.) Graph-programming grammars for analysis of hierarchical graph structures. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 1, 5-9, 137. (Authors' summary) 82a:68150 68F05 (68E10)

Pevzner, P. A. On the problem of two-product packing of cuts. (Russian) Moskov. Inst. Inž. Železnodorož. Transporta Trudy No. 640 Prikl. Mat. i Zadači Železnodorož. Transporta (1979), 126-131, 158. (Knut Richter) 82e:90043

Pexton, Robert L. Table errata: Formulas and theorems for the special functions of mathematical physics [third edition, Springer, New York, 1966; MR 38 #1291] by W. Magnus, F. Oberhettinger and R. P. Soni. Math. Comp. 36 (1981), no. 153, 316-317. 65A05

Peyrard, M. Dynamic polarizability of the double quadratic and multiquadratic chains with anharmonic coupling. J. Math. Phys. 22 (1981), no. 12, 2986–2995. (Author's summary) 82m:82037 82A55

Peyraud, N. (with Coste, Jean) Two-dimensional convection; oscillation of rolls with reversal of their sign of rotation. Phys. Lett. A 84 (1981), no. 1, 17-19. (Authors' summary) 82:76079 76R99 (58F14, 58F21) summary) 82i:76079

Peyrière, Jacques Substitutions aléatoires itérées. [Iterated random substitutions] Seminar on Number Theory, 1980–1981 (Talence, 1980–1981), Exp. No. 17, 9 pp., Univ. Bordeaux I, Talence, 1981. (See 82m:10006) 10K50 (60J80)

Generalized systems of linear differential equations. Proc. Roy. So.

Edinburgh Sect. A 89 (1981), no. 1-2, 1-14. (Angelo Favini) 82j:34009 34A30 (46F10) Pfaff, Th. (with Pfanzagl, J.) On the numerical accuracy of approximations based on Edgeworth expansions. J. Statist. Comput. Simulation 11 (1980), no. 3-4, 223-239. (Authors' summary) 82a:62044 62F05 (62E20)

Pfaffenberger, Roger C. (with Dinkel, John J.) Constrained l_1 estimation via geometric programming. European J. Oper. Res. 7 (1981), no. 3, 299–305. (Authors' summary) 82;90049 90C05 (90C30)

Pfaffenberger, W. E. (with Johnsonbaugh, Richard) ★Foundations of mathematical analysis. Monographs and Textbooks in Pure and Applied Math., 62. Marcel Dekker, Inc., New York, 1981. viii + 428 pp. ISBN 0-8247-6919-8 (William Eames) 82a:26001 26-01

Pfaltzgraff, J. A. (with Livingston, Albert E.) Structure and extremal problems for classes of functions analytic in an annulus. Collog. Math. 43 (1980), no. 1, 161-181 (1981). (G. Schober) 82g:30030 30C45

Pfanzagl, J. Nonparametric minimum contrast estimators. Mathematical statistics, pp. 105-140, Selecta Statist. Canadiana, V, Univ. Press of Canada, Toronto, Ont., 1979. (László Györfi) 82f:62074 62G05

Asymptotic expansions in parametric statistical theory. Developments in Vol. 3, pp. 1-97, Academic Press, New York, 1980. (M. G. Akritas) 82d:62041 (with Pfaff, Th.) On the numerical accuracy of approximations based on Edgeworth expansions. J. Statist. Comput. Simulation 11 (1980), no. 3-4, 223–239. (Authors' summary) 82a:62044 62F05 (62E20)

Pfautsch, Jonathan D. (with Letaw, John R.) Quantized scalar field in the stationary coordinate systems of flat spacetime. Phys. Rev. D (3) 24 (1981), no. 6, 1491-1498. (Authors' summary) 82h:81099 81E20 (83C47)
Pleffer, W. F. Some remarks on generalized Borel measures in topological spaces.

Proceedings of the 1977 Topology Conference (Louisiana State Univ., Baton Rouge, La., 1977), II. Topology Proc. 2 (1977), no. 2, 543-562 (1978). (K. Jacobs) 82b:28025 28C15 (54H05)

(with Gardner, R. J.) Are diffused, regular, Radon measures o-finite? J. London Math. Soc. (2) 20 (1979), no. 3, 485-494. (Robert F. Wheeler) 82i:28016 (03E50, 28C05, 54A35)

Corentz transformations of a Hilbert space. Amer. J. Math. 103 (1981), no. 4, 691–709. (E. H. Kronheimer) 82h:53037 53B30 (46C10, 51B20)

Pfeffermann, Dan (with Nathan, Gad) Regression analysis of data from complex samples. (French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 3. With discussion. Bull. Inst. Internat. Statist. 47

(1977), no. 3, 21-42, 58-64. (V. P. Godambe) 82m:62017 62D05

Pfeifer, Peter A simple model for irreversible dynamics from unitary time evolution. Helv. Phys. Acta 53 (1980), no. 3, 410-415 (1981). (Author's summary) 824:82943 82A35

Adjoints of nondensely defined Hilbert space operators. J. Math. Phys. 22 (1981), no. 8, 1619-1622. (J. Weidmann) 82:47003 47A05 Estimates of the A²-term in the interaction of matter with radiation. J. Phys. A 14

(1981), no. 5, L129-L132. (Author's summary) 82d:81185

Pfeifer, Phillip E. (with Deutsch, Stuart Jay) Independence and sphericity tests for the residuals of space-time ARMA models. Special issue on time series in M dimensions.

Comm. Statist. B—Simulation Comput. 9 (1980), no. 5, 533-549. (See 82e:62150) 62M10

(with Deutsch, Stuart Jay) Stationarity and invertibility regions for low order STARMA models. Special issue on time series in M dimensions. Comm. Statist. -Simulation Comput. 9 (1980), no. 5, 551-562. (See 82e:62150) 62M10

(with Deutsch, Stuart Jay) Variance of the sample space-time autocorrelation function. J. Roy. Statist. Soc. Ser. B 43 (1981), no. 1, 28-33. (E. J. Hannan) 821:62167

(with Deutsch, Stuart Jay) Variance of the sample space-time correlation function of contemporaneously correlated variables. SIAM J. Appl. Math. 40 (1981), no. 1, 133-136. (Basilio de B. Pereira) 82f:62168 62M10

er-Pfeiffer, Erich See Müller-Pfeiffer, Erich

Pfeifroth, L. Newtonsche Flüssigkeiten als elastische Materialien mit inneren Variablen. Z. Angew. Math. Mech. 60 (1980), no. 7, T206-T208. (David Owen) 82j:73004

Pleuty, Pierre (with Jullien, R.; Uzelac, K.; Moussa, P.) The Yang-Lee edge singularity studied by a four-level quantum renormalization-group blocking method. (French summary) J. Physique 42 (1981), no. 8, 1075-1080. (Authors' summary) 82i:82024

(with Wheeler, John C.) Polymer statistics, the n-vector model, and thermodynamic stability. Phys. Rev. A (3) 23 (1981), no. 3, 1531-1534. (Authors' summary) 82c:82076

Pfister, Charles Edouard On the symmetry of the Gibbs states in two-dimensional lattice systems. Comm. Math. Phys. 79 (1981), no. 2, 181-188. (A. Corciovei) 82h:82007 82A05 (58G35, 82A25, 82A68)

(with Fröhlich, Jürg) On the absence of spontaneous symmetry breaking and of crystalline ordering in two-dimensional systems. Comm. Math. Phys. 81 (1981), no. 2, 277-298. (H. Araki) 82m:82009 82A05 (58E99, 81D20)

(with Bricmont, Jean; Lebowitz, Joel L.) Periodic Gibbs states of ferromagnetic spin J. Statist. Phys. 24 (1981), no. 1, 269-277. (Authors' summary) 82b:82006 82A05 (82A67)

(with Lebowitz, Joel L.) Surface tension and phase coexistence. Phys. Rev. Lett. 46

(1981), no. 15, 1031-1033. (Authors' summary) 82b:82031 82A25 (58E07, 82A67) Pfister, Gerhard (with Fitzner, Heinz-Jörg; Kleinert, Werner; Kurke, Herbert; Roczen, Marko; Zink, Thomas) Modulprobleme in der algebraischen Geometrie. III. Beiträge zur Algebra und Geometrie, 7. Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg M 11

(1978), 91–144. (Contents) 82k:14011 14D20 (with Popescu, Dorin) Die Approximationseigenschaft von Primidealen. (English and Russian summaries) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 10, 771–778. (J. Ohm) 82d:13022 13J99 (14B12)

(with Popescu, Dorin) On three-dimensional local rings with the property of approximation. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 2, 301–307. (Johnny A. Johnson) 82:13022 13H10 (14B12)

Pflug, A. Gravitating fermions in an infinite configuration space. Comm. Math. Phys. 78 (1980/81), no. 1, 83–98. (John L. Challifour) 82g:82019 82A15 (82A05)

Pflug, Georg Some remarks on stochastic approximation. Compstat Lectures, I, pp. 25-29, Physica, Würzburg, 1978. (Madanlal T. Wasan) 82e:62135 621.20

The equivalence of the Bishop-de Leeuw and the Pigou-Dalton order structures of measures. (Italian summary) Riv. Mat. Sci. Econom. Social. 2 (1979), no. 1, 71-75. (Robert M. Anderson) 82k:28004 28A12 (60A05)

Optimale sequentielle Zerlegung. (English and Russian summaries) Math.

Operationsforsch. Statist. Ser. Statist. 11 (1980), no. 2, 287-295. (Ulrich Herkenrath)

uger, Albert Nonlinear extremal problems for starlike functions. J. Analyse Math. 36 (1979), 217-226 (1980). (D. R. Wilken) 82a:30033 30C75 (30C45)

Über die Koeffizienten schlichter Funktionen. Lectures from the Colloqui Occasion of Ernst Peschl's 70th birthday (German), pp. 41-61, Bonner Math. Schriften, 121, Univ. Bonn, Bonn, 1980. (R. Kühnau) 82f:30014 30C50

(with Boutellier, Roman) Some extremal problems for functions of bounded ndary rotation. Israel J. Math. 39 (1981), no. 1-2, 46-62. (G. Schober) 82g:30021 30C45 (30C70)

Phadke, B. B. (with Busemann, H.) Locally Desarguesian spaces. J. Geom. 14 (1980), no. 2, 123-138. (Tibor Bisztriczky) 82a:53068 53C70 (51K10)

(with Busemann, H.) Two theorems on general symmetric spaces. Pacific J. Math. 92 (1981), no. 1, 39-48. (J. A. Wolf) 82f:53079 53C70

Phadke, S. V. (with Thakare, N. K.) A study of elements of normed algebras by means of

special subsets. Bull. Calcutta Math. Soc. 71 (1979), no. 6, 406-411. (T. Husain) 82j:46060 46H05 (46C99)

(with Thakare, N. K.) Conditions on p-oid operators implying normality. Indian J. Pure Appl. Math. 11 (1980), no. 9, 1188-1193. (Takayuki Furuta) 82a:47025 47B15)

Phakadze, S. S. Some questions of notation theory. (Russian) Begriffsschrift-Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 319-340,

Friedrich-Schiller-Univ., Jena, 1979. (Jerzy Kotas) 82;03009 03B30 m, Frédéric Déploiements de singularités de systèmes holonômes. (English summary) C. R. Acad. Sci. Paris Sér. A-B 289 (1979), no. 5, A333-A336. (J. S. Joel) 82e:58089 58G07 (32C40, 35S05, 81F15)

Remarque sur l'équivalence des fonctions de phase. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 23, 1095-1097. (Alan Weinstein) 82f:32016 32B30

Pham Dinh Tuan Nonparametric estimation of the drift coefficient in the diffusion equation. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Statist.

 (1981), no. 1, 61-73. (B. L. S. Prakasa Rao) 821:62157 62M05
 am-Gia, T. On infinite convolutions of uniform distributions. Houston J. Math. 7 (1981), no. 1, 111-114. (T. Kawata) 82j:60019 60E05 (60F10, 62E10)

m Hů'u Sách A support principle for a discrete inclusion with a vector-valued criterion function. Acta Math. Vietnam. 4 (1979), no. 2, 64-87 (1980). (F. M. Kirillova) 82h:90106

Pham Ngoc Anh On a problem of F. Szász. Comm. Algebra 9 (1981), no. 17, 1743-1746. (From the text) 82m:16029 16A64

m Ngoc Phue On characterization problems of autoregression-type Gaussian processes. ingarian. English summary) Alkalmaz. Mat. Lapok 5 (1979), no. 3-4, 303-374 (1980). (M. Arató) 82f:62169 62M10

Pham The Lai Meilleures estimations asymptotiques des restes de la fonction spectrale et des valeurs propres rélatifs au Laplacien. Journées: Équations aux Dérivées Partielles (Saint-Cast, 1979), Exp. No. 6, 11 pp., École Polytech., Palaiseau, 1979. (From the introduction) 82e:35089 35P20

Phan Quoc Khanh A concept of optimality of degree p in the observation theory and optimal observability for convex functionals. (Polish and Russian summaries) Control

Cybernet. 8 (1979), no. 1, 43-53. (Françoise Berquier) 82m:49055 49E99 (93B07) han-Thien, N. (with Antonia, R. A.; Chambers, A. J.) Taylor's hypothesis and the probability density functions of temporal velocity and temperature derivatives in a turbulent flow. J. Fluid Mech. 100 (1980), no. 1, 193-208. (T. Tatsumi) 82c:76063

On the Stokes flow of viscous fluids through corrugated pipes. Trans. ASME Ser. E J. Appl. Mech. 47 (1980), no. 4, 961-963. (William H. H. Banks) 82e:76049

On the effect of parallel and transverse stationary random surface roughness in nics lubrication. Proc. Roy. Soc. London Ser. A 374 (1981), no. 1759, 569-591. (Author's summary) 82e:76027 76D99

Erratum: "On the Stokes flow of viscous fluids through corrugated pipes" [Trans. ASME Ser. E J. Appl. Mech. 47 (1980), no. 4, 961-963; MR 82c:76049]. Trans. ASME Ser. E J. Appl. Mech. 48 (1981), no. 2, 454. (Editors) 82k:76028 76D99

Similarity solutions to the nonisothermal, two-dimensional squeezing flow of a viscous fluid. Trans. ASME Ser. E.J. Appl. Mech. 48 (1981), no. 3, 670-672. (From the text) 82k:76029 76D99

Phan Văn Chu'o'ng Sur l'existence de sections séparément mesurables et séparément absolument continues d'une application multivoque. Applications aux équations intégrales multivoques. Acta Math. Vietnam. 4 (1979), no. 2, 3-14 (1980). (Michel Valadier) 82e:28013 28B20 (45N05, 49A36)

Densité des sections extremales d'une multiapplication mesurable. Travaux Sém. Anal. Convexe 9 (1979), no. 1, Exp. No. 5, 15 pp. (Vladimir L. Levin) 82c:46059 46G99 (46E40, 49A99)

Versions aléatoires du théorème de point fixe de Kakutani-Ky-Fan. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A143-A146. (Author's summary) 82f:60150 60H25 (54H25)

Quelques théorèmes de point fixe aléatoire. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 4, A259-A262. (R. E. Smithson) 821:54079 54H25

Random versions of Kakutani-Ky Fan's fixed point theorem. J. Math. Anal. Appl. 82 (1981), no. 2, 473-490. (A. T. Bharucha-Reid) 82k:47077 47H10 (54C60, 54H25, 60H25)

ntarfod, Ravindra M. The infinitely deep dam with seasonal Markov inflows. SIAM J. Appl. Math. 40 (1981), no. 3, 400-408. (M. S. Ali-Khan) 82k:60207 60K30 (90B05, 92A17)

Phelps, Kevin T. Parallelism in design and strongly regular graphs. Proceedings of the Ninth Manitoba Conference on Numerical Mathematics and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 365–384, Congress. Numer., XXVII, Utilitas Math., Winnipeg,

Man., 1980. (J.-M. Goethals) 82h:05027 05B05 (05C99) On the number of commutative Latin squares. Ars Combin. 10 (1980), 311-322.

(Jennifer Seberry) 82c:05026 05B15 On the construction of cyclic quadruple systems. Collog. Math. 43 (1980), no. 1,

203-207, 210 (1981). (Charles J. Colbourn) 82k:05020 05B05 (51E10) (with Colbourn, Charles J.) Three new Steiner quadruple systems. Utilitas Math. 18 (1980), 35-40. (Charles C. Lindner) 82f:05011 05B05

(with Rosa, Alexander) Steiner triple systems with rotational automorphism

Discrete Math. 33 (1981), no. 1, 57-66. (Luc Teirlinck) 82a:05018 05B05 (51E10) (with Mathon, Rudolf A.; Rosa, Alexander) A class of Steiner triple systems of order 21 and associated Kirkman systems. Math. Comp. 37 (1981), no. 155, 209-222. (Charles J. Colbourn) 82k:05022 05B07 (51E10)

(elss, R. I. Replacement policies under minimal repair. J. Oper. Res. Soc. 32 (1981), no. 7, 549–554. (H. Taylor) 82k:60174 60K10 (62N05, 90B25)

Phien, Huynh Ngoc Reservoir storage problem with independent normal inflows. Inter-J. Math. Ed. Sci. Tech. 12 (1981), no. 2, 203-210. (Author's summary) 82f:60230 60K30

Philip, J. R. The symmetrical Euler-Maclaurin summation formula. Math. Sci. 6 (1981), no. 1, 35-41. (B. P. Mishra) 82g:40002 40A25 (65B15)

Philip, Varughese A double integral involving the H-function of two variables. Jhānabha 8 (1978), 33-36. (Author's summary) 82k:33011 33A35

Philipp, Reiner (with Prauß, Ernst-Jürgen) Über Separatoren in planaren Graphen. (English mary) Acta Inform. 14 (1980), no. 1, 87-106. (A. K. Dewdney) 82a:05062 (05C10, 68E10)

lipp, Walter (with Kuelbs, J.) Almost sure invariance principles for partial sums of ixing B-valued random variables. Ann. Probab. 8 (1980), no. 6, 1003-1036. (Evarist 60B12 (60F17) Giné) 82i:60020

(with Pinzur, Laurence) Almost sure approximation theorems for the multivariate pirical process. Z. Wahrsch. Verw. Gebiete \$4 (1980), no. 1, 1-13. (P. Révész) empirical process. 82a:60039 60F15 (60G15)

hilippi, M. E. See Einstein, Albert, \$2x:01054 hillippin, G. A. (with Payne, L. E.) On maximum principles for a class of nonlinear

lippon, P. Indépendance algébrique de valeurs de fonctions elliptiques p-adiques. [Algebraic independence of values of p-adic elliptic functions] Proceedings of the Queen's Number Theory Conference, 1979 (Kingston, Ont., 1979), pp. 223-235, Queen's Papers in re and Appl. Math., 54, Queen's Univ., Kingston, Ont., 1980. (Michel Waldschmidt) 10F37 (33A25)

pou, Andreas N. (with Dross os. Constantin A.) A note on mini es. Ann. Inst. Statist. Math. 32 (1980), no. 1, 121-123. (Authors' summary) 824-62015

62C99 (62F10) ps, P. R. (with Anderson, John Anthony) Regression, discrimination and m models for ordered categorical variables. J. Roy. Statist. Soc. Ser. C 30 (1981), no. 1, 22-31. (Authors' summary) 82f:62116 62105 (62F10, 62H30) lies, George D. J. Contribution of nonhydrodynamic interactions to the concentration

pendence of the friction factor of the mutual diffusion coefficient. J. Chem. Phys. 74 (1981), no. 4, 2436-2440. (Author's summary) 82k:82060 82A70

s, Anthony (with Stone, David A.) The Euler cycle of a foliation. J. Differential Geom. 15 (1980), no. 1, 39-50 (1981). (John Cantwell) 82b:57022 57R30 (with Sullivan, Dennis) Geometry of leaves. Topology 20 (1981), no. 2, 209-218.

(John Cantwell) 82f:57021 57R30

lips, C. (with Hendry, John; Delves, L. M.) Numerical experience with the global element method. Mathematics of finite elements and applications, III (Proc. Third MAFELAP Conf., Brunel Univ., Uxbridge, 1978), pp. 341–348, Academic Press, London, 1979. (Kristian Witsch) 82b:65125 65N30

1979. (Kristian Wilsch) easters 25 (Kristian Wilsch) easters 25 (Kristian Wilsch) easters 25 (Kristian Wilsch) easters 25 (1980), no. 2, 177–197. (Rolf Rannacher) 82b:65118 65N30

(with McKerrell, A.; Delves, L. M.) Chebyshev expansion methods for the solution of elliptic partial differential equations. J. Comput. Phys. 41 (1981), no. 2, 444–452. (Authors' summary) 82k:65084 65N30 65N30 llips, G. D. A. (with Harvey, A. C.) Testing for heteroscedasticity in simultaneous

ation models. J. Econometrics 15 (1981), no. 3, 311-340. (Authors' summary) 62P20 (62F03)

Hips, G. M. (with Holland, A. S. B.; Taylor, P. J.) Generalization of a theorem of Bernstein. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 513-516, Academic Press, New York, 1980. (D. Leviatan) 82a:41015 41A17 The development of logarithms. Bull. Inst. Math. Appl. 16 (1980), no. 7, 165-168. (J. Dieudonnė) 82m:01032 01A45

Phillips, John (with Raeburn, Iain) Automorphisms of C*-algebras and second Čech mology. Indiana Univ. Math. J. 29 (1980), no. 6, 799-822. (Christopher Lance) 82b:46089 46M20 (18F25, 46L40, 58G12)

Phillips, M. J. A characterization of the negative exponential distribution with application to reliability theory. J. Appl. Probab. 18 (1981), no. 3, 652-659. (Carl M. Harris) 60K10 (60E05, 90B25)

Letter to the editor. J. Oper. Res. Soc. 32 (1981), no. 9, 836. (Editors) 82h:90059

Phillips, O. M. Wave interactions—the evolution of an idea. 25th anniversary issue: editorial reflections on the development of fluid mechanics. J. Fluid Mech. 106 (1981), 215-227. (See 82g:76002) 76B15

lips, P. C. B. (with Holly, A.) A saddlepoint approximation to the distribution of the k-class estimator of a coefficient in a simultaneous syste 1527-1547. (Authors' summary) 82c:62147 62P20 system. Econometrica 47 (1979), no. 6,

lips, Ralph S. (with Lax, Peter D.) Correction to: "Translation representations for the solution of the non-Euclidean wave equation" [Comm. Pure Appl. Math. 32 (1979), no. 5, 617-667; MR 81a:43013]. Comm. Pure Appl. Math. 33 (1980), no. 5, 685. (Editors) 43A99 (10D40, 22E45, 35P99, 58G25)

(with Lax, Peter D.) Translation representations for the solution of the

non-Euclidean wave equation. II. Comm. Pure Appl. Math. 34 (1981), no. 3, 347-358. (L. A. Takhtajan (Tahtadžjan)) 821:43010 43A85 (35L05) (with Lax, Peter D.) The translation representation theorem. Integral Equations

Operator Theory 4 (1981), no. 3, 416-421. (J. A. Goldstein) 82h:47041 47D10 (47A40. 47B25)

ilos, Ch. G. (with Staikos, V. A.) Boundedness and oscillation of solutions of differential ations with deviating argument. An. Științ. Univ. "Al. I. Cuza" Iași Secț. I a Mat.

(N.S.) 26 (1980), no. 2, 307-317. (Bhagat Singh) 82e-34083 34K15
Oscillatory and asymptotic behavior of strongly superlinear differential equations with deviating arguments. Ann. Mat. Pura Appl. (4) 126 (1980), 343-361 (1981). (Hiroshi Onose) 82e:34084 34K15 (34K25)

A comparison result for retarded differential equations. Utilitas Math. 17 (1980),

259-269. (I. Kiguradze) 82x-34086 34K15
On the existence of nonoscillatory solutions tending to zero at ∞ for differential equations with positive delays. Arch. Math. (Basel) 36 (1981), no. 2, 168-178. (Eng-Bin Lim) 82f:34107

ipps, Michel Entropy and community pattern analysis. J. Theoret. Biol. 93 (1981), no. 1, 253-273. (Author's summary) 82m:92074 92A17 (92A20) oenix, S. L. (with Smith, Richard L.) Asymptotic distributions for the failure of fibrous

materials under series-parallel structure and equal load-sharing. Trans. ASME Ser. E.J. Appl. Mech. 48 (1981), no. 1, 75–82. (Authors' summary) 82f:62181 62N05

ng, D. H. (with Fefferman, Charles) On the asymptotic eigenvalue distribution of a pseudodifferential operator. Proc. Nat. Acad. Sci. U.S.A. 77 (1980), no. 10, part 1, 5622-5625. (Akira Asada) 82h:35101 35S05 (35P20, 47G05, 58G25)

(with Fefferman, Charles) The uncertainty principle and sharp Garding inequalities. m. Pure Appl. Math. 34 (1981), no. 3, 285-331. (V. Ja. Ivrii) 82j:35140 (35P99, 47G05, 81C05)

m ngoc Phuc See Pham Ngoc Phuc ta Phuoc Loc See Ta Phuoc Loc

vu anh Phuong See Vu Anh Phuong
Phythian, R. The application of renormalised perturbation theory in turbulence and related protections. Mathematical modelling of turbulent diffusion in the environment (Proc. Conf., Unio. Liverpool, Liverpool, 1978), pp. 115-141, Academic Press, London, 1979. (Author's summary) 82a:76046 76F99 (76R99) Piacentini Cattaneo, Giulia Maria Gametic algebras of mutation and Jordan algebras. (Italian summary) Rend. Mat. (6) 13 (1980), no. 2, 179–186. (I. M. H. Etherington) 82c-92015 92A10 (16A68, 17A10, 17D99)

A connection between algebra and genetics: some ideas for introducing the concept of a nonassociative algebraic structure in high schools. (Italian. English summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 1, 69-75. (I. M. H. Etherington) 82h:17001 (17D92, 92A10)

cenza, R. J. Cohomology of diagrams and equivariant singular theory. Pacific J. Math. 91 (1980), no. 2, 435-443. (R. M. Vogt) 82i:55003 55N35 (55S99)

Pian, J. (with Sharma, C. S.) The variational principle for the scattering phase. Phys. Lett. A 76 (1980), no. 5-6, 365-366. (Peter Michor) 82c:58017 58E99 (46G99, 58C20,

Pian, Theodore H. H. (with Tong, Pin) Reissner's principle in finite element formulations. Mechanics today, Vol. 5, pp. 377–395, Pergamon, Oxford, 1980. (P. G. Ciarlet) 82c:73659 73K25 (78-02)

iani, Giulio First return map and invariant measures. Israel J. Math. 35 (1980), no. 1-2, 32-48. (N. G. Markley) 82a:58031 58F11 (28D99)

Conditionally invariant mer sures and exponential decay. J. Math. Anal. Appl. 82

(1981), no. 1, 75-88. (Michael J. Field) 82j:58074 58F11 (28D05)
Piasecki, J. The runaway effect in a Lorentz gas. J. Statist. Phys. 24 (1981), no. 1, 45-58.
(Nina B. Maslova) 82f:82036 82A40

Piatetski-Shapiro, Ilja Iosifovitch (with Jacquet, Hervé; Shalika, Joseph) Facteurs L et ε du groupe linéaire. (English summary) C. R. Acad. Sci. Paris Sér. A-B 289 (1979), no. 2, A59–A61. (Stephen Gelbart) 82c:10038 10D40 (22E50)

Tate theory for reductive groups and distinguished representations. Proceedings of the International Congress of Mathematicians (Helsinki, 1978), pp. 585–590, Acad. Sci. Fennica, Helsinki, 1980. (Audrey A. Terras) 82f:10037 10D24 (10D40, 12A67, 22E55) (with Gelbart, Stephen) Distinguished representations and modular forms of

half-integral weight. Invent. Math. 59 (1980), no. 2, 145-188. (Martin L. Karel) 10D40 (22E55) 82b:10035

(with Jacquet, Herve; Shalika, Joseph) Relevement cubique non normal. (English ary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 12, 567-571. (J. Tunnell) 10D40

(with Jacquet, Hervé; Shalika, Joseph) Conducteur des représentations génériques du groupe linéaire. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 13, 611-616. (Authors' summary) 82f:22015 22E50

(with Jacquet, Hervé; Shalika, Joseph) Facteurs L et e du groupe linéaire: théorie archimédienne. (English summary) [L- and e-factors for the linear group: Archimedean theory] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 1, 13-18. (Authors' summary) 82i:22021 22E50 (10D40, 12B27)

Piazza, Giuseppe On the BN stability of the Runge-Kutta methods. Math. Comp. 37 (1981), no. 156, 399–401. (Author's summary) 82i:65045 65L05

Pic, E. (with Saguet, P.) Le maillage rectangulaire et le changement de maille dans la méthode TLM en deux dimensions. (English summary) Electron. Lett. 17 (1981), no. 7, 277-279. (Authors' summary) 82d:94060 94C05

Picard, C. F. See Aggarwal, N. L.; et al., 82a:01027

Picard, Dominique (with Deshayes, Jean) Convergence de processus à double indice: application aux tests de rupture dans un modèle. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 8, 449-452. (Authors' summary) 82c:62053 (60F17)

Picard, Jean-Claude (with Ouevranne, Maurice) On the structure of all minimum cuts in a network and applications. Combinatorial optimization, II (Proc. Conf., Univ. East Anglia, Norwich, 1979). Math. Programming Stud. No. 13 (1980), 8-16. (Jacques A. Ferland) 82a:90054 90B10

(with Houck, David J., Jr.; Queyranne, Maurice; Vernuganti, R. R.) The travelling sman problem as a constrained shortest path problem: theory and computational experience. Opsearch 17 (1980), no. 2-3, 93-109. (Claude Benzaken) 82h:90076

(with Queyranne, Maurice) Errata: "On the structure of all min network and applications" [Math. Programming Stud. No. 13 (1980), 8-16; MR 82a:90054]. Math. Programming 22 (1982), no. 1, 121. (Editors) 82k:90052

Picard, Rainer Some remarks on the horizontal line method. Math. Methods Appl. Sci. 2 (1980), no. 4, 471-479. (Rolf Rannacher) 82c:34071 34G10 (65M20)

(with Neittaanmäki, Pekka) Error estimates for the finite element approximation to a Maxwell-type boundary value problem. Numer. Funct. Anal. Optim. 2 (1980), no. 4, 267-285. (J. S. Colonias) 82b:78006 78A25 (49G10, 65N30) Ein Kommentar zur Linienmethode bei der Maxwellschen Anfangsrandwertaufgabe.

Z. Angew. Math. Mech. 60 (1980), no. 7, T265-T267. (From the introduction) 82h:35042 35199 (78A25)

(with Neittaanmäki, Pekka) On the finite element method for time-harmonic

acoustic boundary value problems. Comput. Math. Appl. 7 (1981), no. 2, 127-138. (Authors' summary) 82g:76031 76Q05 (65N30, 76A60)

Picardello, Massimo A. Locally compact unimodular groups with atomic duals. (Italian summary) Rend. Sem. Mat. Fis. Milano 48 (1978), 197–216 (1980). (Elliot C. Gootman) 82e-22015 22D35 (22E35, 43A65)

82e:22015 22D35 (22E35, 43A65)
Picavet, Gabriel Ultrafiltres sur un espace spectral—anneaux de Baer—anneaux à spectre minimal compact. Math. Scand. 46 (1980), no. 1, 23-53. (Melvin Henriksen) 82e:13003

Piccard, Sophie Diverses façons de caractériser un groupe abstrait dont on connaît une réalisation. Publ. Centre Rech. Math. Pures (1) No. 15 (1980), 5-12. (Editors) 82g:20062

Les groupes P-symétriques. II. Publ. Centre Rech. Math. Pures (1) No. 15 (1980),

23-24. (A. O. Morris) 82g:20057 20E34

Picci, Giorgio On the internal structure of finite-state stochastic processes. Recent

developments in variable structure systems, economics and biology (Proc. US-Italy Sem Taormina, 1977), pp. 288-304, Lecture Notes in Econom. and Math. Systems, 162, Springer, Berlin, 1978. (Beloslav Riečan) 82d:60116 60J05 (68D25)

(with Lindquist, Anders) Realization theory for multivariate Gaussian processes. II. State space theory revisited and dynamical representations of finite-dimensional state spaces. Second Interna ational Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. II, pp. 108-129, Reidel, Dordrecht, 1980. (Authors' summ 82g:93010 93B15 (93C35)

, Ludovico The theory of statistical decisions. (Italian) Boll. Un. Mat. Ital. A (5)

17 (1980), no. 3, 376-405. (Jean Larisse) 82e:62011 62C05
Piccinini, Livio C. G-convergence and evolution problems. Abstract Cauchy problems and functional differential equations (Proc. Workshop, Leibnitz, 1979), pp. 149–166, Res. Notes in Math., 48, Pitman, Boston, Mass., 1981. (A. Szép) 82j:34072 34G99

Remarks on a uniqueness problem for dynamical systems. (Italian summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 1, 132-137, (V. Sree-Hari-Rao) 82f:34052 34C35

cinini, Renzo (with Mahammed, N.; Suter, U.) ★Some applications of topological K-theory. North-Holland Mathematics Studies, 45. Notas de Matemática [Mathematical] K-theory. North-Holland Publishing Co., Amsterdam-New York, 1980. ix+317 pp.

ISBN 0-444-86113-0 (J. M. Boardman) 821:55009 55N15 (58Gxx)

(with Booth, Peter; Heath, Philip R.; Morgan, Chris) Remarks on the homotopy type of groups of gauge transformations. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 1, 3-6. (From the text) 82c:55019 55R99 (81E10)

colella, Lia Fioravanti Differential characterizations of some classes of algebraic varieties. (Italian. English summary) Pubbl. Istit. Mat. Appl. Fac. Ingr. Univ. Stud. Roma Quaderno No. 16 (1980), 65–74. (Froim Marcus) 82h:53019 53A20 (14N05)

On the vertices of surfaces of n-dimensional Euclidean space (Italian English summary) Rend. Mat. (6) 13 (1980), no. 3, 389–400 (1981). (E. J. F. Primrose) 82i:53004

Piceni, Hans A. L. (with van Ouwerkerk, Hendrik J.; Tulp, Jan H.; Roufs, Jacques A. J.; Blommaert, Frans J. J.) Instabilities in a continuous medium model for the retina. Biol. Cybernet. 39 (1980/81), no. 1, 11-14. (Authors' summary) 82j:92064 92A27 (92A09)

Pichai, V. (with Sezer, Mesut E.; Šiljak, Dragoslav D.) Vulnerability of dynamic systems. Internat. J. Control 34 (1981), no. 6, 1049-1060. (Authors' summary) 82m:93010 93B05 (05C20, 93B07)

Pichat, Michèle See Vignes, Jean, 82g:65002

Pichaud, Joëlle Cohomologie continue et cohomologie différentiable des groupes localement compacts. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 3, 171-173. (Author's summary) 82b:22010 22D99 (22E41)

Homologie continue et homologie différentiable des groupes localement compacts. (English summary) [Continuous homology and differentiable homology of locally compact groups] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 3, 191-194. (Author's summary) 82k:22005 22D05 (22D12)

Pichler, Franz R. See Progress in cybernetics and systems research, 82i:00031

Pichorides, S. K. A theorem of J.-F. Fournier on Littlewood's conjecture. Seminar on Harmonic Analysis, 1978–1979 (French), pp. 56-63, Publ. Math. Orsay 79, 7, Univ. Paris XI, Orsay, 1979. (Walter R. Bloom) 82d:10054 10G10 (42A05)

Pichot, Ch. (with Caron, Armand; Dupuy, M.) Numerical solution of singular integral equations. Application to the flanged plane waveguide. J. Comput. Phys. 38 (1980), no. 3, 357-377. (Authors' summary) 82d:78023 78A50 (65R20)

Pickard, David K. Unilateral Markov fields. Adv. in Appl. Probab. 12 (1980), no. 3, 655-671. (J. Fritz) 82e:60164 60K35 (60J10)

(with Weiner, Howard J.; Tory, E. M.; Tanemura, Masaharu; Hori, Motoo) Further comments on: "Sequential random packing in the plane" [J. Appl. Probab. 15 (1978), no. 4, 803-814; MR 80a:60015] by Weiner. J. Appl. Probab. 17 (1980), no. 3, 878-892. (Adrian Baddeley) 82m:60021 60D05

Pickel, P. F. (with Hartley, Brian) Free subgroups in the unit groups of integral group rings. Canad. J. Math. 32 (1980), no. 6, 1342-1352. (I. B. S. Passi) 82i:20008

Picken, R. F. New topological indices in SO(3) Einstein-Yang-Mills theory. J. Phys. A 14 (1981), no. 2, 471-477. (S. M. Christensen) 82a:83039 83C99 (53C05, 57R20, 58G10) Pickering, W. M. (with Sozou, C.) The nonlinear flow field induced by a point force in the

presence of a plane wall. Proc. Roy. Soc. London Ser. A 376 (1981), no. 1766, 435-450. (Authors' summary) 82i:76027 76D05 (76Q05, 76Z05)

(Authors' summary) 82i:76027 Pickert, Günter Partial planes with exactly two complete parallel classes. Geometry of differential geometry (Proc. Conf., Univ. Haifa, Haifa, 1979), pp. 114-127, Lecture Notes in Math., 792, Springer, Berlin, 1980. (P. J. Lorimer) 82e:51006 51A15 (20H15)

A problem of free mobility. Geometry and differential geometry (Proc. Conf., Univ. Haifa, Haifa, 1979), pp. 128-131, Lecture Notes in Math., 792, Springer, Berlin, 1980. (G. J. Schellekens) 82e:51020 51F20

Pickup, C. D. (with Taylor, John G.) Gauging Lie superalgebras. J. Phys. A 13 (1980),

no. 5, 1537–1542. (Nigel B. Backhouse) **82c-81091** 81E10 (17A70, 83E99) (with Taylor, John G.) Representations of N=4 supersymmetry on superfields. Nuclear Phys. B **188** (1981), no. 3, 577–593. (Authors' summary) **82i:81148** 81G20 (17A70, 17B65)

Picolet, Guy See Euler, Leonhard, 82h:01075

Picone, Mauro See Fichera, Gaetano, 82f:01093 and 82f:01094

Pičugov, S. A. (with Babenko, V. F.) Best linear approximation of certain classes of differentiable periodic functions. (Russian) Mat. Zametki 27 (1980), no. 5, 683–689, 829. 41A35 (I. Szalav) 82b:41022

(with Babenko, V. F.) Approximation in the mean of linear combinations of shifts of certain functions. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 2, 234-240. (J. Peetre) 41A30

(with Babenko, V. F.) On a property of compact operators in the space of integrable functions. (Russian) Ukrain. Mat. Z. 33 (1981), no. 4, 491-492. (From the text)

82m:47018 47B38 (47B05)
Pidlipenko, Ju. K. (with Zaliznjak, S. N.) Application of linear methods to the solution of boundary value problems for the Helmholtz equation. (Russian) Questions of the theory of the approximation of functions (Russian), pp. 88-100, 196, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (Authors' summary) 82h:35021 35J05

aková, A. (with Pefina, J.) Statistical properties of Brillouin scattering. Czechoslovak

J. Phys. B 31 (1981), no. 8, 837–856. (Authors' summary) 82j:81075 81K05

Pielon, E. C. The statistics of biogeographic range maps: sheaves of one-dimensional ranges.

(French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 2. With discussion. Bull. Inst. Internat. Statist. 47 (1977), no. 2, 111-122, 138, 140-142, 143-144, 147. (Author's summary) 82m:92075

Piene, Ragni (with Ronga, Felice) A geometric approach to the arithmetic genus of a projective manifold of dimension three. Topology 20 (1981), no. 2, 179-190. (K.

Lamotke) 82e:14027 14F12 (57R20, 58A10)
Pieper, H. Das historische Argument für die Beschäftigung mit komplexen Zahlen. [The historical argument for the study of complex numbers] Mitt. Math. Ges. DDR 1 (1981), 31-59. (Burnett Meyer) 82j:01027 01A40 (01A50, 01A55, 12-03) See also Drinfel'd, G. I., 82k:10001

Pieper, K.-D. (with Klink, Helge-Karsten) Über Lösungen von komplexen partiellen
Differentialgleichungssystemen. Wiss. Z. Tech. Hochsch. Magdeburg 23 (1979), no. 6, 593-597. (Authors' summary) 82k:35006 35A25 (35C99)

Pieper, Volkmar (with Beyer, Otfried; Hackel, Horst; Tiedge, Jürgen)

*Wahrscheinlichkeitsrechnung und mathematische Statistik. (German) [Probability theory and mathematical statistics] Second edition. Mathematik für Ingenieure, Naturwissenschaftler, Ökonomen und sonstige Anwendungsorientierte Berufe [Mathematics for Engineers, Natural Scientists, Economists and other Application-Oriented Occupations], 17. Verlag Harri Deutsch, Thun, 1980. 224 pp. ISBN 3-87144-433-2 (From the introduction) 82k:60002a 60-01 (62-01) (with Beyer, Otfried; Hackel, Horst; Tiedge, Jürgen)

★Wahrscheinlichkeitsrechnung und mathematische Statistik. (German) [Probability theory and mathematical statistics] Second edition. Mathematik für Ingenieure, Naturwissenschaftler, Ökonomen und Landwirte [Mathematics for Engineers, Natural Scientists, Economists and Agriculturalists], 17. BSB B. G. Teubner Verlagsgesellschaft, Leipzig, 1980. 224 pp. (Editors) 82k:60002b 60-01 (62-01)

Pieprzyk, Józef Codes that detect illegal exchange of messages (analysis). (Polish. Russian and English summaries) Arch. Elektrotech. 29 (1980), no. 2, 419-435. (I. Vajda)

Pier, Jean-Paul Historique de la notion de compacité. (English and German s Historia Math. 7 (1980), no. 4, 425-443. (Roman Duda) 821:01068 01A60 (54-03

Pierce, David A. Data revisions with moving average seasonal adjustment procedures. Econometric modeling and policy design at the Federal Reserve, Part I. J. Econometrics 14 (1980), no. 1, 95-114. (See 82c:90003a) 62P20

Pierce, John R. ★An introduction to information theory. Symbols, signals & noise. Revised edition of Symbols, signals and noise: the nature and process of communication.

Dover Publications, Inc., New York, 1980. xii+305 pp. ISBN 0-486-24061-4 (Editors)

82j:94009 94A15 (00A69, 92A25, 94-01)

(with Posner, Edward C.; Rodemich, Eugene R.) The capacity of the photon counting channel. IEEE Trans. Inform. Theory 27 (1981), no. 1, 61-77. (Carl W.

Helstrom) 82c:94009 94A40
Pierce, Keith R. (with Glass, A. M. W.) Equations and inequations in lattice-ordered

groups. Ordered groups (Proc. Conf., Boise State Univ., Boise, Idaho, 1978), pp. 141-171, Lecture Notes in Pure and Appl. Math., 62, Dekker, New York, 1980. (Editors) 82c:06030 06F15 (03C25, 03C60, 06F20) (with Glass, A. M. W.) Existentially complete lattice-ordered groups. Israel J. Math.

36 (1980), no. 3-4, 257-272. (Carol Wood) 82b:06016 06F15 (03C60)

Pierce, Stephen Maximal subgroups of the orthogonal group. J. Geom. 16 (1981), no. 1, 30-40. (Dennis Estes) 82m:20049 20G15 (10C30)

Pierce, T. H. (with Cukier, R. I.; Dye, J. L.) Application of nonlinear sensitivity analysis to enzyme mechanisms. Math. Biosci. 56 (1981), no. 3-4, 175-208. (Authors' summary)

Pierini, Stefano (with Vulpiani, Angelo) Nonlinear stability analysis in multilayer quasigeostrophic systems. J. Phys. A 14 (1981), no. 5, L203-L207. (J. C. J. Nihoul) 82d:86012 86A35 (35Q20, 76V05)

Pieroni, Goffredo G. See Map data processing, 82m:68006a

Pierre, Michel Problèmes d'evolution avec contraintes unilatérales et potentiels paraboliques. Comm. Partial Differential Equations 4 (1979), no. 10, 1149–1197. (Author's review (Zbl 426:31005)) 82g:35062 35K85 (31B20, 49A29)

Représentant précis d'un potentiel parabolique. Seminar on Potential Theory, Paris, No. 5 (French), pp. 186-228, Lecture Notes in Math., 814, Springer, Berlin, 1980. (J. 31C25 (31B35)

Le problème de Skorokhod: une remarque sur la démonstration d'Azéma-Yor. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 392-396, Lecture Notes in Math., 784, Springer, Berlin, 1980. (H.-J. Engelbert) 821:60108 60G44 (60J55)

Evolution equations with irregular obstacles. Abstract Cauchy problems and funcdifferential equations (Proc. Workshop, Leibnitz, 1979), pp. 167-173, Res. Notes in Math., 35K22 (31C99, 34G99) 48, Pitman, Boston, Mass., 1981. (A. Szép) 82j:35080

Pierru, C. See Mascheroni, L., 82m:01081

Pierru, J. See Mascheroni, L., 82m:01081

Pietka, Marek A remark about the periodic solution of the system of n differential equations with deviating argument. Fasc. Math. No. 11 (1979), 133-134. (B. S. Lalli)

Pietrabissa, Ettore (with Spaccarelli, Attilio) Remarks on weighted and constrained least squares methods. (Italian, English and French summaries) Statistica (Bologna) 39 (1979). no. 3, 479-497. (Adolfo Gili) 82a:62102 62J10

Pietraszkiewicz, Wojciech Some problems of the nonlinear theory of shells. (Polish. Russian and English summaries) Mech. Teoret. Stos. 18 (1980), no. 2, 169-192. (Author's summary) 82d:73069 73L99

Pietrzykowski, T. (with Cox, P. T.) A complete, nonredundant algorithm for reversed Skolemization. 5th Conference on Automated Deduction (Les Arcs, 1980), pp. 374-385, Lecture Notes in Comput. Sci., 87, Springer, Berlin, 1980. (M. M. Richter) 82e:03017

Pietsch, Albrecht Weyl numbers and eigenvalues of operators in Banach spaces. Ann. 247 (1980), no. 2, 149-168. (Mikio Kato) 82i:47073a 47D30 (46M35, 4' 47D30 (46M35, 47A70) Eigenvalues of integral operators. I. Math. Ann. 247 (1980), no. 2, 169-178. (Mikio

Kato) 82:47073b 47D30 (47A70, 47B38)
 Factorization theorems for some scales of operator ideals. Math. Nachr. 97 (1980),
 15–19. (Bernd Rosenberger) 82i:47030 47B10 (47D30)

Über die Verteilung von Fourierkoeffizienten und Eigenwerten-nicht nur ein

her Überblick. (Russian and English sum ries) Wiss. Z.

hatonscher Obertonck. (Kussian and English summaries) wiss. Z.

Friedrich-Schiller-Unio. Jean Math. Natur. Reithe 29 (1980), no. 2, 203-211. (D.

Waterman) 82e-47022 47A70 (01A60, 35P99, 42A16)

sech, Bodo (with Alford, W. A.) An application of the nilpotent quotient program.

Burnside groups (Proc. Workshop, Unio. Bielefeld, Bielefeld, 1977), pp. 47-48, Lecture

Notes in Math., 806, Springer, Berlin, 1980. (Colin M. Campbell) 82d:20001 20-04

ch, Wolfgang (with Werner, Udo) Die Polynome S_n(x) zur Darstellur gereiesnektralfunktionen idealer Turbulenzfelder. Z. Angew. Math. Energiespektralfunktionen idealer Turbulenzfelder. Z. Angew. Math. Mech. S8 (1978), no. 3, 166–168. (Editors) 82f:33009 33A70 (33A40, 76F05) al Piga, Alfonso See Casal Piga, Alfonso

eaud, Pierre (with Sakoto, Moussa) Espaces cosmologiques et transformations infinitésimales conformes fermées. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 7, B181–B184. (J. R. Vanstone) 824:83022 83C20 (53B30, 83C55)

etti, Cécile (with Gavrilov, V. I.; Kanatnikov, A. N.) Ensembles d'accum généralisés. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 7, 393-396. (Authors' summary) 82c:30051 30D40

taro, M. (with Rizzi, N.; Di Carlo, A.) Symmetric bifurcation of plane frames

pattern, M. (with Kizz, K. E. Carto, K.) Symmetric contraction of prince trained through a modified potential energy approach. J. Structural Mech. 8 (1980), no. 3, 237–255. (Authors' summary) 82e:73046 73H05 (58E07, 73K20) pno. Louis (with Sacki, Sadahiro) Constructions of singular measures with remarkable convolution properties. Studia Math. 69 (1980/81), no. 2, 133–141. (Colin C. Graham) 82b:43001 43A05 (43A25)

Small sets in the support of a Fourier-Stieltjes transform. Colloq. Math. 44 (1981), no. 1, 147-149. (Colin C. Graham) 82k:430f6 43A46 (42A38, 43A25) monl, Roberto Morse functions and the strict Whitney condition. (Italian summary) Boll. Un. Mat. Ital. A (5) 17 (1980), no. 2, 307-312. (D. J. A. Trotman) 82c:58006

ozzi, D. (with Adams, M. E.; Sichler, J.) Endomorphisms of direct unions of bounded lattices. Arch. Math. (Basel) 36 (1981), no. 3, 221-229. (T. S. Blyth) 82f:20097 20M30 (05C99, 06B99)

Phh, Mogens (with Wergeland, Harald) Christian Moller. (Norwegian) Norske Vid. Selsk. Forh. (Trondheim) 1980, 69-72 (1981). (S. D. Chatterji) 82mo1065 01A70 Phhillkor, S. A. Skew semigroup rings with identity. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1980, no. 5, 27-31, 84. (Hubert Grassmann) 82a:20077

20M25 (16A38)

Pill E. I. (with Donianc, V. N.) Synthesis of Boolean functions in modified matrix be (with Domanic, v. N.) Synthesis of Boolean Indictions in modified matrix geneous media with repeated input of variables. (Russian) Systems for control of wks (Russian), pp. 79–90, 140, "Nauka", Moscow, 1980. (See 824:94048) 94C10

Pik, Jiř. A hierarchical pattern description in the syntactic approach to pattern recognition. Pattern Recognition 14 (1981), no. 1-6, 191-196. (Author's summary) 82k:68054 68G10

Pikovskii, A. S. (with Gorškov, K. A.; Ostrovskii, L. A.; Papko, V. V.) On the existence of stationary multisolitons. Phys. Lett. A 74 (1979), no. 3-4, 177–179. (Authors' summary) 824:35990 35Q20

Nonlinear resonant two-wave interaction in an inhomogeneous medium. Phys. Lett. A 80 (1980), no. 5-6, 367-368. (From the text) 82f:35179 35O99 (58F05, 58F07)

Pikulin, V. P. Periodic and almost periodic solutions of weakly nonlinear and parabolic equations. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 412 (1979), 107–111, 161. (Pierre-Louis Lions) 82g:35009 35B15 (35K60)

nlinear hyperbolic equat 28 (1980), no. 4, 555-563, 635. (M. Zerner) 82a:35073 35L70

Pikur, E. A. (with Severin, V. P.) Minimization of integral quadratic quality estimates for linear automatic control systems. (Russian) Mathematical methods in cybernetics (Russian), pp. 8-13, 82, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Authors' mmary) 82c:49023 49D30

Pilati, M. Another geometrical representation of supergravity. (Italian and Russian ries) Nu vo Cimento A (11) 57 (1980), no. 4, 361-376. (W. Cox) 824:83065 83E99 (53B50, 57R99)

Pilch, Krzysztof A. (with Jadczyk, A. Z.) Superspaces and supersymmetries. Comm. Math. Phys. 78 (1980/81), no. 3, 373-390. (W. Cox) 82e:58002 58A05 (83E99)

 Phys. 78 (1980/81), no. 3, 373-390. (W. Cox)
 82e:58002
 58A05 (83E99)

 Geometrical meaning of the Poincaré group gauge theory.
 Lett. Math. Phys. 4

 (1980), no. 1, 49-51. (Eckehard W. Mielke)
 82i:83079
 83E10 (53C05, 81E10)

osjan, F. E. Minimax regression. (Russian) Algorithms and software for applied statistical analysis. Učen. Zap. Statist. 36 (1980), 100-111. (A. L. Rukhin) 82h:62099 62J02

uk, V. N. See Pilipčuk, V. N.

pcuk, S. S. Divergence of Lagrange interpolation processes on countable sets. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 12, 38-44. (J. Szabados) 82d:41004

Pilipčuk, V. N. (with Manevič, L. I.) Nonlinear vibrations of a three-element mechanical system with several equilibrium positions. Prikl. Meh. 17 (1981), no. 2, 97-103 (Russian); translated as Soviet Appl. Mech. 17 (1981), no. 2, 178-184. (From the text) 70K99

peckli, N. F. (with Zel'dovič, Ja. B.; Sudarkin, A. N.; Škunov, V. V.) Wave front reversal by a surface. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 1, 92-95. (From 78A55 the text) 82c:78027

posjan, T. E. Length of a class of directed trees on a plane. (Russian. Armenian summary) Trudy Vyčisl. Centra Akad. Nauk Armjan. SSR i Erevan. Gos. Univ. Mat. Voprosy Kibernet. i Vyčisl. Tehn. No. 9 Teorija Grafov (1979), 64-70. (G. N. Kopylov) 82h:05028 05C20 (05C05)

Pilipovic, Stevan On convergence in some subspaces of generalized functions. Mat. Vesnik 3(16)(31) (1979), no. 2, 209-221. (J. N. Pandey) 82g:46078 46F05 (with Pap, Endre) A sequential theory of some semigroups in special spaces of

eralized functions. Mat. Vesnik 3(16)(31) (1979), no. 3, 315-326. (Ioana Ciorănescu) 47D05 (46F10)

Convolution and the Laplace transform in L'. (Serbo-Croatian. English summary)
Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 53-58 (1980). (Author's summary) 82:44008 44A35 (44A10, 46F12)

Piljavs'kii, A. I. (with Petrina, D. Ja.; Gerasimenko, V. I.; Mališev, P. V.) The reversed osmosis problem as a boundary value problem in a domain with a fine structure. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 75-78. (L. I. Rubinstein) 82e:92018 92A09 (35K99, 80A30)

Piljugin, S. Ju. Periodic trajectories and the structure of phase diagrams. (Russian) Differencial nye Uraonenija 15 (1979), no. 6, 1000–1006, 1148. (M. I. Brin) 82e:58052

A manifold that determines the type of asymptotically stable invariant set. (Russian) ferencial'nye Uravnenija 16 (1980), no. 12, 2140-2147, 2300. (M. I. Brin) 82m:58034

58F09 (34C35, 34D20) Piljugina, V. B. On a system with a triple zero root of the characteristic equation. I. (Russian) Differencial'nye Uravnenija 16 (1980), no. 12, 2148-2155, 2300. (M. I. Brin) 82m:34039 34C20 (58F10)

Pillai, K. C. S. (with Nagarsenker, B. N.) Distribution of the likelihood ratio statistic for substitution of two-sided tests of equality of two Hermitian covariance comparisons of two-sided tests of equality of two Hermitian covariance comparisons of two-sided tests of equality of two Hermitian covariance matrices. J. ist. Plann. Inference 4 (1980), no. 3, 267-290. (Edward M. Carter) 82a:62071 62H10 (62E15)

(with Singh, Anita) On the exact nonnull distribution of Wilks' L_{VC} criterion and wer studies. Ann. Inst. Statist. Math. 33 (1981), no. 1, 45-55. (Minoru Siotani) power studies.

82i:62036 62H10

Pillat, Ulf Über einige Aspekte zur Symbolrechnung elliptischer Randwertprobleme für Pseudodifferentialkomplexe. Elliptische Differentialgleichungen (Meeting, Rostock, 1977), pp. 205-216, Wilhelm-Pieck-Univ., Rostock, 1978. (From the text) 82f:58083 58G20 (with Schulze, Bert-Wolfgang) Some classes of nonelliptic boundary value problems for pseudodifferential operators. II. Overdetermined and underdetermined systems. Comm. Partial Differential Equations 6 (1981), no. 4, 373-398. (Ja. A. Roitberg) 82k:58090 58G20 (35J70, 47G05)

Pillay, Anand No-categoricity in regular subsets of L J. London Math. Soc. (2) 22 (1980), no. 2, 193–196. (B. Węglorz) 82d:03047 03C15 (03C35, 03C75)

Prime models over subsets. Study Group on Stable Theories (Bruno Poizat), Second year: 1978/79 (French), Exp. No. 7, 8 pp., Secrétariat Math., Paris, 1981. (W. Hodges) 82k:03041 03C45

Number of models of theories with many types. Study Group on Stable Theories (Bruno Poizat), Second year: 1978/79 (French), Exp. No. 9, 10 pp., Secrétariat Math., Paris, 1981. (John T. Baldwin) 82k:03042 03C45

de Pillis, John How to embrace your spectrum for faster iterative results. Linear Algebra Appl. 34 (1980), 125-143. (Peter Lancaster) 82g:65021 65F10 (15A99, 65J10) (with Neumann, Michael) A noncommutative spectral theorem for operator entried companion matrices. Linear and Multilinear Algebra 10 (1981), no. 1, 45-51. (Chandler

Davis) 82::15010 15A18 (47A10)
di Pillo, G. See Di Pillo, G.
Pilloni, L. (with Levi, D.; Santini, P. M.) Integrable three-dimensional lattices. J. Phys. A 14 (1981), no. 7, 1567-1575. (L. A. Takhtajan (Tahtadžjan)) 82j:35132

(with Levi. D.: Santini. P. M.) Backlund transformations for nonlinear evolution equations in 2+1 dimensions. Phys. Lett. A 81 (1981), no. 8, 419-423. (Authors' nmary) 82e:35070 35O20 (76B25, 81C99)

schulze-Pillot, Rainer See Schulze-Pillot, Rainer Pilz, Günter Near-rings of compatible functions. Proc. Edinburgh Math. Soc. (2) 23 (1980), no. 1, 87-95. (G. Betsch) 82f:16041 16A76

(with So, Yong Sian) Near-rings of polynomials over Ω-groups. Monatsh. Math. 91 (1981), no. 1, 73–76. (G. Betsch) 82e:16034 16A76 (08A40)

Pilz, J. (with Näther, Wolfgang) Estimation and experimental design in a linear regression model using prior information. (Polish summary) Zastos. Mat. 16 (1980), no. 4, 565-577. (B. C. Gupta) 82e:62100 62J05 (62K05)

Robust Bayes and minimax-Bayes estimation and design in linear regression (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Statist. 12 (1981), no. 2, 163-177. (C. R. Rao) 82g:62095 62J05 (62F15)

Pimbley, George H., Jr. On the nonoccurrence of secondary bifurcations in eigenvalue problems for nonlinear operators in Banach space. Indiana Univ. Math. J. 29 (1980), no. 5, 747-767. (M. Shearer) 824:58022 58E07 (47H15, 73K05) no. 5, 747-767. (M. Shearer) 824:58022

Pimenov, R. I. Finsler kinematics. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 3, 136-146, 237. (Leo Boček) 82k:53017 53A17 (53A40, 83D05)

nenov, V. G. (with Osipov, Ju. S.) On the theory of differential games in systems with aftereffect. Prikl. Mat. Meh. 42 (1978), no. 6, 969-977 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 6, 1061-1069 (1980). (Authors' summary) 82j:90090 901026

sner, M. (with Popa, Sorin; Voiculescu, Dan) Homogeneous C*-extensions of C(X)⊗K(H). I. J. Operator Theory 1 (1979), no. 1, 55-108. (Maurice J. Dupré) 46M20 (47D25, 58G12)

(with Voiculescu, Dan) Exact sequences for K-groups and Ext-groups of certain cross-product C*-algebras. J. Operator Theory 4 (1980), no. 1, 93-118. (Vern Paulsen) 46L05 (46M20, 58G12)

(with Voiculescu, Dan) Imbedding the irrational rotation C*-algebra into an AF-algebra. J. Operator Theory 4 (1980), no. 2, 201-210. (David Handelman) 82d:46086

(with Popa, Sorin; Voiculescu, Dan) Homogeneous C^* -extensions of $C(X) \otimes K(H)$. J. Operator Theory 4 (1980), no. 2, 211-249. (Maurice J. Duprė) 82e:46093b 46M20 (47D25, 58G12)

Pin, Jean-Eric Une caractérisation de trois variétés de langages bien connues. Theoretical computer science (Fourth GI Conf., Aachen, 1979), pp. 233-243, Lecture Notes in Comput. Sci., 67, Springer, Berlin, 1979. (Manfred Armbrust) 82a:68151 68F05

Propriétés syntactiques du produit non ambigu. Automata, languages au ning (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 483-499, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (J.-M. Autebert) 82e:68086

Variétés de langages et monoïde des parties. Semigroup Forum 20 (1980), no. 1,

1982

11-47. (Manfred Armbrust) 82a:68152 68F05 (20M07)

Langages reconnaissables et codage prefixe pur. [Recognizable languages and pure prefix coding] Automata, languages and programming (Akko, 1981), pp. 184–192, Lecture
Notes in Comput. Sci., 115, Springer, Berlin, 1981. (See 82:68003) 68F05
(with Straubing, Howard) Remarques sur le dénombrement des variétés de monoïdes

(English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 111-113. (Authors' summary) 82k:69027 68D30 (20M07, 20M35)

Piña, E. (with Rosales, M. A.) A hydrodynamic formalism for Brownian systems. (Spanish mary) Rev. Mexicana Fis. 27 (1980/81), no. 2, 169-178. (Authors' sun 82A70

Pina, H. L. G. (with Fernandes, J. L. M.; Brebbia, C. A.) Some numerical integration

formulae over triangles and squares with a 1/r singularity. Appl. Math. Modelling 5 (1981), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1981), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1980), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 65D32 (1990), no. 3, 209–211. (C. Ilioi) 82j:c5014 (19 Wilken) 82a:30031 30C70

(with Netanyahu, E.) Symmetrization and extremal bounded univalent functions. J. Analyse Math. 36 (1979), 139-144 (1980). (D. R. Wilken) 82a:30032 30C70

Pincus, Joel D. (with Carey, Richard W.) Mean motion, principal functions, and the zeros of Dirichlet series. Integral Equations Operator Theory 2 (1979), no. 4, 484-502. (Nicholas P. Jewell) 82k:47040 47B35 (28A75, 30B50, 58G12)

(with Carey, Richard W.) An integrality theorem for subnormal operators. Integral tions Operator Theory 4 (1981), no. 1, 10-44. (C. R. Putnam) 82j:47029 47B20 (58G12)

(with Carey, Richard W.) Almost commuting pairs of unitary operators and flat currents. Integral Equations Operator Theory 4 (1981), no. 1, 45-122. (Hari Bercovici) 82j:47024 47B15 (46L99, 58G12)

Pincus, R. Monotonicity properties of statistical procedures for an increasing number of observations or a decreasing number of parameters, especially ANOVA procedures. Mathematical statistics, pp. 249-255, Banach Center Publ., 6, PWN, Warsaw, 1980. (B. K. Ghosh) 82m:62054 62F03 (62E15)

(with Ahrens, H.) On two measures of unbalancedness in a one-way model and their relation to efficiency. Biometrical J. 23 (1981), no. 3, 227-235. (Authors' sun 82i:62100 62J10

der, George F. (with Voss, Clifford I.) A block iterative-preprocessed technique for efficient finite element simulation of large nonlinear problems. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Unio., Bethlehem, Pa., 1977), pp. 170-177, IMACS, New Brunswick, N.J., 1977.

(with Huyakorn, P. S.) A pressure-enthalpy finite element model for simulating hydrothermal reservoirs. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 284–293, IMACS, New Brunswick, N.J., 1977. (Authors' summary) 82c:76102 76T05 (65N30)

(with Tang, D. H.) A new algorithm for the numerical solution of nonlinear parabolic partial differential equations. Computational methods in nonlinear mechanics (Proc. Second Internat. Conf., Univ. Texas, Austin, Tex., 1979), pp. 463-473, North-Holland, Amsterdam, 1980. (J. G. Herriot) 82b:65083 65M05 (65N05)

(with Hayes, L.; Celia, M.) Alternating-direction collocation for rectangular regions. out. Methods Appl. Mech. Engrg. 27 (1981), no. 3, 265-277. (Authors' summ 76003 76A60 (65N35, 76S05) 82m:76003

Variational calculation of matrix elements of operator Padé approximants. Lett. Nuovo Cimento (2) 31 (1981), no. 6, 226-230. (H. Wallin) 82k:41009 41A21

eda, Justino (with Baker, George A., Jr.; de Llano, Manuel) New constructive methods for the ground-state energy of quantum fluids. Phys. Rev. B (3) 24 (1981), no. 11, 6304-6311. (Authors' summary) 82k:81099 81J05

Pinelis, I. F. A problem of large deviations in a space of trajectories. (Russian. English summary) Teor. Verojatnost. j. Primenen. 26 (1981), no. 1, 73-87. (M. M. Leonenko) 60F10 (60B10)

ngree, David The Liber universus of 'Umar Ibn al-Farrukhan al-Tabari. J. Hist. Arabic Sci. 1 (1977), no. 1, 8-12. (Editors) 82d:01008 01A30 See also van der Waerden, B. L., 82j:01024

Pinhas, Max Processus de diffusion et espérance arrêtée: application au calcul actuariel. Rev. Statist. Appl. 28 (1980), no. 1, 77-79. (Andrew D. Barbour) 82d:60162 60376

Pini, Fabrice (with Nassif, Nabil R.) Semidiscrete and fully discrete finite-element methods with penalty for the numerical solution of the waterhammer problem. SIAM J. Numer. Anal. 18 (1981), no. 1, 111-128. (Authors' summary) 82a:76019 76B99 (65N30)

um, Henry Charles (with Persson, Ulf) Degeneration of surfaces with trivial ca bundle. Ann. of Math. (2) 113 (1981), no. 1, 45-66. (M. H. Gizatullin) 82f:14030 14J10 (14E05, 14J25)

larities of Surfaces, 82d:14021 See also Seminar: Si

Pinkus, A. (with Brutman, L.) On the Erdős conjecture concerning minimal norm interpolation on the unit circle. SIAM J. Numer. Anal. 17 (1980), no. 3, 373-375. (Albert Baernstein, II) 82h:30044 30E10 (41A10)

asker, Harold M. (with Bell, Jonathan) Phase plane description of endogenous neuronal oscillators in Aphysia. Biol. Cybernet. 39 (1980/81), no. 3, 211-221. (Authors' summary) 92A09 (34C05)

Pinsker, M. S. (with Poltyrev, G. S.) Carrying capacity of a stationary Gaussian broadcast channel. (Russian) Methods of information transmission and processing (Russian) pp. 27-45, 116, "Nauka", Moscow, 1980. (W. Greblicki) 82m:94036b 94A4

(with Gel'fand, S. I.) Coding for channel with random parameters. (Russian mary) Problems Control Inform. Theory/Problemy Upravlen. Teor. Inform. 9 (1980), no. 1, 19-31. (From the introduction) 824:94034 94A40 (94B70)

Optimal filtration of square-integrable signals in Gaussian noise. Problemy Peredaci Informacii 16 (1980), no. 2, 52-68 (Russian); translated as Problems Inform. Transmission 16 (1980), no. 2, 120-133. (R. S. Bucy) 82j:93048 93E11 (60G15, 94A12)

See also Methods of information transmission and processing, 82a:94002
Pinskli, V. L. (with Dem'janov, Ju. A.; Sekrieru, G. V.; Igošin, A. I.; Kireev, V. T.) ★Одиомерные нестационарные течения реального газа. (Russian) [One-dimensional transient flows of a real gas] Формирование течений с учетом вязкости, теплопроводности, диффузии и химических реакций. [Formation of flows with account taken of viscosity, heat conduction, diffusion and chemical reactions]. With English and French summaries. "Štiinca", Kishinev, 1980. 188 pp. (Authors' summary) 76-02 (76N15)

A topological version of Obata's sphere theorem. J. Differential Geom. 14

(1979), no. 3, 369-376 (1980). (Y. Mutò) 82g:58091 58G25 (53C20) Three problems in stochastic Riemannian geometry. Analysis and control of systems (IRIA Sem., Rocquencourt, 1979), pp. 61-70, INRIA, Rocquencourt, 1980. (Editors) 82m:60093 60J60 (58G32, 60H10)

The eigenvalues of an equilateral triangle. SIAM J. Math. Anal. 11 (1980), no. 5, 819-827. (Gerd Grubb) 82d:35077 35P20 (12A05)

annian geometry. Stochastics 4 (1980/81), no. 3, 58G32 (60J65) Three problems in stochastic Rien 187-192. (Hélène Airault) 82k:58100

The first eigenvalue of a spherical cap. Appl. Math. Optim. 7 (1981), no. 2, 137-139. (Jean-Louis Ducourtioux) 82g:58095 58G32 (35P15, 58G25)

On the spectrum of Cartan-Hadamard manifolds. Pacific J. Math. 94 (1981), no. 1, 223-230. (Jacques Vauthier) 82i:58073 58G25 (53C20)

Homogenization in stochastic differential geometry. Publ. Res. Inst. Math. Sci. 17

(1981), no. 1, 235–244. (Jean-Louis Ducourtioux) 82e:88103 58G32 (60H10, 60J60) son, Suzanne (with Chandon, Jean-Louis) ★Analyse typologique. (French) [Typological analysis] Théories et applications. [Theories and applications] With a preface by E. Diday. Masson, Paris, 1981. x + 254 pp. ISBN 2-225-63613-3 (Table of contents) R2k-92073 92A25 (62H20, 62H30)

Pinter, Charles The logic of inherent ambiguity. Proceedings of the Third Brazilian Conference on Mathematical Logic (Inst. Math., Fed. Univ. Pernambuco, Recife, 1979), pp. 253-262, Soc. Brasil. Lógica, São Paulo, 1980. (N. C. A. da Costa) 82h:03059 03B60 (68G10)

lopes-Pinto, António J. B. See Lopes-Pinto, António J. B.

ntz, János On Legendre's prime number formula. Amer. Math. Monthly 87 (1980), no. 9, 733-735. (K. Masuda) 82e:01055 01A50 (10-03, 10H15)

(with Bentz, Hans-J.) Quadratic residues and the distribution of prime numbers Monatsh. Math. 90 (1980), no. 2, 91-100. (M. I. Israilov) 82e:10072 10H15 (10A15) (with Komlós, János; Szemerédi, Endre) On Heilbronn's triangle problem. J.

London Math. Soc. (2) 24 (1981), no. 3, 385-396. (W. W. Adams) 82m:10051 Pinus, A. G. The Löwenheim-Skolem property for second-order logics. (Russian) Recursive functions (Russian), pp. 55-60, Ivanov. Gos. Univ., Ivanovo, 1978. (A. T. Nurtazin) 82c:03058 03C85

A characterization of the category of linearly ordered sets. (Russian) Sibirsk. Mat. Ž. 22 (1981), no. 3, 156-161, 238. (V. Novák) 82j:06001 06A05 (18B35) The spectrum of rigid systems of Horn classes. (Russian) Sibirsk. Mat. Ž. 22 (1981),

no. 5, 153-157, 223. (O. V. Belegradek) 82k:03044 03C50 (03C20, 03C52, 06E99, 08A30, 08A35)

Pinzani, Renzo (with Cesarini, Francesca; Grazzini, Elisabetta; Pippolini, Fabio; Soda, Giovanni) ★Dynamic page allocation for AVL trees. Pubblicazioni Serie III [Publication Series III], 164. Isinuto per le Applicazioni del Calcolo "Mauro Picone (IAC), Rome, 1978. 19 pp. (Authors' summary) 82m:68035 68B15 (05C05, 68B2 68B15 (05C05, 68B20,

Pinzur, Laurence (with Philipp, Walter) Almost sure approximation theorems for the multivariate empirical process. Z. Wahrsch. Verw. Gebiete 54 (1980), no. 1, 1-13. (P. Révész) 82a:60039 60F15 (60G15)

Piotrowski, Zbigniew Separate almost continuity and joint continuity. Topology, Vol. 11 (Proc. Fourth Colloq., Budapest, 1978), pp. 957-962, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (Joe A. Guthrie) 82a:54020 54C05 Continuity points in $\{x\} \times Y$. (French summary) Bull. Soc. Math. France 108 (1980),

no. 1, 113-115. (T. R. Hamlett) 82m:54007 54C10 Pipija, G. M. (with Dalec'kil, Ju. L.) Calculation of distributions of integral polynomials of random processes by means of Feynman integrals. (Russian. Georgian and English

summaries) Soobšč. Akad. Nauk Gruzin. SSR 102 (1981), no. 2, 309-312. (Editors) 82m:60036 60G05 Pipkin, A. C. (with Rogers, T. G.) Holes in inextensible networks. Quart. J. Mech. Appl.

Math. 33 (1980), no. 4, 447-462. (Authors' summary) 82c:73015 73C40

Finite plane stress of stiff fibre-reinforced sheets. IMA J. Appl. Math. 27 (1981), no. 2, 195-209. (Author's summary) 82h:73043 73G99 (73K20)

Plane traction problems for inextensible networks. Quart. J. Mech. Appl. Math. 34 (1981), no. 4, 415–429. (Author's summary) 82m:73040 73G05

Pippenger, Nicholas A new lower bound for the number of switches in rearrangeable networks. SIAM J. Algebraic Discrete Methods 1 (1980), no. 2, 164–167. (Claude Benzaken) 82a:94119 94C10

On the evaluation of powers and monomials. SIAM J. Comput. 9 (1980), no. 2, 230–250. (D. G. Cantor) 82c:10064 10L05 (10M99, 68C25)
Algebraic complexity theory. IBM J. Res. Develop. 25 (1981), no. 5, 825–832.

(Author's summary) 82k:68020 68C25 (12-04, 65F99, 68-02) (with Lev, Gavriela Freund; Valiant, Leslie G.) A fast parallel algorithm for routing

in permutation networks. IEEE Trans. Comput. 30 (1981), no. 2, 93-100. (Authors' mary) 82m:68055 68B20 (68C25, 94C15)
Bounds on the performance of protocols for a multiple-access broadcast channel.

IEEE Trans. Inform. Theory 27 (1981), no. 2, 145-151. (Author's summary) 82i:94017

Computational complexity of algebraic functions. Special issue dedicated to Michael Machtey. J. Comput. System Sci. 22 (1981), no. 3, 454-470. (Maurice Mignotte)

82m:12001 12-04 (03D15, 68C25)

Pippolini, Fabio (with Cesarini, Francesca; Grazzini, Elisabetta; Pinzani, Renzo; Soda, Giovanni) ★Dynamic page allocation for AVL trees. Pubblicazioni Serie III [Publication Series III], 164. Istituto per le Applicazioni del Calcolo "Mauro Picone" (IAC), Rome, 1978. 19 pp. (Authors' summary) 82m:68035 68B15 (05C05, 68B20, 90B05, 90B30)

Pique, J. F. (with Colmerauer, A.) About natural logic. Advances in data base theory, Vol. 1 (Proc. Warkshop, Toulouse, 1979), pp. 343–365, Plenum, New York, 1981. (See 68B15 82a:68040)

formulation of Backlund transformations. With applications to nonlinear evolution equations. Mathematical Physics Studies, 1. D. Reidel Publishing Co., Dordrecht-Boston, ss.-London, 1979. viii + 132 pp. ISBN 90-277-1036-8 (A. M. Vinogradov) 82g:58097 58G35 (35A30, 81C99) nian, George (with Campbell, Douglas M.) Normal analytic functions and a question of M. L. Cartwright. J. London Math. Soc. (2) 20 (1979), no. 3, 467-471. (D. A. Storvick)

ni, Felix A. E. (with Robinson, David Clyde; Shadwick, William F.) *Local jet bundle

30D45

82c:30053 30D45

abvili, T. I. Spectral sequence of the epimorphism for (co)homology of groups and algebraic K-functors (Russian. Georgian and English summaries) Soobië. Akad. Nauk

Grazin. SSR 99 (1980), no. 3, 565–568. (From the text) 82m:18007 18F25 (20J05)

A Security Control of the first passage time over a given level

Alamov, B. (with Annaev, T. A.) Distribution of the first passage time over a given level for a random walk on a sawtooth Markov process. (Russian. English summary) Dokl. d. Nauk Ukrain. SSR Ser. A 1980, no. 9, 3-5, 103. (D. A. Darling) 82b:60093 60J30 (60J25)

Piret, Philippe (with Brouwer, Andries; Delsarte, Philippe) On the (23, 14, 5) Wagner code.

IEEE Trans. Inform. Theory 26 (1980), no. 6, 742-743. (From the text) 82h:94021

94B05

(with Delsarte, Philippe) Bounds and constructions for binary asymmetric error-correcting codes. *IEEE Trans. Inform. Theory* 27 (1981), no. 1, 125–128. (Authors' ary) 82b:94027 94B25

Pir'ev, Ju. O. (with Mokrik, R. I.) Some questions of the theory of coupled fields in uum mechanics. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1961, no. 3, 29-33, 93. (Authors' summary) 82i:73004

A 1981, no. 3, 29-33, 93. (Authors' summary) 82i:73004 73B99
ov, Dimit"r (with Kantardžieva, Elena) Über eine Verallgemeinerung des Kriteriums
von G. Pölya über die Irreduzibilität ganzzahliger Polynome im Körper der rationalen Zahlen. Serdica 5 (1979), no. 4, 316-320. (Hale F. Trotter) 82e:10068

See also Desimirova, L. K., 82k:10069

Pirie, Walter R. (with Lee, Larry) A graphical method for comparing trends in series of events. Comm. Statist. A—Theory Methods 10 (1981), no. 9, 827-848. (Authors' mary) 82f:62180 62N05 (62M10)

Piriou, Alain (with Chazarain, Jacques) *Introduction à la théorie des équations aux dérivées partielles linéaires. (French) [Introduction to the theory of linear partial differential equations] Gauthier-Villars, Paris, 1981. vii + 466 pp. ISBN 2-04-012157-9 (R. S. Freeman) 82i:35001 35-02 (46E35, 46F10, 47G05, 58Gxx)

Pirl, U. (with Michel, C.) Normalformen für schlichte endlich-vielfach zusammenhängende Gebiete bezüglich schichter konformer Abbildung mit vier Fixpunkten. Math. Nachr. 95 (1980), 119–133. (R. Kühnau) 82c:30021 30C55

Pirling, Christian (with Förster, Michael; Voelkel, Lutz) Zweiregister-Akzeptoren mit

ling, Christian (with Förster, Michael; Voelkel, Lutz) Zweiregister-Akzeptoren mit unterschiedlichen Druckbefehlen. Elektron. Informationsverarb. Kybernet. 16 (1980), no. 7, 325-334. (Authors' summary) 826-68050 68F10 mamedov, F. K. A numerical method for solving the problem of displacement of petroleum by water in a bounded porous medium in the presence of a number of contours of petroleum content. (Russian) Azerbaidžian. Gos. Univ. Učen. Zap. 1979, no. 2, 85-93. (From the text) 828-76070 76S05 (65P05) maddi Pion. A. See Grienald Pion. A.

maldi Piro, A. See Grimaldi Piro, A. rogov, G. G. See Zellner, Arnold, 82c:62150

n, C. A first lecture on quantum mechanics. Quantum mechanics, a half century later (Collog., Univ. Louis Pasteur, Strasbourg, 1974), pp. 69-87, Episteme, 5, Reidel, Dordrecht, 1977. (C. W. Kilmister) 82b.81013 81B10 (03G12) Dordrecht, 1977. (C. W. Kilmister) 82b:81013

Galilean and Lorentz particles: a new approach of quantization. Problems in the foundations of physics (Proc. Internat. School Phys. "Enrico Fermi", Course LXXII, Varenna, 1977), pp. 300-307, North-Holland, Amsterdam, 1979. (See 82m:81003)

A new type of Schrödinger equation. Quantum theory and the structures of time and space, Vol. 3 (Third Conf., Tutzing, 1978), pp. 77-83, Hanser, Munich, 1979. (F. R. Halpern) 82c:81024

nu, Olivier (with Bardos, Claude; Bercovier, Michel) Vortex method with finite element for the Euler equation. Computing methods in applied sciences and engineering (Proc. Fourth Internat. Sympos., Versailles, 1979), pp. 213–227, North-Holland, Amsterdam, 1980. (V. Girault) 82c:76026 76C05 (58D05, 65N30) (with Bardos, Claude; Bercovier, Michel) The vortex method with finite elements.

Math. Comp. 36 (1981), no. 153, 119-136. (Authors' summary) 82c:65066 (65M25, 76C05)

di Pisa, Giovanni See Di Pisa, Giovanni

d Pisa, Giovanni See Lu risa, Giovanni Pisanee, S. I. Limit theorems for processes of diffusion type in Rⁿ. (Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 3, 597–606. (Z. Schuss) 60H10 (60J60)

sanski, Tomaž (with Shawe-Taylor, John) Search for minimal trivalent cycle permutation graphs with girth nine. Discrete Math. 36 (1981), no. 1, 113-115. (Norman Biggs) 82k-05072 05C35

(with Jackson, Brad; Parsons, Torrence D.) A duality theorem for graph embeddings. J. Graph Theory 5 (1981), no. 1, 55-77. (Jonathan L. Gross) 82f:05034

arenko, V. G. Approximate solution of a nonlinear two-dimensional integral equation with variable limits by means of bicubic splines. (Russian) Boundary value problems of mathematical physics (Russian), pp. 142-154, 181, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1978. (B. I. Kvasov) 82g:65065 65R20

arenok, V. P. The behavior of solutions of a class of first-order differential equations in

the complex plane. (Russian) Differencial'nye Uravnenija 17 (1981), no. 5, 930-932, 959. (Shlomo Strelitz) 82h:34007 34A20 (34A30)

Pisarevskii, V. A. Minimization of losses in a system of multistage optimization. (Russian) Èkonom. i Mat. Metody 16 (1980), no. 5, 997-999. (I. Maruşciac) 82k:90042 90A16 Pisarski, Robert D. (with Stein, D. L.) Critical behavior of linear Φ^4 models with $G \times G'$

symmetry. Phys. Rev. B (3) 23 (1981), no. 7, 3549-3552. (Authors' summary) 82c:82034 82A25 (82A51)

(with Gross, David J.; Yaffe, Laurence G.) QCD and instantons at finite temperature. Rev. Modern Phys. 53 (1981), no. 1, 43-80. (From the summary) 82e:81053

Pisarskii, A. V. (with Kurgaev, A. F.) Telescopic approximation of functions. Avionatika

1978, no. 2, 80-84, 95 (Russian. English summary); translated as Soviet Automat. Control 11 (1978), no. 2, 67-71 (1979). (Authors' summary) 82k:41006 41A10 coya Hermoza, Francisco Mario The strong approximation property in formally real fields. (Spanish. English summary) Rev. Cienc. (Lima) 72 (1980), no. 1, 5-13. (A.

12D15 Prestel) 82k:12024

harody, Vijay B. (with Michalopoulos, Panos G.; Stephanopoulos, Gregory) Modeling of traffic flow at signalized links. *Transportation Sci.* 14 (1980), no. 1, 9-41. (Authors' mary) 82m:90080 90B20

Psier, Gilles Estimations des distances à un espace euclidien et des constantes de projection des espaces de Banach de dimension finie; d'après H. König et al. Séminaire d'Analyse nnelle (1978-1979), Exp. No. 10, 21 pp., École Polytech., Palaiseau, 1979. (N.

Tomczak-Jaegermann) 82e:46030 46B20
Sur les espaces de Banach de dimension finie à distance extrémale d'un espace euclidien [d'après V. D. Milman et H. Wolfson]. Séminaire d'Analyse Fonction (1978-1979), Exp. No. 16, 10 pp., École Polytech., Palaiseau, 1979. (H. E. Lacey)

46B20 Sur les espaces de Banach K-convexes. Seminar on Functional Analysis, 1979-1980 (French), Exp. No. 11, 15 pp., École Polytech., Palaiseau, 1980. (T. Figiel) 82i:46028 46B20 (47D05)

Conditions d'entropie assurant la continuité de certains processus et applications à l'analyse harmonique. Seminar on Functional Analysis, 1979–1980 (French, Exp. No. 13-14, 43 pp., École Polytech., Palaiseau, 1980. (S. V. Hruščěv) 82j:60067 (43A25, 47B10)

Un théorème sur les opérateurs linéaires entre espaces de Banach qui se factorisent par un espace de Hilbert. Ann. Sci. École Norm. Sup. (4) 13 (1980), no. 1, 23-43. (N. Tomczak-Jaegermann) 82b:47025 47B10 (46B99)

De nouvelles caractérisations des ensembles de Sidon. (English summary) [Some new characterizations of Sidon sets] Mathematical analysis and applications, Part B, pp. 685-726, Advances in Math., Suppl. Studies, 7b, Academic Press, New York, 1981. (George S. Shapiro) 82m:43011 43A46 (43A15)

(with Marcus, Michael B.) Caractérisation des processus p-stables, fortement stationnaires, à trajectoires continues. (English summary) [Characterization of strongly stationary p-stable processes with continuous sample paths] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 8, 439-441. (Authors' summary) 82m:60045 60G17 (60G15)

Piskarev, S. I. Approximation of holomorphic semigroups. (Russian. English summary) Tartu Riikl. Ül. Toimetised No. 492 (1979), 3-14. (Pavel Doktor) 82c47047 47D0.

Piskorek, Adam ★Równania całkowe. (Polish) [Integral equations] Elementy teorii i zastosowania. [Elements of theory and applications] Second edition. Wydawnictwa Naukowo-Techniczne (WNT), Warsaw, 1980. 330 pp. (loose errata). ISBN 83-204-0155-0

(with Zabrodzki, E.) Über die instationären hydrodynamischen Potentiale. Z. Angew. Math. Mech. 60 (1980), no. 7, T267-T269. (Michael Wiegner) 82i:35147

men, L. M. Bifurcation into wave patterns and turbulence in reaction-diffusion equations. *Phys. Rev. A* (3) 23 (1981), *no.* 1, 334–344. (Tommaso Ruggeri) 82e:80011 80A30 (35K55, 58F14, 92A09)

ents en algorithme de Jacobi de certaines irrationnelles Pisot, Charles Sur des développem liées à des fonctions de Bessel. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 2, 131–134. (Author's summary) 82b:10042 10F35 (10A30, 10F20)

etzky, Sergio (with Basombrio, Fernando G.) Efficient calculation of numerical values of a polyhedral function. *Internat. J. Numer. Methods Engrg.* 17 (1981), no. 2, 231–237. (Authors' summary) 82b:65137 65N30

KUBIK: an automatic three-dimensional finite element mesh generator. *Internat. J.*

er. Methods Engrg. 17 (1981), no. 2, 255-269. (From the summary) 82c:65078 65N30 (65-04)

(with Basombrio, Fernando G.) On the numerical errors in one-step algorithms for time dependent problems. Numer. Math. 38 (1981/82), no. 1, 31-37. (Authors summary) 82k:65058 65N20 (65G05)

Pistone, G. (with Bellomo, Nicola) Time-evolution of the probability density under the action of a deterministic dynamical system. J. Math. Anal. Appl. 77 (1980), no. 1, 215-224. (T. T. Soong) 824:60102 60G99 (28D99, 54H20, 60H10, 65U05)

Pitacco, Ermanno On a generalization of the traveling salesman problem. (Italian. English summary) Riv. Mat. Sci. Econom. Social. 1 (1978), no. 2, 51-66. (From the summary)

821:90034 90B10 (05С38, 68С25, 90В35)

Рітаечskii, L. Р. (with Beresteckii, V. В.; Lifšic, E. М.) ★Теоретическая физика ("Ландау-Лифшин"). Том IV. (Russian) [Theoretical physics ("Landau-Lifšic"). Vol. IV] Квантовая электродинамика. [Quantum electrodynamics]. Second edition. "Nauka", Moscow, 1980. 704 pp. (K. Wódkiewicz) 82g:81001 81-01 (81L05)

(with Dikman, S. M.) New type of convection in a magnetoactive plasma. Z. Èksper. Teoret. Fiz. 78 (1980), no. 5, 1752-1759 (Russian); translated as Soviet Phys. JETP 51 (1980), no. 5, 879-883 (1981). (Authors' summary) 82b:76073 76X05 (82A45)

Pitcher, Everett Counting compatible boundary conditions. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 379–388, Lecture Notes in Math., 819, Springer, Berlin, 1980. (U. D'Ambrosio) 82e:58029 58E05 (34C05)

Piterbarg, V. I. Poisson limit theorem for large excursions of a Gaussian sequence. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 1, 48-50. (S. A. Book) 82j:60063 (60F05, 60G55)

(with Prisjažnjuk, V. P.) Exact asymptotic behavior of the probability of large span of a Gaussian stationary process. (Russian English summary) Teor. Verojatnosi Primenen. 26 (1981), no. 3, 480-495. (Franz Schmidt) 82m:60042 60G15 (60F10)

Pitis, Gh. On the singular cohomology of a topological space. (Romanian. French summary) Bul. Univ. Braşov Ser. C 21 (1979), 113-118. (Author's summary) 82j:55005 (55N10)

Pitkäranta, Juhani Boundary subspaces for the finite element method with Lagrange multipliers. Numer. Math. 33 (1979), no. 3, 273-289. (P. G. Ciarlet) 82b:65138

The finite element method with Lagrange multipliers for domains with corners.

Math. Comp. 37 (1981), no. 155, 13-30. (David F. Griffiths) 82h:65087 65N30

Pitman, Jim W. (with Yor, Marc) Processus de Bessel, et mouvement brownien, avec "drift". (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A151-A153. (Authors' summary) 82b:60105 60J65

(with Greenwood, Priscilla) Construction of local time and Poisson point processes from nested arrays. J. London Math. Soc. (2) 22 (1980), no. 1, 182-192. (Jacques Azéma) 82a:60117 60J55 (60G55)

A note on L₂ maximal inequalities. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 251–258, Lecture Notes in Math., 850, Springer, Berlin, 1981. (Mou-Hsiung Chang) 82h:60090 60G44 (60G42) (with Yor, Marc) Bessel processes and infinitely divisible laws. Stochastic integrals

(Proc. Sympos., Univ. Durham, Durham, 1980), pp. 285-370, Lecture Notes in Math., 851,
 Springer, Berlin, 1981. (D. A. Darling) 82j:60149 60J60 (60E07)
 (with Rogers, L. C. G.) Markov functions. Ann. Probab. 9 (1981), no. 4, 573-582.

(D. Kannan) 82j:60133 60J25 (60J65)

Pitovranov, S. E. (with Četverikov, V. M.) A class of boundary value problems for stochastic differential equations. (Russian. English summary) Teoret. Mat. Fiz. 43 (1980), no. 2, 240-252. (S. G. Kalandarišvili) 82b:60067 60H10 (76F10)

Pittel', B. G. A process of runs and its convergence to the Brownian motion. Stock Process. Appl. 10 (1980), no. 1, 33-48. (Endre Csáki) 82a:60044 60F17 (60C05) Limiting behavior of a process of runs. Ann. Probab. 9 (1981), no. 1, 119–129. (Endre Csāki) 82f:60058 60F05 (60C05) lenger, A. O. Success probabilities for second guessers. J. Appl. Probab. 17 (1980), no. 4, 1133–1137. (James Berger) 82a:62023 62C99

Pitteri, Mario A counterexample for the heat-transfer condition in the kinetic theory of gases. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 5, 303-307 (1980). (Author's summary) 82f:82037 82A40 (80A20)

The secondary characteristic classes of parabolic foliations. Con Math. Helv. 54 (1979), no. 4, 601-614. (D. B. Fuks) 82h:57022 57R30 (57R32) Pittl, Jan Characterizations of stack uniform strict deterministic languages. Kybernetika

(Prague) 17 (1981), no. 3, 209-221. (Author's summary) 82h:68108 wer, F. (with Wyrwich, Herbert) Ganze Funktionen mit gebrochenen asymptotischen Potenzreihen-Entwicklungen. (English and Serbo-Croatian summaries) Glas. Mat. Ser. III 15(35) (1980), no. 2, 269-278. (S. M. Shah) 82c:30060 30E15 (30D15)

Pittner, L. (with Gesztesy, F.) On the commutation relation [A, B] = -icl. Lett. Nuovo Cimento (2) 22 (1978), no. 8, 332-335. (Editors) 82d:81059 81D05 (47B25)

Pitts, Joan I. (with Smith, Robert E.) The solution of the three-dimensional viscous-compressible Navier-Stokes equations on a vector computer. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Interne Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 245-252, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82c:76085 76N99 (65-04, 65P05)

Piven', N. N. An inverse boundary value problem for domains that are holomorphically equivalent to the bidisc. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1979, no. 8, 45-53. (Author's introduction) 82k:32028 32A40

Pivovarčik, V. N. (with Maljarov, V. V.) The inverse problem of quantum scattering theory for fixed energy under spin-orbital interaction. (Russian. English summary) Ukrain. Fiz. Ž. 25 (1980), no. 4, 635–640, 697. (H. Baumgärtel) 82f:81068 81F05 (34B25)

(with Maljarov, V. V.) An algebraic method for solving an inverse problem of the um scattering theory for fixed energy under spin-orbit interaction. (Russian. English summary) Ukrain. Fiz. Ž. 26 (1981), no. 2, 233-239, 348. (Nicolae Angelescu) 81F05 (34B25, 35R30)

Pivovarov, I. Some nonlinear systems' damping properties. Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 1, 133-149. (Author's summary) 82d:70040 70K99 Nonconservative oscillatory systems with periodic solutions. (German summary) Internat. J. Non-Linear Mech. 16 (1981), no. 2, 187-190. (From the text) 82e:70022

70K99 (34C25, 58F22)

Pixton, Dennis More counterexamples to Coleman's conjecture. Proc. Amer. Math. Soc. 82 (1981), no. 1, 145-148. (F. W. Wilson, Jr.) 82g:58077 58F25 (34D30, 58F15)

niglio, Pier Luigi Study of the horological works in the Carlo Vigano collection. (Italian. English summary) Proceedings of the Brescia Mathematical Seminar, Vol. 4 (Italian), pp. 84-97, Sci. Mat., 4, Vita e Pensiero, Milan, 1980. (Author's summary) 01A75

Pizzella, G. (with Amaldi, E.) Search for gravitational waves. Relativity, qu cosmology in the development of the scientific thought of Albert Einstein, Vol. I, II, pp. 9-139, Johnson, New York, 1979. (See 82b:83002) 83C35

'Since', 'even if', 'as if'. Italian studies in the philo Boston Studies Philos. Sci., 47, Reidel, Dordrecht, 1981. (Stephen Read) 82d:03043 03B65

Pjarnpuu, A. A. (with Zmievskaja, G. I.; Šematovič, V. I.) Application of Monte Carlo methods to the study of the states of a gas mixture with internal degrees of freedom. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 2, 511-516, 528. (I. N. Molčanov) 65C05 (76T05)

Pjartli, A. S. (with Il'jašenko, Ju. S.) Neighborhoods of zero type imbeddings of complex tori. (Russian) Trudy Sem. Petrovsk. No. 5 (1979), 85-95. (H. Tornehave) 82a:58045

Pjaseckii, R. N. A problem of resource allocation on a flow grid and its application to the construction of dynamical flows. (Russian) Mathematical methods of solution of economic problems, No. 8 (Russian), pp. 75-81, "Nauka", Moscow, 1979. (K. Zimmermann) 82g:90046 90B10

S2g.90046 90B10

Pjaseckii, V. S. A finiteness theorem for convex cones of finite type. (Russian) Dokl. Akad.

Nauk SSSR 250 (1980), no. 2, 288-290. (E. Vinberg) 82æ32037 32M10 (20H20,

Classification of convex cones of finite type of rank four. (Russian) Trudy Sem. Vektor. Tenzor. Anal. No. 20 (1981), 86-107. (A. Korányi) 82i:32059 32M10 (57S25)

Pjatkov, S. G. Local solvability of the Cauchy problem and boundary value problems for certain nonlinear hyperbolic equations. (Russian) Application of the methods of functional analysis to problems of mathematical physics and numerical analysis (Russian), pp. 107–115, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1979. (Sergiu

Aizicovici) 82b:35095 35L15 (35L20, 35L70)
A third-order nonlinear equation. (Russian) Partial differential equations (Proc.

Conf., Novosibirsk, 1978) (Russian), pp. 94-96, 250, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (J. Muszyński) 82g:35028 35G30
Pjatnicyn, B. N. (with Tjagnibedina, O. S.) The role of the concepts of "probability" and "degree of certainty" in B. Bolzano's logic. (Russian) Studies in logical meti-(Russian), pp. 167-181, Moskov. Gos. Univ., Moscow, 1980. (Siegfried Gottwald)

Riassian), pp. 107-101, measure. Uses: One., measure. Post. Gregarian State of Carrierion CST.6 in Chapter IV of Nicolas Bourbaki's Théorie des ensembles. (Spanish). Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish). pp. 291-294, Consejo Sup. Inv. Cient., Madrid, 1977. (From the introduction) 82h:04001

nov, A. B. Nonstationary normal waves of a thin curved waveguide in a multiray zone (uniform asymptotics). (Russian. English summary). Interference waves in layered media, I. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 99 (1980), 127-137. 159-160. (Author's summary) 82d:78025 78A50

Plachky, Detlef (with Lipecki, Zbigniew; Thomsen, W.) Extensions of positive operators and extreme points. I. Colloq. Math. 42 (1979), 279-284. (N. Pacchiarotti) 82k:47055

Darboux property of measures and contents. Math. Slovaca 30 (1980), no. 3, 243-246. (J. Diestel) 82a:28003 28A12

with Baringhaus, Ludwig) On the optimality of the sample variance. Comm. Statist.

A—Theory Methods 10 (1981), no. 13, 1277-1284. (Bradford R. Crain) 82g:62044 62F10

Plackett, R. L. ★The analysis of categorical data. Second edition. Griffin's Statistical Monograph Series, 35. Macmillan Co., New York, 1981. xii + 207 pp. ISBN 0-02-850420-8 (From the preface) 82m:62001 62-01 (62H17)

(with Abdelbasit, K. M.) Experimental design for categorized data. (French ummary) Internat. Statist. Rev. 49 (1981), no. 2, 111-126. (Authors' summary) 82k:62151 62K99

Plahta, L. P. (with Homenko, M. P.; Gluhov, A. D.) The simplest properties of q-transforms of topological spaces. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1981, no. 1 q-Preobrazovanija i Kombinator. Svošstva Grafov, 5-16, 54. (From the text) 82i:54028 54C10 Plahtienko, N. P. Forced oscillations of a system with nonmonotonic discontinuous

characteristic friction. Prikl. Meh. 16 (1980), no. 7, 108-115 (Russian); translated as Soviet Appl. Mech. 16 (1980), no. 7, 639-645 (1981). (Author's summary) 82k:70024 70K40 (34C15)

ission et réflexion d'une onde plane sur une surface agitée. (English Plaisant, Alain Transi summary) Study Conference on Acoustic Propagation (Marseille, 1980). Rev. CETHEDEC Cahier 1980, no. 1, 195-205. (Author's summary) 82j:76070

Plaisted, David A. The application of multivariate polynomials to inference rules and partial tests for unsatisfiability. SIAM J. Comput. 9 (1980), no. 4, 698-705. (P. Štěpánek) 82g:68045 68C25 (03B35)

Theorem proving with abstraction. Artificial Intelligence 16 (1981), no. 1, 47-108. (S.

Ju. Maslov) 82m:68134 68G15 (03B35) Erratum: "Fast verification, testing, and generation of large primes" [Theoret. Comput. Sci. 9 (1979), no. 1, 1-16; MR 80d:10012]. Theoret. Comput. Sci. 14 (1981), no. 3, 345. (Editors) 82f:10008 10.025 (10-04, 68C05)

Plakhtienko, N. P. See Plahtienko, N. P.

Plaksin, V. A. Weak equivalence of finite automata. Izv. Akad. Nauk SSSR Tehn. Kibernet.

1979, no. 6, 117-122, 221 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 6,

90-95 (1980). (Author's summary) 821:68056 68D05
Representation of numbers by the sum of four squares of integers, two of which are prime numbers. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 5, 1064-1066. (M. I. Israilov) 82h:10027 10B35 (10J10)

Plaksina, O. A. Some inverse boundary value problems for Sturm-Liouville operators. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 5, 1051–1054. (Jan Bochenek) 82c:34026 34B25

Characterization of the spectrum of some boundary value problems for the Sturm-Liouville operator. (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 199-200. 34B25 (47E05) (Jan Bochenek) 82h:34027

nenevskii, B. A. (with Maz'ja, V. G.; Morozov, N. F.) Nonlinear bending of a plate with a crack. (Russian) Differential and integral equations. Boundary value problems (Russian), pp. 145-163, Tbilis. Gos. Univ., Tbilisi, 1979. (R. Kodnár) 82b:35063

(with Maz'ja, V. G.) Pseudoanalyticity of the solutions of a perturbed polyharmonic equation in R. (Russian) Scattering theory. Theory of oscillations (Russian), pp. 75-91, 185, Probl. Mat. Fiz., 9, Leningrad. Univ., Leningrad, 1979. (R. V. Duduchava) 824:35043 35J30 (31B30)

Planat, Michel (with Theobald, Geneviève) Phénomènes non linéaires dans les dispositifs élastiques à forte puissance. (English summary) Study Conference on Acousti Propagation (Marseille, 1980). Rev. CETHEDEC Cahier 1980, no. 1, 39-45. (Authors' nary) 82d:73016 73C50 (73D35)

Planchard, J. Fréquences propres d'un faisceau de tubes placés dans un liquide. (English summary) Bull. Direction Études Rech. Sér. C Math. Inform. 1980, no. 2, 3, 45-54. (Author's summary) 82a:73026 73J06 (76B99)

(with Bossavit, Alain) Simplicité de la valeur propre 1 pour les opérateurs intégra à noyau positif stochastique irréductible. (English summary) Bull. Direction Études Rech. Sér. C Math. Inform. 1980, no. 2, 3, 43–44. (Authors' summary) 82b:60080 60H99

Planck, Max H. A. Lorentz (1853-1928). (Bulgarian) Translated from the German by D. Vačov. Fiz.-Mat. Spis. B"lgar. Akad. Nauk. 21(54) (1978), no. 1, 75-83. (Editors)

82e:01099 01A70

Plans, Antonio Heterogonal systems of subspaces. Proceedings of the IV International Systems of Subspaces. Proceedings of the IV International Systems of Subspaces. his, Antonio Tretetogonal systems of saugustes. Proceedings of new Princentinosa Colloquium on Differential Geometry (Univ. Santiago de Compostela, Santiago de Compostela, 1978), pp. 225–233, Cursos Congr. Univ. Santiago de Compostela, 15, Univ. Santiago de Compostela, Santiago de Compostela, 1979. (E. R. Lorch) 82a: 46026

nt, Andrew T. A note on the modulus of convexity. Glasgow Math. J. 22 (1981), no. 2, 157-158. (Zvi Altshuler) \$28:46030 46B20 (52A07)

nigroups in uniformly convex spaces. Israel J.

- Math. 38 (1981), no. 3, 257-268. (T. M. Liggett) 824-47072 47H20

 th. Richard E. (with Miura, Robert M.) Rotating waves in models of excitable media.

 Differential equations and applications in ecology, epidemics, and population problem. ial equations and applications in ecology, epidemics, and populations, Calif., 1981), pp. 247–257, Academic Press, New York, 1981. (See 82-92003) 92A09
 - A FitzHugh differential-difference equation modeling recurrent neural f SIAM J. Appl. Math. 40 (1981), no. 1, 150-162. (F. Brauer) 82g:34104 (58F14, 92A09)
- e, J. F. Anosov flows, transversely affine foliations, and a conjecture of Verjovsky. J. don Math. Soc. (2) 23 (1981), no. 2, 359-362. (Robert Roussarie) 82g:5800
- bitinina, V. D. Geometric properties of congruences of projective t-normals. (Russian)
 Differential geometry of homogeneous spaces (Russian), pp. 90-109, Irkutsk. Gos. Univ.,
 Irkutsk, 1979. (Josef Vala) 824:53014 53A25
- tino, A. (with Gutierrez, G.) A systematic approach to the Hartree-Fock problem in the thermodynamic limit. Ann. Physics 133 (1981), no. 2, 332-354. (Authors' summary) 82k:81097 81H10
- Plateau, Brigitte (with Colfman, Edward G., Jr.; Gelenbe, Erol) Optimization of the number of copies in a distributed data base. IEEE Trans. Software Engrg. 7 (1981), no. 1, 78-84. (Authors' summary) 82m:68036 68B15
- Plátek, M. (with Svejdarová, H.) Dependency grammars with non-context-free rules.

 Prague Bull. Math. Linguist. No. 34 (1980), 65-71. (From the text) 82g:68074 68F05

 Platen, Eckhard **An approximation method for a class of Itô processes with jump component. With German and Russian summaries. Wissenschaftliche Sitzungen zur Stochastik 80 [Scientific Meetings on Stochastics 80], 1. Akademie der Wissenschaften der DDR, Institut für Mathematik, Berlin, 1980. ii + 26 pp. (D. Kannan) 82a:60094 60H20 (65C05)

on of Itô integral equations. Stochastic differential systems (Proc. IFIP-WG 7/1 Working Conf., Vilnius, 1978), pp. 172–176, Lecture Notes in Control and Information Sci., 25, Springer, Berlin, 1980. (Shinichi Kotani) 82i:60117 60H20

Weak convergence of approximations of Itô integral equations. (German and Russian aries) Z. Angew. Math. Mech. 60 (1980), no. 11, 609-614. (A. I. Dale) 82f:60145 60H20 (60F99, 65U05)

An approximation method for a class of Itô processes. (Lithuanian and Russian amaries) Litovsk. Mat. Sb. 21 (1981), no. 1, 121-133. (B. Marchal) 82g:60083

ath, P. J. Strukturelle Aspekte des Aromatizitätsbegriffes. Proceedings of Bremer Konferenz zur Chemie (Univ. Bremen, Bremen, 1978), Part II. Match No. 7 (1979), 229-253. (From the text) 82:92044 92A40 (82A99)

Plato, Jan Reductive relations in interpretations of probability. Synthese 48 (1981), no. 1, 61–75. (Maurizio Fattorosi-Barnaba) 82j:60005 60A05 (03B48, 03G12, 81B99) tone Garroni, Maria Giovanna (with Hanouzet, Bernard; Joly, Jean-Luc) Régularité pour la solution d'un système I.Q.V. (Italian summary) Rend. Accad. Sci. Fis Napoli (4) 46 (1979), 395-397 (1980). (Lucio Boccardo) 82m:35063 35185 (49/ 35J85 (49A29) Vivaldi, Maria Agostina) Bilateral inequalities and implicit

ateral systems of the nonvariational type. Manuscripta Math. 33 (1980/81), no. 2, 49A29 (35J85, 60H99) 177-215. (Alfonso Castro) 82f:49006

nov, V. P. Reduced K-theory for n-fold Henselian fields. (Russian) Dokl. Akad. Nauk 10000, V. P. Reduced A-theory for #-100t reinschant neites (Russian) Dokt. Akad. Nauk SSSR 249 (1979), no. 6, 1318-1320. (J. Browkin) 82e:12026 12E15 (1285), 16A54) (with Bondarenko, A. A.; Rapinčuk, A. S.) Numbers and groups of classes of algorithms of classes of alg

onova, O. A. Singularities in the problem of the fastest passage of an obstruction. (Russian) Funkcional. Anal. i Priložen. 15 (1981), no. 2, 86–87. (G. N. Himšiašvili) n) Funkcio 58C27 (35R35, 49F10, 53C22)

ngularities of relative position of a surface and a line. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 221-222. (Peter Giblin) 82d:14003 14B05 (58C27)

wa, V. I. Finite equations of some nonruled surfaces in a three-dimen sional affine

space. (Russian: English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 6, 45-49, 141. (Z. Nādenik) 82j:53012 53A15

att, C. R. (with Grätzer, G.; Sands, Bill) Embedding lattices into lattices of ideals.

Pacific J. Math. 85 (1979), no. 1, 65-75. (Authors' summary) 82k:06005 06B10

(with Grätzer, G.) A characterization of sharply transferable lattices. Canad. J. Math. 32 (1980), no. 1, 145-154. (J. Kist) 82a:06010

Finite transferable lattices are sharply transferable. Proc. Amer. Math. Soc. 81 (1981), no. 3, 355–358. (Werner Poguntke) 82c:06612 06B05

Platte, Erich Differentielle Eigenschaften der Invarianten regulärer Algebren. J. Algebra 62

(1980), no. 1, 1-12. (Jürgen Herzog) 824:13021 13H99 (32B05)

Zur endlichen homologischen Dimension von Differentialmoduln. (English summary) nuscripta Math. 32 (1980), no. 3-4, 295-302. (Jürgen Herzog) 82d:13015 (32B05)

Pure descent for the module of Zariski differentials. Proc. Amer. Math. Soc. 82 (1981), no. 1, 7-12. (Ernst Kunz) 82-14008 14899 (13810, 14F10) tynowicz, Barbara On some extremal problems in classes of holomorphic functions

- $S_p^*(\rho)$, $S^0 dp(\rho)$, $\Sigma_p^*(\rho)$. Mat. Vesnik 4(17)(32) (1980), no. 2, 203-219. (R. Kühnau) 30C45 82f:30012
- Platzeck, A. M. (with Agudin, J. L.) Resolution of the fields of an accelerated charge into their bradyonic and tackyonic parts. Phys. Lett. A 83 (1981), no. 9, 423-427. (Authors' summary) 82f:83001 83A05 (78A35)
- m, Loren K. Optimal infinite-horizon undiscounted control of finite probabilistic s. SIAM J. Control Optim. 18 (1980), no. 4, 362-380. (A. A. Juškevič) 82k:90131 90C48 (93E20)
- n, Peter (with Strambach, Karl) Die lokal kompakten Halbgruppen und Ringe von Pollák-Rédeischem Typus. Publ. Math. Debrecen 26 (1979), no. 3-4, 199–203. (A. B. Paalman-de Miranda) 82e:22005 22A15

See also Geometry—von Staudt's point of view, 82e:51005

Plavšić, M. (with Naerlović-Veljković, Natalija) Thermodiffusion in dipolar elastic terials. (Serbo-Croatian. English summary) Acad. Serbe Sci. Arts Glas 311 (1979),

no. 44, 29-38. (I. Aganović) 82e:73006 73B05 (with Vukobrat, M.) Thermodiffusion in micropolar elastic plates. (Serbo-Croatian. English summary) Acad. Serbe Sci. Arts Glas 311 (1979), no. 44, 53-63. (I. Aganović) 82e:73007 73B05 (73U05)

Plazzi, Piero The equations y' = Sy + T and By' = Sy + T with B, S, T distributions. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 3-4, 206–213 (1980). (S. Lojasiewicz) 82m:34063 34G10 (46F10)

Elements of algebras @_@\(\mathre{R}'\) as linear functionals. (Italian summary) Atti Sem.

Mat. Fis. Univ. Modena 28 (1979), no. 1, 174-184. (R. S. Pathak) 82b:46049 46F10

- baliski, Jerzy F. (with Robinson, Ivor) Electromagnetic and gravitational Hertz potentials. J. Math. Phys. 19 (1978), no. 11, 2350-2358. (Authors' summary) 82i:83042 83C50 (53C10, 83C30)
 - (with Przanowski, M.) Generalized Goldberg-Sachs theorems in complex and real ce-times. II. Acta Phys. Polon. B 10 (1979), no. 7, 573-599. (Authors' summary) 83C99 (53A40)
 - (with Boyer, Charles P.; Finley, J. D., III) Complex general relativity, & and &&
 - spaces—a survey of one approach. General relativity and gravitation, Vol. 2, pp. 241-281, Plenum, New York, 1980. (Garry Ludwig) 82k:83015 83C30 (53C55)
 - (with Garcia Diaz, Alberto) Some type-G solution of electrovac equations. (Italian and Russian summaries) Nuovo Cimento B (11) 55 (1980), no. 1, 52-58. (Authors' summary) 82s:83014 83C50 (53B50, 83C20)
 - with Seligman, Thomas H, Partial isometries and quotient structures in Hilbert ces. Rep. Math. Phys. 17 (1980), no. 3, 437–458. (C. S. Sharma) 82j:47060 47D05 (47B99, 81C99)
 - (with Finley, J. D., III) All algebraically degenerate % spaces, via %% spaces. J. Math. Phys. 22 (1981), no. 4, 667-674. (Marcos D. Maia) 82g.83006 83C30 (53B50, 83C20)
 - (with Alarcon Gutiérrez, Sabás; Dudley, Alan L.) Signals and discontinuities in general relativistic nonlinear electrodynamics. J. Math. Phys. 22 (1981), no. 12, 2835–2848. (Philippe-A. Dionne) 82m:83027 83C55 (83C50)
- Pletko, V. N. (with Bogoljubov, N. N., Jr.; Vozjakov, V. I.) Many-boson averages for Dicke-type model systems. (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 3, 363-372. (D. Ja. Petrina) 82j:82021 82A15 (81K05)

no. 3, 903-372. (D. Ja. Petrina) 843-8404 BZAT3 (81805) Critical-point singularities. I. The critical-point condition and susceptibility. (Russian. English summary) Teoret. Mat. Fiz. 46 (1981), no. 1, 111-124. (Author's

summary) 82i:82028a 82A25 Critical point singularities. II. The ordered phase. (Russian. English sum

Teoret. Mat. Fiz. 47 (1981), no. 1, 106-119. (Author's summary) 82i:82028b ons, Robert J. (with Berman, Abraham) *Nonnegative matrices in the

mathematical sciences. Computer Science and Applied Mathematics. Academ [Harcourt Brace Jovanovich, Publishers], New York-London, 1979. xviii + 316 pp. ISBN 0-12-092250-9 (R. S. Varga) 82b:15013 15A48 (15-02, 60J05, 90C33)

(with Golub, Gene H.) Sparse least squares problems. Computing methods in sciences and engineering (Proc. Fourth Internat. Sympos., Versailles, 1979), pp. 489-496, North-Holland, Amsterdam, 1980. (D. S. Henderson) 82a:65025 65F05

(with Berman, Abraham; Parlett, B. N.) Diagonal scaling to an orthogonal matrix. SIAM J. Algebraic Discrete Methods 2 (1981), no. 1, 57-65. (Authors' summary) 65F35 (15A21)

See also Large scale matrix prol ems, 82j:65017

- PleScinskaja, I. E. Some nonintegral representations of solutions of linear elliptic and hyperbolic systems of first-order partial differential equations. (Russian) Partial differential equations, pp. 63-72, Rjazan. Gos. Ped. Inst., Ryazan, 1980. (See 82i:35004)
- Pleščinskii, N. B. On the solution of boundary value problems for the generalized Tricomi equation by the method of integral equations. (Russian) Trudy Sem. Kraev. Zadačam No. 16 (1979), 112-126, 244. (Author's summary) 82g:35080 35M05 (45A05)
- skač, P. M. The value of operative information. (Russian) Ekonom. i Mat. Metody 16 (1980), no. 5, 952-960. (Editors) 82e:94003 94A05
- Plesken, Wilhelm Projective lattices over group orders as amalgamations of irreducible lattices. Representation theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 438-448, Lecture Notes in Math., 832, Springer, Berlin, 1980. (From the 16A26 introduction) 82b:16009

(with Neubüser, Joachim; Wondratschek, H.) An emendatory discursion on defining crystal systems. Proceedings of the Conference on Kristallographische Gruppen (Univ. Bielefeld, Bielefeld, 1979), Part II. Match No. 10 (1981), 77-96. (Daniel B. Litvin) 20H15 (51F15, 82A60)

Bravais groups in low dimensions. Proceedings of the Conference on Kristallographische Gruppen (Univ. Bielefeld, Bielefeld, 1979), Part II. Match No. 10

(1981), 97-119 (loose microfiche). (A. O. Morris) 82k:20077 20H05 (10E45) snik, Ján A construction of geodetic blocks. (Slovak and Russian summaries) Acta Fac. Rerum Natur. Univ. Comenian. Math. 36 (1980), 47-60. (J. Bosák) 82g:05058 05C38

On the computational complexity of centers locating in a graph. (Czech summary) With a loose Russian summary. Apl. Mat. 25 (1980), no. 6, 445-452. (Kabekode V. S. Bhat) 82b:68037 68C25 (68E10, 90B05)

A bound for the Steiner tree problem in graphs. (Russian summary) Math. Slovaca

31 (1981), no. 2, 155–163. (Fan R. K. Chung) 82i:05031 05C05 (05C35, 68E10)

The complexity of designing a network with minimum diameter. Networks 11 (1981), no. 1, 77–85. (Author's summary) 82h:68069 68C25 (05C35, 05C38, 68E10, 90C35)

**exczyńska, E. (with Bartoszyński, Robert) Reducibility of statistical structures and design problems. Methografical extractions of the statistical structures and design problems. Methografical extractions on 2, 88 Parcel Course, Park 16, 1917.

decision problems. Mathematical statistics, pp. 29-38, Banach Center Publ., 6, PWN, Warsaw, 1980. (Authors' introduction) 82i:62013 62C05

(with Kowalczyk, T.; Matuszewski, A.; Nalbach-Leniewska, A.) On concepts and measures of bivariate stochastic dependence. Mathematical statistics, pp. 189-195, Banach Center Publ., 6, PWN, Warsaw, 1980. (C. A. Robertson) 82c:62085 6.

(with Dabrowska, D.) On partial observability in statistical models. (German a Russian summaries) Math. Operationsforsch. Statist. Ser. Statist. 11 (1980), no. 1, 49-59. (Authors' summary) 82i:62012 62A99

(with Dabrowska, D.; Szczesny, W.) Remarks on multivariate analogous Kendall's tau. Comm. Statist. A—Theory Methods 10 (1981), no. 23, 2435-2445. (Authors' summary) 82k:62106 62H20 (Authors' summary) 82k:62106

1982

Pletjuhov, V. A. (with Stražev, V. I.) Additional invariance of the theory of particles with multi-spin ½, ½. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 1, 84–89, 140. (Authors' summary) 82c:81069 81D25 (22E70,

(with Stražev, V. I.) Additional invariance for relativistic wave equations. (Russian) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 2, 103-108, 143. (Authors' summary) 82g:81041 81D25

Plewik, Szymon On subspaces of the Pixley-Roy example. Colloq. Math. 44 (1981), no. 1, 41–46. (Michael Starbird) 82j:54056 54E35
 Pličko, A. M. (with Vinokurov, V. A.; Petunin, Ju. Ī.) Measurability and regularizability of

mappings that are inverses of continuous linear operators. (Russian) Mat. Zametki 26 (1979), no. 4, 583-591, 654. (A. Alexiewicz) 82g:47002 47A05 (46A99, 65J10) A Banach space without a fundamental biorthogonal system. (Russian) Dokl. Akad.

Nauk SSSR 254 (1980), no. 4, 798-802. (W. H. Ruckle) 82a:46015 46B15

(with Macak, I. K.) Sums of independent random variables in Banach sp (Russian. English summary) Teor. Verojamost. i Mat. Statist. 23 (1980), 101-109, 149. (V. J. Paulauskas) 82h:60015 60B12 (60G50)

Choice in Banach space of subspaces with special properties and certain properties of quasicomplements. (Russian) Funkcional. Anal. i Priložen. 15 (1981), no. 1, 82-83. (G. J. O. Jameson) 82e:46031 46B20

Some properties of a Johnson-Lindenstrauss space. (Russian) Funkcional. Anal. i

Priložen. 15 (1981), no. 2, 88-89. (G. J. O. Jameson) 82h:46021

(with Vaher, F. S.) The bounded approximation property and linear finite-dimensional regularizability. (Russian) Ukrain. Mat. Z. 33 (1981), no. 2, 167-171. (I. K. Marck) 82h:46033 46B20 (47A99)

See also Diestel, Joseph, 82h:46023

Pliev, F. B. The multiplicities of the weights of irreducible representations of the Lie

algebras A_2 and C_2 . (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 94 (1979), no. 2, 297-300. (H. de Vries) 82g:17005 17R10 Multiplicities of weights of irreducible representations of the Lie algebra A.

(Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 94 (1979), no. 3, 561-564. (H. de Vries) 82g:17006 17B10

Plikusas, A. Estimates for the cumulants and large deviations for certain nonlinear transformations of a stationary Gaussian process. (Russian. Lithuanian and English aries) Litovsk. Mat. Sb. 20 (1980), no. 2, 119-128, 209. (M. M. Leonenko) 82b:60035 60G10 (60F10, 60G15)

Some properties of multiple Itô integrals. (Russian. Lithuanian and English maries) Litovsk. Mat. Sb. 21 (1981), no. 2, 163-173. (Ju. M. Kabanov) 82j:60095

60H05 (28C20, 60F05, 60G57)

Plindov, G. I. (with Dmitrieva, I. K.) Perturbation theory and hypervirial theorems for the anharmonic oscillator. Phys. Lett. A 79 (1980), no. 1, 47-50. (Authors' summary) 81C05

(1980), no. 3, 444-459. (A. A. Juškevič) 82h:90124 90C40 (47D07, 47H06)

Pliss, P. V. On continuous dependence of the controllability set on a parameter. (1980), no. 3, 444-459.

English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 4, 31-36, 115-116. (M. A. Jagubov) 82i:93010 93B05

Pliss, V. A. Stability of an arbitrary system with respect to perturbations that are small in the sense of C1. (Russian) Differencial'nye Uravnenija 16 (1980), no. 10, 1891-1892, 1919. (A. Halanay) 82b:34068 34D30 (58F10) Connection between various conditions for structural stability. (Russian)

Differencial'nye Uravnenija 17 (1981), no. 5, 828-835, 955. (A. Morimoto) 82g:58046 58F10 (34D30, 58F15)

Pliuškevičius, R. A. Some questions of the structural theory of proofs of program correctness. (Russian) Semiotics and information science, No. 14 (Russian), pp. 81-91, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (Stefan Sokolowski) 82a:68025 68B10

(with Matulis, V.; Tumasonis, V.) Some works of Lithuanian mathematicians on mathematical logic and programming. (Russian. Lithuanian and English summaries) Litovsk. Mat. Sb. 20 (1980), no. 3, 19-27, 216. (Authors' summary) 82c:01042 (01A73, 90-03, 90Cxx)

Ploch, Jerzy (with Wierzbicki, Tomasz) Bounds for large plastic deformations of dynamically loaded continua and structures. Internat. J. Solids and Structures 17 (1981), no. 2, 183-195. (Authors' summary) 82d:73024 73E99

ov, K. E. A multiscale model of turbulence. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 64, 27 pp. (Author's summary) 82m:76038 76F99

ov, S. S. (with Peletminskii, S. V.; Prihod'ko, V. I.) Kinetics of fluctuations with large radius of correlations. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 6, 1365-1368. (R A Minlos) 82f-82030 82A35

(with Peletminskii, S. V.; Prihod'ko, V. I.) On statistical theory of nonequilibrium fluctuations with long radius of correlations. (Russian. English summa Fiz. 46 (1981), no. 2, 263–278. (V. P. Kalašnikov) 82j:82036 82A35 nary) Teoret. Mat.

Plonka, Jerzy On lattices of congruences of relational systems and universal algebras. Algebra Universalis 13 (1981), no. 1, 82-88. (E. T. Schmidt) 82k:08002 (03C05)

Ploski, Arkadiusz Remarque sur le lemme de Hensel. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 3-4, 115-116 (1981). (Rosario Strano) 82m:13020

Płotkin, B. I. (with Kublanova, E. M.) Algebra of varieties of representations of groups over an arbitrary commutative ring. (Russian) Late. Mat. Eżegodnik No. 24 (1980), 210–222, 262. (V. A. Belonogov) 82h:20010 20C07

Plotkin, E. B. Parabolic subgroups in ³D₄(R). (Russian) Modules and linear groups. Zap. Naukn. Sem. Leningrad. Oidel. Mat. Inst. Stekhoo. (LOMI) 103 (1980), 106–113, 159. (Author's summary) 82i:20054 20G35 (10C30)

Plotkin, Gordon D. Lambda-definability in the full type hierarchy. To H. B. Curry: essays on combinatory logic, lambda calculus: and formalism, pp. 363–373, Academic Press, London, 1980. (B. Lercher) \$2a:03016 03B40

(with Apt, Krzysztof R.) A Cook's tour of countable nondeterminism (extended abstract). Automata, languages and programming (Akko, 1981), pp. 479-494, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (See 82:68003) 68F20 (with Nielsen, Mogens; Winskel, Glynn) Petri nets, event structures and doma Theoret. Comput. Sci. 13 (1981), no. 1, 85-108. (Ryszard Janicki) 82h:68049

Plotkin, J. M. (with Hickin, Kenneth Keller) Boolean powers: direct decom isomorphism types. Trans. Amer. Math. Soc. 265 (1981), no. 2, 607-621. (B. H. Neumann) 82e:08005 08A99 (06E99, 20E15)

Plotnick, Steven P. Vanishing of Whitehead groups for Seifert manifolds with infinite fundamental group. Comment. Math. Helv. 55 (1980), no. 4, 654-667. (W. D. Neumann) 82i:57020 57Q10 (18F25)

Plotnikov, P. I. A variant of the Nash-Moser theorem. (Russian) Dinamika Sploin. Sredy No. 36 Dinamika Židkosti so Svobodnymi Granicami (1978), 97-107, 162. (Author's summary) 82e:58013 58C15 (47H15)

Solvability of the problem of spatial gravitational waves on the surface of an ideal liquid. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 3, 591-594. (RZMat 1980:7 B336) 824:76016 76B15

(with Monahov, V. N.) Quasiconformal mappings and problems of hydrodynamics. (Russian) Ž. Prikl. Meh. i Tehn. Fiz. 1980, no. 5, 59-69, 204. (J. Lawrynowicz) 76-02 (30C60, 76G99)

Plotnikov, S. V. Systems of piecewise-linear inequalities. (Russian) Ural. Gas. Univ. Mat. Zap. 12 (1979), no. 1, 118-123, 158. (Author's summary) 82m:90110 90C05 (68G05)

uet, Gottfried *Sammlung der Schriften, welche den logischen Calcul Herrn Prof. Ploucquets betreffen, mit neuen Zusätzen. (German) [Collection of writings concerning The logical calculus of Prof. Ploucquet, with new addenda] Facsimile of the 1766 edition. Edited by August Friedrich Bök. Friedrich Frommann Verlag (Günther Holzboog), Stuttgart, 1970. xxxii + 272 pp. ISBN 3-7728-0237-0 (Eberhard Knobloch) 82h:01032 01A50 (03-03)

Plucińska, Agnieszka A characterization of Gaussian processes based on partial and on ordinary differential equations. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 7-8, 419-422 (1981). (P. Laurie Davies) 82n:60043 60G15

Remarks on prospective equations. (Russian summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 2, 350-358. (François Bronner) 82b:60103 60J60 (60G15) Ordinary differential equations for the densities of a stochastic process. Proceedings of the Sixth Conference on Probability Theory (Braşov, 1979), pp. 331-339, Ed. Acad. R.S.

Demonstratio Math. 11 (1978), no. 3, 829-838. (Michael Sharpe) 82j:60056

On some properties of discrete stochastic processes. Des

no. 4, 1089-1110. (Rashid Ahmad) 82h:60115 60K15 (60f60)
mmer, A. P. N. (with Davies, E. R.) Thinning algorithms: a critique and a new methodology. Pattern Recognition 14 (1981), no. 1-6, 53-63. (Authors' summary) 82k:68050 68G10

drová, I. (with Valenta, Ja.; Matoušek, I.; Šatra, M.) Identification of the elastic-plastic response of solid bodies using the finite-element method. (Russian. English summary) Adv. in Mech. 2 (1979), no. 2, 101-144. (Authors' summary) 82c:73029 73E99 (65N30)

kov, A. I. Harmonic mappings of Riemann surfaces and foliated manifolds. (Rus Mat. Sb. (N.S.) 113(155) (1980), no. 2(10), 339-347, 352. (John C. Wood) 82g:58029 58E20 (30F30, 53C20, 55Q40)

Plykin, R. V. Hyperbolic attractors of diffeomorphisms. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 94–104. (M. I. Brin) 82k:58081 58F15 (58F12)

Hyperbolic attractors of diffeomorphisms (the nonorientable case). (Russian) Uspehi

Mat. Nauk 35 (1980), no. 4(214), 205-206. (M. I. Brin) 82k:58082 58F15 (58F12)

Płyśevskaja, T. K. (with Drahlin, M. E.) Well-posedness of boundary value problems for functional-differential equations. (Russian) Differencial'nye Uravnenija 16 (1980), no. 2, 214-226, 379-380. (Józef Kalinowski) 82b:34090 34K10

Prueli, Amir (with Zarhi, R.) Realizing an equational specification. Automata, languages and programming (Akko, 1981), pp. 459–478, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (See 82i:68003) 68B05

(with Slutzki, Giora) Automatic programming of finite state linear programs. SIAM J. Comput. 10 (1981), no. 3, 519-535. (Authors' summary) 82m:68103 68D15 (03D05, 68B10)

Po Ch., Fco. Javier See Gómez Calderón, Javier, 82i:03001

Pochcial, Jan (with Kowalski, Pawel) On the directional derivative for the maximum functional. Demonstratio Math. 13 (1980), no. 2, 405-420. (Authors' introduction) 90C30 (46G05) 82m:90138

le Poche, Gabriel See Le Poche, Gabriel
Pocobelli, G. Damping of an electron plasma wave with detrapping of the electrons. Phys. Fluids 24 (1981), no. 12, 2177–2182. (Author's summary) 82m:82031 82A45 (76X05)

Podčukaev, V. A. A method for constructing Ljapunov functions. (Russian summary) Differencial nye Uravnenija 17 (1981), no. 5, 933-935, 960. (A. Pelczar) 82j:34052

Poddoskin, A. B. (with Jalamov, Ju. I.; Juškanov, A. A.) On boundary conditions during the flow of a nonuniformly heated gas around a spherical surface of small curvature. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 2, 343-346. (Simona Popp) 82k:76051 76N15

dewski, K.-P. (with Reineke, J.) On algebraically closed commutative indecomposings. Algebra Universalis 12 (1981), no. 1, 123-131. (J. M. Plotkin) 82c:03050 03

gornova, E. G. The intrinsic geometry of a noncompact evolute. (Russian) Differential geometry of manifolds (Russian), pp. 46-58, 60, Taškent. Gos. Ped. Inst., Tashkent, 1980. (K. Radziszewski) 82;53105 53C45 (53A05)

rnyi, A. L. On the analysis of first reflections of sound for curvilinear forms of halls. (Russian) Prikl. Geom. i Interior. Grafika No. 30 (1980), 7-10, 132. (Author's summary) 51M15 (76O05)

orodyński, Marian (with Brückner, Damian; Skalmierski, Bogdan) The characteristic functional and some statistical characteristics of a stochastic process (sequential formulation). (Polish. Russian and English summaries) Zeszyty Nauk. Politech. Ślątk

Mat.-Fiz. No. 29 (1979), 51-65. (From the summary) 82a:60075 60G99

Ill'euk, Ju. N. (with Kiričenko, A. M.) Elastic deformation of a one-sheeted hyperboloid cements on the boundary. (Ukrainian. English and Russian s ik Kiiv. Univ. Ser. Mat. Meh. No. 21 (1979), 121-127, 166. (Authors' sum

82m:73007 73C02

lio-Guidagii, Panlo (with Capriz, Gianfranco) The role of Fredholm conditions in Signorimi's perturbation method. Arch. Rational Mech. Anal. 70 (1979), no. 3, 261-288. (Authors' introduction) 82m:73035 73G05

(with Martins, Luiz Carlos) A variational approach to the polar decompositi theorem. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 6, 487-493. (C.-C. Wang) 82i:15013 15A23 (with Capriz, Gianfranco) Materials with spherical structure. Arch. Rational Mech. Anal. 75 (1980/81), no. 3, 269-279. (From the introduction) 82i:73003 73B05

korytov, A. N. (with Donis, A. A.) Construction of normals at nodes of discretely given plane curves. (Russian) Prikl. Geom. i Inžener. Grafika No. 30 (1980), 10-12, 132.

(Authors' summary) 82a:51019 51N20 (70B99)

(with Dyn'kin, E. M.) Inequality in L* of V. A. Markov type. (Russian) Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 102 (1980), 102-110, 193-194. (L. Losonczi) 824:26010 26D05 (41A17)

Theory of analytic surfaces of a biaffine sp. ace. II. (Russian) Tra Sem. Kazan. Univ. No. 10 (1978), 65-77. (L. Tamássy) 82c:53017 53B05 (53A15)

lipens'k, Ju. K. See Pidlipenko, Ju. K. lipens'kii, V. S. (with Ljubčenko, G. G.) Formal determination of the skeletons and values of variable graphs. Automatika 1980, no. 4, 48-54, 96 (Russian. English summary); translated as Soviet Automat. Control 13 (1980), no. 4, 39-44 (1981). (From the

lol'skii, E. N. (with Korobov, V. I.; Marinič, A. P.) Controllability of nonlinear system in the presence of constraints on the control. (Russian) Vestnik Har'kov. Gos. Univ. No. 174 vyp. 43 (1978), 34-37, 104. (N. N. Petrov) 82d:49034 49E15

N'skii, V. G. Spaces (V_n,g) (n=3,4) admitting fibre-exchanging transformation in (TV_n,g^c). (Russian) Trudy Geom. Sem. Kazan. Univ. No. 12 (1980), 58-65. (Adrian C. Albu) 82j-53034 53B20

porin, V. P. Operators that commute with polynomials of differentiation and sequences of Appell type. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk. 1981, no. 1, 17–19, 101. (Author's summary) 82:46044 46E99 (47B37)

no. 3, 271-286, 287-302, 303-325. (John Staples) 82a:68163 68F20 (03B40)

maru, V. Présentation d'ensemble des théorèmes de Thurston sur les surfaces. Travaux

Marty, V. Freschaubil d'ensemble des directues de l'instantina de l'Austron sur les surfaces, pp. 5–20, Astérisque, 66-67, Soc. Math. France, Paris, 1979. (See 82m:57003) 57NO5 (58F15, 58F17, 30F35)

(See 82m:57003) 57NU5 (58F15, 50F17, 50F32)
Quelques rappels sur les difféomorphismes des surfaces. Travaux de Thurston sur les surfaces, pp. 21–31, Astérisque, 66-67, Soc. Math. France, Paris, 1979. (See 82m:57003) 57N05 (57R50, 58D05, 57M25)

Rappels de géomètrie hyperbolique en dimension 2 et généralités sur $i:8\times8\rightarrow \mathbb{R}_+$. Traoaux de Thurston sur les surfaces, pp. 33-55, Astérisque, 66-67, Soc. Math. France, Paris, 1979. (See 82m:57003) 51M10 (57N05, 32G15, 30F35)

L'espace des courbes simples fermées sur une surface. With an appendix "Double décomposition d'une surface en pantalons" by Albert Fathi. Travaux de Thurston sur les surfaces, pp. 57-70, Astérisque, 66-67, Soc. Math. France, Paris, 1979. (See 82m:57003) 57N05 (57N37, 57R42, 32G15)

Classification des difféomorphismes des surfaces. Travaux de Thurston sur les surfaces, pp. 159-180, Astérisque, 66-67, Soc. Math. France, Paris, 1979. (See 82m:57003)

57R52 (57N05, 58F17)

(with Fathi, Albert) Théorèmes d'unicité des difféomorphismes pseudo-Anosov. Travaux de Thurston sur les surfaces, pp. 225-242, Astérisque, 66-67, Soc. Math. France, Paris, 1979. (See 82m:57003) 58F18 (57N05, 58F11)

(with Chew, G. F.; Finkelstein, J.; McMurry, Robert E., Jr.) A topological theory of electric charge. Phys. Lett. B 100 (1981), no. 1, 53-56. (Authors' summary) 82d:81152 81G10 (81G05)

See also Fathi, Albert; et al., (See 82m:57003)

ggi, Carta On a significant algebraic structure for an information space. (Italian. English summary) Atti Accad. Ligure Sci. Lett. 37 (1980), 79-89 (1981). (Author's summary) 94A15

oggio, T. (with Reichardt, W.) Visual fixation and tracking by flies: mathematical properties of simple control systems. *Biol. Cybernet.* **40** (1981), *no.* 2, 101–112. (Authors' summary) **82e-92019** 92A09 (34H05)

w, A. V. Geometric methods in the nonlinear theory of elastic shells. (Russian) Vestnik Akad. Nauk SSSR 1980, no. 9, 17-20. (B. A. Bondarenko) 82f:53072 (58E07, 73L99)

(with Aleksandrov, A. D.; Aminov, Ju. A.; Oleïnik, O. A.; Poznjak, È. G.; Rozendorn, E. G.; Sabitov, I. H.) Nikolaĭ Vladimirovič Efimov (on the occas seventieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 3(219), 233-238. (Editors) 82g:01037b 01A70

See also Aleksandrov, A. D.; et al., 82h:01041

sorelov, B. A. Primitive permutation groups of small degree. (Russian) Sixth All-Union Symposium on Group Theory (Čerkassy, 1978) (Russian), pp. 146-157, 222, "Naukova Dumka", Kiev, 1980. (V. D. Mazurov) 82g:20010 20B35

Primitive permutation groups containing a 2^m-cycle. (Russian) Algebra i Logika 19 (1980), no. 2, 236-247, 251. (Ja. G. Berkovič) 82f:20014 20B35

Primitive groups of permutations of small degrees. I. (Russian) Algebra i Logika 19 (1980), no. 3, 348-379, 383. (Ja. G. Berkovič) 82j:20009a 20B10

Primitive groups of permutations of small degrees. II. (Russian) Algebra i Logika 19 (1980), no. 4, 423–457, 503. (Ja. G. Berkovič) 82j:20009b 20B10

relov, D. Ju. (with Beleckii, V. V.) Plane resonance rotations of a satellite in an elliptic

orbit. Prikl. Mat. Meh. 43 (1979), no. 3, 401-410 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 3, 433-443 (1980). (Authors' summary) 82g:70052 (58F12)

Pogoriljak, E. Ja. (with Gudivok, P. M.) Representations of finite groups over some local rings. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 4, 12-14, 95. (Authors' summary) 82g:20022 20C20 (16A42)

osian, S. K. See Pogosjan, S. K. osian, T. I. See Pogosjan, T. I. osjan, È. M. Training as a variety of induction inference. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1978, no. 3, 62-69 (Russian); translated as Engrg. Cybernetics 16 (1978), no. 3, 46-52. (Author's summary) 82;68091 68G10 (03D20, 65G05)

On estimating the complexity and approximate decoding of combinatorial descriptions. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 2, 72–79. (M. I. Dehtjar) 82c:68026 68C25 (68G99)

Pogosjan, S. K. (with Abdulla-Zadeh, F. H.; Minlos, R. A.) Cluster estimates for Gibbs random fields and some applications. Multicomponent random systems, pp. 1-36, Advances in Probability and Related Topics, 6, Dekker, New York, 1980. (D. Szász) 82A05 (60K35)

Large deviations for Gibbs random fields. (Russian) Uspehi Mat. Nauk 36 (1981),

no. 2(218), 201-202 (J. Fritz) 82;82015 82A05 (6056)
Pogosjan, T. I. (with Harlamov, M. P.) Bifurcation set and integral manifolds of the lem concerning the motion of a rigid body in a linear force field. Prikl. Mat. Meh. 43 (1979), no. 3, 419-428 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 3, 452-462 (1980). (Authors' summary) 82g-70016 70E15 (58E05, 58E05, 70E05)

ogosyan, E. M. See Pogosjan, E. M.

Ogrebkov, A. K. Complete integrability of dynamical systems generated by singula solutions of the Liouville equations. (Russian English summary) Teoret. Mat. Fiz. 45 (1980), no. 2, 161-170. (Alexander A. Pankov) 82k:58048 58F07 (35Q20, 70H99,

rebysskaja, E. I. (with Kipnis, N. S.) Two problems in physical optics during the late 18th and early 19th centuries. (Russian) Mechanics and physics in the second half of the 18th century (Russian), pp. 72-133, "Nauka", Moscow, 1978. (N. V. Mickevič) 82j:01039 01A50 (01A45, 70-03, 78-03)

★Дисперсия света. (Russian) [Dispersion of light] Исторический очерк. [A historical outline] "Nauka", Moscow, 1980. 166 pp. (Publisher's description) 82a:78002 78-03 (01A40, 01A45, 01A50, 01A55, 01A60)

★Онтнка Ньютона. (Russian) [Newtonian optics] История Науки и Техники. [The History of Science and Technology] "Nauka", Moscow, 1981. 136 pp. (I. Grattan-Guinness) 82j:01036 01A45 (78-03)

Pogrebysskii, I. B. See Struik, D. J., 82i:01001

gribnii, V. D. A theorem on the topological imbedding of vector lattices. (Ukrainian. English and Russian summaries) Visnik Kiiv. Univ. Ser. Mat. Meh. No. 20 (1978), 96-98, 166. (Author's summary) 82m:46005 46A40

Compatibility of the structures of a vector space and a vector lattice. (Ukrainian. English and Russian summaries) Visnik Kiiv. Univ. Ser. Mat. Meh. No. 21 (1979), 118–121, 166. (Author's summary) 82:46004 46A40

-121, 166. (Author's summary) 82j:46004 Pogu, Marc (with Ciavaldini, Jean-François; Tournemine, Georges) Étude de problèmes monotones posés dans des ouverts non bornés, estimation de l'erreur de troncature. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 7, 397-400. (Authors' summary) 82b:49010 49A29 (49D30, 76N10)

Poguntke, Detlev Symmetry and nonsymmetry for a class of exponential Lie groups. J. Reine Angew. Math. 315 (1980), 127-138. (A. Hulanicki) 82b:43013 43A80 (22E30)

Poguntke, Werner (with Ganter, Bernhard; Wille, Rudolf) Finite sublattices of four-generated modular lattices. Algebra Universalis 12 (1981), no. 2, 160-171. (Ralph Freese) 82f:06012 06C05

(with Sands, Bill) On finitely generated lattices of finite width. Canad. J. Math. 33 (1981), no. 1, 28-48. (Ralph Freese) 82f:06009 06B20

On finitely generated simple complemented lattices. Canad. Math. Bull. 24 (1981), no. 1, 69–72. (R. W. Quackenbush) 82i:06011 06C15

Pohilevič, V. O. (with Kaidan, V. O.) On boundaries of α-convexity for subclasses of starlike functions of \$\beta\$ kind. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 12, 6-10, 91. (Authors' summary) 82k:30013 30C45 (46E99)

Pohjola, Matti T. Uncertainty and the vigour of policy: some implications of quadratic preferences. J. Econom. Dynamics Control 3 (1981), no. 3, 299–305. (Author's summary) 90A15

en, Seppo (with Koivo, H. N.) Properties and calculation of transmission zeros for distributed parameter systems. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 431-438, Lecture Notes in Control and Information Sci., 22, Springer, Berlin, 1980. (A. J. Pritchard) 82c:93016 93C20 (47A40) A feedforward controller for distributed parameter systems. Internat. J. Control 34

(1981), no. 1, 173–184. (Author's summary) 82h:93047 93C45

Pohl, Ira (with Shaw, Alan C.) ★The nature of computation: an introduction to computer science. Computer Software Engineering Series. Computer Science Press, Rockville, Md., 1981. xii + 397 pp. ISBN 0-914894-12-9 (From the preface) 82j:68002 68-01 (00A69, 01A80, 03Dxx)

Imeyer, K. Relativistic integrable fields. Mathematical aspects of quantum field theory, Part II (Karpacz, 1978), pp. 75-102, ACTA Univ. Wratislav., 519, Wydawn. Uniw.

Wrocław., Wrocław, 1979. (See 82:81004b) 81E10 (53C05, 81C05) Pohożaev, S. I. Equations of the type $\Delta u = f(x, u, Du)$. (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 2(10), 324-338, 351. (A. Kufner) 82i:35066 35J65 (53C45)

On subordinate operators of nonlinear equations. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 2, 282-286. (Stefan Balint) 82j:35021 35B45 (47H15)

Poigné, Axel Using least fixed points to characterize formal computations of nondeterministic equations. Formalization of programming concepts (Proc. Internat. Colloq., Peñiscola, 1981), pp. 447–459, Lecture Notes in Comput. Sci., 107, Springer, Berlin, 1981. (See 82f:68005) 68B05

caré, Henri See Mitropol'skii, Ju. A., 82a:01042

Point, Françoise (with Boffa, M.; Macintyre, Angus) The quantifier elimination problem for rings without nilpotent elements and for semisimple rings. Model theory of algebra and arithmetic (Proc. Conf., Karpacz, 1979), pp. 20-30, Lecture Notes in Math., 834, 1982

Springer, Berlin, 1980. (Carol Wood) 824:03054 03C60 (03C10, 16A99)

Elimination des quantificateurs dans les L-anneaux »-réguliers et application aux neaux biréguliers. Proceedings of the Model Theory Meeting (Univ. Brussels, Brussels/Univ. Mons, Mons, 1980). Bull. Soc. Math. Belg. Sér. B 33 (1981), no. 1, 93-107. (G. Cherlin) 82h:03028 03C60 (03C10, 16A99)

irée, B. L'équation de l'énergie en acoustique non linéaire. (English and German summaries) Acustica 47 (1980/81), no. 4, 266-274. (Author's summary) 82e:76057

L'équation de conservation de l'énergie en acoustique non linéaire dans un fluide parfait hétérogène en mouvement unidimensionnel. (English summary) Study Conference on Acoustic Propagation (Marseille, 1980). Rev. CETHEDEC Cahier 1980, no. 1, 5-9. (Author's summary) 82d:76080 76005

L'équation de conservation de l'énergie en acoustique non linéaire dans un fluide parfait hétérogène en mouvement. (English summary) Rev. CETHEDEC No. 66 (1981), 1-39. (Author's summary) 821:76030 76Q05 (49H05) rigué-Poirrier, Micheline See Vigué-Poirrier, Micheline

on, Siméon Denis See Grigor'jan, A. T.; et al., 82m:01059

izat, Bruno Les équations différentielles vues par un logicien. Seminar on Hyperbolic and Holomorphic Partial Differential Equations, 1979-1980 (French), Exp. No. 6, 5 pp., Univ. Paris VI, Paris, 1980. (Carol Wood) 82g:12027 12H05 (03C60)

Modèles premiers d'une théorie totalement transcendante. Study Group on Stable Theories (Bruno Poizat), Second year: 1978/79 (French), Exp. No. 8, 7 pp., Secretariat Math., Paris, 1981. (W. Hodges) 82i:03042 03C45

Exercices en stabilité. Study Group on Stable Theories (Bruno Poizat), Second year. 1978/79 (French), Exp. No. 11, 5 pp., Secrétariat Math., Paris, 1981. (Editors) 82g:03053

Sous-groupes définissables d'un groupe stable. J. Symbolic Logic 46 (1981), no. 1, -146. (G. Cherlin) 82g:03054 03C45 (03C60, 20A15)

137-146. (G. Cherlin) 82g:03054 03C45 (03C60, 20A15) Théorie de Galois pour les algèbres de Post infinitaires. Z. Math. Logik Grundlag. Math. 27 (1981), no. 1, 31-44. (G. Georgescu) 82h:03070 03G20

See also Study Group: Stable Theories (Bruno Poizat), 82f:03028

Pokalo, A. K. An asymptotic formula for deviation of double multiplicative operators in a Banach space with a Cesàro approximative unit. The Bernštein inequality and Jackson's theorem. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 6, 32-37, 141. (S. D. Riemenschneider) 82;41016 41A17 (47B38)

(with Sloma, L. I.) On a representation of the Lebesgue constant by an asymptotic series. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 3, 204-205, 284. (Ekkehard Krätzel) 82i:41036 41A60

Pokornyi, Ju. V. (with Krasnosel'skii, M. A.; Liffsic, E. A.; Stecenko, V. Ja.) Positive invertibility of linear operators. (Russian) Qualitative and approximate methods for the investigation of operator equations (Russian), pp. 90-99, 167, Jaroslav. Gos. Univ., Yaroslav!', 1980. (G. M. Ustinov) 821:47050 47B55 (47A05, 65J10)

Pokrovskii, A. V. (with Krasnosel'skii, M. A.; Muhamadiev, E. M.) Bifurcation values of parameters in variational problems. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 2, 282-286. (P. P. Zabreiko) 82b:58029 58E07 (47H15) (with Vladimirov, A. A.; Klepcyn, A. F.; Kozjakin, V. S.; Krasnosel'skii, M. A.;

Lifsic, E. A.) Vector hysteresis nonlinearities of the von Mises-Tresca type. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 3, 581-584. (Petr Procházka) 82h:73035 73E05 (34G20)

Pokrovskii, L. D. (with Pavlov, K. B.; Taranenko, S. N.) Temperature waves in an ideal gas with nonlinear heat conduction. (Russian) Differencial'nye Uravnenija 15 (1979), no. 11, 2034–2038, 2109–2110. (From the summary) 82d:76065 76N15 (65P05, 80A20)

Pokrovskii, S. V. (with Bašilov, Ju. A.) Conservation laws in the quantum version of N-positional Potts model. Comm. Math. Phys. 76 (1980), no. 2, 129-141. (A. Barchielli) 82A15 (58F07, 82A67) 82a:82009

Pokrovskii, V. L. Splitting of commensurate-incommensurate phase transition. (French mary) J. Physique 42 (1981), no. 6, 761-766. (Author's summary) 82j:82029 82A25 (82A57, 82A67)

Pokrovsky, S. V. See Pokrovskii, S. V.

Pokrovsky, V. L. See Pokrovskii, V. L.

Pokrzywa, Andrzej Spectra of operators with fixed imaginary parts. Proc. Amer. Math. Soc. 81 (1981), no. 3, 359–364. (L. Rodman) 82a:15011 15A18 (15A42, 15A60, 47A10) Pol, Antoni See Bubnicki, Zdzisław, 82h:93080

A theorem on the weak topology of C(X) for compact scattered X. Fund. Math. 106 (1980), no. 2, 135-140. (Donald Plank) 82f:46027 46E15 (54C40)
On a question of H. H. Corson and some related problems. Fund. Math. 109 (1980),

On a question of H. H. Coson and activation technology and technology and technology and technology and technology are a technology and technology and technology are a technology and technology and technology are a technology and technology and technology and technology are a technology and technology and technology and technology are a technology and technology and technology are a technology and technology and technology are a technology and technology are a technology and technology are a technology and technology and technology are a technology are a technology and technology are a technology are a technology and technology are a technology are a technology are a technology and technology are a technology are a technology are a technology are a technology and technology are a technology are a technology are a technology and a technology are a technolog 1980 Topology Conference (Univ. Alabama, Birmingham, Ala., 1980). Topology Proc. 5

(1980), 231-242 (1981). (E. Hemmingsen) 82k:54060 (1980), 231-242 (1981), (E. Hellininger) 243-2440.

A weakly infinite-dimensional compactum which is not countable-dimensional.

Proc. Amer. Math. Soc. 82 (1981), no. 4, 634-636. (R. Engelking) 821:54059 54F45

Poladjan, F. M. (with Zadojan, M. A.) The problem of nonlinear creep of a curved bar under torsion. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 71 (1980), no. 3, 165-173. (L. Jentsch) 82e:73057 73K05 (73F15)

Polak, Elijah (with Tishyadhigama, S.) New convergence theorems for a class of feasible directions algorithms. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 432-438, IEEE, New York, 1979. (J. Abrham) 90C30

(with Tits, A. L.) A globally convergent, implementable multiplier method with automatic penalty limitation. Appl. Math. Optim. 6 (1980), no. 4, 335-360. (M. M. Flood) 82c:90084 90C30 (49D37)

(with Payne, Anthony N.) An interactive rectangle elimination method for

biobjective decision making. IEEE Trans. Automat. Control 25 (1980), no. 3, 421-432.

(A. Aganbegjan) 82c:9006 90A05 (49D99)

(with Mayne, D. Q.) An exact penalty function algorithm for optimal control problems with control and terminal equality constraints. L. J. Optim. Theory Appl. 32 (1980), no. 2, 211-246. (V. F. Dem'janov) 82e:49050a 49D30

(with Mayne, D. Q.) An exact penalty function algorithm for optimal control problems with control and terminal equality constraints. II. J. Optim. Theory Appl. 32

(1980), no. 3, 345-364. (V. F. Dem'janov) 82e:49050b 49D30 (with Mayne, D. Q.) Design of nonlinear feedback controllers. IEEE Trans

mat. Control 26 (1981), no. 3, 730-733. (A. van Harten) 82k:93051 (49B99)

(with Mayne, D. Q.; Heunis, A. J.) Solving nonlinear inequalities in a finite num of iterations. J. Optim. Theory Appl. 33 (1981), no. 2, 207-221. (B. T. Poljak) 82i:65040 65K05 (90C30)

See also Halemane, Keshava P.; et al., 82a:94692

Polak, G. G. (with Kortanek, K. O.; Lee, D. N.) A linear programming model for design of ommunications networks with time varying probabilistic demands. Naval Res. Logist.

Quart. 28 (1981), no. 1, 1-32. (Authors' summary) 82h:90115 90C35

Polák, Josef On the 100th anniversary of the death of James Clerk Maxwell. (Czech) Pokroky Mat. Fyz. Astronom. 24 (1979), no. 6, 301-312. (Editors) 821:01129 (01A55, 78-03)

Polak, L. S. (with Vizgin, V. P.) Noether's theorem in the history of physics. (Russian. English summary) History and methodology of the natural sciences, No. XXII: Physics (Russian), pp. 99-110, Moskov. Gos. Univ., Moscow, 1979. (D. ter Haar) 82c:70001 70-03 (01A60, 49C99, 49H05, 70H99, 81C99)

Polak, Libor (with Niederle, Josef) The category of nonindexed algebras and weak ns. Colloq. Math. 41 (1979), no. 2, 167-179. (Marta C. Bunge) 82d:18006 18B99 (08A05)

Poland, John Finite potent groups. Bull. Austral. Math. Soc. 23 (1981), no. 1, 111-120. (W. E. Deskins) 82e:20034 20D60 (20E10)

Poland, Justin (with Kassoy, D. R.) The thermal explosion confined by a constant temperature boundary. I. The induction period solution. SIAM J. Appl. Math. 39 (1980), no. 3, 412-430. (J. Adler) 82b:80017 80A25

Polasek, W. ACF-patterns in seasonal MA-processes. Time series (Proc. Internat. Meeting, Univ. Nottingham, Nottingham, 1979), pp. 259-275, North-Holland, Amsterdam, 1980.
(Roch Roy) 82b:62121 62M10

Polat, Norbert (with Flament, Claude) Applications galoisiennes proches d'une application entre treillis. Math. Sci. Humaines No. 70 (1980), 33-49, 81. (F. Lapscher) 82a:06007 06A12

Polchinski, Joseph Green functions of vortex operators. Nuclear Phys. B 179 (1981), no. 3,

509-540. (Author's summary) 82e:81045 81E99 (81G05)

Polcino Milies, Francisco César (with Merklen, Héctor A.) Group rings over Z_(p) with FC unit groups. Canad. J. Math. 32 (1980), no. 5, 1266-1269. (S. K. Sehgal) 82e:20013 20C07 (20F24)

Group rings whose torsion units form a subgroup. II. Comm. Algebra 9 (1981), no. 7, 699-712. (M. M. Parmenter) 82h:16005b 16A26 (20C07) (with Sehgal, Sudarshan K.) FC-elements in a group ring. Comm. Algebra 9 (1981),

no. 12, 1285-1293. (M. M. Parmenter) 82i:16013 16A27 (20C07)

Group rings whose torsion units form a subgroup. Proc. Amer. Math. Soc. 81 (1981), no. 2, 172-174. (M. M. Parmenter) 82h:16005a 16A26 (20C07)

Polder, D. (with Schuurmans, M. F. H.) Superfluorescence and amplified spontan emission: a unified theory. Phys. Lett. A 72 (1979), no. 4-5, 306-308. (From the text) 81K05

Polec'kih, V. M. Primary layer-compact topological groups. (Russian. English sur Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 26-28, 104. (L. A. Kurdačenko) 22A05

rchakis, Heraklis M. (with Green, Jerry R.; Lau, Lawrence J.) Identifiability of the von Neumann-Morgenstern utility function from asset demands. General equilibris growth, and trade, pp. 151-161, Academic Press, New York, 1979. (Rubin Saposnik) 90A10 (90A09)

eščuk, S. N. Exact Weyl multipliers. (Russian) Mat. Sb. (N.S.) 108(150) (1979), no. 1, 105-114, 144. (Paul Nevai) 82e:42022 42C15

Poleščuk, V. S. See Poliščuk, V. S.

Polesja, I. V. Invariant sets of autonomous differential systems. (Russian) Differencial'nye Uravnenija 17 (1981), no. 4, 643-650, 764. (J. Jarnik) 82e:34045 34C30 (34C29)
Polevikov, V. K. Application of a relaxation method for a solution of atationary difference

problems of convection. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 1, 127-138, 254. (Author's summary) 82d:76084 76R99

Polexe, R. (with Cazacu, Mariana; Coca, Marilena) Considerations concerning the study of the stability of multiple systems. (Romanian. French summary) Bul. Univ. Braşov Ser. C 21 (1979), 45-51. (Authors' summary) 82g:34075 34D99

Poležaev, A. A. (with Volkov, E. I.) On the possible mechanism of cell cycle synchronization. Biol. Cybernet. 41 (1981), no. 2, 81-89. (From the introduction) 82i:92037 92A09 (58F14)

Poležaev, V. I. (with Dalkovskii, A. G.; Fedoseev, A. I.) Application of the finite element method in the mechanics of a viscous fluid. (Russian) Cisl. Metody Meh. Sploin. Sredy 11 (1980), no. 1 Mat. Modelirovanie, 37-50. 82j:76028 76D05 (65N30, 76A60)

aev, A. A. See Poležaev, A. A. Poli, A. (with Ventou, M.) Codes autoduaux principaux et groupe d'automorphismes de l'algèbre A = F₂·[X₁, -, X_n]/ (X₁²-1, -, X_n²-1). (English summary) European J. Combin. 2 (1981), no. 2, 179-183. (Authors' summary) 82i:94022 94B05 (13M99,

Poli, M. (with Borchi, E.) The two-dimensional minimum-bias window function. (German and French summaries) Signal Process. 4 (1982), no. 1, 65-71. (Authors' summary) 82m:94003 94A05 (94A12)

Polia, G. See Pólya, G.

Policello, George E., II (with Cressie, Noel; Davis, Anne S.; Folks, J. Leroy) The moment-generating function and negative integer moments. Amer. Statist. 35 (1981), no. 3, 148-150. (Authors' summary) 82j:62009 62E15 (with Fligner, Michael A.) Robust rank procedures for the Behrens-Fisher problem.

J. Amer. Statist. Assoc. 76 (1981), no. 373, 162-168. (Authors' sum 62G10 (62F35)

Politica, N. P. Stability of solutions of the Tricomi problem for a Lavrent'ev-Bicadze equation with variation of the domain. (Russian) Kuilbyšev. Gos. Ped. Inst. Naukin. Trudy 232 (1979), Differencial. Uravnenija i Mat. Fiz. No. 1, 78-87. (Megumi Saigo) 824:35068

(with Krein, S. G.) Behavior of the solutions of boundary value problems for the

- Lavrent'ev-Bicadze equation under variation of the domain. (Russian) Partial differential equations (Proc. Conf., Nocosibirsk, 1978) (Russian), pp. 39-41, 247, "Nauka" Sibirsk. Ondel., Nocosibirsk, 1980. (Authors' summary) 82k:35971 35M05 icono Milies, Cesar See Polcino Milies, Francisco Cesar lasrov, Asaria Overturn and continuity of the hypotheses in the framing of the theory of relativity. An attempt at reconstructing the transition from classical to relativistic physics. Einstein Symposion, Berlin (1979), pp. 397-411, Lecture Notes in Phys., 100, Springer, Berlin, 1979. (Lawrence Skiar) 82c:83006 83A05 (00A69, 01A60) Bis, Michael P. (with Courdesses, Michel; Amourous, Marcel) On identifiability of parameters in a class of parabolic distributed systems. IEEE Trans. Automat. Control 26 (1981), no. 2, 474-477. (Authors' summary) 82c:93028 93B30 83B30 Bisculs, E. G. Upper estimate for the value of a linear differential game. Prikl. Mat. Meh. 44 (1980), no. 2, 254-257 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 2,
- 44 (1980), no. 2, 254-257 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 2, 180-182 (1981). (L. D. Berkovitz) 82h:49011 49A45 (90D25)
- buk, E. M. * Эмик Борет (1871-1956). (Russian) [Émile Borel (1871-1956)] Hayeno-Bangabarecasa /Interpreta (1871-1930) (Russian) [Emite Bottet (1871-1930)]

 Hayeno-Bangabarecasa /Interparypa, [Scientific Biographical Literature]. *Nauka
 Leningrad. Oudel., Leningrad, 1980. 168 pp. (I. Grattan-Guinness) 82g:01067 0
- Heuk, L. I. Piecewise-linear approximation of the Pareto boundary of convex two-criteria problems. (Russian) Models and methods of investigating economic systems (Russian), pp. 108-116, "Nauka" Sibirsk. Otdel., Novosibirsk, 1979. (R. Şerban) 82a:90159 90C31 (90C25)
- Histuk, R. F. Petrov types and stratification of a space of Weyl tensors. (Russian) Gravitacija i Teor. Otnositel'nosti No. 16 (1980), 120-127. (A. K. Guc) 82j:83012
- Birth, V. N. (with Il'kiv, V. S.) A boundary value problem with nonlocal conditions for differential operators with constant real coefficients. (Ukrainian. Russian su Studies in the qu tive theory of differential equations and its applications (Ukrainian), pp. 15-16, 71, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Authors' summary) 82e:35024 35E20
 - (with Ptašnik, B. I.) Periodic boundary value problem for a system of integro-differential equations of hyperbolic type. (Ukrainian. Russian summary) Studies in the qualitative theory of differential equations and its applications (Ukrainian), pp. 49-51, 75, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Authors' summary) 82f:45012 45K05
- Poliščuk, V. S. Moments of frequencies of sojourns of controlled walks in a fixed state. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 25 (1981), 106-110, 168. (M. A. Maher) 82m:60082 60J15 (60J45)
- evschi, Dan A. (with Paşa, Gelu I.) The macroscopic behavior of a heterogeneous elastic medium. (Romanian. English summary) Stud. Cerc. Mat. 32 (1980), no. 4. 445-449. (Authors' summary) 82j:73011
- olishchuk, E. G. See Poliščuk, E. G.
- Politof, Themistocles (with Gale, David) Substitutes and complements in network flow problems. Discrete Appl. Math. 3 (1981), no. 3, 175-186. (From the introduction) 90B10
- Poliv'janii, V. O. (with Semenov, Ju. A.) On the theory of generalized diffusion processes. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1981, no. 6, 20 pp. (Publisher's description) 82m:60070 60H10 (35J15, 60J60)
- Polizzotto, C. (with Mazzarella, C.) Structural optimization based on the workhardening adaptation concept. Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 597-611, North-Holland, Amsterdam, 1980. (See 82g:93003) 93C10
- Poljačenko, B. E. An effective algorithm for obtaining the optimal partitioning of a graph with addition of vertices. (Russian) Data bases and information retrieval system (Russian), pp. 106-110, 142, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. mary) 82d:68057b 68H05 (68-06)
- Poljačenko, V. L. (with Curilov, S. M.; Šuhman, I. G.) The nonlinear stage of gravitational instability in flat gaseous systems. (Russian) Astronom. Ž. 57 (1980), no. 3, 497-504 (Russian); translated as Soviet Astronom. 24 (1980), no. 3, 287-291. (Authors' summary) 85A30 82::85005
- Astronomy early lighter, N. N. (with Sestermina, Z. N.) On the convergence of discrete vortices. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1979, no. 2, 75–81, 120. (Simona Popp) 82h:76010 76B05 (65P05)
- (with Sesternina, Z. N.) Stationary flow around a rectangular wing with variable alation along the span. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 3, 85-92, 131. (N. D. Kopačevskii) 82i:76005 76B05
- See also Flow of viscous and inviscid gas. Two-phase fluids, 82g.76024a
 Poljak, B. T. Subgradient methods: a survey of Soviet research. Nonsmooth (Proc. IIASA Workshop, Laxenburg, 1977), pp. 5-29, IIASA Proc. Ser., 3, Pergamon,
- Oxford, 1978. (Author's summary) \$2m:49046 49D37 (90C30) (with Cypkin, Ja. Z.) Optimal pseudogradient adaptation algorithms. Aetomat. i Telemeh. 1980, no. 8, 74-84 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 8, part 1, 1101-1110 (1981). (Authors' summary) \$2h:90082
- jak, L. М. ★Вероятностный анализ много-уровневых сигналов. (Russian)
 [Probabilistic analysis of multilevel signals] Статистическая Теория Связи [Statistical Theory of Communications], 15. "Sojaz", Moscow, 1980. 148 pp. (I. Vajda) 82k:94007 Poljak, L. M. *Bepouth
- k, Svatopluk (with Rödl, Vojtěch) Orthogonal partitions and covering of graphs. With a loose Russian summary. Czechoslovak Math. J. 30(105) (1980), no. 3, 475–485. (A. Pultr) 82j:05088 05C70 (05B15) Poljak, Svato
 - (with Pultr, Ales) On the dimension of trees. Discrete Math. 34 (1981), no. 2, 165-171. (Donald L. Goldsmith) 82m:05040 05C05 (05C10)
 (with Rödl, Vojtěch) On set systems determined by intersections. Discrete Math. 34
- (1981), no. 2, 173-184. (Maria Ferro) 82e:05102 05C65 (05C75) (with Nelethil, Jaroslav; Turzik, Daniel) Amalgamation of matroids and its
- cations. J. Combin. Theory Ser. B 31 (1981), no. 1, 9-22. (John H. Mason) 05C55 (05B35, 05C65)
- (with Rödl, Vojtěch) On the arc-chromatic number of a digraph. J. Combin. Theory Ser. B 31 (1981), no. 2, 190-198. (R. C. Entringer) 82j:05059 05C15 (05C20)

- Poljakov, E. A. Some remarks on relative recursiveness. (Russian). Recursive functions (Russian), pp. 61-70, Ivanov. Gos. Univ., Ivanovo, 1978. (G. Asser) 82i:03056 03D30
 Poljakov, I. N. (with Petrov, V. V.; Ageev, V. M.; Zaporožec, A. V.; Kort'ev, A. V.; Kostjukov, V. M.; Medvedev, S. B.) Information theory of complex systems functioning
- under conditions of incomplete information. (Russian) Engineering cybernetics, Vol. 13 (Russian), pp. 121-151, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (Authors' summary) 82f:90074 90C15 (92A20)
- Poljakov, L. Ja. Normal subgroups of finite groups. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 11, 965-966, 1051. (Author's summary) 82k:20041
- Poljakov, N. D. (with Ostianu, N. M.) Submanifolds in differentiable manifolds provided with differential geometric structures (Russian) Problems in geometry, Vol. 11 (Russian), pp. 3-63, 243, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (Adrian C. Albu) 82e:53084 33C40 (33C10, 53C15)
- Poljakov, R. V. (with Bessonov, E. V.) An application of bicubic splines to the solution of two-dimensional integral equations of the second kind with constant limits. (Russian) Approximate and que ulitative methods in the theory of differential and functional-different equations (Russian), pp. 64-75, 111, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1979. (R. Smarzewski) 82c:65010 65D07 (45B05)
- tova, L. N. Necessary conditions for the extremum of quasidifferentiable functions. (Russian English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 3, 57-62, 130. (Author's summary) 82e:90092 90C30

 Poljanin, A. D. On the integration of nonlinear nonstationary equations of convective heat
- and mass transfer. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 4, 817-820. (B. Vujanović) 82b:80012 80A20
 - On solving some nonlinear boundary layer problems of nonsteady diffusion (heat sfer). (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 1, 53-56. (B. Vujanović) 80A20
- Poljudov, A. N. (with Seljandin, B. D.; Sigov, Ju. S.) A three-dimensional kinetic plasma model in a problem of evolution of a Langmuir wave of large amplitude. (Russian) Dokl. k SSSR 246 (1979), no. 1, 58-62. (From the text) 82g:82046 (35020, 82-04)
- Polk, J. F. Boundary and interior layers in parabolic equations. Boundary and interior layers nal and asymptotic methods (Proc. Conf., Trinity College, Dublin, 1980), pp. 397-402, Boole, Din Laoghaire, 1980. (Rudolf Gorenflo) 82c:35007 (35C20)
- ard (with Moser, William O. J.) A new identity and some applications. Pollack, Richa Canad. Math. Bull. 23 (1980), no. 3, 281-290. (S. Zaks) 82b:05022 05A19
 - (with Goodman, Jacob E.) Proof of Grünbaum's conjecture on the stretchability of certain arrangements of pseudolines. J. Combin. Theory Ser. A 29 (1980), no. 3, 385-390. (Joseph Zaks) 82m:05026 05B25 (51D20)
- Pollak, Edward (with Emigh, Ted H.) Fixation probabilities and effective population numbers in diploid populations with overlapping generations. Theoret. Population Biol. 15 (1979), no. 1, 86-107. (Susan Wilson) 82k:92041 92A10
- Effective population numbers and mean times to extinction in dioecious populations with overlapping generations. Math. Biosci. 52 (1980), no. 1-2, 1-25. (J. N. Kapur) 92A10 (92A15)
- Pollak, Eli (with Child, Mark S.) Analytical reaction dynamics: origin and implications of trapped periodic trajectories. J. Chem. Phys. 73 (1980), no. 9, 4365-4372. (Authors' summary) 82c:80018 80A30 (58F22)
- (with Child, Mark S.) Classical mechanics of a collinear exchange reaction: a direct evaluation of the reaction probability and product distribution.
- (1980), no. 9, 4373-4380. (Authors' summary) 82c:80019 80A30 (58F22) A classical spectral theorem in bimolecular collisions. J. Chem. Phys. 74 (1981), no. 12, 6763-6764. (Author's summary) 82g:82030 82A40 (82A05)
- A nonseparable quantum mechanical transition state theory. J. Chem. Phys. 74 (1981), no. 12, 6765-6770. (Author's summary) 82h:81154 81G55
- Pollak, G. (with Szendrei, Agnes) Independent basis for the identities of entropic groupoids. Comment. Math. Univ. Carolin. 22 (1981), no. 1, 71–85. (Jaroslav Ježek) 08B05 (20L05)
- Pollak, H. O. (with Coffman, Edward G., Jr.; Gelenbe, Erol; Wood, R. C.) An analysis of parallel-read sequential-write systems. Performance Evaluation 1 (1981), no. 1, 62-69. (Authors' summary) 82c:68020 68C15
- Pollak, Moshe (with Cohen, Jiska) A comparison of the independent-samples t-test and the paired-samples t-test when the observations are nonnegatively correlated pairs. J. Statist. Plann. Inference 5 (1981), no. 2, 133-146. (Authors' summary) 82h:62038 62F03
- Pollard, David Limit theorems for empirical processes. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 2, 181-195. (Sándor Csörgó) 82;60053 60F17 (60F05)
 Pollard, H. (with Berkovitz, L. D.) A class of filter problems. I. Existence theory. J. Optim.
- Theory Appl. 32 (1980), no. 4, 521–536. (Authors' summary) 821:93075 93E11

 Pollard, J. H. ★Numerical and statistical techniques. With examples mainly from the life sciences. Cambridge University Press, Cambridge-New York, 1979. xvi +349 pp. ISBN 0-521-297508 (Editors) 82;65031 65U05 (00A06, 62-04, 65-04, 92-01,
- Polley, L. On infinite direct products of Lorentz transformations. Lett. Math. Phys. 4 (1980), no. 3, 227-233. (Adriaan Tip) 82h:81046 81D05 (22D35, 46M99) (with Reents, G.; Streater, R. F.) Some covariant representations of massless boson
 - fields. J. Phys. A 14 (1981), no. 9, 2479-2488. (Wolfgang Lücke) 82k:81034 (46L60, 81E05)
- Pollin, Jack M. (with Schoenberg, I. J.) On the matrix approach to Fibonacci numbers and the Fibonacci pseudoprimes. Fibonacci Quart. 18 (1980), no. 3, 261-268. (Jau-Shyong Shiue) 82f:10013 10A35
- Pollington, Andrew Douglas The Hausdorff dimension of certain sets related to sequences which are not dense mod 1. Quart. J. Math. Oxford Ser. (2) 31 (1980), no. 123, 351-361. (K. E. Hirst) 82a:10065 10K50 (10K05, 28A75)
 - Progressions arithmètiques généralisées et le problème des (½)". (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 7, 383-384. (Author's summary)
- Pollock, J. (with Pritchard, A. J.) The infinite time quadratic cost control problem for distributed systems with unbounded control action. J. Inst. Math. Appl. 25 (1980), no. 3,

287-309. (E. O. Roxin) 82k:49012 49A27

1982

(with Pritchard, A. J.) The tracking problem for distributed systems with unbounded control action. J. Inst. Math. Appl. 25 (1980), no. 4, 387-396. (Authors' summary) 49B27

Pollock, John L. A refined theory of counterfactuals. Special issue on conditionals. J. Philos. Logic 10 (1981), no. 2, 239-266. (N. B. Cocchiarella) 82m:03019

niakowski, Z. On some ordinary differential equations. Comment. Math. Prace Mat. 21 (1980), no. 1, 219-231. (From the text) 82m:34033 34C11 (34A20, 34A34)

Polo, S. R. (with Willson, P. D.) Polynomial filters of any degree. J. Opt. Soc. Amer. 71 (1981), no. 5, 599-603. (Authors' summary) 82d:93066 93E11

ockii, V. N. Maximal errors of Luenberger observers for single-output systems. Autom

i Telemeh. 1980, no. 3, 31-35 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 3, part 1, 312-316. (Author's summary) 82g:93046 93E12 Control of (1900), no. 3, part 1, 512-310. (Audita's saminary) 622-3040

Signature of the Control of the Contro 82i:20065 20E34

winkin, E. S. (with Gusjatnikov, P. B.) A linear differential game with a simple matrix. (Russian) Differencial nye Urannenija 16 (1980), no. 8, 1360–1369, 1531. (Clau Simionescu) 82c:90103 90D25

Simionescu) 82e:90103 90D25 lozov, R. V. (with Smetanië, Ja. S.) On the algorithms for determining the primary structure of biopolymers. Bull. Math. Biol. 41 (1979), no. 1, 1-20. (Authors' summ 82m:92037 92A09 (68G99, 92A40)

Poltavcev, A. N. (with Vereškov, G. M.) Quantum phenomena in strongly curved space-time and the structure of equations of a gravitational field. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Skoly Ser. Estesto. Nauk. 1980, no. 3, 40–48, 110. (S.

G. Mamaev) 82c:83053 83C99 (81G25) (with Beilin, V. A.; Vereškov, G. M.; Griškan, Ju. S.; Ivanov, N. M.; Nesterenko, V. A.) Quantum gravitational effects in an isotropic universe. Ž. Eksper. Teoret. Fiz. 78

(1980), no. 6, 2081–2098 (Russian); translated as Soviet Phys. JETP 51 (1980), no. 6, 1045–1052. (Authors' summary) 820:83034 83C45 (83F05) terevoič, V. M. Optimal distribution of goods under nonequilibrium prices. (Russian) Ékonom. i Mat. Metody 16 (1980), no. 4, 746–759. (Hildegard Dierker) 82a:90028 90A12

eri, Jorge Bayesian decision. I. (Spanish) Cienc. Tecn. 3 (1979), no. 1, 39-51. (J. M. Bernardo) 82i:62006 62A15

Poltyrev, G. S. (with Kudrjašov, B. D.) Upper bounds for decoding error probability in some broadcast channels. Problemy Peredači Informacii 15 (1979), no. 3, 3–17 (Russian); translated as Problems Inform. Transmission 15 (1979), no. 3, 163-174 (1980). (Authors' summary) 82a:94047 94A24

Carrying capacities for certain broadcast channels. (Russian) Methods of information transmission and processing (Russian), pp. 22-27, 116, "Nauka", Moscow, 1980. (W. Greblicki) 82m:94036a 94A40

(with Pinsker, M. S.) Carrying capacity of a stationary Gaussian broadcast channel. (Russian) Methods of information transmission and processing (Russian), pp. 27-45, 116, "Nauka", Mascow, 1980. (W. Greblicki) 82m:94036b 94A40

Poltz, Juliusz Analysis of a quasistationary electromagnetic field by iteration methods. (Polish. English and Russian summaries) Rozprawy Politech. Poznań No. 96 (1979), 91 pp. (Author's summary) 82a:78007 78A25 (93B55)

ubarinova-Kočina, P. Ja. (with Džuraev, T. D.; Kabulov, V. K.; Salahitdinov, M. S.; Sarymsakov, T. A.; Siraždinov, S. H.) Ivan Seměnovič Aržanyh. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 195-202. (Editors) 82b:01042

See also Aleksandrov, P. S.; et al., 82g:01035

Poluikis, John A. (with Hill, Richard D.) Completely positive and Hermitian-preserving linear transformations. Linear Algebra Appl. 35 (1981), 1-10. (B. N. Moyls) 82i:15002 15A04 (15A57)

Poluljah, A. K. (with Ogai, S. V.) Estimation of the number of subfields of index two of a hyperelliptic field. (Russian) Studies in geometry and algebra (Russian), pp. 114-119, Kirgiz. Gos. Univ., Frunze, 1978. (G. Eiseareich) 82h:12023 12F05

Construction of a subgroup of the group of divisors of degree zero on a curve of genus two. (Russian) Studies in geometry and algebra (Russian), pp. 126-133, Kirgiz. Gos. Univ., Frunze, 1978. (Editors) 82g:14032 14H35

le conte de Poly, C. See Le Conte de Poly, C.
Polya, G. (with Szegő, Gábor) ★Задачи и теоремы из анализа. Часть вторая. (Russian)
[Problems and theorems in analysis. Part Two] Теория функций (специальная часть).
Распределение нулей. Полиномы. Определителя. Теория часел (The theory of functions (a special section). Distribution of zeros. Polynomials. Determinants. Number theory] Translated from the German by D. A. Raïkov. Third Russian edition. "Nauka", Moscow, 1978. 431 pp. (Editors) 82c:26001 26-01 (00A07)

★Vom Lösen mathematischer Aufgaben. Band I. (German) [On solving mathematical problems. Vol. I] Einsicht und Entdeckung, Lernen und Lehren. [Insight and discovery, learning and teaching] Second edition. Translated from the English by Lulu Bechtolsheim. Wissenschaft und Kultur [Science and Culture], 20. Birkhäuser Verlag, Basel-Boston, Mass., 1979. 315 pp. ISBN 3-7643-1101-0 (Editors) 82i:00004

★Mathematical discovery. On understanding, learning, and teaching problem solving, Reprint in one volume. With a foreword by Peter Hilton. With a bibliography by Gerald Alexanderson. With an index by Jean Pedersen. John Wiley & Sons, Inc., New York, 1981. xxv+220 pp. ISBN 0-471-08975-3 (Editors) 82f:00002

Polyachenko, V. L. See Poljačenko, V. L. Polyak, B. T. See Poljak, B. T.

Polyzankis, M. (with Jami, A.) A finite element solution of diffraction problems in unbounded domains. Comput. Methods Appl. Mech. Engrg. 29 (1981), no. 1, 1-18. (Authors' summary) 82m:76054 76Q05 (65P05, 76A60)

Polyzou, Wayne Interior dynamics in the unified connected reaction theory of Polyzou and Redish. J. Math. Phys. 22 (1981), no. 4, 798-802. (Chindhu S. Warke) 82g:81098

neau, V. Strange attractors. Intrinsic stochasticity in plasmas (Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 315-328, École Polytech., Palaiseau, 1979.

(Michael J. Field) 82c:58041 58F13 (76F99, 86A10)

(with Manneville, Paul) Intermittency: a generic phenomenon at the onset of turbulence. Intrinsic stockasticity in plasmas (Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 329-340, École Polytech., Palaiseau, 1979. (C. Tresser) 82c:58042 58F13 (28D20, 76F99)

(with Manneville, Paul) Intermittency and the Lorenz model. Phys. Lett. A 75 (1979/80), no. 1-2, 1-2. (Authors' summary) 82c:58039 58F13 (76F99) (with Zaleski, S.) Wavelength selection in one-dimensional cellular structures

(French summary) J. Physique 42 (1981), no. 4, 515-528. (Authors' summary) 821:76017 76B35 (35B32, 58E07, 76B15, 92A09)
(with Manneville, Paul) Wavelength selection in axisymmetric cellular structures.

(French summary) J. Physique 42 (1981), no. 8, 1067-1074. (K. K. Puri) 82k:76033 76E15 (58F14)

A solvable problem in Poisson statistics. J. Statist. Phys. 24 (1981), no. 1, 189-197. (Gheorghe Nenciu) 82d:82100 82A77 (34F05, 82A05)

nerance, Carl (with Hunsucker, J. L.) There are no odd super perfect numbers less than 7-10²⁴. Indian J. Math. 17 (1975) as 3 107-130. (Feen the interaction of the control of the contr Indian J. Math. 17 (1975), no. 3, 107-120. (From the introduction) 82b:10010 10A25 (10-04, 10A20)

(with Selfridge, J. L.; Wagstaff, Samuel S., Jr.) The pseudoprimes to 25 · 109. Math. Comp. 35 (1980), no. 151, 1003-1026. (Authors' summary) 82g:10030 10A25) 10A40 (10-04.

On the distribution of amicable numbers. II. J. Reine Angew. Math. 325 (1981),

183-188. (G. J. Rieger) 82m:10012 10A20
(with Diamond, Harold G.; Rubel, Lee A.) Sets on which an entire function is determined by its range. Math. Z. 176 (1981), no. 3, 383-398. (I. V. Ostrovskii)

Stee-30031 30D20

nerol, J.-Ch. About a minimax theorem of Matthies, Strang and Christiansen. Math. Programming 19 (1980), no. 3, 352-355. (W. Schirotzek) 82g:49010 49A40 (90C25) (with Levine, P.) Erratum: "Sufficient conditions for Kuhn-Tucker vectors in convex ramming" [SIAM J. Control Optim. 17 (1979), no. 6, 689-699; MR 81a:90155].

SIAM J. Control Optim. 19 (1981), no. 3, 431–432. (Editors) 82d:90998 90:C25
nillo, Isabella Anastasia Immersion of metric linear spaces of dimension four into nonlinear spaces of dimension three. (Italian. English summary) Pubbl. Istit. Mat. Appl. Fac. Ingr. Unito. Stud. Roma Quaderno No. 17 (1981), 3–14. (Rainer Löwen) 82h:51004 51A30 (51A45, 51B10, 51F15)

Inmaret, Jean-François Differential Galois theory. Geometry and differential geometry (Proc. Conf., Univ. Haifa, Haifa, 1979), pp. 406-413, Lecture Notes in Math., 792, Springer, Berlin, 1980. (A. M. Vinogradov) 82e:35004 35A30 (12H05, 58H05)

Galois theory for systems of partial differential equations. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 348-350, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81004) 13N05 (35A30)

Cohomologie intrinsèque des algèbres de Lie tronquées. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 4, A181-A184. (A. M. Vinogradov) 82g:58100 58H15 (17B56)

Algèbre différentielle formelle. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 10, 519-522. (Author's summary) 82i:12027 12H05 (58H15)

Systèmes automorphes d'équations aux dérivées partielles (English summary) C. R. Acad. Sci. Paris Sér. 1 Math. 292 (1981), no. 11, 551-554. (Author's summary) 82e:58106 58H05 (35A99, 58G99)

Théorie de Galois différentielle. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 17, 817-820. (Author's summary) 82f:12031 12H05 (35A99,

Théorie de Galois des systèmes dynamiques. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 18, 885-888. (Author's summary) 82g:12028 12H05 (35F99, 58F05, 58H15, 70H99)

mmerening, Klaus Invarianten unipotenter Gruppen. Math. Z. 176 (1981), no. 3, 359–374. (H. H. Andersen) 82i:14029 14L30 (20G05)

merenke, C. (with Jørgensen, Troels; Marden, A.) Two examples of covering surfaces. Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference (State Univ. New York, Stony Brook, N.Y., 1978), pp. 305-317, Ann. of Math. Studies, 97, Princeton Univ. Press, Princeton, N.J., 1981. (Jane Gilman) 82k:30048 30F35

erenke, Ch. Boundary behaviour of conformal mappings. Aspects of cont complex analysis (Proc. NATO Adv. Study Inst., Univ. Durham, Durham, 1979), pp. 313-331, Academic Press, London, 1980. (C. L. Belna) 82i:30008 30C3. (with Marden, A.) Analytic self-mappings of infinite order of Riemann surfaces. J Analyse Math. 37 (1980), 186-207. (B. Maskit) 82e:38067 30F99

On asymptotic iteration of analytic functions in the disk. Analysis 1 (1981), no. 1,

45-61. (I. N. Baker) 82g:30048 30D05 (60J80)

On ergodic properties of inner functions. Math. Ann. 256 (1981), no. 1, 43-50. (Kenneth Stephenson) 82h:30019 30D05 (28D20)

On the stationary measures of critical branching processes.

Gebiete 55 (1981), no. 3, 305-312. (D. R. Grey) 82c:60151 60J80

Pomraning, G. C. (with Larsen, Edward W.) Elementary solutions of the linear transport equation for continuously varying spatial media. J. Math. Phys. 21 (1980), no. 7, 1603-1612. (Paul F. Zweifel) 82f:82070 82A70

The criticality problem for an exponential atmosphere. J. Math. Phys. 22 (1981), no. 8, 1623–1625. (C. V. Pao) 82j:85008 85A25 (82A70)

narin, Ja. P. Similarity transformations of the plane. (Russian) Mat. v Škole 1979, no. 3, 62–67. (Krzysztof Witczyński) 824:51009 51M05 (51N30)

nath, H.-E. (with Schubert, M.) The time-space-dependent power spectrum for the

description of nonstationary and inhomogeneous electromagnetic fields. (Germa summary) Ann. Physik (7) 37 (1980), no. 2, 109-120. (Werner Kohler) 824:78011 78A25 (94C05)

See Manara, Carlo Felice; et al., 82c:01024

adélicek, Bedřich On the intersection graph of a commutative distributive groupoid. (Russian summary) Math. Slovaca 29 (1979), no. 1, 57-62. (Ian M. Chiswell) 82e:08006

The intersection graph of an ordered commutative semigroup. Semigroup Forum 19 (1980), no. 3, 213-218. (P. F. Conrad) 82&06015 06F05 (05C99, 20M14)

- On representations of tolerance ordered commutative semigroups. Czechoslovak Math. J. 31(106) (1981), no. 1, 153-158. (S. M. Goberštein) 82d:06016 06F05 (92A27)
- al and convolutional discrete systems. Kybernetika (Prague) 17 On com (1981), no. 4, 277-286. (Author's summary) 82m:93064 93C55 (93D99)

- (1981), no. 4, 217-280. (Author's summary) admission:

 Uniform semigroups whose proper quasi-ideals are power joined. Semigroup Forum
 22 (1981), no. 4, 331-337. (Nascem Ajmal) 82g:20097

 20M12

 ulrorskii, L. Z. See Noether, F., 82e:01127

 ulrowswamp, P. K. (with Kaliappan, P.; Lakshmanan, M.) Travelling waves for a model nonlinear reaction-diffusion system. J. Phys. A 13 (1980), no. 7, L227-L229. (From the nary) 824:80031 80A30 (92A09)
- , A. I. See Po ko, O. İ.
- enko, G. G. (with Grunskii, 1. S.) A criterion of finiteness of a class of automata indistinguishable by a simple experiment. (Russian) Metody Diskret. Analiz. No. 36 (1981), 3–15, 93. (Authors' summary) 82m:68097 68D05
- nko, L. A. (with Borovik, V. N.; Ponomarenko, T. B.) *Curryama пианической диспетчеризации дискретного производства. (Russian) [Situational odels of dynamic dispatching of discrete production] Preprint 79-61. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. 30 pp. (Authors' summary) 82f:90039
- ko, L. L. A problem of distinguishing and identifying objects described by stochastic equations of hyperbolic type. (Russian) Questions of modeling comp (Russian), pp. 35-40, 78, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (Author's summary) 82i:930886 93E12 (35R60, 60H15)
- omarenko, O. İ. Representations of moving averages for generalized homogeneous random fields on locally compact abelian groups. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 24 (1981), 119–125, 155. (G. M. Fel'dman) 82k:60020 60B15 (43A99, 60G10, 60G60)
 - Estimates of the mean of generalized random fields. (Russian. English summa Teor. Verojatnost. i Mat. Statist. 25 (1981), 110-113, 168. (D. Szász) 82m:62154 62J05 (60G60, 62M09)
- renko, T. B. (with Borovik, V. N.; Ponomarenko, L. A.) ★Ситуациониме модели динамической диспетчеризации дискретного производства. (Russian) [Situational models of dynamic dispatching of discrete production] Preprint 79-61. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. 30 pp. (Authors' sun
- omarenko, V. G. (with Vlasov, V. F.; Kolmogorov, A. N.; Trofimov, V. M.; Judin, D. B.) Aleksandr Filippovič Timan (on the occasion of his sixtieth birthday). (Russian)
- Uspehi Mat. Nauk 36 (1981), no. 2(218), 221-226. (Editors) 82:01153 01A70 onsarenko, V. P. Investigation of a model of a correlational-extremal system of tracking of the delay of a noisy signal. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 5, 177-184, 223 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 5, 127-134 (1981).
- (Author's summary) 82m:34024 94A12 (60G35)

 (Author's summary) 82m:34024 94A12 (60G35)

 somarenko, V. S. Solution of a class of mathematical programming problems using the group method of data handling (GMDH). Automatika 1980, no. 1, 13–19, 94 (Russian); translated as Soviet Automat. Control 13 (1980), no. 1, 9–14 (1981). (From the text) 90C30 (65K05)
- A method of solving contin ous vector optimization problems with a large number of criteria. Avtomatika 1980, no. 3, 59-68, 94 (Russian. English summary); translated as Societ Automat. Control 13 (1980), no. 3, 50-58 (1981). (Author's summary) 82e:90102 90C31 (90A05)
- Nomarev, A. P. An error estimate of the numerical method of constructing an alternative Pontrjagin integral. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1978, no. 4, 37-43. (Author's summary) 82a:65019 65D30 (90D25)
- rev, D. A. Deformations of complex tori. (Russian) Geometric metho of analysis and algebra (Russian), pp. 161-169, Jaroslav. Gos. Univ., Yaroslavl', 1978. (A. Oniščik (RŽMat 1980:1 A743)) 82k:32049 32G05
- rev, Paul The Doi-Naganuma lifting of quaternary theta series. Math. Ann. 255
- (1981), no. 4, 443–452. (Marie-France Vignéras) 82;:10050 10D20 (10C15)
 nombrev, S. M. On the theory of the Tricomi problem for the Lavrent'ev-Bicadze
 equation with a spectral parameter. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 4, 797-801. (V.-V. Olariu) 82m:35110 35M05
- rev, V. A. (with Gel'fand, I. M.) Model algebras and representations of graphs. (Russian) Funkcional. Anal. i Priložen. 13 (1979), no. 3, 1-12. (V. Dlab) 82a:16030
- (with Kaplenko, E. F.) Binary relation of a nondegenerate quadruple of subspaces. (Russian) Funkcional. Anal. i Priložen. 15 (1981), no. 1, 76-77. (J. Bulatović) 82d:15018
- rev, V. D. Connections of the solvability of two boundary value problems with functional boundary conditions for second-order functional-differential equations. (Russian) Law. Mat. Ežegodnik No. 24 (1980), 137-141, 259-260. (I. Kiguradze) 34K10
- arev, V. I. (with Bandlov, I.) Cardinal-valued invariants of tightness type. Absolutes of spaces and continuous mappings. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 23-30. (Z. Balogh) 82c:54004 54A25
- omarev, V. M. (with Aleksandrov, V. V.) Constructive approach to knowledge representation. CL & CL—Comput. Linguist. Comput. Lang. 14 (1980), 244–259. (From the summary) 82g-68022 68B15
- See also Algorithmic models in computerization of research, 82b:68002 as, J. M. (with Gomis, J.) Poincaré transformations and Galilei transformations. Phys. Lett. A 66 (1978), no. 6, 463-465. (Helmuth K. Urbantke) 82a:83003
- (with Gomis, J.; Lobo, J. A.) A singular Lagrangian model for two interacting relativistic particles. (French summary) Ann. Inst. H. Poincaré Sect. A (N.S.) 35 (1981), no. 1, 17–35. (Authors' summary) 82i:70014 70F99 (83A05) ns, Odile Test sur la loi d'un processus ponctuel. (English summary) C. R. Acad. Sci.
- Paris Sér. I Math. 292 (1981), no. 1, 91-94. (Author's summary) 82c:60095 60G55
- sard, Claude An application of fuzzy subsets theory to the analysis of the consumer's

- spatial preferences. Fuzzy Sets and Systems 5 (1981), no. 3, 235–244. (Author's summary) 82k:90009 90A06 (03E72)
- in, J. *Approaches to the theory of optimization. Cambridge Tracts in
- Mathematics, 77. Cambridge University Press, Cambridge-New York, 1980. xii+205 pp. ISBN 0-521-23155-8 (S. Rolewicz) 82b:90071 90Cxx (49-01, 90-01) nte, S. (with Ansemil, J. M.) An example of a quasinormable Fréchet function space which is not a Schwartz space. Functional analysis, holomorphy, and approximation theory
- (Proc. Sem., Unio. Fed. Rio de Janeiro, Rio de Janeiro, 1978), pp. 1–8, Lecture Notes in Math., 843, Springer, Berlin, 1981. (Klaus-Dieter Bierstedt) 82:46004 46A05 (32A10.
- ntrjagin, L. S. *Знакомство с высшей математикой. (Russian) [Acquaintance with higher mathematics] Анализ бесконечно малых. [Analysis of infinitesimals] "Nauka", Moscow, 1980. 256 pp. (М. Stojaković) 82e:00005 00A05 (26-01)
 - Linear differential pursuit games. (Russian) Mat. Sb. (N.S.) 112(154) (1980), no. 3(7), 307-330, 475. (Milan Medved) 82a:90189 90D26
 - Optimization and differential games. (Czech) Translated from the Russian by Pavel Goralčik. Pokroky Mat. Fyz. Astronom. 25 (1980), no. 6, 318-324. (Editors) 82g:90 90D25
 - (with Vladimirov, V. S.; Guščin, A. K.; Dezin, A. A.; Millionščikov, V. M.) Valentin Petrovič Mihailov (on the occasion of his fiftieth birthday). (Russian)
- Differencial'nye Uravnenija 17 (1981), no. 4, 757-762. (Editors) 82g:01077
- Pooch, U. W. (with Feldman, Richard M.; Adkins, G. W.; Curry, Guy L.) Measurement bias in feedback queues. J. Assoc. Comput. Mach. 28 (1981), no. 2, 351-357. (Authors' summary) 824-68027 68C15 (68B20). summary) 82d:68 68C15 (68B20)
- Pool, T. P. (with Kupsch, J.) Saturation of the Froissart bound. (Italian and Russian maries) Nuovo Cimento A (11) 52 (1979), no. 1, 99-114. (Authors' summary) 81F20 (32A45)
- Poole, George D. (with Campbell, Stephen L.) Computing nonnegative rank factorizations.

 Linear Algebra Appl. 35 (1981), 175–182. (Petr Liebl) 82i:15009 15A23 (15A09, 15A48)
 - (with Campbell, Stephen L.) Convergent regular splittings for nonnegative matrices. ear and Multilinear Algebra 10 (1981), no. 1, 63-73. (Thomas L. Markham) 82m:15005 15A09 (15A48, 65F05)
- Poon, S. W. H. (with Bui, Tien D.) On the computational aspects of Rosenbrock procedures with built-in error estimates for stiff systems. BIT 21 (1981), no. 2, 168-174. (Authors' summary) 82h:65048 65L05
- Poon, Ting Chung (with Korpel, Adrianus) Feynman diagram approach to acousto-optic scattering in the near-Bragg region. J. Opt. Soc. Amer. 71 (1981), no. 10, 1202-1208. (Authors' summary) 82i:78025 78A45 (81C30)
- (Authors summary) secretized for the following for the following for generalized k-numerical range. Linear and Multilinear Algebra 9 (1980), no. 3, 181–186. (E. Deutsch) 82x:15024 15A60
- Poor, H. Vincent Further results in robust Wiener filtering. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 494-499, IEEE, New York, 1979. (Author's summary) 82a:93062 93E11 (60J99)
- Poore, A. B. (with Heinemann, R. F.) Hopf bifurcation computations for distributed parameter systems. Transactions of the Twenty-Sixth Conference of Army Mathematicians (Hanover, N.H., 1980), pp. 313-325, ARO Rep. 81, 1, U. S. Army Res. Office, Research Triangle Park, N.C., 1981. (Authors' summary) 82a:35012 35B32 (58E07, 65H10, 80A30, 92A09)
 - (with Halbe, D. C.) Dynamics of the continuous stirred tank reactor with reactions + B → C. Chem. Engrg. J. 21 (1981), no. 3, 241-253. (Authors' summary) 82j:80005 80A30 (58F14)
- rnima, S. Multiplicateurs des espaces de Sobolev. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 3, 195–196. (Author's summary) 82c:46047 46F05
- van der Poorten, Alfred J. See Van der Poorten, Alfred J.
- Poorzahedy, Hossain (with Turnquist, Mark A.) Approximate algorithms for the discrete network design problem. Transportation Res. Part B 16 (1982), no. 1, 45-55. (Authors' mary) 82k:90057 90B20 (90C35)
- Pop, I. A generalization of simple spaces. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 6, 925-932. (M. Arkowitz) 82b:55013 55Q35
- Pop, Maria S. On the boundary in topological n-semigroups. Mathematica (Chij) 22(45) (1980), no. 1, 127-130. (Anne C. Baker) 82k:22002 22A15
- Pop, Radu (with Golumbovici, Dan) Step-by-step linear interpolator with the computation of the discriminant and minimization of the interpolation error. (Romanian. English summary) Bul. Inst. Politehn. Bucureşti Ser. Electrotehn. 42 (1980), no. 4, 97-105. (Authors' summary) 82g:68094 68K05 (65D05)
- Popa, Emil Sur quelques critères d'oscillation pour les équations différentielles linéaires du second ordre. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 1, 135-138. (L. Erbe) 82h:34045 34C10
- Popa, Eugen Standard spaces of balayage-standard H-cones. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 7, 1015–1022. (Ursula Schirmeier) 82i:31012 31D05 (46E05, 60145)
- Popa, M. S. (with Ixaru, L. Gr.; Cristu, M. I.) Choosing step sizes for perturbative methods of solving the Schrödinger equation. J. Comput. Phys. 36 (1980), no. 2, 170-181. (Authors' summary) 824:81020a 81C05 (65L15, 81C12)

 Popa, Maria Solution of the integral equation in S'(R*). (Russian) Bull. Math. Soc. Sci.
- Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 2, 171-188. (A. S. Dynin) 82m:45002 45A05 (46F10)
- Popa, Nicolae Some ideals of operators on I_p. Rev. Roumaine Math. Pures Appl. 24 (1979), no. 7, 1117–1122. (N. Tomczak-Jaegermann) 82a:47044 47D30
 - (with Niculescu, Constantin P.) *Elemente de teoria spațiilor Banach. (Romanian) [Elements of the theory of Banach spaces] With an English summary. Editura Academiei Republicii Socialiste România, Bucharest, 1981. 239 pp. (G. J. O. Jameson) 82m:46010

 - On the complemented subspaces of I_p , 0 . Rev. Roumaine Math. Pures App. 26 (1981), no. 2, 287–299. (H. E. Lacey) 821-46011 46A45

 Basic sequences and subspaces in Lorentz sequence spaces without local convexity.

 Trans. Amer. Math. Soc. 263 (1981), no. 2, 431–456. (Bor-Luh Lin) 821-46012 46A4

Popa, Sorin (with Pimsner, M.; Voiculescu, Dan) Homogeneous C*-extensions of C(X)⊗K(H). I. J. Operator Theory 1 (1979), no. 1, 55-108. (Maurice J. Dupré) 82e:46093a 46M20 (47D25, 58G12)

(with Pimsner, M.; Voiculescu, Dan) Homogeneous C*-extensions of C(X)⊗K(H).
 II. J. Operator Theory 4 (1980), no. 2, 211-249. (Maurice J. Dupré) 82e:46093b
 46M20 (47D25, 58G12)

On the Russo-Dye theorem. Michigan Math. J. 28 (1981), no. 3, 311-315. (Guyan Robertson) 82;46074 46L05 (47C15)

Popa, Valeriu A common fixed point theorem for multifunctions. Bul. Ştiinţ. Tehn. Inst. Politehn. "Traian Vuia" Timişoara 24(38) (1979), no. 2, 7-8. (S. Swaminathan) 82m:54059 54125 (54C60)

H-almost continuous multifunctions. (Romanian. English summary) Stud. Cerc. Mat. 32 (1980), no. 1, 103–109. (O. Costinescu) 82a:54026 54C60

Connected monotone mappings between bitopological spaces. (Romanian. French summary) Stud. Cerc. Mat. 32 (1980), no. 2, 213-220. (Author's summary) 82j:54061 54E55 (54C08, 54C60)

Popa-Burcà, Liana Schwartz Trybulec domination and its corresponding right topology. Rev. Roumaine Math. Pures Appl. 23 (1978), no. 9, 1375–1388. (Author's summary) 82c:68051 68F05

Some topologies generated by quasiorder relations in algebraic linguistics. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 971–976, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (Editors) 82e:68087 68F05

Popadinec, V. I. Modification of a typical computational scheme of the Runge-Kutta method. (Russian) Stochastic methods in problems of optimization (Russian), pp. 27-35, 61, Preprint 80, 20, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (See 82d:90003) 651.99

Popcov, S. L. Hierarchical systems: approach to the description of structure and properties. (Russian) Mathematical methods of optimization and structuring of systems (Russian), pp. 115-119, 170, Kalinin. Gos. Univ., Kalinin, 1980. (Author's summary) 82g-92060 92A20 (93A13)

Pope, C. N. Eigenfunctions and Spin' structures in CP². Phys. Lett. B 97 (1980), no. 3-4, 417-422. (M. J. Perry) 82a:83040 83C99 (53C15, 53C55, 58A12, 58G10)

The η invariant for charged spinors in Taub-NUT. J. Phys. A 14 (1981), no. 5, L133-L137. (M. J. Perry) 82d:83049 83C99 (58G10)

Pope, Rulon D. (with Just, Richard E.) A general equilibrium model of production with a random marginal rate of substitution. J. Econom. Theory 19 (1978), no. 2, 534-547. (Authors' summary) 82g:90028 90A17 (90A14)

Pope, S. B. Transport equation for the joint probability density function of velocity and scalars in turbulent flow. *Phys. Fluids* 24 (1981), no. 4, 588-596. (Author's summary) 82482097 82A70 (80A20)

Popenda, Jerzy (with Werbowski, Jarosław) On the discrete analogy of Gronwall lemma. Fasc. Math. No. 11 (1979), 143–154. (Miomir S. Stanković) 82g:39011 39C05 (26D20, 39A05)

(261) 220, 39AU5)

(with Werbowski, Jarosław) On the asymptotic behaviour of the solutions of difference equations of second order. Comment. Math. Prace Mat. 22 (1980), no.

difference equations of second order. Comment. Math. Prace Mat. 22 (1980), no. 1, 135-142. (T. J. Mahar) 82i:39001 39A10 (39A12) assexu. Dorin (with Pitter Gerhard) Die Approximationseigenschaft von Primidealen.

Popescu, Dorin (with Pfister, Gerhard) Die Approximationseigenschaft von Primidealen. (English and Russian summaries) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 10, 771-778. (J. Ohm) 82d:13022 13J99 (14B12)

(with Basarab, Scrban A.; Nica, Vasile) Approximation properties and existential completeness for ring morphisms. Manuscripta Math. 33 (1980/81), no. 3-4, 227-282. (Carlo Toffalori) 82k:03047 03C60 (03H05)

A remark on two-dimensional local rings with the property of approximation. Math. Z. 173 (1980), no. 3, 235–240. (Leonard Lipshitz) 82b:13012 13J10 (14B12) (with Pfister, Gerhard) On three-dimensional local rings with the property of approximation. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 2, 301–307. (Johnny A. Johnson) 82b:13022 13H10 (14B12)

Popescu, Dragos Properties of signed graphs. (Romanian. French summary) Stud. Cerc. Mat. 31 (1979), no. 4, 433-452. (Ioan Tomescu and S. Marcus) 82b:05111 05C99

Popescu, E. Sur les connexions Galois. Proceedings of the International Symposium on Applications of Mathematics in System Theory (Univ. Braşov, Braşov, 1978), II, pp. 321–324, Univ. Braşov, Braşov, 1979. (Roman Murawski) 82a:04001 04A05 (08A99, 68F05)

Popescu, I. P. Recherches sur les variétés non holonomes à Timisoara. Proceedings of the National Conference on Nonholonomic Spaces (Iaşi, 1976), pp. 94–100, Ed. Acad. R.S. România, Bucharest, 1979. (Bernard Rouxel) 82i:010671 01A72 (53A40)

See also Proceedings: National Seminar on Finsler Spaces, 82k:53002

Popescu, Mariana (with Boju, V.; Virlan, I.) Espaces Chern-Vrânceanu qui admettent deux feuilletages à courbure presque constante. An. Unio. Craiova Mat. Fiz.-Chim. 6 (1978), 89–96. (Toru Ishihara) 82c:53018 53B20

89-96. (Toru Ishihara) 82e:55018 33820
Popescu, Mihai Florin Étude du mouvement optimum des véhicules spatiaux dans les conditions de la limitation du transfert de chaleur. Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 25 (1980), no. 5, 665-687. (Author's summary) 82d:70042 70M05 (80A20)

On re-entry into the atmosphere of spaceships on a circular trajectory with maximum final velocity and with limitation of the heat transfer. (Romanian. English summary) Stud. Cerc. Mat. 32 (1980), no. 5, 567–581. (Author's summary) 82h:70030 70M05 (70M10)

On the optimal transfer of a space vehicle at the libration point equidistant from the Earth-Moon system. (Romanian) Stud. Cerc. Mec. Apt. 39 (1980), no. 1, 29-47. (Gh. Silaş) 82e:70025 70M05 (70D10)

On an asymptotic representation related to the integration of the equation of motion of a rocket in a resistant medium. (Romanian) Stud. Cerc. Mec. Apl. 39 (1980), no. 4, 485-499. (Author's summary) 82e:70026 70P05 (70E10)

Méthodes d'énumération implicite basées sur la monotonie par morceaux. [Implicit enumeration methods based on piecewise monotonicity] Proceedings of the Sixth conference on Probability Theory (Bragov, 1979), pp. 443–454, Ed. Acad. R.S. România, Bucharest. 1981. (Author's summary) 82m:90120 90C10

Popescu, Nicolae N. Necessary and sufficient conditions for exponential dichotomies in Banach spaces. An. Univ. Timisoara Ser. Ştiinţ. Mat. 18 (1980), no. 1, 61–70. (Jan Prüss) 821:34065 34G10. Popescu, P. On a central axis problem. (Romanian. French summary) Bul. Ştiinţ. Inst. Politehn. Chij-Napoca Ser. Mat.-Fiz.-Mec. Apl. 20 (15:7), 54–58 (1978). (Author's summary) 82i:70001 70C99 (70B15)

Popescu, Vasile Existence for an abstract control problem in Banach spaces. Numer. Funct. Anal. Optim. 1 (1979), no. 5, 475–497. (S. Rolewicz) 82d:49008 49A27 (49A50)

Popivanov, Pet'r R. (with Popov, Georgi St.) A priori estimates and some microlocal properties of a class of pseudodifferential operators. C. R. Acad. Bulgare Sci. 33 (1980), no. 4, 461-463. (Bent E. Petersen) 82i:35193 35S05 (35H05, 58G15)

no. 4, 461–463. (Bent E. Petersen) 82f:35193 35S05 (35H05, 58G15)
Some classes of differential operators having no solutions. (Russian) C. R. Acad.
Bulgare Sci. 33 (1980), no. 12, 1603–1606. (L. Cattabriga) 82£435008 35A07 (32F20)
(with Popov, Georgi St.) Microlocal properties of a class of pseudodifferential operators with multiple characteristics. (Russian) Serdica 6 (1980), no. 2, 167–181. (Ju. V. Egorov) 282435008 35H05 (35A07, 35S05)

Popov, A. M. Comparison theorems for equations of neutral type and estimates of solutions. (Russian) Differential equations with deviating argument (Russian), pp. 60-65, Univ. Družby Narodov im. Patrisa Lumumby, Moscow, 1979. (M. I. Kamenskii) 82i:34088 34K15

(with Šabarov, A. Ju.) Study of magnetohydrodynamic stability of a compact torus. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1981, no. 1, 82-85, 88. (B. Vujanović) 821:76016 76E25 (58E07, 76W05)

Popov, B. A. Uniform approximation with interpolation. (Russian) Other i Peredača Informacii No. 60 (1980), 47-56, 114. (É. O. Zeel') 822-41010 41A10 (41A05) Approximation splines with a given error. (Russian) Other i Peredalva Informacii No. 60 (1980), 56-67, 114. (B. Bojanov) 82e-65012 65D07 (41A15, 65D10)

No. 60 (1980), 56-67, 114. (B. Bojanov) 82ee56012 65D07 (41A15, 65D10)
Uniform splines for approximation of continuous functions. (Russian)
Othor
Peredača Informacii No. 62 (1980), 62-65, 122. (Author's summary) 82f:65017 65D1:

Peredača Informacii No. 62 (1980), 62-65, 122. (Author's summary) 82f:65017 65D15 Popov, Błagoj S. Prof. Dragoslav S. Mitrinović (on his 70th birthday). (Macedonian) Prirod.-Mat. Fak. Univ. Kiril Metodij Skopje Godišen Zb. 29 (1978), 5-8 (1 plate). (Editors) 82f:01130 01A70

Popov, E. P. (with Petrov, B. N.; Krut'ko, P. D.) Nonlinear algorithms for the control of rotational motions of dynamical objects. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 5, 1079-1081. (A. A. Zlatkin) 82e:93055 93C15

(with Timofeev, A. V.) The principle of high-speed control in the problem of analytic synthesis of stabilization automata. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 5, 1073-1076. (From the text) 82i:93062 93D99 (34H05)

Popov, F. D. (with Voinovic, P. A.; Žmakin, A. I.; Fursenko, A. A.) Numerical study of flows of a gas with discontinuities of complex configurations. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 19 (1979), no. 6, 1608–1614, 1632. (Authors' summary) 82h:76033 76N99 (65R99, 76L05)

Popov, G. A. (with Danieljan, E. A.) A heavy traffic limit theorem for priority systems. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 1, 11-15. (W. Szczotka) 82a:60138 60K25

Popov, G. Ja. On a method of solving mechanics problems for domains with slits or thin inclusions. Prikl. Mat. Meh. 42 (1978), no. 1, 122-135 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 1, 125-139 (1979). (Author's summary) 82i:65129 (73C40)

Biorthogonal expansions in problems of mechanics. Prikl. Mat. Meh. 43 (1979), no. 4, 698-708 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 4, 747-757 (1980). (Author's summary) 821:73043 73T05 (42C05)

On expansion of the possibilities of the integral transformation method in solving problems of mechanics. Prikl. Mat. Meh. 44 (1981), no. 1, 130-142 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 1, 89-97 (1981). (P. M. Gupta) 82g:44001 44A05 (34825, 73C35)

49400 (34B23, 7323) (with Oniščuk, O. V.) Some problems of bending of plates with cracks and thin inclusions. Izv. Akad. Nauk SSSR Meh. Tverd. Tela 15 (1980), no. 4, 141–150

(Russian); translated as Mech. Solids 15 (1980), no. 4, 110-118. (Authors' summary) 82g;73044 73M99

(with Gribnjak, S. T.) Solving problems in mechanics for layered media. Prikl. Meh.
 16 (1980), no. 10, 68-74 (Russian); translated as Soviet Appl. Mech. 16 (1980), no. 10, 890-895 (1981). (Roger D. Low) 82h:73012 73C40 (73L15)

Popov, Georgi St. Parametrices for pseudodifferential operators with multiple characteristics. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 3, 297–300. (Toader Jucan) 82h;35102 . 35505 (47005)

(with Popivanov, Pet"r R.) A priori estimates and some microlocal properties of a class of pseudodifferential operators. C. R. Acad. Bulgare Sci. 33 (1980), no. 4, 461–463. (Bent E. Petersen) 82f:35193 35S05 (35H05, 58G15)

Hypoelliptic operators with multiple characteristics. Math. Nachr. 95 (1980), 27-46. (Maria Mascarello Rodino) 82i:35059 35H05 (35S05)

(with Popivanov, Pet"r R.) Microlocal properties of a class of pseudodifferential operators with multiple characteristics. (Russian) Serdica 6 (1980), no. 2, 167–181. (Ju. V. Egorov) 82d:35038 35H05 (35A07, 35S05)

(with Petkov, Vesselin) Asymptotique de la phase de diffusion pour des domaines non convexes. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 4, 275–277. (Authors' summary) 82b:35123 35P25

Popov, Ju. I. On the invariant framing of a special class of decomposable hyperbands CH_m in a projective space. (Russian) Kaliningrad. Gov. Univ. Differencial rapid Geom. Mnogoobraz. Figur No. 11 (1980), 70–75, 127. (A. H. Hakimov) 82m:S2010 53A20

Popov, Ju. P. (with Tihonov, A. N.; Bicadze, A. V.; Erugin, N. P.; Arsen'ev, A. A.; Il'in, V. A.; Svešnikov, A. G.) Aleksandr Andreevič Samarskii (on the occasion of his 60th birthday). (Russian) Differencial'nye Uravnenija 15 (1979), no. 7, 1155–1163. (Editors) 82161074. D1470.

(with Popov, S. B.) Peculiarities of the solution of equations of gas dynamics by finite-difference methods. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 91, 33 pp. (Publisher's description) 82m:76046 76N15 (76A60)

(with Mažorova, O. S.) Methods for the numerical solution of Navier-Stokes equations. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 4, 1005–1020, 1086. (Jaroslaw Jeleń) 824:76026 76D05 (65P05)

Popov, M. M. Wave field in the caustic shadow in the vicinity of a boundary flex point.

(Russian. English summary) Mathematical questions in the theory of wave propagation,

Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 89 (1979), 246–260,
 (V. Gheorghijā) 82b:78012 78A40

(with Tjurikov, L. G.) Two approaches to the calculation of geometric divergence in an inhomogeneous isotropic medium (Russian) Questions in the dynamical theory of seismic wave propagation, No. XX, pp. 61–68, 213–214, "Nauka" Leningrad. Otdel., Leningrad, 1981. (See 822:86002) 86A15

A new method of computation of wave fields using Gaussian beams. Wave Motion 4 (1982), no. 1, 85-97. (Author's summary) 82nr.73021 73D25 (65P05, 76Q05, 78A40) no. 5. B. (with Popov, Ju. P.) Peculiarities of the solution of equations of gas dynamics by finite-difference methods. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl.

Mat. Preprint 1980, no. 91, 33 pp. (Publisher's description) 82m:76046

w, S. P. (with Aristov, V. V.; Mahmudov, A. A.) Solution of the nonstat ity evolution in a viscous heat-conducting gas. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 4, 1066-1070, 1088. (Authors' summary) 82i:76062 76N15

pov, S. V. (with Zahar'jaščev, M. V.) On the power of countermodels in intuitionistic calculus. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 45, 28 pp. (Bernd Dahn) 82m:63022 03B45 (03B55)

ov, V. A. Superm d sen ires on Boolean algebras. (Russian) Functions of sets (Russian), pp. 40–49, Komi Gos. Ped. Inst., Syktyvkar, 1977. (L. Ja. Savel'ev) 82x:28007 28A60

(with Andreev, Andrei St.; Sendov, Blagovest) Jackson-type theorems for the best etric polynomials and splines. (Russia Zametki 26 (1979), no. 5, 791-804, 816. (Authors' summary) 824:42001 (41A15)

Popov, V. G. (with Tihonenko, M. Ja.) Approximate solution of a singular integral equation with involution. (Russian) Approximate solution of some problems for differential and integral equations of applied character (Russian), pp. 15–18, 46, Preprint 80, 17, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (See 82g:65004) 45E05 (65R20) ppov, V. N. Asymptotic behavior of the sum of sums of the elements of continued

fractions for numbers of the type a/p. (Russian. English summary) Analytic number theory and the theory of functions, 2. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 91 (1979), 81-93, 181. (Ekkehard Krätzel) 82a:10013

(with Konopleva, N. P.) ** Калибровочные поля. (Russian) [Gauge fields] Second tion. "Atomizdat", Moscow, 1980. 239 pp. (E. Wieczorek) 821::81043 81Exx

(35Q20, 81-20, 83Cxx)

(with Kapitonov, V. S.) Functional approach to the theory of crystals. (Russian)

Questions in quantum field theory and statistical physics, 2. Zap. Naučn. Sem.

Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 101 (1981), 77-89, 206-207. (Authors' nary) 82e:82048 82A60 (81C35)

estions in quantum field the ory and statistical physics, 82g:81004 See also Qu Popov, V. P. (with Čečin, G. M.; Raspopov, V. N.) Irreducible representations of

hexagonal space groups. Kristallografija 25 (1980), no. 4, 661-674 (Russian); translated as Soviet Phys. Cryst. 25 (1980), no. 4, 383-389 (1981). (Authors' summary) 82b:20069

(with Gufan, Ju. M.) On the theory of phase transitions represented by four-component order parameters. Kristallografija 25 (1980), no. 5, 921-929 (Russian); translated as Soviet Phys. Cryst. 25 (1980), no. 5, 527-532 (1981). (Authors' summary) 824-82030 82A25

Popov, V. S. (with Eleckii, V. L.; Turbiner, A. V.) Higher orders of perturbation theory and summation of series in quantum mechanics and field theory. Ž. Eksper. Teoret. Fiz. 74 (1978), no. 2, 445-465 (Russian); translated as Soviet Phys. JETP 47 (1978), no. 2, 232-242. (Authors' summary) 82c:81032 81C12 (40G10)

(with Alliluev, S. P.; Vainberg, V. M.; Eleckii, V. L.) Logarithmic perturbation ory for excited levels. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1392-1396. (From the text) 82k:81014 81C12

Popov, V. V. Metrizability and the space of closed subsets. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 209–213. (From the introduction) 82d:54034 54E35 (54B20)

(with Goman, O.) A new method of using the relationship between p-harmonic and analytic functions for a solution to the problems of potential theory. (Russian. English nary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 4, 36-38, 96. (N. V. Rao) 31B10 (30F25 31B35)

Popova, A. A. See Popova, Anna A.

Popova, A. M. (with Komarov, V. V.; Šablov, V. L.) Two-particle system in a force field. Nonsingular integral equations for components of T-operator. Progr. Theoret. Phys. 66 (1981), no. 3, 940-947. (Authors' summary) 82k:81077 81F05

Popova, Anna A. Application of the method of steepest descent to the solution of asymmetric operator equations. (Russian) Vyčisl. Prikl. Mat. (Kiev) No. 42 (1980), 17-24, 162. (Author's summary) 82e:35041 35J99 (65J99)

Popova, N. M. An approach to the algorithmization of the design of data bases. (Russian) Data banks and information retrieval systems (Russian), pp. 19-32, 127-128, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (See 82g:68003) 68B15

Popovič, A. Ju. (with Filippov, I. G.; Muhammadiev, K.) Propagation of viscoelastic waves in two-component media (Russian) Mathematical methods in mechanics. Mat. Issled. No. 57 (1980), 91–97, 136. (Authors' summary) 82e:73033 73F99 (73D99) (with Filippov, I. G.) Viscoelastic displacement waves in the quarter plane. (Russian)

utational methods of mechanics. Mat. Issled. No. 64 (1981), 107-112, 193. (See 82k:73001) 73D99

wie, M. V. (with Raković, Branko D.) A predistortion technique for increasing the clement tolerances in elliptic and general parameter filters. Internat. J. Electron. 50 (1981), no. 1, 27–36. (From the summary) 82b:94005 94A05
See also Logical-gnoseological studies of the categorical structure of thought,

novich, A. Matrix elements for baryon semi-leptonic processes. Advances in twistor theory, pp. 221-227, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81G20 (81F20)

ovich, M. V. See Popović, M. V.

Popovici, Iulian (with Ianus, Stere) On the Vränceanu's nonholonomic connection. An. Stiint. Univ. "Al. I. Cuta" Iași Secț. I a Mat. (N.S.) 26 (1980), no. 2, 389–392. (Franco Tricerri) 82g:53040 53C05

(with Anastasie, Mihai) Constant linear connections on Banach manifolds. Rev. ine Math. Pures Appl. 25 (1980), no. 1, 3-11. (Efstathios Vassiliou) 82b:58014

Popoviciu, Elena Sur un problème de la meilleure approximation. Rev. Anal. Numér. Théor. Approx. 4 (1975), no. 1, 63-66. (TITLE) 82c:41028 41A50

Sur les fonctions simultanément convexes par rapport aux plusieurs ensembles interpolatoires. Proceedings of the Third Colloquium on Operations Research (Chij-Napoca, 1978), pp. 214-219, Univ. "Babeş-Bolyai", Chij-Napoca, 1979. (See

41A05 sembles remarquables d'un ensemble interpolatoire. Anal. Numér. Théor. Approx. 8 (1979), no. 2, 193-202. (Luciana Lupaș) 82d:26007 26B25

Sur un théorème de la moyenne. Anal. Numér. Théor. Approx. 9 (1980), no. 1, 107-112. (M. Stieglitz) 82f:41008 41A05

povski, D. B. A note on Neta's family of sixth-order methods for solving equations. Internat. J. Com out. Math. 10 (1981/82), no. 1, 91-93. (Author's introduction) 65H05

owicz, Zie it Bäcklund transformations for the generalized sine-Gordon equation in 2+1 and 3+1 dimensions. Lett. Math. Phys. 3 (1979), no. 5, 431-436. (Enrico Onofri) 35Q20 (58A15, 81E10) 82h:35091

Popper, Györgi (with Tarnai, T.) Solution of flexural-torsional problem of beams by series on in eigenfunctions of quadratic operator pencils. Acta Tech. Acad. Sci. Hungar. 89 (1979), no. 1-2, 237-254 (1980), (From the introduction) 82c:73046 (47A70)

(with Gaspar, Zs.) Solution of an algebraic eigenvalue problem by partitioning into cells. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 2, 263-270, 523. (Raičo Lazarov) 82e:65037 65F15 (15A18)

Popplestone, R. J. Relational programming. Machine intelligence, Vol. 9, pp. 3-25, Horwood, Chichester, 1979. (Editors) 82hc68006 68B05 (68G99)
Pop-Stojanović, Zoran R. Approximation of an optimal filter for a diffusion type process. (Serbo-Croatian summary) Unio. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 139-144 (1981). (A. F. Gualtierotti) 82k:60094 60G35 (93E11)

Porat, B. (with Meiri, A. Zvi) Nonlinear estimation of generalized vector shot processes. IEEE Trans. Aerospace Electron. Systems 17 (1981), no. 4, 520-530. (Authors' summary)

Porebska, M. (with Kabziński, Jacek K.; Wroński, Andrzej) On the (↔, ~)-reduct of the intuitionistic consequence operation. Studia Logica 40 (1981), no. 1, 55-66. (Authors' summary) 82e:03023 03B55 (03B99)

Poreda, S. J. (with Kably, A. K.; Ward, J. W.) Multipliers of Hankel matrices. Ann. Acad. Sci. Fenn. Ser. A I Math. 5 (1980), no. 2, 347-354. (Nicholas P. Jewell) 82j:47047

Porickaja, L. H. Lebesgue-Banach points of functions in symmetric spaces. (Russian) Mat. Zametki 23 (1978), no. 4, 581-592. (Author's summary) 82d:46049 46E30 (28A20)

Poroškin, A. G. Functions on lattices. (Russian) Functions of sets (Russian), pp. 29-39, Komi Gos. Ped. Inst., Syktyokar, 1977. (L. Ja. Savel'ev) 82a:28008 28A60 (06D99)

Porper, F. O. (with Eidel'man, S. D.) Weak fundamental solutions of second-order parabolic equations with measurable coefficients. (Russian, English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 1, 22-26, 91. (Authors' summary) 82m:35068 35K10

Porrill, J. (with Stewart, J. M.) Electromagnetic and gravitational fields in a Schwarzschild space-time. Proc. Roy. Soc. London Ser. A 376 (1981), no. 1766, 451-463. (Garry Ludwig) 82i:83029 83C30 (83C50)

Porru, Giovanni A regularity result for the solutions of degenerate second-order elliptic equations of nonvariational type. (Italian, English summary) Ann. Univ. Ferrara Sez. VII (N.S.) 26 (1980), 69-80 (1981). (Maurizio Chicco) 82k:35049

sching, Thomas A. (with Amit, R.) The numerical solution of one-dimensional thermally expandable flows. J. Math. Anal. Appl. 78 (1980), no. 1, 183–194. (M. Drăganu) 76T05 (76V05)

(with Cavendish, James C.; Hall, Charles A.) Galerkin approximations for initial value problems with known end time conditions. J. Math. Anal. Appl. 78 (1980), no. 1, 328-356. (Jack Williams) 82b:65058 65L05 (65N30)

(with Hall, Charles A.) Padé approximants, fractional step methods and Navier-Stokes discretizations. SIAM J. Numer. Anal. 17 (1980), no. 6, 840-851. (T. S. Papatheodorou) 82a:65080 65N15

Porta, Horacio Néstor Marcelo Rivière. (Spanish) Rev. Un. Mat. Argentina 29 (1979/80), no. 1-2, 109-112. (Editors) 82f:01131 01A70

Porta, Marcel (with Doerk, Klaus) Über Vertauschbarkeit, normale Einbettung und

Dominanz bei Fittingklassen endlicher auflösbarer Gruppen. Arch. Math. (Basel) 35 (1980), no. 4, 319-327. (H. Lausch) 82j:20043 20D10 (20D35)

Porte, Jean A research in modal logics. Logique et Anal. (N.S.) 23 (1980), no. 89, 3-34. Porte, Jean A research in modal logics. Logique et Anat. (N.S.) 25 (1980), no. 89, 3-34. (Scott K. Lehmann) 82ac03021 03B45

Congruences in Lemmon's S0.5. Notre Dame J. Formal Logic 21 (1980), no. 4, 672-678. (Michael Byrd) 82bc03048 03B45

Portela, Artur Theoretical basis of boundary solutions for the linear theory of structures. Appl. Math. Modelling 5 (1981), no. 1, 57-59. (Editors) 82bc73017 73C99 (73K99)

s, Ian R. *Topological geometry. Second edition. Cambridge University Press, nbridge-New York, 1981. vi+486 pp. ISBN 0-521-23160-4, 0-521-29839-3 (Editors)

82c:51018 51Hxx (58Axx)

Porter, B. Comments on: "A canonical parameter space for linear systems design" [IEEE Trans. Automat. Control 23 (1978), no. 3, 454-458; MR 58 #26390] by A. T. Fam and J. S. Meditch. With a reply by Fam and Meditch. IEEE Trans. Automat. Control 25 (1980), no. 1, 137. (Editors) 82a:93049 93D25

no. 1, 137. (Editors) 82a:93049 931025 (with Grujić, Ljubomir T.) Discrete-time tracking systems incorporating Lur'e plants with multiple nonlinearities. Internat. J. Systems Sci. 11 (1980), no. 12, 1505–1520. (Authors' summary) 82c:90110 90D26 Porter, H. R. "Skip" (with Childs, Bart) QUASII—a system identification code. Codes for boundary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 186–195. Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (cs. 2016-1670). 1979. (See 82b:65074) 65-04 (65L10)

Porter, J. F. (with Feldman, W. A.) The relative uniform convergence structure. Proceedings of the Conference on Convergence Structures (Cameron Univ., Lawton, Okla., 1980), pp. 46-55, Cameron Univ., Lawton, Okla., 1980. (Authors' introduction) 46A40 (06F20, 46E05, 54C40)

(with Feldman, W. A.) Convergence structures for operators. Proceedings of the Conference on Convergence Structures (Cameron Univ., Lawton, Okla., 1980), pp. 113-118, Cameron Univ., Lawton, Okla., 1980. (From the introduction) 82b: 46A15 (46A05, 54A20, 54C40)

(with Feldman, W. A.) The order topology for function lattices and realcompactness. Internat. J. Math. Math. Sci. 4 (1981), no. 2, 289-304. (Melvin Henriksen) 82h:46065 46H15 (06F30, 54A20, 54C40)

Ferrita (With Dickman, R. F., Jr.; Rubin, L. R.) Completely regular absolutes and projective objects. Pacific J. Math. 94 (1981), no. 2, 277-295. (A. I. Baškirov) 82k:54061 54G05 (54C05)

rter, John R. Left-flat spaces and null geodesics. Gen. Relativity Gravitation 13 (1981), no. 5, 443-449. (Author's summary) 82h:83026 83C30

Exhibiting left-flat spaces as H spaces: an example. Gen. Relativity Gravitation 13 (1981), no. 5, 509-516. (Author's summary) 82h:83027 83C30

Porter, Richard (with Cenkl, Bohumil) Malcev's completion of a group and differential forms. J. Differential Geom. 15 (1980), no. 4, 531-542 (1981). (Chih-Han Sah) 82k:55013 55P62 (58A10)

ter, T. Stability of algebraic inverse systems. II. Purity and localization. J. Pure Appl.

Algebra 7 (1976), no. 2, 133-143. (Editors) 82a:18010 18E99

rter, William A. The state representation of polynomic maps. IEEE Trans. Auto. Control 26 (1981), no. 4, part 1, 953-956. (Author's summary) 82m:93022 (47A99)

(with Aravena, Jorge L.) Finite memory partial inverses. IEEE Trans. Circuits and Systems 28 (1981), no. 4, 287-294. (Authors' summary) 82h:93014 93B15 (47A99,

On factoring the polyvariance operator. Math. Systems Theory 14 (1981), no. 1, 67-82. (R. Saeks) 82e:93095 93E03 (47A68)

teus, Evan L. Overview of iterative methods for discounted finite Markov and

semi-Markov decision chains. Recent developments in Markov decision processes (Proc. Internat. Conf., Univ. Manchester, Manchester, 1978), pp. 1-20, Academic Press, London, 1980. (See 82k:90128) 90C40

Improved iterative computation of the expected discounted return in Markov and semi-Markov chains. (German summary) Z. Oper. Res. Ser. A-B 24 (1980), no. 5, 155-170. (Uriel G. Rothblum) 82b:90125 90C40 (60J20)

tjanko, N. A. On conditions for the stability of solutions of linear and completely integrable equations. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 1, 14-18, 137. (C. Olech) 82g:34068

On the dependence of properties of stability and complete solvability of multidimensional differential equations on perturbations. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 4, 15-20, 139. (Author's nary) 82k:34070 34G20

Portnoff, Michael R. Short-time Fourier analysis of sampled speech. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 3, part 1, 364-373. (Author's summary) 82e:94018

Time-scale modification of speech based on short-time Fourier analysis. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 3, part 1, 374-390. (Author's summary) 82e:94019

rtnov, V. R. The minimum of functionals containing differential operators. (Russian) Theory of cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 169-182, 254, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Françoise Berquier) 82m:49007 49A22 (73C50)

Portnoy, Esther Transitive groups of isometries on Hⁿ. Pacific J. Math. 92 (1981), no. 1, 127–139. (J. L. Koszul) 82j:53024 53A35 (53C30)

tnoy, Stephen L. (with Collins, John R.) Maximizing the variance of M-estimators u the generalized method of moment spaces. Ann. Statist. 9 (1981), no. 3, 567-577. (Jana Jurečková 82m.62089 62605 (62F35)

Portolano, Aida (with Maniscalco, Ignazia) Three-parameter measurable families of

manifolds of the affine plane. (Italian) Atti Accad. Sci. Lett. Arti Palermo Parte I (4) 37

(1977/78), 415-432 (1980). (L. A. Santaló) 82;:53118 53C65 (51N10, 60D05)

Pontikov, V. B. Solution of dynamic problems of the theory of elasticity for wedge-like regions with mixed boundary conditions. Prikl. Mat. Meh. 42 (1978), no. 5, 908-919 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 5, 988-1002 (1979). (Author's summary) 82h:73010 73C35 (35C99)

Exact solutions of spatial problems of diffraction of plane elastic waves by a v (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 4, 823-826. 82h:73030

Pöschel, Jürgen *Über invariante Tori in differenzierbaren Hamiltonschen Systemen. (German) [On invariant tori in differentiable Hamiltonian systems] Dissertation, Rheinische Friedrich-Wilhelms-Universität, Bonn, 1979. Beiträge zur Differentialgeometrie [Contributions to differential geometry], 3. Bonner Mathematische Schriften [Bonn Mathematical Publications], 120. Rheinische Friedrich-Wilhelms-Universität, Bonn, 1980. 103 pp. (D. Schmidt) 82c:58023

(34C35, 70Hxx) Pöschei, Reinhard (with Gössel, Michael) Invariant relations for automata-a proposal.

(German and Russian summaries) Elektron. Informationsverarb. Kybernet. 16 (1980), o. 4, 147-169. (Authors' summary) 82m:68096 68D05 Posdorf, H. (with Baszenski, G.; Delvos, F.-J.) *Darstellungsformeln zur

zweidimensionalen reduzierten Hermite-Interpolation. (German) [Representation formulas for two-dimensional reduced Hermite interpolation] Arbeitsberichte des Rechenzentrums [Reports of the Computer Center], 7805. Ruhr-Universität, Bochum, 1978. iv+89 pp. (Werner Haussmann) 82d:41043 41A63 (41A05)

(with Baszenski, G.; Delvos, F.-J.) Representation formulas for conforming bivariate interpolation. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 193-198, Academic Press, New York, 1980. (Allan Pinkus) 82b:41003

(with Delvos, F.-J.) On abstract Boolean interpolation. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 321-326, Academic Press, New York, 1980. (Pier Luigi Papini) 82e:41002 41A05 (41A65) 1980. (Pier Luigi Papini) 82c:41002

(with Delvos, F.-J.) A Boolean method in bivariate interpolation. Théor. Approx. 9 (1980), no. 1, 35-45. (R. Smarzewski) 82j:41002 Poser, Christa See von Borzeszkowski, Horst-Heino; et al., 82i:01021 41A05 (65D05)

vnik, Andrzej Some remarks on dynamical semigroups. Rep. Math. Phys. 10 (1976), no. 2, 151-157. (Panayotis Tsilimigras) 824:82020

no. 2, 151-157. (Panayotis Tsilimigras) 824:82020 82A15 (47D05, 47H20)
ner, Edward C. (with Rubin, Arthur L.; Taylor, Herbert) Partitioning files into subfiles with keys. Utilitas Math. 17 (1980), 85-101. (James W. Snively, Jr.) 82c:68015 68B15 (with Pierce, John R.; Rodemich, Eugene R.) The capacity of the photon counting channel. IEEE Trans. Inform. Theory 27 (1981), no. 1, 61-77. (Carl W. Helstrom) 82c:94009 94A40

ner, M. J. M. (with Chugha, A. K.) Determination of server utilization in a general two-stage cyclic queue. *AHE Trans.* 12 (1980), no. 4, 323-331. (Authors' summary) 90B22

(with Brill, P. H.) The system point method in exponential queues: a level cross approach. Math. Oper. Res. 6 (1981), no. 1, 31-49. (G. C. Jain) 82j:60169

er, Marc E. (with Wu, Chu Tao) Linear max-min programming. Math. Programming

20 (1981), no. 2, 166-172. (Authors' summary) 82j:90043 90C05 Pospelov, A. S. Orthonormal systems generated by representations of a class of compact

groups. (Russian) The theory of the approximation of functions (Froc. Internat. Cost., Kaluga, 1975) (Russian), pp. 293–295, "Nauka", Moscow, 1977. (B. Osilenker (RŽMat 1977:9 B855)) 82e:22011 22C05 (33A65)

Pospelov, D. A. (with Pospelov, G. S.) Investigations in artificial intelligence in the USSR. (Russian) Cybernetics—in the service of Communism, Vol. 9: Control and informa (Russian), pp. 212–236, "Energija", Moscow, 1978. (J. S. Joel) 821:68089 68

elov, G. S. (with Pospelov, D. A.) Investigations in artificial intelligence in the USSR. (Russian) Cybernetics—in the service of Communism, Vol. 9: Control and info (Russian), pp. 212-236, "Energija", Moscow, 1978. (J. S. Joel) 821:68089

pelova, M. V. (with Mellahs, A. M.) A maximin problem of resource distribution. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 3, 43–46, 129. (Authors' summary) 82e:90036 90B05

czaja-Pośpiech, Dorota See Czaja-Pośpiech, Dorota

Pospitil, Jaroslav Electromagnetic theory of the optical waves propagation through the isotropic and unisotropic dielectrical waveguides in the integrated optics. (Czech. Russian and English summaries) Sb. Praci Přirodověd. Fak. Univ. Palackého v Olomouci Fyz. 19 (1980), 83-118. (Author's summary) 82j:78011 78A50

Post, Emil See Gleiser, Molly, 82a:01033 Post, Wilfred M. (with Travis, Curtis C.; DeAngelis, D. L.; Perkowski, J.) Analysis of compensatory Leslie matrix models for competing species. Theoret. Population Biol. 18 (1980), no. 1, 16-30. (Ju. I. Ljubič) 82f:92040 92A15 (15A48)

(with Travis, Curtis C.; DeAngelis, D. L.) Evolution of mutualism between species. Differential equations and applications in ecology, epidemics, and population problems (Claremont, Calif., 1981), pp. 183-201, Academic Press, New York, 1981. (See

(with Travis, Curtis C.) Global stability in ecological models with continuous time delay. Integral and functional differential equations (Proc. Conf., West Virginia Univ., Morgantown, W. Va., 1979), pp. 241-250, Lecture Notes in Pure and Appl. Math., 67, Dekker, New York, 1981. (Howard B. Stauffer) 82j:92056 92A15 (34K20, 45J05, 92A17)

stan, M. Ja. (with Abol'nikov, L. M.) On duality relationships in queueing systems with group appearance, group servicing, and feedback. Izo. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 1, 78-85, 220 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 1, 64-71 (1981). (Gerald A. Anderson) 82m:60114 60K25

Postelnicu, Tiberiu See Proceedings Conference on Probability Theory, 82i:60002

Postlethwaite, Ian (with Edmunds, John M.; MacFarlane, Alistair G. J.) Principal gains and principal phases in the analysis of linear multivariable feedback systems. IEEE Trans. Automat. Control 26 (1981), no. 1, 32-46. (Authors' summary) 82c:93013 93B55 (93C35, 93D15, 94C05)

Postlewaite, Andrew (with Schmeidler, David) Approximate Walrasian equilibria and nearby economies. Internat. Econom. Rev. 22 (1981), no. 1, 105-111. (From the introduction) 82k:90038 90A14

Tauberian theory and its applications. (Russian) Trudy Mat. Inst. Steklov. tnikov. A. G. 144 (1979), 147 pp. (G. Halász) 82f:40012a 40E05 (10Jxx, 30B50, 40E10, 44A10) Tauberian theory and its applications. A translation of Trudy Mat. Inst. Steklov. 144 (1979). Proc. Steklov Inst. Math. 1980, no. 2, v+138 pp. (G. Halász) 82f:40012b 40E05 (10Jxx, 30B50, 40E10, 44A10)

Postnikov, M. M. *Устойчивые многочлены. (Russian) [Stable polynomials] "Nauka", Moscow, 1981. 176 pp. (Wolfgang Hahn) 82k:12023 12D10 (26C10, 30C10, 93-01,

Postnikov, N. S. (with Sabaev, E. F.) Matrix comparison systems and their applications to automatic control problems. Automat. i Telemeh. 1980, no. 4, 24-34 (Russian. English nmary); translated as Automat. Remote Control 41 (1980), no. 4, part 1, 455-464. (B. G. Pachpatte) 82i:93053 93D10 (34H05)

on, Tim (with Stewart, Ian) *Теория катастроф и ее приложения. (Russ [Catastrophe theory and its applications] Translated from the English and with a preface by A. V. Černavskii. With an appendix by D. R. Olsen, S. R. Carter and A. Rockwood. "Mir", Mascow, 1980. 608 pp. (Editors) 821:58019 58C28 (00A69, 70-02, 73-02, 76-02, 78-02, 81-02, 92A05)

Posy, C. J. (with de Swart, Henricus Cornelius Maria) Validity and quantification in intuitionism. J. Philos. Logic 10 (1981), no. 1, 117-126. (Authors' summary) 82a:03059 03F55 (03B20)

anina, V. L. (with Maksimov, V. A.) A mathematical model of slide bearings for a turbine engine and its numerical realization. (Russian) Computational methods and computer software, No. 2 (Russian), pp. 107-117, Kazan. Gos. Univ., Kazan, 1980. (See 82h:76001) 76D10

Potapenko, A. A. (with Seftel', M. B.) *Методы математической физики. (Russian) [Methods of mathematical physics] Severozapad. Zaočn. Politehn. Inst., Leningrad, 1979. 80 pp. (Editors) 82f:35001 35-01 (00A69) 80 pp. (Editors) 82f:35001

w, A. S. (with Gerštein, V. M.; Sadovskii, B. N.) On the calculation of steady state the investigation of operator equations (Russian), pp. 43-57, 166, Jaroslav. Gos. Univ., roslav!, 1980. (Authors' summary) 82j-94025 94C05

Yarostanor, 1980. (Autnors summary) 8439-940.5 940.05 pp., M. K. (with Laković, B.) On the question of the interrelation of certain classes of functions. (Russian) Mat. Vesnik 3(16)(31) (1979), no. 3, 295-312. (Ju. A. Brudnyi) Table 42A99 (46E30)

Imbedding theorems in a mixed metric. (Russian) Studies in the theory of

nctions of several variables and its applications, VIII. Trudy Mat. Inst. w. 156 (1980), 143-156, 263. (V. M. Gol'dštein) 82k:46054 46E35

Conditions for the coincidence of certain classes of functions. (Russian. English summary) Trudy Sem. Petrovsk. No. 6 (1981), 223-238. (H. Triebel) 82i:46053

- Potapov, M. M. (with Ismuhametov, A. Z.) On the concordance of a regularization parameter with a step of difference mesh. (Russian) Vestnik Maskov. Univ. Ser. XV Vyčisi. Mat. Kibernet. 1980, no. 3, 66-68, 71. (Ja. I. Al'ber) 82m:49043 49D25
- wa, T. M. (with Gul'karov, I. S.) Graphical methods of spin algebra and scattering of electrons in nuclei. (Russian) Izv. Akad. Nauk UZSSR Ser. Fiz.-Mat. Nauk 1980, no. 4, 84–88, 106. (Ē. S. Krjačko) 82c:81153 81G30 (22E70, 81F99)
- hek, Alain (with Jamy, Claude; Vanbreugel, Michel) Programmation par polyalgorithmes: présentation et exemples de réalisation. (English summary) Translated as Rech.

 Aérospat. (English) 1980, no. 6, 77–90. Rech. Aérospat. 1980, no. 6, 445–458. (Authors' ry) 82b:49052 49D45 (90C30)
- emkin, V. F. Turbulent boundary layer. Inž.-Fiz. Ž. 39 (1980), no. 1, 39-46 (Russian); translated as J. Engrg. Phys. 39 (1980), no. 1, 741-747 (1981). (Author's summary) 76F99
- mkina, A. V. Construction of regular cuts and branches in convex integer program (Russian) Upravljaemye Sistemy No. 19 (1979), 51-56, 79. (Author's introduction)
 - (with Ševčenko, V. N.) Construction of regular cutoffs in convex integer programming. (Russian) Ékonom. i Mat. Metody 17 (1981), no. 2, 390–394. (R. Şerban) 82f:90066 90C10

otier, J. See Le Potier, J.

- Potier-Ferry, M. Multiple bifurcation, symmetry and secondary bifurcation. Nonlinear problems of analysis in geometry and mechanics (Proc. Sympos., Univ. Paul Sabatier, ulouse, 1979), pp. 158-167, Res. Notes in Math., 46, Pitman, Boston, Mass., 1981. (B. V. Loginov) 82j:58037 58E07
- Potlov, V. V. (with Potlova, N. I.) Some properties of the trajectories of a class of systems of homogeneous type with discontin mous right-hand sides. (Russian) Differencial'nye nija (Ryazan) No. 11 (1978), 140-143. (Authors' summary) 82a:34028
- Potlova, N. I. (with Potlov, V. V.) Some properties of the trajectories of a class of systems of homogeneous type with discontinuous right-hand sides. (Russian) Differencial nye onenija (Ryazan) No. 11 (1978), 140-143. (Authors' summary) 82a:34028
- Potra, Florian Alexandru (with Pták, Vlastimil) Nondiscrete induction and a double step secant method. Math. Scand. 46 (1980), no. 2, 236-250. (M. Z. Nashed) 82a:65040

(with Pták, Vlastimil) A generalization of regula falsi. Numer. Math. 36 (1980/81),

no. 3, 333-346. (Michel Cosnard) 82;65029 65H10 (58C15)
The rate of convergence of a modified Newton's process. (Czech summary) With a ary. Apl. Mat. 26 (1981), no. 1, 13-17. (I. P. Mysovskih) 82j:65038 65J15 (58C15)

An application of the induction method of V. Pták to the study of regula falsi. (Czech summary) With a loose Russian summary. Apl. Mat. 26 (1981), no. 2, 111–120. (Sadayuki Yamamuro) 82f:58013 58C15 (47H17, 49A51, 65J10)

- tra, T. (with Coţiu, A.; Moruşca, I.) Mathematical modeling by complex spline functions of filtering phenomena through porous media. (Romanian. French summary) Bul. Stiint. Inst. Politehn. Chij-Napoca Ser. Mat.-Fiz.-Mec. Apl. 21 (1978), 26-33. (Authors' summary) 82;76077 76S05
- Potsch, K. (with Schneider, W.) Weak buoyancy in laminar vertical jets. Recent developments in theoretical and experime Berlin, 1979. (See 82c:76004) 76R10 nts in theoretical and experimental fluid mechanics, pp. 501-510, Springer,
- Potten, C. S. Proliferative cell populations in surface epithelia: biological models for cell replacement. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 23-35, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (See 82c:92004)
- Potter, J. M. (with Anderson, Brian D. O.) Time-limited time-invariant Wiener filtering. Inform. Sci. 23 (1981), no. 3, 153-158. (Authors' summary) 82e:94029 (94A11)
- Pottinger, Garrel A type assignment for the strongly normalizable λ-terms. To H. B. Curry: essays on combinatory logic, lambda calculus and formalism, pp. 561-577, Academic Press, London, 1980. (Carlo Cellucci) 82j:03014 03B40 (03F05)
 - The Church-Rosser theorem for the typed \(\lambda\)-calculus with surjective pairing. \(\lambda\)

 Dame J. Formal Logic 22 (1981), no. 3, 264-268. (R. Hindley) 82;03015 03B40
- (with Gorcev, A. M.) Structural adaptation of a two-line queuing system with an auxiliary device. Actomat. i Vyčisl. Tehn. (Riga) 1980, no. 5, 43-49, 97 (Russian); translated as Automat. Control Comput. Sci. 14 (1980), no. 5, 37-42. (Authors' summary) 68C15 (68A05, 90B22)
- Potts, C. N. Analysis of a heuristic for one machine sequencing with release dates and delivery times. Oper. Res. 28 (1980), no. 6, 1436-1441. (Author's summary) 82b:90067
- Potts, Renfrey B. Exact solution of a difference approximation to Duffing's equation. J. Austral. Math. Soc. Ser. B 23 (1981/82), no. 1, 64-77. (Author's summary) 82i:65046 65L05 (34C25, 58F14, 65Q05)
- Potts, Timothy C. "The grossest confusion possible?"—Frege and the lambda ca Rev. Internat. Philos. 33 (1979), no. 4, 761-785. (E. Mendelson) 82d:03004 est confusion possible?"-Frege and the lambda calculus. 03 - 03(01A55, 03A05, 03B40)

- Potvin, J. A nonrelativistic reduction of the Dirac equation in the free-particle basis. J.
- Phys. A 14 (1981), no. 5, 1117-1122. (Author's summary) 824:81023 81C05 schain, Michel Estimations de demande de facteurs en termes d'adjustements croisés. (English and Spanish summaries) Production functions and factor demand functions. Ann. I. N.S. E. E. No. 38-39 (1980), 259-286. (See 82e:90019) 90A99

nder, James R. (with Klamkin, Murray S.) Orthonormal matrices. Math. Mag. 52 (1979), no. 4, 251-252. (From the text) 82k:15001 15-01

- et, A. (with Garnier, M.; Alemany, A.; Sulem, Pierre-Louis) Influence of an external magnetic field on large scale low magnetic Reynolds number MHD turbulence. (French summary) J. Mécanique 20 (1981), no. 2, 233-251. (Authors' summary) 82j:76053 76F99 (76W05)
- de la vallée Poussin, Charles See de la Vallée Poussin, Charles Pouzet, Maurice Sur les chaînes d'un ensemble partiellement bien ordonné. Publ. Dép. Math. (Lyon) 16 (1979), no. 1, 21-26. (From the text) 82a:06003 06A10 (04A05)
 - (with Duffus, Dwight; Rival, Ivan) Complete ordered sets with no infinite antichains. Discrete Math. 35 (1981), 39-52. (R. P. Dilworth) 82;06003
 - Application de la notion de relation presque-enchaînable au dénombrement des restrictions finies d'une relation. Z. Math. Logik Grundlag. Math. 27 (1981), no. 4, 289-332. (Bruno Poizat) 821:03050 03C68 (05A99)
- čun, L. P. Fourier-Laguerre series and Lagrange interpolation polynomials. (Russian) . Vysš. Učebn. Zaved. Matematika 1980, no. 10, 80-83. (Paul Nevai) 82e:42021 42C10 (41A05)
- s, M. On some singular hyperbolic evolution equations. J. Math. Pures Appl. (9) 60 35L50 (1981), no. 2, 133-192. (C. Bardos) 82g:35071 35L50 olockii, A. I. (with Redlih, S. M.) On the selection of a locally convex space for a
- Hammerstein-type operator. (Russian) Functional analysis, No. 15, pp. 127-134, Ul' janovsk. Gos. Ped. Inst., Ul' yanovsk, 1980. (R. V. Duduchava) 82j:47085
- war, P. (with Dikshit, H. P.) On deficient cubic spline interpolation. J. Approx. Theory 31 (1981), no. 2, 99-106. (Jean Tzimbalario) 82h:41014 41A15 (65D07)
- wazka, Zbigniew (with Choczewski, Bogdan) Generalized subadditivity and convexity. General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978), pp. 185-192, Birkhäuser, Basel, 1980. (E. F. Beckenbach) 82d:26006 26A51 (39C05)
 - On the differentiability of generalized subadditive functions. Zeszyty Nauk. Uniw. Jagiellon. Prace Mat. No. 22 (1981), 189-194. (J. Matkowski) 82m:39012 (26A24, 39B50)
- wder, Charles An existence theorem for solutions of nth order nonlinear differential equations in the complex domain. Rend. Sem. Mat. Univ. Padova 61 (1979), 61–90 (1980). (Author's summary) 82k:34008 34A20 (34A34)
- Powell, Charles H. (with Wade, William R.) Term by term dyadic differentiation. Canad. J. Math. 33 (1981), no. 1, 247-256. (W. Splettstösser and P. L. Butzer) 82d:42025
- Powell, M. J. D. (with Roberts, F. D. K.) A discrete characterization theorem for the discrete L_1 linear approximation problem. J. Approx. Theory 30 (1980), no. 3, 173-179. (Martin Bartelt) 82h:41034 41A50 (41A45)
 - *Approximation theory and methods. Cambridge University Press, Cambridge-New York, 1981. x+339 pp. ISBN 0-521-22472-1, 0-521-29514-9 (D. D. Stancu) 82f:41001
- Powell, Robert E. (with Fridy, John A.) Tauberian theorems for matrices generated by analytic functions. Pacific J. Math. 92 (1981), no. 1, 79-85. (S. M. Shah) 82j:40006 40G05 (40C15, 40E05)
- vell, Roger A. Stability in a one-predator-three-prey community. Amer. Natur. 115 (1980), no. 4, 567-579. (Brian D. Sleeman) 82f:92036 92A15 wer, S. C. Vanishing Carleson measures. Bull. London Math. Soc. 12 (1980), no. 3,
- 207-210. (David A. Stegenga) 82c:30057 30D55 (47B35)
 - Hankel operators on Hilbert space. Bull. London Math. Soc. 12 (1980), no. 6, 422-442. (Nicholas P. Jewell) 82a:47030 47B35
 - Fredholm Toeplitz operators and slow oscillation. Canad. J. Math. 32 (1980), no. 5, 1058-1071. (R. G. Douglas) 82b:47032 47B35 (47A53, 58G12)
 - Commutator ideals and pseudodifferential C*-algebras. Quart. J. Math. Oxford Ser. (2) 31 (1980), no. 124, 467-489. (R. G. Douglas) 82c:47033 47B35 (46L05, 46M20, 58G15)
- wers, David L. Matrix partitions of the vertices of a graph. (Italian. English summary) Scientia (Valparaiso) No. 153 (1979), 60-71. (Author's summary) 82f:05081
 - (with Al-Nasr, Nazar; Lovass-Nagy, Victor) On transmission zeros and zero directions of multivariable time-invariant linear systems with input-derivative control.
- Internat. J. Control 33 (1981), no. 5, 859-870. (Authors' summary) 82e:93068 (65F15)
- Powers, S. R. (with Sharma, S. K.; Somerford, D. J.) Investigation of domains of validity of approximation methods in forward light scattering from long cylinders. Optica Acta 28 (1981), no. 11, 1439-1446. (Authors' summary) 82m:78004 78A10
- vers, W. F. On the order of singular optimal control problems. J. Optim. Theory Appl. 32 (1980), no. 4, 479–489. (Arthur J. Krener) 821:49009 49A36 (49A10) (with Bortins, R.; Boustany, N. M.) The infinite-order singular problem. Opti Control Appl. Methods 1 (1980), no. 3, 279-302. (V. L. Bakke) 82f:49047
- (93B40) Poynton, F. Y. (with Sterling, R. C.) Obituary: Professor Alfred Geary. Bull. Inst. Math.
- Appl. 15 (1979), no. 1, 27-28. (Editors) 82c:01051 01A70 zdnjakovič, E. V. (with Sudakov, S. N.) Necessary and sufficient conditions for stability of uniform rotations of a gyrostat with a rotor that has a vortex filling. (Russian) Meh. Tverd. Tela No. 12 (1980), 67-72, 119. (Q. K. Ghori) 824:70007 70E05
- Pozin, B. A. A method of test structuring for debugging control programs. Programmirovanie 1980, no. 6, 62-69, 95 (Russian); translated as Program Comput. Software 6 (1980), no. 2, 98-103 (1981). (Author's summary) 82m:68028 68R10
- Poznjak, A. S. (with Butkovskii, A. G.; Gavrilov, M. A.; Krasnenker, A. S.; Cypkin, Ja. Z.) Some problems in engineering cybernetics. (Russian) Cybernetics—in the service of Communism, Vol. 9: Control and information (Russian), pp. 58-108, "Energija", Moscow, 1978. (Editors) 82e:90003 90-02 (49-02, 93-02, 94-02)

Poznjak, E. G. (with Sikin, E. V.) Green's formula for domains with rectifiable boundary. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 1, 42-44. (Jan Bochenek) 82e:26015 26B20

(with Sikin, E. V.) Isometric imbeddings of the domains of the Lobačevskii plane in Euclidean space. (Russian. English summary) Collection of articles on geometry, II. Trudy Tbiliss. Mat. Inst. Razmadze Akad. Nauk Gruzin. SSR 64 (1980), 82-93. (M. L. Gromov) 82b:53081 53C42

(with Aleksandrov, A. D.; Aminov, Ju. A.; Oleinik, O. A.; Pogorelov, A. V.; Rozendorn, E. G.; Sabitov, I. H.) Nikolai Vladimirovič Efimov (on the occasion of his seventieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 3(219), 233-238.

(Editors) 82g-01037b 01A70
jimenez Pozo, Miguel A. See Jimenez Pozo, Miguel A.
Pozzi, Glanni A. (with Friedman, Avner) The free boundary for elastic-plastic torsion problems. Trans. Amer. Math. Soc. 257 (1980), no. 2, 411-425. (Authors' summary) 82i:35165 35R35 (49A29, 73C99, 73K99)

van Praag, Bernard M. S. Model free regression. Econom. Lett. 7 (1981), no. 2, 139-144.

(Author's summary) 82k:62120 62J02 abaharan, K. (with Chandna, O. P.; Toews, H.) Integrability conditions and their applications in steady plane electromagneto-fluid-dynamic aligned flows. Quart. Appl. Math. 39 (1981/82), no. 2, 249-260. (From the introduction) 82j:76089 76W05

bhakar, T. R. (with Jain, Sudha) Generalized Bessel function and some integral ions. Math. Student 45 (1977), no. 4, 53-57 (1979). (R. G. Buschman) 82b:45015 equations. Math. Stude. 45H05 (33A70, 44A40)

(with Jain, Sudha) On a general class of polynomials relevant to quantum mechanics. Proc. Indian Nat. Sci. Acad. Part A 44 (1978), no. 2, 103-116. (R. C. Varma) 82g:33030 33A65

Some singular integral equations involving Laguerre polynomials and finite parts of divergent integrals. *Indian J. Pure Appl. Math.* 11 (1980), no. 3, 384-391. (Author's summary) 82b:45011 45E99 (33A65, 44A40)

(with Tomar, R. C.) Some integrals and series relations for biorthogonal polynomials suggested by the Legendre polynomials. Indian J. Pure Appl. Math. 11 (1980), no. 7, 863-869. (B. R. Bhonsle) 82h:33013 33A45

(with Reva) A general Sheffer set of polynomials relevant to the theory of hyperbolic differential equations. *Indian J. Pure Appl. Math.* 12 (1981), no. 7, 889–897. (J. P. Singhal) 82h:33015 33A65

Prabhu, N. U. *Stochastic storage processes. Queues, insurance risk, and dams. Applications of Mathematics, 15. Springer-Verlag, New York-Berlin, 1980. xii + 140 pp. ISBN 0-387-90522-7 (N. H. Bingham) 82:60140 60Kxx (60J15, 60J25, 62P05)

Corrigendum: "Stochastic control of queueing systems" [Naval Res. Logist. Quart. 21 (1974), 411-418; MR 50 #3395]. Naval Res. Logist. Quart. 27 (1980), no. 4, 711-712. (Editors) 82a:60142 60K25

(with Basawa, I. V.) Estimation in single server queues. Naval Res. Logist. Quart. 28 (1981), no. 3, 475–487. (Carl M. Harris) 82h:62142 62M09 (60K25) da-Blanco, J. Local convexity in sequence space. Math. Nachr. 98 (1980), 21–26. (Bernd

46A45 (46A12) Rosenberger) 82k:46017

Prade, Henri M. (with Dubois, Didier) ★Fuzzy sets and systems. Theory and applications

With a foreword by Lotfi A. Zadeh. Mathematics in Science and Engineering, 144. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1980. xvii+393 pp. ISBN 0-12-222750-6 (John Hooley) 82c:03074 03E72 (03E75, 90B99, 93-02, 94D05)

An outline of fuzzy or possibilistic models for queuing systems. Fuzzy sets (Proc. Sympos. Policy Anal. Inform. Systems, Duke Univ., Durham, N.C., 1980), pp. 147–153, Plenum, New York, 1980. (I. B. Turksen) 821:60224 60K25 (03E72) la Pradelle, Arnaud (with Feyel, Denis) ★Ejercicios sobre las funciones analiticas.

(Spanish) [Exercises on analytic functions] Con soluciones. [With solutions] Translated from the French by Emilio Romero Ros. Paraninfo, Madrid, 1980. 337 pp.

ISBN 84-283-1032-7 (Editors) 82m:30001 30-01 (00A07, 31-01)

Deux remarques sur la représentation intégrale des fonctions excessives ou Seminar on Potential Theory, Paris, No. 5 (French), pp. 229-239, surharmoniques.

Lecture Notes in Math., 814, Springer, Berlin, 1980. (Denis Feyel) 82a:31009 31C05 dhan, Anirudh (with Lal, K. B.) On wave solutions of the unified field equations of Finzi in a generalized Peres space-time. (Turkish summary) İstanbul Üniv. Fen Fak. Mecm. Ser. A 41 (1976), 29-38 (1981). (Authors' summary) 82i:83067 83E10

Pradhan, D. K. (with Kodandapani, K. L.) A framework for the study of permutations and applications to memory processor interconnection networks. Proceedings of the 1979 ational Conference on Parallel Processing (Bellaire, Mich., 1979), pp. 148-158, IEEE, New York, 1979. (Authors' summary) 82d:94079 94C10 (05A05)

(with Matsui, Kineo) A fault-diagnosis technique for closed flow networks. FTCS-10 (Tenth Internat. Sympos. Fault-Tolerant Comput., Kyoto, 1980), pp. 302-304, IEEE, New York, 1980. (Authors' summary) 82a:68044 68B20 (94C15)

Pradhan, K. M. An integral involving the generalized associated Legendre function and the double H-function. Indian J. Math. 21 (1979), no. 2, 141–144. (K. C. Gupta) 82b:33007 33A35

es, Jean Echelles et faisceaux sur les quotients de feuilletages. Third Colloquium on Categories (Amiens, 1980), Part II. Cahiers Topologie Géom. Différentielle 22 (1981), no. 1, 57R30 73-83. (From the text) 82d:57016

ado, C. P. C. (with Fleming, H.; Lyra, J. L.; Silveira, V. L. R.) Spontaneous breakdown of symmetry in cosmological models. Lett. Nuovo Cimento (2) 27 (1980), no. 9, 261–264. (From the introduction) 82c:83072 83F05 (81D20)

(From the introduction) 82c309/2 63F03 (61820) eger, Cheryl E. Symmetric graphs and a characterization of the odd graphs. Combinatorial mathematics, VII (Froc. Seventh Australian Conf., Univ. Newcastle,

Newcastle, 1979), pp. 211-219, Lecture Notes in Math., 829, Springer, Berlin, 1980. (Hugo S. Sun) 82i:05043 05C25 (20B25)

S. Sunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:05043 05C.25 (2005.2)
 Gunj 82:0

Praetz, Peter D. Testing for a flat spectrum on efficient market price data. J. Finance 34 (1979), no. 3, 645-658. (Peter M. Robinson) 82c:62130 62M15 (62P20, 90A30)
Pragarauskas, H. On Bellman equation for controlled degenerate general stochastic

processes. Stochastic differential systems (Proc. IFIP-WG 7/1 Working Conf., Vilnius, 1978), pp. 69-79, Lecture Notes in Control and Information Sci., 25, Springer, Berlin,

1980. (M. A. Jagubov) 82:53096 93E20 (49B60, 60I60) (with Krylov, N. V.) On the Bellman equation for uniformly nondegenerate general stochastic processes. (Russian. Lithuanian and English summaries) Litousk. Mat. Sb. 20 (1980), no. 1, 85-98, 218. (S. G. Kalandarišvili) 82b:60102 60J60 (60G40, 93E20)

On the limit transition in degenerate Bellman equations. (Russian. Lithuanian and English summaries) Litousk. Mat. Sb. 20 (1980), no. 1, 145-155, 219-220. (V. F. Dem'janov) 82d:47052 47G05 (45P05, 60J60)

On the Bellman equation for weakly degenerate general random processes. (Russian. Lithuanian and English summaries) Litovsk. Mat. Sb. 20 (1980), no. 2, 129-136, 210. (Z.

Lithuanian and English summaries) Litouis. Mat. So. 20 (1901), no. 2, 127-130, 210. (Schus) 82a:93075 93E20 (60160)

Prager, D. L. (with Wellstead, P. E.) Multivariable pole-assignment self-tuning regulators.

Proc. IEE-D 128 (1981), no. 1, 9-18. (Authors' summary) 82e:93139 93E25

Prager, William Unexpected results in structural optimization. J. Structural Mech. 9 (1981),

no. 1, 71-90. (Author's summary) 82f:73036 73K40 See also Gautheret, Roger, 82f:01099; Germain, Paul, 82f:01101 and Hodge, Philip

G., Jr., 82f:01113

Prajapat, M. L. (with Joshi, C. M.) On some properties of a class of polynomials unifying the generalized Hermite, Laguerre and Bessel polynomials. Math. Student 45 (1977), no. 2, 74-86 (1979), (S. Saran) 82a:33011 33A65

(with Joshi, C. M.) On a unified presentation of certain classical polynomials. Math.

Student 45 (1977), no. 3, 39-46 (1979). (S. Saran) 82a:33012 33A65 (with Joshi, C. M.) The operator T_{k,q} and characterization of a class of polynomials by the generalized Rodrigues' formula. Kyungpook Math. J. 21 (1981), no. 1, 135-145. (H. M. Srivastava) 82j:33005 33A30 (33A65)

Prajneshu Time-dependent solution of the logistic model for population growth in random environment. J. Appl. Probab. 17 (1980), no. 4, 1083-1086. (H. C. Tuckwell) 82c:60106 60H10 (60J80, 92A15)

A stochastic prey-predator model with time delay. Math. Biosci. 52 (1980), no. 3-4, 217-226. (Howard B. Stauffer) 821:92037 92A15 (34K99, 60H99)

Gompertz model with heredity in random environment. Biometrical J. 23 (1981),

no. 6, 551-562. (Author's summary) 82k:62198 62P10 (92A10)

Prakasa Rao, B. L. S. Remarks on the bounds for partial sums of random elements in Banach spaces of type p. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 10, 811-818. (Gilles Pisier) 82i:60025 60B12

Characterizations of distributions through some identities. J. Appl. Probab. 16 (1979), no. 4, 903-909. (Author's summary) 82c:62023 62E10 Sequential nonparametric estimation of density via delta-sequences. Sankhyā Ser. A

41 (1979), no. 1-2, 82-94. (Author's summary) 82m:62095 62G05 (62L12)

Prakash, Anand (with Srivastava, Pramila) A note on almost convergence. Indian J. Math. 18 (1976), no. 3, 169-170. (From the text) 82b:54011 54A20 (with Srivastava, Pramila) Some results on weak continuity, almost continuity and

C-continuity. Indian J. Math. 19 (1977), no. 1, 47-52. (Hughes B. Hoyle, III) 82g:54019 54C05

Prakash, J. S. k-particle Green function diagrams and the restriction of irreducible representations of a group to its subgrou E. H. Trainor) 82e:81021 81C40 (811 o its subgroups. J. Phys. A 13 (1980), no. 11, 3347-3355. (L. 81C40 (81H99)

Prakash, M. (with Shlomo, S.) Phase space distribution of an N-dimensional harmonic Nuclear Phys. A 357 (1981), no. 1, 157-170. (N. D. Sengupta) 82d:81041 81C20 (33A65, 42B10, 81G35)

Prakash, Nirmala (with Bahadur, Neera) Sphere as a hypersurface of #-almost contact manifold. Indian J. Math. 19 (1977), no. 2, 103-112. (M. Okumura) 82i:53019 (with Lata, Sneh) A note on integrability conditions of an almost contingent manifold. J. Math. Sci. 12(13) (1977/78), 17-24 (1981). (K. L. Duggal) 82j:53066 53C15 (53C05)

Prakash, S. A model of magnetoviscous fluid in general relativity. Acta Phys. Polon. B 12

(1981), no. 1, 3-10. (Author's summary) 82:83047 83C55 (with Rao, V. V.) Comments on: "Very fast Fourier transform algorithms hardware for implementation" [IEEE Trans. Comput. 28 (1979), no. 5, 333-341; MR 80h:68026] by A. M. Despain. With a reply by Despain. IEEE Trans. Comput. 30 (1981), no. 6, 452. (Editors) 82h:68050 68C05

amanik, Sakti A mathematical model of character string manipulation. Computer Conference (Proc. AFIPS Conf., Anaheim, Calif., 1980), pp. 837-839, AFIPS Conf. Proc., 49, AFIPS Press, Arlington, Va., 1980. (See 821:68004) 68B15 (68C05)

char, C. R. (with Athreya, K. B.; Singhi, N. M.) On the number of Latin rectangles and chromatic polynomials of $L(K_{r,s})$. European J. Combin. 1 (1980), no. 1, 9-17. (Diane Johnson) 824:05033 05B15 (05A15)

Some formulae for the number of SDRs and symbolic representations. European J.

05A05 (04A20) Combin. 2 (1981), no. 2, 185-191. (J. E. Graver) 82k:05006

Pranger, Walter Riemann surfaces and bounded holomorphic functions. Trans. Amer. Math. Soc. 259 (1980), no. 2, 393–400. (Charles M. Stanton) 82k:30067 30F99 (14F05, 32L05)

Prangišvili, I. V. Sec Multiprocessor computer systems with reorganizable structure 82m:68007

Prank, R. On the quotient lattice of the lattice of recursively enumerable sets by the immunity congruence. (Russian. Estonian and English summaries) Tartu Riikl. Ü Toimetised No. 556 Trudy Mat. Meh. (1981), 11-14. (Costica Cazacu) 82k:93062 maries) Tartu Riikl. Ül.

Prasad, B. (with Garg, V. K.) Stability of a Timoshenko beam under initial stress to a moving load. Proceedings of the 16th Midwestern Mechanics Conference (Kansas State Univ., Manhattan, Kan., 1979), pp. 91–96, Decelop. in Mech., 10, Kansas St. Univ., Manhattan, Kan., 1979. (Authors' summary) 82j:73047 73K12 (73H10)

Variable penalty methods for constrained minimization. Comput. Math. Appl. 6 (1980), no. 1, Special Issue, 79–97. (Nobuo Sannomiya) 82g:49031 49D30 (65K10, 90C30)

Prasad, B. N. (with Singh, V. P.) Finsler spaces with the Berwald's curvature tensor of a special form. Indian J. Pure Appl. Math. 11 (1980), no. 10, 1270-1277. (S. Kawaguchi) 82g:53037 53B40 (with Singh, U. P.; Agrawal, P. N.) On Finsler spaces with stretch curvature tensor

of some special forms. Progr. Math. (Allahabad) 14 (1980), no. 1-2, 49–58. (B. B. Sinha) 822c3043 53B40

(with Bose, V. V.) The Lie derivatives in complex areal space. Publ. Math. Debrecen
28 (1981), no. 1-2, 79-88. (A. Kawaguchi) 82m-53027 53B40
On the geometry of classical nonconservative dynamical system. Ann. Fac.
Sci. Univ. Nat. Zaire (Kinshasa) Sect. Math.-Phys. 4 (1979) 70G25 vić) 82k:70013

Jovanove, 342: 10013 10024: (with Sinha, Bipin Behari) Cordes magnétiques (électriques) en magnétohydrodynamique relativiste. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 6, A439-A442. (E. G. Broadbent) \$2a:76097 76705 (53208, 83C55) Stiff magnétic field lines. I. A geometrical foundation. Gen. Relativity Gravitation 13 (1981), no. 3, 217-226. (Author's summary) 82h:83040 83C50 (83C55)

sad, Jagdish (with Hayashi, H.) Representation of continuous and differentiable functions by Fourier series of Jacobi polynomials. Math. Notae 27 (1979/80), 41–47. (C. L. Parihar) 82e:42023 42C05 (33A65)

(with Varma, A. K.) An interpolatory rational approximation. Approximand applications (Proc. Workshop, Technion—Israel Inst. Tech., Haifa, 1980),

pp. 319-327, Academic Press, New York, 1981. (P. Vertesi) 82g:41005 41A05 (41A20) (with Varma, A. K.) A study of some interpolatory processes based on the roots of dre polynomials. J. Approx. Theory 31 (1981), no. 3, 244-252. (J. Szabados) 41A05 (41A10)

sad, Kanhaiya On the $(N, p_n)C_1$ summability of a sequence of Fourier coefficients. Indian J. Pure Appl. Math. 12 (1981), no. 7, 874-881. (S. M. Mazhar) 82g:42004

42A24 (40G05)

Presed, M. K. (with Ogielski, A. T.; Sinha, A.; Wang, Ling Lie Chau) Bäcklund transformations and local conservation laws for principal chiral fields. *Phys. Lett. B* 91 (1980), no. 3-4, 387–391. (Peter Holod) 82f:81050 81EI0 (35A30, 35Q20, 58A15) Yang-Mills-Higgs monopole solutions of arbitrary topological charge. Comm. Math. Phys. 80 (1981), no. 1, 137–149. (R. S. Ward) 82h:81093 81E10 (53C05)

(with Rossi, Paolo) Mirror symmetry and exact multimonopole solutions.

Rev. D (3) 23 (1981), no. 8, 1795-1799. (A. Comtet) 82g:81085 81E99 (83C20 (with Sinha, A.; Wang, Ling Lie Chau) Systematic framework for generating 81E99 (83C20)

onopole solutions. Phys. Rev. D (3) 23 (1981), no. 10, 2321-2334. (A. Comtet)

82k-81058 81E10 (14F05, 53C05) (with Chau, Ling Lie; Sinha, A.) Some aspects of the linear system for self-dual Yang-Mills fields. Phys. Rev. D (3) 24 (1981), no. 6, 1574–1580. (A. Comtet) 82k:81049

81E10 (55R10) (with Rossi, Paolo) Construction of exact multimonopole solutions. Phys. Rev. D (3)

24 (1981), no. 8, 2182-2199. (R. S. Ward) 82m:81056

(with Brown, S. A.; Rossi, Paolo) Multimonopole solutions. Phys. Rev. D (3) 24
 (1981), no. 8, 2217-2224. (Authors' summary) 82k:81048 81E10
 (with Rossi, Paolo) Construction of exact Yang-Mills-Higgs multimonopoles of

trary charge. Phys. Rev. Lett. 46 (1981), no. 13, 806-809. (A. Comtet) 82g:81062 81E10 (53C05, 58E30)

Prasad, Mohan (with Shankar, Rama) On the nonuniform propagation of weak discontinuities in magnetogasdynamics. Arch. Rational Mech. Anal. 75 (1980/81), no. 2, 169–174. (From the summary) 821:76043 76W05 (35L67) isimha Prasad, N. G. See Narasimha Prasad, N. G.

sad, R. D. (with Bhonsle, B. R.) Kontorovich-Lebedev transform of a class of eralised functions. Ranchi Univ. Math. J. 9 (1978), 65-76. (R. S. Pathak) 82b:46050 46F12 (44A15)

Prasad, Rajendra (with Saxena, Ashok K.) On the summabilities of the derived series of the Fourier series. J. Math. Sci. 12(13) (1977/78), 33-44 (1981). (H. P. Dikshit) 82j:42006 42A24 (40G05)

(with Saxena, Ashok K.) On the uniform matrix summability of Fourier series. An. ng. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 26 (1980), no. 2, 281-286. (H. P. Dikshit) 82h:42014 42A24 (40C05)

Dikshit) 82h-42014 42A24 (40C05)
(with Saxena, Ashok K.) Uniform matrix summability of Fourier series. Serdica 7
(181), no. 1, 76-78. (Shri Nivas Bhatt) 82j-42005 42A24 (40C05)
(sad, S. N. (with Thakur, P. J.) Axially symmetrical universal motions of Navier-Stokes

fluids. Math. Ed. (Siwan) 14 (1980), no. 2, A15-A24. (P. L. Sulem) 82c:76034 76D05 (35Q10)

(with Thakur, P. J.) Rotationally symmetrical universal motions of Navier-Stokes Math. Ed. (Siwan) 14 (1980), no. 3, A35-A45. (From the text) 82f:76012

sad, S. S. (with Kumar, M. M.) Stable circular orbits of test particles moving in the equatorial plane of a black hole. Lett. Nuovo Cimento (2) 28 (1980), no. 8, 269-274. 83C10 (83C20) (From the text) 82c:83014

sad, Sankatha (with Prasad, Y. N.) Expansion formulae for the new H-function of two variables. (Turkish summary) İstanbul Tek. Üniv. Bül. 33 (1980), no. 2, 41–47 (1981). (C. L. Koul) 82g:33012 33A35

(with Prasad, Y. N.) Fourier series for Buschman's H-function of two variables. (Hindi. English summary) Vijnana Parishad Anusandhan Patrika 23 (1980), no. 2, 83-92.

(C. L. Parihar) 82g:33013 33A35 (42C10)

Prasad, Surendra (with Mahalanabis, A. K.; Mohandas, K. P.) A fast optimal

deconvolution algorithm for real seismic data using Kalman predictor model. IEEE Trans. Geosci. Remote Sensing 19 (1981), no. 4, 216-221. (Authors' summary) 82;86003 86A15 (94A05)

ndra Prasad, V. See Rajendra Prasad, V.

sad, Y. N. (with Maurya, R. P.) Application of Jacobi polynomial and multivariable H-function in heat conduction in nonhomogeneous moving rectangular parallelepiped. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 4, 393-400. (C. L. 80A20 (33A35, 33A65) Koul) 82e:80005

(with Prasad, Sankatha). Expansion formulae for the new H-function of two variables. (Turkish summary). Istanbul Tek. Ūniv. Būl. 33 (1980), no. 2, 41–47 (1981). (C. L. Koul) 82p:33012 33A35

(with Prasad, Sankatha) Fourier series for Buschman's H-function of two variables. (Hindi. English summary) Vijnana Parishad Amusandhan Patrika 23 (1980), no. 2, 83–92.
 (C. L. Parihar) 82g:33013 33A35 (42C10)
 (with Siddiqui, A.; Singh, Awadhesh Kumar) Integrals involving spheroidal wave

ons. Indian J. Pure Appl. Math. 12 (1981), no. 11, 1336-1342. (R. C. Varma) 1014 33A35 (33A55) 33A35 (33A55)

(with Pati, Raj) Basic properties of modified multidimensional integral transform. indi. English summary) Vijnana Parishad Anusandhan Patrika 24 (1981), no. 1, 9-22. M. Saksena) 82k:44007 44A30 (Hindi. English sur (K. M. Saksena) 82k:44

(A. Jansena) Jackson (A. Saha, D. C.) Identification of distributed parameter systems via multidimensional distributions. Proc. IEE-D 127 (1980), no. 2, 45-50. (Author's 93B30 (94A12) summary) 82a:93021

Samma, A. R. Plasma discs around black holes. Gravitation, quanta and the universe (Proc. Einstein Centenary Sympos., Ahmedabad, 1979), pp. 168–183, Wiley, New York, 1980. (Andrew King) 82g:85011 85A30 (83F05)

See also Gravitation, quanta and the universe, 82d:83005

a, Shanti The norm of a derivation and the Björck-Thomeé-Istrățescu theorem. Math. Japon. 26 (1981), no. 5, 585-588. (V. Istrățescu) 82k:47038 47B20 (47B47)

ov, A. V. Converse to Simanov's theorem on the instability of solutions for systems with lag. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. with lag. (Russian. Engash summary) vestnik Lenngrud. Univ. Matt. Men. Astronom. 1981, pp. 1, 116–117, 123. (Pavol Marušiak) 2821-34166 34K20

Prasolov, V. V. Linear spaces in the general linear group. (Russian) Geometric methods in

problems of algebra and analysis, No. 2 (Russian), pp. 3-6, 160, Jaroslav. Gos. Univ.,

Yaroslavl', 1980. (Jože Vrabec) 82i:15014 15A30 (17A35, 57R25)
Prastacos, Gregory P. Allocation of a perishable product inventory. Oper. Res. 29 (1981), no. 1, 95–107. (Author's summary) 82b:90047 90B05

Pratelli, M. (with Lenglart, Erik; Lépingle, D.) Présentation unifiée de certaines inégalités de la théorie des martingales. With an appendix by Lenglart. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 26-52, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Michael Sharpe) 82d:60087 60G44

Prather, Ronald E. Generating the k-subsets of an n-set. Amer. Math. Monthly 87 (1980), no. 9, 740-743. (S. Gudder) 82e:05005 05A05 (28A12)

Pratihari, D. (with Samal, G.) Number of real zeros of a random algebraic polynomial. Indian J. Math. 20 (1978), no. 3, 225-232. (J. E. A. Dunnage) 82d:60103 (60H25)

da Prato, G. See Da Prato, G.

Pratt, Vaughan R. A near-optimal method for reasoning about action. ACM-SIGACT Symposium on the Theory of Computing (San Diego, Calif., 1978). J. Comput. System Sci. 20 (1980), no. 2, 231–254. (R. Parikh) 82a:68014 68B05 (68B10)

Prätzel-Wolters, Dieter (with Hinrichsen, Diederich) Module-theoretic characterization of system equivalence in time domain. Algebraic and geometric methods in linear systems theory (AMS-NASA-NATO Summer Sem., Harvard Univ., Cambridge, Mass., 1979), pp. 137-156, Lectures in Appl. Math., 18, Amer. Math. Soc., Providence, R.I., 1980. (Allen Tannenbaum) 821:93018 93B25 (93B15)
(with Hinrichsen, Diederich) Solution modules and system equivalence. Internat. J.

Control 32 (1980), no. 5, 777-802. (Allen Tannenbaum) 82c:93014 93C05 (93B15) Brunovsky equivalence of system matrices: the reachable case. IEEE Trans.

Automat. Control 26 (1981), no. 2, 429-434. (Author's summary) 82f:93033

Prauß, Ernst-Jürgen (with Philipp, Reiner) Über Separatoren in planaren Graphen (English sur nary) Acta Inform. 14 (1980), no. 1, 87-106. (A. K. Dewdney) 82a:05062 05C40 (05C10, 68E10)

(with Paul, Wolfgang J.; Reischuk, Rüdiger) On alternation. Acta Inform. 14

(1980), no. 3, 243-255. (Ryszard Janicki) 82e:68048a 68C40 (03D10)
Pravednaja, T. N. Approximate analytic solution of some boundary value problems for the wave equation. (Russian. English summary) Vyčisl. Prikl. Mat. (Kiev) No. 40 (1980), 81-86, 159. (From the text) 82f:35005 35A35 (65N40)

Pravotorova, N. A. (with Abramov, A. H.; Šahbazov, A. A.) On determining the optimal service discipline with a limited number of waiting places. (Russian) Questions of mathematical cybernetics and applied mathematics, No. 3 (Russian), pp. 74-81, "Élm", Baku, 1978. (E. A. Danieljan) 82f:60201 60K25 (90B22)

Prechtl, A. Nondispersive waves in nonlinear anisotropic dielectrics. Wave Motion 2 (1980). no. 2, 125-138. (J. A. Bennett) 82a:78011 78A40

Precup, Radu Le théorème des contractions dans des espaces syntopogènes. Thèor. Approx. 9 (1980), no. 1, 113-123. (A. Császár) 82i:54008 54A15 (54E40, 54H25)

Precupanu, Anca-Maria Some properties of the almost periodic functions in probability An. Ştiint. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.) 25 (1979), no. 1, 93-97. (G. Simboan) 82e:60088 60G99

Sur les suites asymptotiquement presque périodiques en probabilité. An. Ştiinţ. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 26 (1980), no. 1, 19-22. (G. Simboan) 82i:60052 60F99

Precupanu, Teodor Duality in best approximation problem. An. Ştiinţ. Univ. "Al. I. Cuza Iași Secț. I a Mat. (N.S.) 26 (1980), no. 1, 23-30. (W. W. Breckner) 82a:41025 41A50 (41A65, 90C48)

Preda, Petre Sur la dichotomie exponentielle non uniforme des équations différentielles linéaires. An. Univ. Timişoara Ser. Ştiinţ. Mat. 17 (1979), no. 2, 147-157. (A. I. Kir'ianen) 82c:34057 34D05

(with Megan, Mihail) On exponential dichotomy in Banach spaces. Bull. Austral. Math. Soc. 23 (1981), no. 2, 293-306. (S. Leela) 82m:34062 34G10 (47D05)

Preda, Vasile Iterative criteria for the sequential decision problem. I. The iterative minimax criterion. (Romanian. English summary) Stud. Cerc. Mat. 31 (1979), no. 2, 227-244. (Viorel Gh. Vodà) 82d:62127a 62L10

Iterative criteria for the sequential decision problem. III. The iterative Bayesian criterion in the wide sense. (Romanian. English summary) Stud. Cerc. Mat. 31 (1979), no. 3, 337-346. (Viorel Gh. Vodă) 824:62127e 62L10

Iterative criteria for the sequential decision problem. II. The iterative Bayesian criterion in the strict sense. (Romanian. English summary) Stud. Cerc. Mat. 31 (1979), no. 4, 453-462. (Viorel Gh. Vodă) 82d:62127b 62L10

Completeness of the class of Bayes solutions in the sense of Wald. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 2, 189-194. (Author's summary) 90D05

Prediger, Hanshermann (with de Boer, Reint) *Tensorrechnung in der Mechanik. (German) [Tensor calculus in mechanics] Ausgewählte Kapitel. [Selected chapters]

Forschungsbericht aus dem Fachbereich Bauwesen [Research Reports of the Department of Construction Engineering], 8. Universität Essen, Fachbereich Bauwesen, Essen, 1979. 78 pp. (Table of contents) 82j:00021 00A69 (15A72, 73-01)

Zur Kompatibilität deformierbarer Kontinua. [On the compatibility of deformable tinua] Z. Angew. Math. Mech. 61 (1981), no. 4, T120-T121. (From the text)

73G99 Predtečenskii, A. A. (with L'vov, V. S.) On Landau and stochastic attractor pictures in the

problem of transition of turbulence. Nonlinear and turbulent processes in physics (Proc. Internat. Workshop, Kiev, 1979). Phys. D 2 (1981), no. 1, 38-51. (Authors' summary) 82h-76027 76F99 (58F13, 76E10) dvoditelev, A. S. On Riemannian manifolds. (Russian. English sum

logy of the natural sciences, No. XXII: Physics (Russian), pp. 32-50, Moskov. Gos.

Univ., Mascow, 1979. (Esther Portnoy) 82e-01039 01A60 (01A55, 53-03, 83-03)
eece, D. A. (with Bailey, R. A.; Patterson, H. D.) A randomization problem in forming designs with superimposed treatments. Austral. J. Statist. 20 (1978), no. 2, 111-125. (Authors' summary) 82k:62153 62K99

(with Payne, R. W.) Identification keys and diagnostic tables: a review. With

discussion. J. Roy. Statist. Soc. Ser. A 143 (1980), no. 3, 253-292. (I. R. Savage) 68E10 (62P10, 92A05, 94A99)

em, R. (with Purga, A.) On the solution of Abel integral equation by the method of fractional integration. (Estonian and Russian summaries) Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. 30 (1981), no. 1, 9-13, 90. (From the text) 82d:65088 65R20 Pregibon, Daryl See Friedm an, Jerome H.; et al., 82h:62092

Preis, Albert (with Rinne, Horst; Thomas, Rainer) *Mathematik. II. (German)

[Mathematics: II] Linear Algebra [Linear algebra] Reihe Uni-Papers [Uni-Papers Series] Verlag Ölschlüger, Munich, 1979. 230 pp. ISBN 3-88295-024-2 (From the text) 00A06 82m:00009b

Preiser, Stanley (with Lee, Ding) Generalized Adams methods for solving underwater wave propagation problems. Comput. Math. Appl. 7 (1981), no. 2, 195–202. (Authors' summary) 82g:76030 76Q05 (76A60, 86A05)

Preiser, Udo (with Happel, Dieter; Ringel, Claus Michael) Vinberg's characterization of

Dynkin diagrams using subadditive functions with application to DTr-periodic modules. Representation theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 280-294, Lecture Notes in Math., 832, Springer, Berlin, 1980. (Idun Reiten) 16A64 (16A35)

(with Happel, Dieter; Ringel, Claus Michael) Binary polyhedral groups and Euclidean diagrams. Manuscripta Math. 31 (1980), no. 1-3, 317-329. (Authors' summary) 82g:20019 20C15 (16A64, 17B20)

Preiss, D. (with Vilimovský, Jiří) In-between theorems in uniform spaces. Trans. Amer. 54C30 (54E15) Math. Soc. 261 (1980), no. 2, 483-501. (M. Katětov) 82b:54022

Preissmann, M. Even polyhedral decompositions of cubic graphs. Discrete Math. 32 (1980), no. 3, 331–334. (Jean-Claude Fournier) 82h:05063 05C15

Prékopa, András On the development of optimization theory. (Hungarian. English summary) Alkalmaz. Mat. Lapok 4 (1978), no. 3-4, 165-191 (1979). (A. B. Németh) 82c:01031 01A55 (49-03, 90-03)

Logarithmic concave measures and related topics. Stochastic programming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 63-82, Academic Press, London, 1980. (Author's summary) 82a:60022 60E15 (52A22, 62H05, 90C15) (Author's summary) 82a:60022

(with Ganczer, Sándor; Deák, István; Patyi, Károly) The STABIL stochastic rogramming model and its experimental application to the electrical energy sector of the Hungarian economy. Stochastic programming (Proc. Internat. Conf., Univ. Oxford, 1974), pp. 369-385, Academic Press, London, 1980. (Authors' summary) ning (Proc. Internat. Conf., Univ. Oxford, 90C50 (90C15)

Dynamic type stochastic programming models. Studies on mathematical programming (Papers, Third Conf. Math. Programming, Matrafüred, 1975), pp. 127-145, Math. Methods Oper. Res., 1, Akad. Kiadó, Budapest, 1980. (I. M. Stancu-Minasian) 82e:90072 90C15

On the development of optimization theory. Amer. Math. Monthly 87 (1980), no. 7, 527-542. (Rolf Klötzler) 82h:01037 01A55 (01A50, 01A60, 90-03)

Prelov, V. V. Asymptotic behavior of the capacity of a continuous channel with large smooth noise. Problemy Peredaci Informacii 16 (1980), no. 2, 3-17 (Russian); translated as Problems Inform. Transmission 16 (1980), no. 2, 81-92. (Author's summary) 82g:94017

remalatha On a superharmonic extension. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 4, 631-640. (J. Veselý) 82i:31013 31D05

Prenter, P. M. (with Anderssen, R. S.) A formal comparison of methods proposed for the numerical solution of first kind integral equations. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 4, 488-500. (Authors' summary) 82h:65094 65R20 (45L10) Prentice, Ross L. (with Kalbfleisch, John D.) Estimation of the average hazard ratio.

Biometrika 68 (1981), no. 1, 105-112. (R. D. Gill) 82m:62224 62N05

obraženskaja, A. M. (with Neimark, Ju. I.) Speeding up of procedures of recurrent optimization of control of a Markov process with gains. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 6, 72-79, 220 (Russian); translated as Engrg. Cybernetics 17 (1979),

no. 6, 50-56 (1980). (Authors' summary) 820-90123 90(20(90)822)

Preobračenskii, I. N. Research pertaining to stability of thin plates with holes (survey).

Prikl. Mech. 16 (1980), no. 7, 3-25 (Russian); translated as Soviet Appl. Mech. 16 (1980), no. 7, 557-574 (1981). (Editors) 82b:73033 73H99 (73K10)

Preobrazhenskaya, A. M. See Preobraženskaja, A. M. Preobrazhenskii, I. N. See Preobraženskii, I. N.

Preparata, Franco P. (with Lipski, Witold, Jr.) Finding the contour of a union of

iso-oriented rectangles. J. Algorithms 1 (1980), no. 3, 235-246. (Wolfgang Boehm) 82c:68062 68K05 (51-04, 68G10) (with Lipski, Witold, Jr.) Efficient algorithms for finding maximum matchings in

convex bipartite graphs and related problems. Acta Inform. 15 (1981), no. 4, 329-346. (Authors' summary) 82m:68069 68C05 (05C35, 05C70, 52-04, 52A45, 68C25) (with Vuillemin, Jean E.) The cube-connected cycles: a versatile network for parallel

omputation. Comm. ACM 24 (1981), no. 5, 300-309. (Authors' summary) 82d:68018

(with Lipski, Witold, Jr.) Erratum: "Finding the contour of a union of iso-oriented rectangles" [J. Algorithms 1 (1980), no. 3, 235-246; MR 82c:68062]. J. Algorithms 2

(1981), no. 1, 105, (Editors) 82k:68059 68K05 (51-04, 51M20, 68G10)

A new approach to planar point location. SIAM J. Comput. 10 (1981); no. 3, 473-482. (Author's summary) 82g:90040 90805 (05C99, 68C05)

Prescott, Edward C. (with Townsend, Robert M.) Equilibrium under uncertainty: multiagent statistical decision theory. Bayesian analysis in econometrics and statistics,

pp. 169-194, Stud. Bayesian Econometrics, 1, North-Holland, Amsterdam, 1980. (See \$24-62170) 62C10 Prescott, P. (with Cook, R. Dennis) On the accuracy of Bonferroni significance levels for

detecting outliers in linear models. Technometrics 23 (1981), no. 1, 59-63. (Authors' summary) 82f:62119 62J05 (62F03)

Prešić, Marica D. A convergence theorem for a method for simultaneous determination of all zeros of a polynomial. Publ. Inst. Math. (Beograd) (N.S.) 28(42) (1980), 159-165. (Author's summary) 82m:65047 65H05

(Adminst Summary) Sciences of 657050

Bayesian computer programs. Bayesian analysis in econometrics and statistics, pp. 429-442, Stud. Bayesian Econometrics, 1, North-Holland, Amsterdam, 1980. (See 62-04

Press, William H. (with Rybicki, George B.) Enhancement of passive diffusion an suppression of heat flux in a fluid with time-varying shear. Astrophys. J. 248 (1981), no. 2, part 1, 751-766. (Authors' summary) 82h:85006 85A30 (76E20)

sacco, Flavio The constrained competitive bargaining set for homogen majority games. (Italian summary) Proceedings of the First AMASES Meeting (Pisa, 1977) (Italian), pp. 333-347, Giappichelli, Turin, 1979. (Elwyn L. Jones) 82c:90101 90D12 (90A07)

Two-person zero-sum games with random spying. (Italian. English summary) Rend. Istit. Mat. Univ. Trieste 11 (1979), no. 1-2, 16-31 (1980). (Author's summary) 82d:90134

Prest, Mike Elementary torsion theories and locally finitely presented categories. J. Pure Appl. Algebra 18 (1980), no. 2, 205-212. (B. Stenström) 82b:18015 18E15 (03C60) Quantifier elimination for modules. Proceedings of the Model Theory Meeting (Univ. Brussels, Brussels/Univ. Mons, Mons, 1980). Bull. Soc. Math. Belg. Sér. B 33 (1981), no. 1, 109-129, (Editors) 82i:03037 03C10 (03C60, 16A53)

Prestel, Alexander Sums of squares over fields. Proceedings of the 5th School of Algebra (Rio de Janeiro, 1978), pp. 33-44, Soc. Brasil. Mat., Rio de Janeiro, 1978. (G. A. Efroymson) 82a:12014 12D15 (10C04, 10J05)

(with Ziegler, Martin) Nonaxiomatizable classes of V-topological fields. J. Reine Angew. Math. 316 (1980), 211-214. (John Rosenthal) 82b:03073 03C85 (12J99. 54H13)

Prestini, Elena A generalized Bessel inequality. Proc. Amer. Math. Soc. 83 (1981), no. 1, 99–102. (Roger L. Jones) 82m:42006 42A20 (42A24)

Preston, Chris Construction of specifications. Quantum fields-algebras, processes (Proc. Sympos., Univ. Bielefeld, Bielefeld, 1978), pp. 269-292, Springer, Vienna, 1980. (S. Guiaşu) 82j:60185 60K35 (82A05)

Presutti, Errico (with Lebowitz, Joel L.) Erratum: "Statistical mechanics of systems of unbounded spins" [Comm. Math. Phys. 50 (1976), no. 3, 195-218; MR 56 #4579].

Comm. Math. Phys. 78 (1980/81), no. 1, 151. (Editors) 82c:82014 82A05

(with Galves, A.; Kipnis, C.; Marchioro, C.) Nonequilibrium measures which

exhibit a temperature gradient: study of a model. Comm. Math. Phys. 81 (1981), no. 1,

127-147. (T. M. Liggett) 82m:60127 60K35 (82A05)

Pretorius, L. M. The factorization of morphisms in a general category and in R-mod. IV. The property 9 and projective morphisms. Algebra Symposium (Potchefstroom Univ., Potchefstroom, 1979), pp. 38-44, Potchefstroom Univ. for Christian Higher Ed., Potchefstroom, 1980. (See 82i:16002) 18A32

Pretzel, Oliver A construction for partially ordered sets. Discrete Math. 32 (1980), no. 1, 59-68. (Derek C. J. Burgess) 82c:06007 06A10

59-68. (Derec C. J. Burgess) 82c:00007 06A10 Preuss, H.-P. Successive pole shifting by state controllers of prescribed structure. Internat. J. Control 33 (1981), no. 6, 1059-1071. (Author's summary) 82h:93035 93B55

Preuss, Wolfgang (with Bleyer, András) A remark to the characterization of closed derivations in C*-algebras. Riv. Mat. Univ. Parma (4) 6 (1980), 311-314 (1981). (R. A. Struble) 82j:46072 46L05 (46J99)

ller-Preussker, M. See Müller-Preussker, M.

Prevot, Kenneth J. Modifications of controllable cutting and pasting. Houston J. Math. 6 (1980), no. 4, 565-575. (R. E. Stong) 82h:57028 57R85 Imbedding smooth involutions in trivial bundles. Pacific J. Math. 89 (1980), no. 1, 163-168. (R. E. Stong) 82a:55018 55R25

Price, Camille C. Partitioning algorithms for program segmentation and processor assignment. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II.

Congr. Numer. 29 (1980), 739–761. (Author's summary) 82g:68026 68B20 (90C20)

Price, J. Michael (with Guilkey, David K.) On comparing restricted least squares

estimators. J. Econometrics 15 (1981), no. 3, 397-404. (Jiří Anděl) 82g:62090 Price, T. M. Spanning surfaces for projective planes in four space. Pacific J. Math. 89 (1980), no. 1, 169-179. (T. B. Rushing) 82i:57021 57Q35

Price, Thomas E., Jr. The numerical approximation of analytic functions in the comple domain. J. Comput. Appl. Math. 6 (1980), no. 3, 177-182. (L. Berg) 82a:65024 (65D15)

Prichett, G. D. (with Furno, Anne L.; Lapenta, J. F.) The determination of all decadic Kaprekar constants. Fibonacci Quart. 19 (1981), no. 1, 45-52. (A. J. van der Poorten)

82g:10014 10A30

Prick, Peter A. J. (with Beurskens, Paul T.) A fast algorithm for determining phase values for symbols from weighted symbol relations in direct methods. Acta Cryst. Sect. A 37 82-04 (82A60) (1981), no. 2, 180-183. (Authors' summary) 82d:82002

(1791), no. 2, 180-183. (Authors summary) 826-82002 82-04 (82A60)

Priddy, Stewart On a conjecture concerning K_a(Z/p²). Algebraic K-theory, Evanston 1980 (Proc. Conf., Northwestern Unic., Evanston, III., 1980), pp. 338-342, Lecture Notes in Math., 854, Springer, Berlin, 1981. (J. F. Adams) 82i:55017 55R50 (18F25)

Pride, Stephen J. One-relator quotients of free products. Math. Proc. Cambridge Philos. Soc. 88 (1980), no. 2, 233-243. (A. H. M. Hoare) 82a:20031 20E99

(with Baumslag, B.) An extension of the freiheitssatz. Math. Proc. Cambridge Philos.

- Priel, Z. (with Zuzovsky, M.; Mason, S. G.) Effects of rotary Brown rheological transients of suspensions of spheroids. J. Rheol. 24 (1980), no. 6, 705-717. (G. Paria) 821:76004 76A10 (76F99, 76T05)
- se. Lutz On the concept of simulation in asynchronous, concurrent systems. Progress in cybernetics and systems research, Vol. VII, pp. 85-92, Hemisphere, Washington, D.C., 1980. (From the introduction) 82h:s8058 68105 (68D90) est, Graham (with Read, Stephen) Ockham's rejection of ampliation. Mind 90 (1981), no. 358, 274-279. (From the introduction) 82h:63005 03-03 (01A35, 03A05, 03B45) estley, M. B. System identification, Kalman filtering, and stochastic control. Directions
- in time series (Proc. Meeting, Iowa State Unio., Ames, Iowa, 1978), pp. 188-218, Inst. Math. Statist., Hayward, Calif., 1980. (Author's summary) 82i:93083 93E12
 - State-dependent models: a general approach to nonlinear time series analysis. J. Time Ser. Anal. 1 (1980), no. 1, 47–71. (Tata Subba Rao) 82j:62067 62M10
- Priezzev, V. B. (with Zagrebnov, V. A.) Gauge symmetry and phase transitions in the random spin systems. (Russian. English summary) Acta Phys. Polon. A 57 (1980), no. 5, 661-666. (M. Bundaru) 82e:81046 81E99 (81G05, 82A25) (with Zagrebnov, V. A.) On phase transitions in spin systems with frustration.
 - (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 2, 217-223. (V. Z. Enol'skii) 82A67 (82A25, 82A42)
- pogine, Bya (with Grecos, A. P.) Topics in nonequilibrium statistical mechanics.

 Problems in the foundations of physics (Proc. Internat. School Phys. "Enrico Fermi",
 Course LXXII, Varenna, 1977), pp. 308-343, North-Holland, Amsterdam, 1979. (See 82m:81003) 82A35
 - (with Misra, Baidyanath; Courbage, Maurice) From deterministic dynamics to ns. Phys. A 98 (1979), no. 1-2, 1-26. (A. S. Wightman) 82e:58066 58F13 (47D07, 60J25, 82A05)
- (with Misra, Baidyanath) On the foundations of kinetic theory. Progr. Theoret. Phys. Suppl. No. 69 (1980), 101-110 (1981). (K. Kumar) 82k:82009 82A05 (60J25,
- (with Stengers, Isabelle) Le problème de l'invention et la philosophie des sciences. Philosophy of science: contemporary issues. Rev. Internat. Philos. 34 (1980), no. 1-2, 5-25. (See 82e:00034) 00A69 (82-03)
- Temps, entropie et dynamique. [Time, entropy and dynamics] Contemporary aspects of science (Brussels, 1979). Acad. Roy. Belg. Cl. Sci. Mém. Collect. 8° (2) 44 (1981), no. 1, 79–82. (See 82k-00008) 80A10 (92A09)
- (with Dewel, G.) Pierre Résibois: 1936-1979. J. Statist. Phys. 24 (1981), no. 1, 7-19. (Editors) 82f:01132 01A70 (82-03)
- (with Kondepudi, D. K.) Sensitivity of nonequilibrium systems. Phys. A 107 (1981), no. 1, 1–24. (Authors' summary) 82f:82029 82A35
- (with Nicolis, G.) Symmetry breaking and pattern selection in far-from-equilibrium systems. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 2, part 1, 659-663. (Authors' summary) 82a:82025 82A35 (35K55)
- See also Fourez, Gérard, 82h:00019 Prihno, V. L. (with Černenko, P. A.) Increasing the computational stability of state evaluation of electrical power systems. (Russian. English summary) Elektronnoe Modelirovanie 1981, no. 1, 78-80, 111. (Authors' summary) 82g:65017
- Prihod'ko, A. P. (with Rabah, R.) Some properties of linear controllable equations in infinite-dimensional spaces. (Russian) Vestnik Har'kov. Gos. Univ. No. 174 vyp. 43
- (1978), 37-43, 104. (E. S. Čičkin) 821:34078 34H05 (93B05)
 Sets of attainability in Banach space. (Russian) Vestnik Har'kov. Gos. Univ.
 No. 177, vpp. 44 (1979), 27-35, 95. (P. Brunovský) 82h:93011 93B05 (34H05, 49E15) Prihod'ko, V. I. (with Peletminskii, S. V.; Plohov, S. S.) Kinetics of fluctuations with large radius of correlations. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 6, 1365-1368.
- (R. A. Minlos) 82f:82030 82A35 (with Peletminskii, S. V.; Plohov, S. S.) On statistical theory of nonequilibrium ations with long radius of correlations. (Russian. English summary) Teoret. Mat.
- Fiz. 46 (1981), no. 2, 263-278. (V. P. Kalašnikov) 82j:82036 82A35 Priimak, V. G. (with Levitan, Ju. L.; Moiseenko, B. D.; Roždestvenskii, B. L.; Sidorova, V. K.) Methods of numerical modeling of turbulent flow of a fluid in a channel. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 3, 737-747, 812. (Authors' summary) 82h:76026 76F99 (65P05, 76A60)
- Prijateli, Niko ★Uvod v matematično analizo. 1. Del. (Slovenian) [Introduction to athematical analysis. Part 1] Matematika-Fizika [Mathemati cs-Physics], 13. Državna Založba Slovenije, Ljubljana, 1980. 360 pp. (Editors) 82h:26001 (00A05, 54-01)
- carpatskii, A. K. (with Golod, P. I.) A periodic problem for the classical two-dimensional Thirring model. (Russian) Ukrain. Mat. Z. 31 (1979), no. 4, 454–459, 479. (Authors' summary) 82c:81092 81E10 (35Q20)
 - The geometric structure and Backlund transforms of nonlinear evolutionary equations that have a Lax representation. (Russian. English summary) Teoret. Mat. Fiz. 46 (1981), no. 3, 382-393. (J. Chrastina) 82k:58007 58A15 (35A30, 53B05, 58F07,
- Prikazčikov, V. G. Prototypes of iteration processes in the eigenvalue problem. (Russian) Differencial'nye Uravnenija 16 (1980), no. 9, 1688-1697, 1727. (E. G. D'jakonov) 65F15
- Prikry, Karel (with Armstrong, Thomas E.) Liapounoff's theorem for nonaton finitely-additive, bounded, finite-dimensional, vector-valued measures. Math. Soc. 266 (1981), no. 2, 499-514. (Detlef Plachky) 821:28008 Trans. Amer 28B05 (28A12, 28A60)
- Prill, David Primitive holomorphic maps of curves. Manuscripta Math. 32 (1980), no. 1-2, 59-80. (R. F. Lax) 82a:30056 30F99 (14H30, 32L99)
- Priluckii, M. H. (with Kazancev, E. N.) The planning problem for models of two-stage stochastic production systems. *Izv. Akad. Nauk SSSR Tehn. Kibernet.* 1980, no. 1, 3-9, 218 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 1, 1-6 (1981). (Authors'
- načuk, L. P. Nonlinear problem of conjugation on an open arc for two holomorphic functions. (Russian) Vestnik Beloruss. Gos. Univ. Ser. 1 1981, no. 1, 44-46, 79. (D. Mitrovič) 82f;30044 30E25
- nak, M. E. Convergence of a truncation method with deletion at each step. Kibernetika

- (Kiev) 1980, no. 1, iv, 119-121, 152 (Russian); translated as Cybernetics 16 (1980), no. 1, 134-137. (From the text) 82e:90076 90C25
- nenko, É. A. Number of equivalence classes with respect to certain subgroups of a symmetric group. Kibernetika (Kiev) 1979, no. 6, 19-22 (Russian); translated of Cybernetics 15 (1979), no. 6, 793-797 (1980). (I. E. Strazdinš) 82g:05009
- micerio, Angela Selvaggi On a terminal value problem for a class of nonlinear ordinary differential equation. (Italian summary) Riv. Mat. Univ. Parma (4) 5 (1979), part 2, 503-510 (1980). (V. Staikos) 82a:34015 34B15
 - (with Taiani, Geraldine) Families of analytic discs with boundary on a nongeneric CR submanifold. (Italian. English summary) Ann. Mat. Pura Appl. (4) 126 (1980), 233-251 (1981). (Claudio Rea) 82j:32047 32F25 (32A17)
 - nicerio, Mario (with Fasano, Antonio) Free boundary problems for nonlinear parabolic
 - equations with nonlinear free boundary condutions. 3. Academic 247-273. (Authors' review (Zbl 421:35080)) 82;35091 35K85 (35R35) (with Fasano, Antonio) Convexity of the free boundary in some classical parabolic during Parma (4) 5 (1979), part 2, 635-645 (1980).
 - (Emmanuele di Benedetto) 82g:35060 35K85 (80A20) (with Rubinstein, Lev; Fasano, Antonio) Remarks on the analyticity of the free nsional Stefan problem. Ann. Mat. Pura Appl. (4) 125 (1980),
 - 295-311. (D. L. Colton) 82f:35087 35K05 (35R35)
 (with Fasano, Antonio; Rubinstein, Lev) A model problem for heat conduction with a free boundary in a concentrated capacity. J. Inst. Math. Appl. 26 (1980), no. 4,
 - 327-347. (Alfonso Castro) 82;35139 35R35 (35K20, 80A20)
 (with Fasano, Antonio) New results on some classical parabolic free-boundary problems. Quart. Appl. Math. 38 (1980/81), no. 4, 439-460. (Emmanuele di Benedetto)
 - 35K85 (80A20)
- Diffusion problems with a free boundary. (Italian) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 1, 11-68. (L. von Wolfersdorf) 82i:35166 35R35 (35K85, 49A29, 80A20)

 Prince, A. R. Finite groups with a certain centralizer of an element of order 3. Proc. Roy. Soc. Edinburgh Sect. A 87 (1980/81), no. 3-4, 249-254. (Gary L. Walls) 82c:20032 20D05 (20B35)
- Prince, G. E. (with Eliezer, C. J.) On the Lie symmetries of the classical Kepler problem. J. Phys. A 14 (1981), no. 3, 587-596. (Authors' summary) 82c:70008 58F35)
- Prince, P. J. (with Dormand, J. R.) High order embedded Runge-Kutta formulae. J. Comput. Appl. Math. 7 (1981), no. 1, 67-75. (David K. Kahaner) 82f:65080
- Prini, Gianfranco (with Aiello, Luigia) An efficient interpreter for the lambda-calculus. J. Comput. System Sci. 23 (1981), no. 3, 383–424. (Authors' summary) 82m:68061 68C05 (03B40)
- Prinja, A. K. On the Green's function for heterogeneous media in one-speed transport theory. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 1, 181-192. (C. V. Pao) 82c-82112 82A70 (35J05)
- Pripik, O. S. (with Dzjadik, V. K.; Dzjadik, S. Ju.) On the asymptotic behavior of the Lebesgue constant in trigonometric interpolation. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 6, 736-744, 859. (S. Aliančić) 82k:42003 42A15 (41A05)
- di Prisco, Carlos A. See Di Prisco, Carlos A.
- Prisjažnjuk, V. P. (with Piterbarg, V. I.) Exact asymptotic behavior of the probability of large span of a Gaussian stationary process. (Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 3, 480-495. (Franz Schmidt) 82m:60042
- Pritchard, A. J. (with Carmichael, N.) Optimal scheduling for the treatment of cancer. Analysis and optimisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 511-521, Academic Press, London, 1980. (Robert Bartoszyński) 92A07 (90B35, 93E20)
- (with Pollock, J.) The infinite time quadratic cost control problem for distributed systems with unbounded control action. J. Inst. Math. Appl. 25 (1980), no. 3, 287-309. (E. O. Roxin) 82k:49012 49A27
- (with Pollock, J.) The tracking problem for distributed systems with unbounded control action. J. Inst. Math. Appl. 25 (1980), no. 4, 387-396. (Authors' summary) 49B27
- (with Magnusson, K. G.) Local controllability for nonlinear evolution equations. Abstract Cauchy problems and functional differential equations (Proc. Workshop, Leibnitz, 1979), pp. 71–89, Res. Notes in Math., 48, Pitman, Boston, Mass., 1981. (See 82d:34001)
- (with Zabczyk, J.) Stability and stabilizability of infinite-dimensional systems SIAM Rev. 23 (1981), no. 1, 25-52. (Authors' summary) 821:93063 93D20
- Pritchard, H. O. (with Vatsya, S. R.) Some analytic properties of the master equation for unimolecular reaction. Proc. Roy. Soc. London Ser. A 375 (1981), no. 1762, 409-424. (Richard J. Field) 82m:80007 80A30 (82A35)
- Pritchard, Paul Comments on a paper by E. J. Neuhold and R. Studer: "The use of Hoare's method of program verification for the quick-sort algorithm" [Computing 18 (1977), no 4, 281-293; MR 56 #13753]. (German summary) Computing 22 (1979), no. 3, 279-282. (Editors) 82j:68008 68B10
 - A sublinear additive sieve for finding prime numbers. Comm. ACM 24 (1981), no. 1, 18-23. (Samuel S. Wagstaff, Jr.) 82c:10011 10A25 (68C25)
- Pritchard, W. G. (with Bona, Jerry L.; Scott, L. R.) A posteriori error estimates for exact and approximate solutions of time-dependent problems. Seminar on Numerical Analysis and its Applications to Continuum Physics (Rio de Janeiro, 1980), pp. 101-111, Soc. Brasil. Mat., Rio de Janeiro, 1980. (Rolf Rannacher) 82c:65059 65M99 (76D05)
- Pritsker, A. Alan B. (with Hazen, Gordon B.) Formulas for the variance of the sample mean in finite state Markov processes. J. Statist. Comput. Simulation 12 (1980/81), no. 1, 25-40. (A. N. Philippou) 82d:60137 60J27 (60K25, 62E25)
- Pritula, Ja. G. Tests for absolute convergence of Fourier series of almost periodic functions of bounded variation. (Russian) Ukrain. Mat. Z. 33 (1981), no. 1, 96-101. (J. Musielak) 42A28 82c-42012
- Pritula, N. N. Excitation of oscillations in nonlinear systems with distributed parameters and a random deviation with respect to time. (Russian) Analytic methods for investigating nonlinear oscillations (Russian), pp. 138-155, 184, Akad. Nauk Ukrain. SSR, Inst. Mat. Kiev, 1980. (Author's summary) 82h:35094 35R10 (35R60, 70L05)

Pritulenko, Р. V. ★Построение плоских фитур и сечений по специальным : (Russian) [Construction of plane figures and sections given specific conditions]
"Malinostroenie", Moscow, 1979. 134 pp. (Editors) 82f:51018a 51N05 (70-01, 70B99)

★Plane figures and sections: how to construct them given specific conditions.

Translated from the Russian by Vladimir Shokurov [Vladimir Sokurov]. "Mir", Moscow, 1980. 164 pp. (O. Bottema) 821:51018b 51N05 (70-01, 70B99)

Pritulo, M. F. (with Kusakin, S. I.) The coordinate-deformation method in the problem of a supersonic gas flow over an airfoil. A translation of Aeromechanics (Russian), pp. 32-39, "Nauka", Moscow, 1976. Fluid Mech.—Soviet Res. 9 (1980), no. 2, 20-26. (Authors' summary) 82a:76051 76J99

Privalov, A. A. (with Ionisjan, S. I.) Divergence of a sequence of linear operations on a set of second category. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1978, no. 6(193), 89-97. (N. T. Anisimova) 82a:40002 40A05 (41A99)

Prival'skii, V. B. The Cauchy problem for systems with the simplest hysteresis nonlinearities. (Russian) Qualitative and approximate methods for the investigation of operator equations (Russian), pp. 112–118, 167, Jaroslav. Gos. Univ., Yaroslav!', 1980. (H. O. Fattorini) 82k:34075 34K05 (34A10)

Priya, Ved (with Sharma, Bhu Dev) Source coding theorem and its converse with side information. Inform. Sci. 17 (1979), no. 3, 169-176. (Authors' summary) 82m:94033

bert, Robert L. On the optimal placement of software monitors. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 763-783. (Lawrence V. Saxton) 82f:68012 68B05 (68B10)

caccia, Itamar (with Goldhirsch, Isaac) The number of propagating modes in hydrodynamic systems. Phys. A 105 (1981), no. 1-2, 330-336. (Authors' summary)

cenko, V. S. (with Koščavec', P. T.) Hybrid integral Fourier-Hankel and Hankel-Fourier transforms. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A No. 2 (1980), 16–19, 94. (A. L. Brodskii) 82h:44005 44A15 (34B25)

(with Solov'ev, A. I.) The symmetric contact problem for a compound strip.
(Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 11, 58-63.
(Authors' summary) 82d:73082 73T05 (45B05)

Procesi, Claudio (with Kraft, Hanspeter) Minimal singularities in GL, Invent. Math. 62 (1981), no. 3, 503-515. (V. L. Popov) 82e:14007 14B05 (14L30, 20G05) (with De Concini, Corrado) Symmetric functions, conjugacy classes and the flag variety. Invent. Math. 64 (1981), no. 2, 203-219. (V. L. Popov) 82m:14030

(14L30, 20C30) cházka, Ladislav Sur p-indépendance et p^{∞} -indépendance en des groupes sans torsion.

Symposia Mathematica, Vol. XXIII (Conf. Abelian Groups and their Relationship to the Theory of Modules, INDAM, Rome, 1977), pp. 107–120, Academic Press, London, 1979. (From the text) 82a:20058 20K20

A note on p-adic completion of torsion-free abelian groups. Comment. Math. Univ. Carolin. 21 (1980), no. 4, 795–803. (Roger H. Hunter) 82e:20066 20K20

Procházka, Petr (with Janovský, Vladimír) Contact problem of two elastic bodies. I, II, III. (Russian and Slovak summaries) Apl. Mat. 25 (1980), no. 2, 87–109, 110–136, 137–146. (V. G. Korneev) 82b:73053 73T05 (35J65, 49A29, 49D15, 65N10)

Prochnow, Dieter Ein Kompaktheitssatz für mehrbasige Finite-Elemente-Verfahren. Math.

Nachr. 97 (1980), 271-277. (Stephen W. Brady) 82es65114 65N30

Procopiuc, Gh. The Cauchy problem in relativistic theory of radiation field. An. Stiint.

Univ. "Al. I. Cuza" Iaşi Seçt. I a Mat. (N.S.) 25 (1979), suppl., 63-72. (J. E. Marsden) 82c:83042 83C50 (35L70, 58D25)

Theorem of existence and uniqueness in relativistic radiative hydrodynamics.

(Romanian summary) Bul. Inst. Politehn. Iași Sect. 1 26(30) (1980), no. 1-2, 103-111.

(Jacques Lacaze) 82i:83048 83C55 (58D25, 58G16)

actor, C. H. Variances for balanced multistage sampling from a finite portion of a time series. Time series analysis (Houston, Tex., 1980), pp. 461–467, North-Holland, Amsterdam, 1981. (See 82k:62005) 62M10

Proctor, M. R. E. (with Chapman, C. J.) Nonlinear Rayleigh-Bénard convection between poorly conducting boundaries. J. Fluid Mech. 101 (1980), no. 4, 759-782. (Authors' summary) 82d:76044 76E30 (76Z99)

(with Knobloch, Edgar) Nonlinear periodic convection in double-diffusive systems.

J. Fluid Mech. 108 (1981), 291–316. (Authors' summary) 82j:76042 76E15 (76R99)
Prodan, N. I. On a variety of CHQ-algebras. (Russian) Algebra i Logika 20 (1981), no. 1, 92–100, 124. (Ivan Chajda) 82k:20112 20N05 (08B99)

danov, Iv. Maximal and minimal topologies on abelian groups. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 985–997, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (M. I. Kabenjuk) 82i:22003 22A05 (20K45)

dinger, Helmut The average height of a stack where three operations are allowed and some related problems. J. Combin. Inform. System Sci. 5 (1980), no. 4, 287-304. (Henry S. Warren, Jr.) 82m:05013 05A15 (05A99, 68E99)

Profera, Luigi Simple and Artinian Lister ternary rings. (Italian) Ricerche Mat. 28 (1979), no. 1, 39-60. (Rainer Mlitz) 82e:17003 17A40

Profeti, Alessandro (with Terreni, Brunello) The uniformity for convergence of parabolic operators in the case of homogenization. (Italian. English summary) Boll. Un. Mat. Ital. 35K10 (49D50) B (5) 16 (1979), no. 3, 826-841. (Lucio Boccardo) 82m:35069a

(with Terreni, Brunello) On some methods for the study of the convergence of parabolic equations. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 17 (1980), no. 2, 675-691. (Lucio Boccardo) 82m:35069b 35K10 (49D50)

Prohaska, L. (with Flachsmeyer, Jürgen) ★Algebra. (German) With historical notes by Hans Wussing. Third edition. Studienbücherei. [Textbook Library] Mathematik für Lehrer [Mathematics for Teachers], 3. VEB Deutscher Verlag der Wissenschaften, Berlin, 1979. 286 pp. (Editors) 82i:00001 00A05

1979. 286 pp. (Editors) bassessori (UAU) horenko, P. P. (with DeEkunov, N. V.; Kuvšinov, V. I.; Kuvšinov, G. I.) Aspherical collapse of a cavitation bubble between two solid walls. Akust. Ž. 26 (1980), no. 5, 695-699 (Russian); translated as Soviet Phys. Acoust. 26 (1980), no. 5, 392-395. (Authors' summary) 82b:76011 76B10

rov, A. M. (with Karlov, N. V.) Quantum electronics and Einstein's theory of radiation. Uspehi Fiz. Nauk 128 (1979), no. 3, 537-543 (Russian); translated as Soviet Phys. Uspekhi 22 (1979), no. 7, 576-579 (1980). (D. ter Haar) 82b:01030 01A60 See also Collection: Mandel'stam, L. I., 82g:01085

Prohorov, D. V. Integral transformations in some classes of univalent functions. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 12, 45-49. (D. A. Brannan) 82h:30012

(with Szynal, Jan) Coefficient estimates for bounded nonvanishing functions. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 29 (1981), no. 5-6, 223-230. (Ved Parkash Gupta) 82m:30024 30C50

orov, V. A. (with Vavilov, V. V.; López Lagomasino, Guillermo) An inverse problem for the rows of a Padé table. (Russian) Mat. Sb. (N.S.) 110(152) (1979), no. 1, 117-127, 160. (F. I. Ibragimov) 82e:41026 41A21 (30E10)

Prohvatilov, E. V. (with Franke, V. A.; Novožilov, Ju. V.) On the light-cone formulation of

classical nonabelian gauge theory. Lett. Math. Phys. 5 (1981), no. 3, 239-245. (A. O. Barut) 82i:81111 81E99 (53C80)

Prokhorenko, P. P. See Prohorenko, P. P. Prokhorov, A. M. See Prohorov, A. M.

Prokhorov, D. V. See Prohorov, D. V. Prokhvatilov, E. V. See Prohvatilov, E. V.

Prokof'ev, B. M. A contact problem for a compound wedge. (Russian) Interaction in the mechanics of constructions (Russian), pp. 52-59, 87, "Višča Škola", Kiev, 1980. (Author's summary) 82d:73083 73T05

Prokof'ev, V. N. (with Bogdanovič, V. A.) Two-sample nonparametric rules for detecting signals. (Russian) Adaptive systems and their applications (Russian), pp. 135-139, 189, "Nauka" Sibirsk. Otdel., Novosibirsk, 1978. (From the text) 82e:94021

Prokop'ev, V. P. (with Vorotnikov, V. I.) On stability of motion of linear systems with respect to some of the variables. Prikl. Mat. Meh. 42 (1978), no. 2, 268-271 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 2, 280-283 (1979). (M. Rama Mohana Rao) 82k:34064 34D20

Action (French) [Numerical solution of multidimensional problems of gas dynamicy] Translated from the Russian by Valéri Platonov. "Mir", Moscow, 1979. 414 pp. (Editors) 82c:76003 76-02 (65P05, 76Nxx)

(with Ceban, V. G.: Kereman, V. I.) Characteristic-difference method of solution of plane and axisymmetric problems of the dynamics of fluid-saturated porous media. (Russian) Computational methods of mechanics. Mat. Issled. No. 64 (1981), 144-158,

194. (Authors' summary) 82m:73045 73J06 (65P05) (with Čeban, V. G.; Kerčman, V. I.) Solution of problems of the dynamics of nonlinear-elastic media by the method of discontinuity decay. (Russian) Computational methods of mechanics. Mat. Issled. No. 64 (1981), 159-166, 194-195. (Authors summary) 82k:73026 73D99 (73E99)

Proll, L. G. (with Dyer, M. E.) Eliminating extraneous edges in Greenberg's algorithm. Math. Programming 19 (1980), no. 1, 106-110. (From the introduction) 82h:65032

Prolla, João B. On the spectra of non-Archimedean function algebras. Functional analysis, holomorphy, and approximation theory (Proc. Sem., Univ. Fed. Rio de Janeiro, Rio de Janeiro, 1978), pp. 547-560, Lecture Notes in Math., 843, Springer, Berlin, 1981. (Alain Escassut) 82k:32043 32E27 (46J10, 46P05)

Pronin, L. N. Automorphisms of positive binary Hermitian forms over a ring of integral naternions. (Russian) Vestnik Har'kov. Gos. Univ. No. 174, vyp. 43 (1978), 89–103, 15. (A. A. Bondarenko) 82h:10046 10E25 (10C05) 105. (A. A. Bondarenko) 82h:10046

Propol, A. I. Dynamic linear programming. Numerical optimisation of dynamic systems pp. 117-135, North-Holland, Amsterdam, 1980. (Edwin H. Neave) 82e:49045

(with Zimin, I. N.) *Dynamic linear programming models of energy, resource, and economic-development systems. With a foreword by Wolf Häfele. RR-81, 14. International Institute for Applied Systems Analysis, Laxenburg, 1981. vi+61 pp. ISBN 3-7045-0010-0 (From the introduction) 82k:90043 90A16 (90A30, 90C39)

Proschan, Frank (with Hollander, M.) Correction to: "Testing to determine the underlyi distribution using randomly censored data" [Biometrics 35 (1979), no. 2, 393-401; MR 81a:62034] Riometrics 35 (1979), no. 4, 905 (Editors) 82h:62053 62G99

(with El-Neweihi, Emad) Multistate reliability models: a survey. Multivariate dysis, V (Proc. Fifth Internat. Sympos., Univ. Pittsburgh, Pittsburgh, Pa., 1978), pp. 523-541, North-Holland, Amsterdam, 1980. (Authors' summary) 82f:62178 62N05 (60K20, 90B25)

(with Langberg, Naftali A.; León, Ramón V.) Characterization of nonp classes of life distributions. Ann. Probab. 8 (1980), no. 6, 1163-1170. (S. Talwalker) 82g:62031 62E10

(with Langberg, Naftali A.; León, Ramón V.; Lynch, James Dennis) Extrem points of the class of discrete decreasing failure rate life distributions. Math. Oper. Res. 5 (1980), no. 1, 35-42. (Authors' summary) 82b:60114 60K10 (62N05, 90B25) (with Ahmed, Abdul-Hadi N.; León, Ramón V.) Generalized association, with

applications in multivariate statistics. Ann. Statist. 9 (1981), no. 1, 168-176. (Richard A. Johnson) 82e:62084 62H20

(with Kitchin, John) Generalization of Block-Savits' convolution result. Ann. Statist. 9 (1981), no. 2, 437. 82d:62151 62N05

(with Hollander, M.; Sethuraman, J.) Decreasing in transposition property of overlapping sums, and applications. *J. Multivariate Anal.* 11 (1981), no. 1, 50–57. (I. Olkin) 82g:62030 62E10 (62N05)

(with El-Neweihi, Emad) Unified treatment of some inequalities among ratios of means. Proc. Amer. Math. Soc. 81 (1981), no. 3, 388-390. (I. Olkin) 82c:26021

seler, Martin Zur Eindeutigkeit der Lösung chemischer Gleichgewichtsprobleme. Wiss. Z. Tech. Hochsch. Karl-Marx-Stadt 22 (1980), no. 5, 443-451. (Author's summary) 90C25 (80A30)

Solution 3.
 Solution 3.
 Asymptotically exact equations for the bending of thin plates. (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 49–56, 307, Leningrad, Univ., Leningrad, 1980. (Vadim Komkov) 82c:73048 73K10 (35399)
 Asymptotically exact equations of the bending of thin plates under conditions of incompressibility. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh.

Astronom. 1981, vyp. 1, 83–87, 121. (Author's summary) 82j:73044 73K10 sharin, N. V. Estimates of the eigenvalues of Hecke operators in the space of cusp forms of weight 0. (Russian) Studies in number theory, 5. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 82 (1979), 136–143, 167. (Valeriu Şt. Udrescu) 82e:10049

**O6 oбщих суммах Клостерманг. (Russian) [General Kloosterman sums] Preprint LOMI R-3-80. Akad. Nauk SSSR, Mat. Inst. Leningrad. Otdel., Leningrad, 1980. 36 pp. (O. M. Fomenko) 82e:10040 10D15 (10G10) skurnja, I. P. On a theorem of Hayman and Fuchs. (Russian) Vestnik Har'kov. Gos. Univ. No. 177, ppp. 44 (1979), 67–74, 96–97. (C. Tanaka) 82d:30025 30D35

ons of R. Nevanlinna characteristics and their properties. (Ru 980). no. 6. 781-790. (W. H. J. Fuchs) 82c:30047 30D35 Some generalizations of R. Nevanlinna characteristics and their p Ukrain. Mat. Z. 32 (1980), no. 6, 781-790. (W. H. J. Fuchs) 82c:30

Some generalizations of R. Nevanlinna's characteristics and their properties for meromorphic functions of infinite lower order. (Russian) Ukrain. Mat. Z. 33 (1981), no. 1, 23-30. (V. I. Gavrilov) 82e:30033 30D35

rowski, Andrzej (with Farley, Arthur M.) Two directed maximal-cut problems. Proceedings of the West Coast Conference on Combinatorics, Graph Theory and Computing (Humboldt State Univ., Arcata, Calif., 1979), pp. 159-162, Congress. Numer., XXVI, Utilitas Math., Winnipeg, Man., 1980. (Claude Benzaken) 821:68065 68E10 (05C35, 68C25)

(with Farley, Arthur M.) Gossiping in grid graphs. J. Combin. Inform. Systes (1980), no. 2, 161-172. (Manfred Kochen) 82:05038 05C35 (92A20, 94C15) bin. Inform. System Sci. 5

Recursive graphs, recursive labelings and shortest paths. SIAM J. Comput. 10 (1981), no. 2, 391-397. (Author's summary) 82j:68065 68E10 (05C99)

rowski, W. On the numerical solution of the eigenvalue problem of the Laplace operator by a capacitance matrix method. (German summary) Computing 20 (1978), no. 2, 139-151. (Author's summary) 82f:65106 65N25 (with Cortelezzi, L.) Small-amplitude waves on the surface of a layer of

a viscous liquid. Quart. Appl. Math. 38 (1980/81), no. 4, 375-389. (F. Ursell) 82m;76025a 76D99

On numerical differentiation of a nom miform grid. J. Comput. Phys. 39 (1981),

no. 2, 481-483. (Jean Tzimbalario) 82e:65020 65D25

Motion of two superposed viscous fluids. Phys. Fluids 24 (1981), no. 7, 1217-1223.

(Author's summary) 82g:76020 76E99 (76D99)

(with Cortelezzi, L.) Errata: "Small-amplitude waves on the surface of a layer of a viscous liquid". Quart. Appl. Math. 39 (1981/82), no. 3, 424. (F. Ursell) 82m:76025b 761399

lorf, Siegfried (with Silbermann, Bernd) Projektionsverfahren zur Lösung von Systemen singularer Gleichungen vom nicht normalen Typ. Rev. Roumaine Math. Pure. Appl. 22 (1977), no. 7, 965–991. (From the introduction) 82k:47019 47A50 (45F15)

(with Schmidt, Günter) Notwendige und hinreichende Bedigungen für die Konvergenz des Kollokationsverfahrens bei singulären Integralgleichungen. Math. Nachr. 89 (1979), 203–215. (R. Kress (Zbl 434:45011)) 82m:45022 45L05 (45E05, 65R20)

(with Mihlin, S. G.) ★Singuläre Integraloperatoren. (German) [Singular integral operators] Mathematische Lehrbücher und Monographien, II. Abteilung: Mathematische Monographien [Mathematical Textbooks and Monographs, Part 2: Mathematical nographs], 52. Akademie-Verlag, Berlin, 1980. xii + 514 pp. (J. V. Baxley) 82c:45002 45-02 (45P05, 47G05, 58G10, 65R20)

(with Schmidt, Günter) A finite element collocation method for singular integral tions. Math. Nachr. 100 (1981), 33-60. (From the introduction) 82m:65127 65R20 (45E05)

Prószyński, A. m-applications over finite fields. Fund. Math. 112 (1981), no. 3, 205-214. (S. D. Cohen) 82k:13014 13C99 (10C10)

tr Petri nets and concurrency-like relations. Formalization of progra concepts (Proc. Internat. Colloq., Peñiscola, 1981), pp. 471-478, Lecture Notes in Comput. Sci., 107, Springer, Berlin, 1981. (See 821:68005) 68D90 (68B20)

Protasi, M. (with Ausiello, G.; D'Atri, Alessandro) Structure preserving reduction convex optimization problems. J. Comput. System Sci. 21 (1980), no. 1, 136-153. (Eugene LeV. er) 821:90076 90C25 (05C35, 90C10)

tasov, A. M. On the distribution of some functionals from sample spacing in a scheme of series. (Russian) Mat. Zametki 29 (1981), no. 5, 771-783, 799. (W. Hoeffding) 62E20 (60F05) 82m:62048

ov, A. V. (with Marčuk, G. I.; Kočergin, V. P.; Sarkisjan, A. S.; Bubnov, M. A.; Zalesnyi, V. B.; Klimok, V. I.; Kordzadze, A. A.; Kuzin, V. I.; Suhorukov, V. A.; Cvetova, E. A.; Ščerbakov, A. V.) ★Математические модели пиркуляции в океане. (Russian) [Mathematical models of circulation in the ocean] "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. 288 pp. (Jiří Nedoma) 82e:86002 86A05 (76V05)

otasov, I. V. (with Gasanenko, V. A.; Kozlik, G. A.; Ostapenko, V. V.) Planning the operational modes of a pumping station in irrigation systems using an automatic control system. (Russian) Autom ation of the control of industrial plants (Russian), pp. 35-48, 102, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (Authors' summary) 82e:93075 93C55

(with Komarov, Ju. A.) Compactness and discreteness in the lattice of invariant subgroups of a topological group. (Russian) Constructive description of groups with properties prescribed on their subgroups (Russian), pp. 133-140, 148, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (K. A. Ross) 821:22003 22D05

Order-convergence in the lattice of subgroups of a topological group. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 9, 25-29. (Klaus Keimel) 82c:22008 22B05 (06B30)

Topological properties of the lattice of subgroups. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 3, 355–360. (Helmut Boseck) 82c-22003 22A05 (22A26) (with Sidorčuk, A. D.) On varieties of topological algebraic systems. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 6, 1314–1318. (Ivan Chajda) 82c:08009 08B99 (22A30)

Topologies in a lattice of subgroups. (Russian. English summary) Dokl. Akad. Nauk rain. SSR Ser. A 1981, no. 2, 29-32, 97. (Klaus Keimel) 82g:22003 22A05 (22D05)

(with Sidorčuk, A. D.) A local theorem for ordered topological groups. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 8, 83-86. (Authors' summary) 82i:06024 06F15 (06F30)

(with Bokan, Neda) CH flat curves in Euclidean space E^{2n+1} . Mat. Vesnik

4(17)(32) (1980), no. 3, 329–337. (D. Mekeroy) 82;53002 53A04 (53C15) topapas, D. A. Generalized queueing approximation techniques for analysis of computer systems. Measurement, modeling and evaluation of computing systems (Jülich, 1981), pp. 339–353, Informatik-Fachber., 41, Springer, Berlin, 1981. (Author's summary) 82:90650 501822 (68C15)

otter, M. H. (with Hile, G. N.) Inequalities for eigenvalues of the Laplacian. India Protter, M. H. (with Hile, G. N.) Inequalities for eigenvalues of the Laplacian. Indiana Univ. Math. J. 29 (1980), no. 4, 523-538. (J. Hersch) 82c:35052 35P15 (35J20)
A lower bound for the fundamental frequency of a convex region. Proc. Amer. Math. Soc. 81 (1981), no. 1, 65-70. (J. Hersch) 82b:35113 35P15
Protter, Philip An extension of Kazamaki's results on BMO differentials. Ann. Probab. 8 (1980), no. 6, 1107-1118. (Mou-Hsiung Chang) 82f:60113 60G46 (60H20) (with Cinlar, E.; Jacod, Jean; Sharpe, M. J.) Semimartingales and Markov processes. Z. Wahrsch. Verw. Gebiete 54 (1980), no. 2, 161-219. (A. N. Al-Hussaini) 870-60046 60G446 (60H20)

82h-60084 60G44 (60J25)

udnikov, A. See Prudnikov, A. P.

Provan, J. Scott (with Billera, Louis J.) Decompositions of simplicial complexes related to diameters of convex polyhedra. *Math. Oper. Res.* 5 (1980), no. 4, 576-594. (J. Parida) 52A25 (90C05) 82c:52010

hen W. (with Vogel, Robert H.) Information loss with transform methods her, Ster in system identification: a new set of transforms with high information content. Math. ci. 50 (1980), no. 3-4, 251-262. (Authors' summary) 82m:92010 92A05 (93E12)

Provost, J. (with Berthomieu, G.; Rocca, A.) Low frequency oscillations of a slowly rotating star: quasitoroidal modes. Astronom. and Astrophys. 94 (1981), no. 1, 126-133. (B. K. Datta) 82i:85005 85A15

nikov, A. P. (with Ditkin, V. A.) *Calcul opérationnel. (French) [Operational calculus Translated from the Russian by Djilali Embarek. "Mir", Moscow, 1979. 439 pp. (I. Fenyő) 82:44001 44–01 (44A10, 44A40)

Watson operators and their application to the solution of certain problems of the theory of heat conduction. (Russian) Seminar on Numerical Methods for Solving Balance ations (Berlin, 1980) (Russian), pp. 79-82, Rep. 1980, 5, Akad. Wiss. DDR, Berlin,

1980. (Tom H. Koornwinder) 82a:35052 35K05 (42A38)

Prudnikov, V. Ja. Some remarks on a theorem of W. Rudin. (Russian) Mathematical analysis and the theory of functions (Russian), pp. 96-97, Moskov. Oblast. Ped. Inst., M. Scow, 1980. (Editors) 82h:32023 32F05

Pruess, Steven An extrapolation method based on solving a sequence of collocation problems. Codes for boundary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 257-262, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 82b:65074) 65N35

Alternatives to the exponential spline in tension. Math. Comp. 33 (1979), no. 148, 1273-1281. (Claude Carasso) 82f:65009 65D07

agovečki, Eduard Quantum spacetime operationally based on propagators for extended test particles. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part B. Hadronic J. 4 (1980/81), no. 3, 1018-1104. (Gerald Kaiser) 82k:81009 81B99 (81E99)

(with Ali, S. Twareque; Gagnon, R.) Conserved quantum probability currents on stochastic phase space. (French summary) Canad. J. Phys. 59 (1981), no. 6, 807-811. (Authors' summary) 82h:81039 81C20 (58G32)

(with Ali, S. Twareque) Self-consistent relativistic model for extended spin-2 particles in external fields. (Italian and Russian summaries) Nuovo Cimento A (11) 63 (1981), no. 2, 171-203. (Authors' summary) 82i:81042 81C20 (81D99)

isken, Adrianus M. M. (with Kadanoff, Leo P.) Marginality, universality, and exp techniques for critical lines in two dimensions. Phys. Rev. B (3) 22 (1980), no. 11. 5154-5170. (C. A. Hurst) 82b:82032 82A25 (82A67)

(with Brown, Alan C.) Universality for the critical lines of the eight-vertex Ashkin-Teller, and Gaussian models. *Phys. Rev. B* (3) **23** (1981), *no.* 3, 1459–1468. (C. A. Hurst) **82b:82033** 82A25 (82A67)

Pruitt, J. W. (with Gupta, U. I.; Lee, Der Tsai; Leung, Joseph Y.-T.; Wong, C. K.) Record allocation for minimizing seek delay. Theoret. Comput. Sci. 16 (1981), no. 3, 307-319. (Authors' summary) 82m:68136 68H05 (68C25, 90B40)

Pruitt, William E. General one-sided laws of the iterated logarithm. Ann. Probab. 9 (1981), 60F15 no. 1, 1-48. (Gutti J. Babu) 82k:60066

Prum, Bernard (with Guyon, Xavier) Identification et estimation de semi-martingales représentables par rapport à un brownien à un indice double. [Identification and estimation of semimartingales representable with respect to a double-index Brownian process] Two-index random processes (Paris, 1980), pp. 211-232, Lecture Notes in Math., 863, Springer, Berlin, 1981. (Ralph Henstock) 82k:60109 60G48 (60G15, 60J65)

(with Guyon, Xavier) Variations-produit et formule de Itô pour les semi-martingales représentables à deux paramètres. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 3, 361-397. (David Nualart Rodón) 82i:60090 60G48 (60H05)

sov, I. A. (with Komarov, G. V.) A representation of general formulas of elasticity theory for a transversally isotropic subspace. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 5, 43-48, 138. (Authors' summary) 73C30

(with Savenkov, V. A.) Integral equation of a contact problem of elasticity theory for an isotropic band. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1981, no. 2, 57-59, 78. (Authors' summary) 82k:73076 73T05 (45L05)

(with Vasilevič, Ju. V.) A variant of the representation of general formulas of the theory of elasticity of an orthotropic body. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1981, no. 3, 39–45, 79. (Authors' summary) 82k:73010 73C03

Priss, Jan On semilinear parabolic evolution equations on closed sets. J. Math. Anal. Appl. 77 (1980), no. 2, 513-538. (G. S. Ladde) 82c:34076 34G20

A characterization of uniform convexity and applications to accretive operators. oshima Math. J. 11 (1981), no. 2, 229-234. (S. Swaminathan) 82g:46040 46B2 (47H06)

ssing, J. E. Stabilization of an unstable linear system by parametric white noise. *Trans.*ASME Ser. E J. Appl. Mech. 48 (1981), no. 1, 198-199. (From the introduction) 70L05 (76G99, 93E15)

Pruszko, Tadeusz An operational equation and differential equations with multivalued nonconvex right-hand side. Demonstratio Math. 13 (1980), no. 1, 33–44. (Bernard Lemaire) 82h:34016 34A60 (34G20, 49E10)

(with Bryszewski, J.; Górniewicz, L.) An application of the topological degree theory to the study of the Darboux problem for hyperbolic equations. J. Math. Anal. Appl. 76 (1980), no. 1, 107-115. (Ju. G. Borisovic) 821:35127 35L70 (35B99, 58C30)

Pruzan, Peter Mark (with Krarup, Jakob) Reducibility of minimax to minisum 0-1 programming problems. European J. Oper. Res. 6 (1981), no. 2, 125–132. (Authors' summary) 82h-90077 90C10 (90B05)

anović, Mileva 150 years after the discovery of non-Euclidean geometry.

(Serbo-Croatian) Matematika (Belgrade) 5 (1976), no. 2, 101-107. (Editors) 82f:01053 01A55 (01A60, 51-03)

Holomorphically semisymmetric connexions. (Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 91–99 (1980). (P. M. Matzeu) 82i:53031 53C15 (53B05)

Pryde, A. J. Higher order elliptic boundary value problems in spaces with home norms. J. Austral. Math. Soc. Ser. A 31 (1981), no. 1, 92-113. (Hideo Soga) 82k:35038 35J40 (35E20)

Second order elliptic equations with mixed boundary conditions. J. Math. Anal. Appl. 80 (1981), no. 1, 203-244. (Gerd Grubb) 82f:35068 35125

Prypik, A. S. See Pripik, O. S.

Przanowski, M. (with Plebański, Jerzy F.) Generalized Goldberg-Sachs theorems in complex and real space-times. II. Acta Phys. Polon. B 10 (1979), no. 7, 573-599. (Authors' summary) 82e:83028 83C99 (53A40)

Przelecki, Marian Commensurable referents of incommensurable terms. The logic and epistemology of scientific change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn. 30 (1978), no. 2-4, 347-365 (1979). (See 82i:00024) 00A25 (03A05)

Przeworska-Rolewicz, Danuta Leon Lichtenstein (1878-1933) (on the occasion of the 100th anniversary of his birth). (Polish) Wiadom. Mat. (2) 22, no. 1, 107-113 (1 plate) (1979). (Editors) 82m:01066 01A70

★Shifts and periodicity for right invertible operators. Research Notes in Mathematics, 43. Pitman Advanced Publishing Program, Boston, Mass., 1980. iv + 191 pp. ISBN 0-273-08478-X (N. K. Karapetjanc) 82bc47012 47A50 (34K05, 39A05, 47A05, 93-02)

Leon Lichtenstein: 1878-1933. (German) Lichtenstein-Festkolloquium

(Karl-Marx-Univ., Leipzig, 1978). Wiss. Z. Karl-Marx-Univ. Leipzig Math.-Natur. Reihe 29 (1980), no. 1, 15-26. (Editors) 82f:01133 01A70

Przeidziecki, S. (with Hurd, R. A.) Diffraction by a half plane perpendicular to the distinguished axis of a gyrotropic medium (oblique incidence). (French summary)

Canad. J. Phys. 59 (1981), no. 3, 403-424. (From the summary) 82c:78019

78A45

Przyhiski, K. Maciej Arbitrary stabilizability of infinite-dimensional discrete-time systems with applications to linear hereditary control systems. Functional differential systems and related topics (Proc. First Internat. Conf., Błażejewko, 1979), pp. 284-294, Higher College Engrg., Zielona Góra, 1980. (M. Q. Jacobs) 82a:93047 93D15

The Lyapunov equation and the problem of stability for linear bounded discrete-time systems in Hilbert space. Appl. Math. Optim. 6 (1980), no. 2, 97-112. (R. F. Datko) 82f:47023 47A62 (39A11, 93C05)

Robustness analysis of observers for time-varying perturbations. Found. Control Engrg. 6 (1981), no. 1, 33-38. (Author's summary) 82h:93054 93D15

ka, Halina On p-valued infinitary predicate calculi. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 5-6, 193-198 (1981). (G. Georgescu) 82k:03053a 03C75 (03B50, 03G20)

Some results concerning p-valued infinitary predicate calculi. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 5-6, 199-202 (1981). (G. Georgescu)

82k:03053b 03C75 (03B50, 03G20) Gentzen-type semantics for p-valued infinitary predicate calculi. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 5-6, 203-206 (1981). (G. Georgescu) 82k:03053c 03C75 (03B50, 03G20)

Craig interpolation theorem and Hanf number for p-valued infinitary predicate calculi. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 5-6, 207-211 (1981). (G. Georgescu) 82k:03053d 03C75 (03B50, 03G20)

Przymusiński, Teodor C. (with van Douwen, Eric K.) Separable extensions of first countable spaces. Fund. Math. 105 (1979/80), no. 2, 147–158. (Authors' summary) 82j:54051 54E18 (03E35, 54A35)

(with Wage, Michael L.) Collectionwise normality and extensions of locally finite coverings. Fund. Math. 109 (1980), no. 3, 175-187. (Anne K. Steiner) 82a:54030 54D15 (54D18)

Przytycki, Feliks (with Jakubczyk, Bronisław) On J. Martinet's conjecture. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 9, 731–735. (Robert Roussarie) 82e:58003 58A10

An upper estimation for topological entropy of diffeomorphisms. Invent. Math. 59 (1980), no. 3, 205-213. (Peter Walters) 82a:58032 58F11 (28D20)
Construction of invariant sets for Anosov diffeomorphisms and hyperbolic attractors.

Studia Math. 68 (1980), no. 2, 199-213. (M. I. Brin) 82c:58051 58F15

Psaraftis, Harilaos N. A dynamic programming approach for sequencing groups of identical jobs. Oper. Res. 28 (1980), no. 6, 1347-1359. (Author's summary) 82i:99062 90B35

Psarev, V. I. On the theory of Ostwald's coagulation of microparticles in solid disperse systems. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 9, 53-58. (Andrzej Zardecki) 82c:82113 82A70

ničnov, V. I. A topological analogue of a theorem of Conrad for I-groups with a basis. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 2, 6-8. (Klaus Keimel) 82c:06033

nicnyi, B. N. (with Rappoport, I. S.) A problem of group pursuit. Kibernetika (Kiev) 1979, no. 6, 145–146 (Russian); translated as Cybernetics 15 (1979), no. 6, 939–940 (1980). (From the text) 82a:90190 90D26

(with Gurov, V. M.) On necessary conditions for the extreme differential inclusions with phase constraints. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 1, 105–109. (J. Jarnik) 82e:49035 49B34 (34A60)

dos, Evagelos (with Tominaga, Hisao; Yaqub, Adil) Some commutativity

theorems for n-torsion free rings. Math. J. Okayama Univ. 23 (1981), no. 1, 37-39. (Howard E. Bell) 82j:16060 16A70

(Howard E. Bell) 82;:16060 16A70

Ptak, Pavel (with Pelant, Jan) The complexity of σ-discretely decomposable families in uniform spaces. Comment. Math. Univ. Carolin. 22 (1981), no. 2, 317-326. (T. L. Hicks) 82k:54047 54E15 (54H05)

(1981), no. 6, 451–456. (Henner Kröger) 82;81008 81B10 (03G12)

20 (1981), no. 6, 451-456. (Henner Kröger) 82j:81008 81B10 (03G12)
Realcompactness and the notion of observable. J. London Math. Soc. (2) 23 (1981),
no. 3, 534-536. (S. Gudder) 82g:28009 28A20 (54D60, 81B10)

Pták, Vlastimil (with Young, N. J.) A generalization of the zero location theorem of Schur and Cohn. IEEE Trans. Auto at. Control 25 (1980), no. 5, 978-980. (M. Marden) 82a-30006 30C15

(with Young, N. J.) Functions of operators and the spectral radius. Linear Algebra (with Young, N. 3.) Functions to operators and a special section of Appl. 29 (1980), 357-392. (Lawrence Williams) 82e47009 47A30 (15A60, 47A60) (with Potra, Florian Alexandru) Nondiscrete induction and a double step secant

method. Math. Scand. 46 (1980), no. 2, 236-250. (M. Z. Nashed) 82a:65040

(with Potra, Florian Alexandru) A generalization of regula falsi. Numer. Math. 36 (1980/81), no. 3, 333-346. (Michel Cosnard) 82j:65029 65H10 (58C15)

The discrete Lyapunov equation in controllable canonical form. IEEE Trans. Automat. Control 26 (1981), no. 2, 580-581. (Author's summary) 82f:93056 93/005

An equation of Lyapunov type. *Linear Algebra Appl.* 39 (1981), 73-82. (Nicholas ang) 82h:15020 15A24 (47A62, 93D05) Young) 82h:15020

Ptašnik, B. I. (with Poliščuk, V. N.) Periodic boundary value problem for a system of integro-differential equations of hyperbolic type. (Ukrainian. Russian summary) Studies in the qualitative theory of differential equations and its applications (Ukrainian), pp. 49-51, 75, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Authors' summary) 82f:45012 45K05

Ptičkin, V. А. ★Анализ нединейных стохастических систем методами уравнений MOMENTOB. (Russian) [Analysis of nonlinear stochastic systems by the moment equation methods] "Nauka i Tehnika", Minsk, 1980. 272 pp. (Editors) 82d:93057 93E03

Pu, Bao Ming (with Liu, Ying Ming) Fuzzy topology. I. Neighborhood structure of a fuzzy point and Moore-Smith convergence. J. Math. Anal. Appl. 76 (1980), no. 2, 571-599. (O. Costinescu) 82e:54009a 54A40 (03E72, 54A20)

(with Liu, Ying Ming) Fuzzy topology. II. Product and quotient spaces. J. Math. Anal. Appl. 77 (1980), no. 1, 20-37. (O. Costinescu) 82e:54009b 54A40 (03E72. 54A40 (03E72.

Pu, Fu Ke (with Tao, Rui Bao) Absence of modulated phase transition and spin density wave phase transition in one- and two-dimensional systems. Phys. Lett. A 81 (1981), no. 1, 54-58. (J. Fernando Perez) 82a:82019 82A25

Density of states, Poisson's formula of summation and Walfisz's formula. Phys. Lett. A 81 (1981), no. 2-3, 127-131. (Author's summary) 82d:82014 82A05 (10J05, 35P20)
Pu, H. H. (with Pu, H. W.) On the set where an approximate derivative is a derivative.

Collog. Math. 43 (1980), no. 1, 155-160 (1981). (Richard J. O'Malley) 82g:26009

(with Pu, H. W.) On Darboux continuity and continuity. J. Math. Anal. Appl. 84 81), no. 1, 59-62. (E. Halfar) 82k:54014 54C05 (26A15, 54D05) (1981), no. 1, 59-62. (E. Halfar) 82k:54014 (with Pu, H. W.) On the derivative of a nondecreasing function. Rev. Ros

Math. Pures Appl. 26 (1981), no. 1, 139-140. (Richard J. O'Malley) 82g:26010 26A24 (26A45)

Pu, H. W. (with Pu, H. H.) On the set where an approximate derivative is a derivative. Colloq. Math. 43 (1980), no. 1, 155-160 (1981). (Richard J. O'Malley) 82g:26009 26A24

(with Pu, H. H.) On Darboux continuity and continuity. J. Math. Anal. Appl. 84 (1981), no. 1, 59-62. (E. Halfar) 82k:54014 54C05 (26A15, 54D05)

(with Pu, H. H.) On the derivative of a nondecreasing function. Rev. Roun Math. Pures Appl. 26 (1981), no. 1, 139-140. (Richard J. O'Malley) 82::26010 26A24 (26A45)

Pu, Pao-Ming See Pu, Bao Ming
Pucci, Patrizia (with Candeloro, Domenico) A criterion for weak compactness in the sense of Dunford and Pettis. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 64 (1978), no. 2, 124-129. (L. Cesari) 82d:46045 46E30 (49A50) (with Bardaro, Carlo) An existence theorem for generalized differential equations in Banach spaces. (Italian) Atti Sem. Mat. Fis. Univ. Modena 28 (1979), no. 1, 9-14. (C. Vinti) 82:47072 47H15 (34A60, 49A99)
(with Candeloro, Domenico) The Burkill-Cesari integral as integral of the calculus of

variations. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 18 (1981), no. 1, 1-24. (E. Baiada) 82f:49048 49F25

Puccio, L. (with Ricca, G.; Termini, D.) On the construction of a table of BIBD for v from 4 to 10. (Italian. English summary) Atti Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur. 55 (1980), 59-78. (A. Barlotti) 82m:05019 05B05 (62K10)

Puchalka, Tadeusz *Teoria systemów przełączających. Część III. (Polish) [Theory of switching systems. Part III] Teoria automatów stochastycznych. Teoria automatów złożonych. [Theory of probabilistic automata. Theory of complex automata] With an English summary. Teoria i Technika Systemów [Theory and Technology of Systems], III. Państwowe Wydawnictwo Naukowe (PWN), Warsaw, 1980. 56 pp. (loose errata). ISBN 83-01-01213-7 (From the summary) 82b:68043 68D25 (68F10, 94C10)

Puczyłowski, Edmund R. On unequivocal rings. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 57-62. (N. Divinsky) 82h:16004 16A21

Remarks on stable radicals. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 1-2, 11-16 (1981). (R. Weigandt) 82g:16010 16A21

Radicals of polynomial rings, power series rings and tensor products. Com Algebra 8 (1980), no. 18, 1699-1709. (R. F. Rossa) 82a:16013 16A21 (16A05)

Radicals of rings and their subrings. Proc. Edinburgh Math. Soc. (2) 24 (1981), no. 3, 209–215. (Terry L. Jenkins) 82k:16008 16A21 209-215. (Terry L. Jenkins) 82k:16006 16A21
Pudil, Pavel (with Blåha, Svatopluk) Evaluation of the effectiveness of features selected by

discriminant analysis methods. Pattern Recognition 14 (1981), no. 1-6, 81-85. (Authors' summary) 82k:68055 68G10 (15A18, 62H30, 65F15)

ik, Pavel (with Hájek, Petr) Two orderings of the class of all countable models of etic. Model theory of algebra and arithmetic (Proc. Conf., Karpacz, 1979), pp. 174-185, Lecture Notes in Math., 834, Springer, Berlin, 1980. (Leonard Lipshitz) e3061 03C62
(with Pally, Peter Pal) Congruence lattices of finite algebras and intervals in

subgroup lattices of finite groups. Algebra Universalis 11 (1980), no. 1, 22-27. (Ralph Freese) 82g:00003 08A30 (06B15, 08A60, 20E15)

lovkin, M. A. (with Grigor'ev, S. G.; Kosolapov, V. N.; Čugunov, V. A.) Scheme of the generalized method of integral relations for multidimensional single-phase Stefan problems and its applications. (Russian) Applied problems of theoretical and math physics (Russian), pp. 43-52, 126, Laro. Gos. Univ., Riga, 1980. (Authors' summary) 82:65136 65R20 (80A20, 86A99)

I, Jean-Pierre (with Mignot, Fulbert; Murat, François) Variation d'un point de retournement par rapport au domaine. (English summary) Comm. Partial Differential Equations 4 (1979), no. 11, 1263-1297. (G. Geymonat) 82£:35075 35160 (with Mignot, Fulbert) Sur une classe de problèmes non linéaires avec non linéairité

(with Mignot, Fulbert) Sur une classe de problemes non linéaires avec non linéairité positive, croissante, convexe. Comm. Partial Differential Equations 5 (1980), no. 8, 791-836. (Lucio Boccardo) 82g-35041 35160 (49A29)

(with Mignot, Fulbert; Suquet, Pierre-M.) Flambage des plaques élastiques multiperforèes. Publ. U.E.R. Math. Pures Appl. IRMA 2 (1980), no. 2, exp. no. 11, 69 pp. (Jesús Hernández) 82f-73016 73C40 (35B32, 58E30)

(with Mignot, Fulbert; Suquet, Pierre-M.) Flambage des plaques élastiques multiperforèes. (English summary) Ann. Fac. Sci. Toulouse Math. (5) 3 (1981), no. 1, 1-57. (P. G. Ciarlet) 82m:73650 73K10 (33B32, 58E07, 73H99)

ue Puerta, Guillermo See Rosique Puerta, Guillermo

è, L. I. Flat ideals of Banach algebras. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1981, no. 1, 59-63, 108. (Michael Grosser) 82e:46073 (46M05)

расеч, V. S. *Теория вероятностей и математическая статистика. (Russian) [Probability theory and mathematical statistics] "Nauka", Moscow, 1979. 496 pp.

(Publisher's description) 82xc6003 60-01 (62-01)
Estimation of Markov processes. Time series (Proc. Internat. Meeting, Univ. Nottingham, Nottingham, 1979), pp. 389-400, North-Holland, Amsterdam, 1980. (Rashid Ahmad) 82b:62107 62M05

Finite-dimensional distributions of the processes, defined by stochastic differential equations, and the extrapolation of such processes. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 1, 40-43. (Kazimierz Sobczyk) 82a:60055 60G25 (60H10)

The finite-dimensional distributions of a random process determined by a stochastic differential equation and their application to control problems (Russian summary) Problems Control Inform. Theory/Problemy Upravlen. Teor. Inform. 10 (1981), no. 2, 95-114. (Author's summary) 82g:93043 93E10 (60H10)

disi, Mario A. Measurability and Daniell integrals on an abstract Riesz space. (Italian. English summary) Matematiche (Catania) 31 (1976), no. 2, 329-34! (1977). (P. V. Reichelderfer) 82b:28022 28C05

Measurability and Riesz-Lebesgue spaces of real functions. (Italian. English summary) Matematiche (Catania) 31 (1976), no. 2, 342–348 (1977). (B. Rodriguez-Salinas) 82b:46024 46E05 (28A20)

nal'skii, E. A. Algebraic reduction of normal statistical models. (Russian) Dokl. Akad. Nauk SSSR 249 (1979), no. 5, 1073-1076. (G. Tusnády) 82c:62076 62H10

načev, V. V. (with Meirmanov, A. M.) Lagrangian coordinates in the Stefan problem. sian) Dinamika Splošn. Sredy No. 47 Mat. Problemy Meh. Splošn. Sred (1980),

90-111, 165-166. (Authors' summary) 82m:35089 35K85 (58G40)

Puhov, A. E. Quantization of field theory in the zero charge sector. (Russian. English summary) Teoret. Mat. Fiz. 47 (1981), no. 3, 315-322. (Author's summary) 82i:81118 81E99

Nov, G. E. (with Beregovenko, G. Ja.) On the analysis of hybrid computer systems. (Russian English summary) Elektronnoe Modelirocanie 1981, no. 1, 32–38, 109. (Authors' summary) 821:68008 68A05 (Authors' summary) 82f:68008

hov, I. K. (with Mihailenko, V. E.; Anpilogova, V. A.; Kovalev, S. N.; Levina, Ž. G.; 10 м. I. К. (with Mihaitenko, V. E.; Априодоvа, V. А.; Коуавеv, S. N.; Levina, Z. О.; Malinovskaja, V. I.; Oleščuk, Т. Ju.; Panasjuk, L. S.; Sedleckaja, N. I.) ★Сборник задач по пачертательной геометрия с елементами программирования. (Russian) [A collection of problems in descriptive geometry with elements of programming] Second edition, revised and augmented. "Višča Škola", Kiev., 1980. 208 pp. (E. Otto) 82e:51004

(with Drobyšev, Ju. P.) Analysis of the influence of a system on objects as a problem of transformation of data tables. Modelling and optimization of complex systems (Proc. IFIP-TC 7 Working Conf., Novosibirsk, 1978), pp. 187-197, Lecture Notes in ntrol and Informa ation Sci., 18, Springer, Berlin, 1979. (From the introduction)

82c:60061 68K05 (03E72, 62H30)
htaevič, G. A. (with Kovalenko, I. I.) Mathematical economics model of optimal distribution of investments in the directions of their use. (Russian. English sum Issled. Operacii i ASU No. 16 (1980), 24-31, 139. (Authors' summary) 82c:90014 90A09

Puig, Lluis Local block theory in p-solvable groups. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 385-388, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (From the introduction) 82c:20045

Pointed groups and construction of characters. Math. Z. 176 (1981), no. 2, 265-292. (P. Donovan) 82d:20015 20C20

Pujar, S. S. On totally real submanifolds of a Kählerian manifold admitting the complex conformal connection. Indian J. Pure Appl. Math. 11 (1980), no. 10, 1259–1269. (V. Mihova-Nehmer) 82b:53044 53C15

slle, G. Réseaux de files d'attente à forme produit. (English summary) RAIRO Rech. Opér. 14 (1980), no. 4, 317–330. (Brian Conolly) 824:60180 60K20 (90B22) (with Labetoulle, J.) A study of flows through virtual circuits computer networks. Comput. Networks 5 (1981), no. 2, 119–126. (Authors' summary) 82h:68003 68A05 (with Labetoulle, J.; Soula, C.) Stationary distributions of flows in Jackson

orks. Math. Oper. Res. 6 (1981), no. 2, 173-185. (Bent Natvig) 82g:60126 60K25 (90B22)

Pukal'skii, I. D. (with Matiičuk, M. I.) An oblique derivative problem for a degenerate dic equation. (Russian) Mat. Zametki 28 (1980), no. 4, 533-544, 635. (J. Kačur) Pukelsheim, Friedrich On linear regression designs which maximize information. J. Statist. Plann. Inference 4 (1980), no. 4, 339-364. (J. Kiefer) 82g:62105 62K05

mation of skewness and kurtosis in linear models. Metrika 27 (1980),

no. 2, 103-113. (M. Atiqullah) 82e:62101 62J05 (62F10)

On the existence of unbiased nonnegative estimates of variance covariance nponents. Ann. Statist. 9 (1981), no. 2, 293-299. (U. B. Paik) 82e:62108 On c-optimal design measures. (German and Russian s

ssforsch. Statist. Ser. Statist. 12 (1981), no. 1, 13-20. (S. Mejza) 82f:62141

Linear models and convex geometry: aspects of nonnegative variance estimation. (French and German summaries) Math. Operationsforsch. Statist. Ser. Statist. 12 (1981), no. 2, 271-286. (C. R. Rao) 82g:62096 62J05

Pukhov, V. V. See Pubov, V. V.

ov, A. K. (with Asurov, R. R.) Asymptotic behavior of the spectral function of an elliptic operator with constant coefficients. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 3, 528-530. (B. Hellwig) 82e:35063 35P20

The uniform convergence and localization of the means of arithmetical Fourier-Laplace series. (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 3, 554-556.

(F. Móricz) 82b42015 42B05

Pullen, R. A. (with Edmonds, A. R.) Comparison of classical and quantal spectra for the non-Heiles potential. J. Phys. A 14 (1981), no. 9, L319-L327. (Authors' summary) 81C99 (58F12)

Pulleyblank, W. R. (with Naddef, D.) Matchings in regular graphs. Discrete Math. 34 (1981), no. 3, 283-291. (David P. Sumner) 82j:05087 05C70

Pulliam, H. R. Optimal management of optimal foragers. Renewable resource management

(Proc. Workshop, Univ. Canterbury, Christchurch, 1980), pp. 46-53, Lecture Notes in Biomath., 40, Springer, Berlin, 1981. (See 82k:90001) 90A30

Pulliam, T. H. (with Chaussee, D. S.) A diagonal form of an implicit approximate-factorization algorithm. J. Comput. Phys. 39 (1981), no. 2, 347-363. (Authors' summary) 82d:65068 65N20 (76C99)

nan, Norman J. (with de Caen, Dom) Clique coverings of graphs. III. Clique coverings of regular graphs. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 795-808. (J. Spencer) 82j:05089c 05C70

(with de Caen, Dom) Clique coverings of graphs. I. Clique partitions of regular graphs. Utilitas Math. 19 (1981), 177-205. (J. Spencer) 82j:05089a 05C70 (05C35) (with Donald, Alan) Clique coverings of graphs. II. Complements of cliques. Utilitas Math. 19 (1981), 207-213. (J. Spencer) 82j:05089b 05C70 (05C35)

Math. 19 (1981), 207–213. (J. Spencer) 82;e5889b 05C70 (05C35)
mannová, Syhta (with Dvurcčenskij, Anatolij) On the sum of observables in a logic.
(Russian summary) Math. Slovaca 30 (1980), no. 4, 393–399. (E. G. Beltrametti) 03G12 (46L99, 81B10)

Semiobservables on quantum logics. (Russian summary) Math. Slovaca 30 (1980), no. 4, 419-432. (E. G. Beltrametti) 82f:03059 03G12 (46L99, 81B10)

Compatibility and partial compatibility in quantum logics. Ann. Inst. H. Poincaré Sect. A (N.S.) 34 (1981), no. 4, 391–403. (R. Piziak) 82j:81009 81B10 (03G12) (with Dvurečenskij, Anatolij) Random measures on a logic. Demonstratio Math. 14 (1981), no. 2, 305-320. (S. Gudder) 82k:81005 81B10 (03G12, 28C20)

A note on the extensibility of states. (Russian summary) Math. Slovaca 31 (1981), no. 2, 177-181. (Anatolij Dvurečenskij) 82e:03054 03G12 (06E99, 46L60, 81B10)

Pultr, Ales (with Babai, László) Endomorphism monoids and topological subgraphs of graphs. J. Combin. Theory Ser. B 28 (1980), no. 3, 278-283. (Jaroslav Nešetřil) 05C25 (05C10, 20M20) 820-05052

(with Lovász, László; Nešetřil, Jaroslav) On a product dimension of graphs. Combin. Theory Ser. B 29 (1980), no. 1, 47-67. (William T. Trotter, Jr.) 82b:05085 05C35 (05C38)

(with Poljak, Svatopluk) On the dimension of trees. Discrete Math. 34 (1981), no. 2, 165-171. (Donald L. Goldsmith) 82m:05040 05C05 (05C10)

Pulvirenti, Giuseppe (with Santagati, Giuseppe) A minimum problem relative to a control process with distributed parameters. (Italian) Matematiche (Catania) 31 (1976), no. 2, 371-389 (1977). (T. Zolezzi) 82g:49017 49B22

Pulvirenti, M. (with Marchioro, C.; Pellegrinotti, A.) On the dynamics of infinite

anharmonic systems. J. Math. Phys. 22 (1981), no. 8, 1740-1745. (J. Fritz) 82k:82008

m, Dieter Initial morphisms and monomorphisms. Manuscripta Math. 32 (1980), 3-4, 309-333. (Walter Tholen) 82d:18001 18A20 (18A99) no. 3-4, 309-333. (Walter Tholen) 82d:18001

ene, Ju. L. See Punienė, J. Püngel, Jürgen (with Florian, H.) Riemannfunktionen als Lösungen gewöhnlicher

Differentialgleichungen (English summary) Ber. Math.-Statist. Sekt. Forsch. Graz No. 106 (1979), 48 pp. (Wolfgang Tutschke) 82d:35032 35C99 (32A30, 35L10) Riemannfunktionen mit speziellen Potenzreihenentwicklungen. (English summary) Applicable Anal. 11 (1980/81), no. 3, 199-210. (Shlomo Strelitz) 82e:35019

Riemann functions for associated operators. Second Zagreb-Graz Meeting of Mathematicians (Plitvice, 1980) (German), Ber. No. 158, 10 pp., Bericht, 154-162, Forschungszentrum Graz, Graz, 1981. (J. Kajiwara) 82j:35023

(with Golosov, Ju. I.) Confidence sets in a filtering problem that is solved by the method of least squares. (Russian. Lithuanian summary) Trudy Akad. Nauk Litov. SSR Ser. B 1979, no. 5(114), 119-132. (Ju. I. Petunin) 82k:62068 Obtaining Kalman's filter equations by the double-sweep method. (Russian. Lithuanian summary) Trudy Akad. Nauk Litov. SSR Ser. B 1981, no. 1(122), 97-99.

(Author's summary) 82h:93076 93E11 Pupeikis, Rimantas On a method of estimating the efficiency of a recursive least squares

algorithm. (Russian. Lithuanian and English summaries) Statist. Problems | Opravlenija - Trudy Sem. Processy Optimal. Upravlenija V Sekcija No. 48 (1980), 31-47, 98. (Author's summary) 82i:93084 93E12 (65U05)

appe, Dieter Duality in monoidal categories and applications to fixed-point theory. Game theory and related topics (Proc. Sem., Bonn and Hagen, 1978), pp. 173-185, -Holland, Amsterdam, 1979. (Marshall Walker) 82m:55011 55M20, 55U30)

- Purcaru, Ion Entropic measures of dependence between the components of a three-dimensional random vector. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 6, 933-938. (Jana Zvárová) 82j:62044 62H20 (94A17)
- Purceladze, R. R. Open mappings of extremally disconnected compacta. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 1, 117–118, 123. (Aleksander Blaszczyk) 821:54064 54G05 (06E99)
- Purcell, A. J. Variational principle for superfluid helium with vorticity. Phys. Rev. B (3) 23 (1981), no. 11, 5769-5774. (Author's summary) 82g:76049 76Y05 (49H05)
- Purdue, P. (with Linton, D.) An infinite-server queue subject to an extraneous phase process and related models. J. Appl. Probab. 18 (1981), no. 1, 236-244. (B. M. Kirstein)
- 82e:60158 60K25 (90822)
 Purdy, George B. (with Wetzel, John E.) Two-coloring inequalities for Euclidean arrangements in general position. Discrete Math. 31 (1980), no. 1, 53–58. (R. P. Bambah) 05B45 (05B30, 51M20, 52A40)
 - A proof of a consequence of Dirac's conjecture. Geom. Dedicata 10 (1981), no. 1-4, 317-321. (Thomas A. Dowling) 82g:05030 05B25 (51M05)
 On three-colored lines in the plane and E_d . Utilitas Math. 19 (1981), 291-293. (E. J.
- F. Primrose) 82i:05036 05C15
- Purfürst, R. Existenz einer invarianten Mannigfaltigkeit für eine Klasse von Abbildungen mit einem kleinen Parameter. Math. Nachr. 98 (1980), 251-256. (M. K. Grammatikopoulos) 82i:34045 34C30 (58F35)
- Purga, A. (with Preem, R.) On the solution of Abel integral equation by the method of fractional integration. (Estonian and Russian summaries) Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. 30 (1981), no. 1, 9-13, 90. (From the text) 82d:65088 65R20
- Turi, M. C. Extreme point enumeration technique for assignment problem. Portus 37 (1978), no. 1-2, 31-37 (1981). (Author's summary) 82g:90061 90B35 (90) 90B35 (90B05 90C15)
- Puri, Madan L. (with Eicker, Friedhelm) On linear combination of order statistics. Essays in probability and statistics, pp. 433-449, Shinko Tsusho, Tokyo, 1976. (Authors' 60F05 (62E20, 62G30) summary) 82i:60040
 - (with Mardia, K. V.; Edwards, Robert) Analysis of central place theory. (French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 2. With discussion. Bull. Inst. Internat. Statist. 47 (1977), no. 2, 93-110, 138-147. (Authors' summary) 82i:52014 52A22 (62P99, 92A20)
 - (with Rao, Jammalamadaka Sreenivasa; Yoon, Youngjoo) A simple test for goodness-of-fit based on spacings with some efficiency comparisons. Contributions to statistics, pp. 197-209, Reidel, Dordrecht, 1979. (From the introduction) 82i:62070
 - (with Rajaram, Navaratna S.) Asymptotic normality and convergence rates of linear rank statistics under alternatives. Mathematical statistics, pp. 267-277, Banach Center Publ., 6, PWN, Warsaw, 1980. (Jana Jurečková) 82e:62070 62G10
 - (with Tran, Lanh T.) Empirical distribution functions and functions of order statistics for mixing random variables. J. Multivariate Anal. 10 (1980), no. 3, 405-425. (Jon A. Wellner) 82a:60034 60F05 (60F15, 62G30)
 - (with Tran, Lanh T.) Invariance principles for rank statistics for testing independence. Contributions to probability, pp. 267-282, Academic Press, New York,
 - 1981. (T. Robertson) 82:62075 62G30 (60F17) (with Ralescu, Dan A.) Différentielle d'une fonction floue. (English summary) [Differential of a fuzzy function] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 4, 237-239. (Authors' summary) 82m:58006 58C20 (03E72, 26E99, 90C15)
- (with Opfer, Gerhard) Complex planar splines. J. Approx. Theory 31 (1981), no. 4, 383-402. (Jean Tzimbalario) 82i:41014 41A15 (65D07) Puri, Prem S. A generalization of a formula of Pollaczek and Spitzer as applied to a storage model. Sankhyā Ser. A 40 (1978), no. 3, 237-252. (E. Arjas) 82b:60116 60K15
- (60K20) (with Woolford, Samuel W.) On a generalized storage model with moment assumptions. J. Appl. Probab. 18 (1981), no. 2, 473-481. (Hideo Osawa) 82h:60173
- 60K15 (60K30) Puri, V. K. (with Patel, C. M.) On the degree of approximation of partial sums of Fourier-Bessel series. Mat. Vesnik 4(17)(32) (1980), no. 3, 339-348. (S. Masood)
- 82i:42003 42A16 (42C10) Purisch, Steve Orderability and suborderability results for totally disconnected spaces. Topology and order structures, Part 1 (Lubbock, Tex., 1980), pp. 9-15, Math. Tracts, 142, Math. Centrum, Amsterdam, 1981. (Marcel Erne) 82j:54066 54F05
 - (with Wattel, Evert) Nonorderability of suborderable spaces with many pseudogaps. Topology and order structures, Part 1 (Lubbock, Tex., 1980), pp. 17-25, Math. Centre Tracts, 142, Math. Centrum, Amsterdam, 1981. (Marcel Erné) 82j;54067 54F05 (06F30)
- actifications and the orderability of scattered spaces. Topology Appl. Scattered compactifications and the orderability of scattered spaces. Topology Appl. 12 (1981), no. 1, 83–88. (R. Telgársky) 82m:54030 54F05 (54D35)

 Puritz, C. W. Extending Pascal's triangle upwards. Math. Gaz. 65 (1981), no. 431, 42–44.
- (Heiko Harborth) 82j:05008 05A10
- Purkert, W. (with vom Scheidt, Jürgen) Limit theorems for solutions of stochastic differential equation problems. Internat. J. Math. Math. Sci. 3 (1980), no. 1, 113–149. (G. Papanicolaou) 82c:60107 60H10
- See also Birthday: Grigorjan, A. T., 82f:01166
 Purl, P. D. (with Nigam, A. K.; Singh, Murari; Gupta, R. A.) A note on balanced row-and-column designs. Sankhyā Ser. B 41 (1979), no. 1-2, 124-127. (Authors' summary) 82f:62144 62K10
- summary) 821-821-94 62.K10

 Purohit, Amita (with Kale, P. P.) The uniqueness of de Sitter's solution. J. Indian Acad.

 Math. 3 (1981), no. 1, 49-52. (Authors' summary) 82d:83015 83C15 (53C50)
- Pursglove, C. J. (with Boffey, T. B.) Heuristic improvement methods: how should starting solutions be chosen? Combinatorial optimization, II (Proc. Conf., Univ. East Anglia, Norwich, 1979). Math. Programming Stud. No. 13 (1980), 135-142. (U. Derigs) 90C09
- sley, Michael B. (with Davisson, Lee D.; McEliece, Robert J.; Wallace, Mark S.) Efficient universal noiseless source codes. IEEE Trans. Inform. Theory 27 (1981), no. 3, 269-279. (Authors' summary) 82e:94038 94A24 (94A05)
- m, C. M. (with Palaniswamy, V. I.) Stability of shear flow of stratified fluids

- with fine dust. Phys. Fluids 24 (1981), no. 7, 1224-1228. (Authors' summary) 82g:76019 76E99 (76E20, 76V05)
- Purushotham, G. (with Aswarthanarayana, C.) On the geometrization of steady rotating incompressible viscous fluid flows. Tensor (N.S.) 34 (1980), no. 3, 242-252. (A. Pozzi) 82b:76032 76D99 (35L65)
- Purvis, George D., III (with Bartlett, Rodney J.) The reduced linear equation method in coupled cluster theory. J. Chem. Phys. 75 (1981), no. 3, 1284-1292. (Authors' summary) 82e:65033 65F10 (81G55)
- Puzzitsky, Norman Quasi-Fricke polygons and the Nielsen convex region. Math. Z. 172 (1980), no. 3, 239-244. (L. Keen) 82e:30070 30F35
 Pušek, N. S. (with Adamjan, V. M.) A Schrödinger operator with singular attracting
- potential. (Russian) Dokl. Akad. Nauk SSSR 249 (1979), no. 1, 81-85. (M. M.
- Skriganov) **82c:34022** 34B25 (81C05) **Pushkarov**, **D. I.** See **Puškarov**, **D. I.**
- Puškarov, Č. I. (with Puškarov, D. I.) Soliton solutions in some nonlinear Schrödinger-like Rep. Math. Phys. 17 (1980), no. 1, 37-40. (M. S. Agranovič) 82g:35110 35O20 (81C05)
- Puškarov, D. I. (with Puškarov, Č. I.) Soliton solutions in some nonlinear Schrödinger-like Rep. Math. Phys. 17 (1980), no. 1, 37-40. (M. S. Agranovič) 82g:35110 35O20 (81C05)
- Puškin, L. N. Distribution of the functional $(1/T)\int_0^T x^2(t) dt$ from a Gaussian stationary process with zero mean and correlation function $e^{-|t|}\cos \alpha t$. (Russian) Probabilistic nethods and cybernetics, No. 16 (Russian), pp. 91-94, Kazan. Gos. Univ., Kazan, 1980. (M. A. Šašiašvili) 82g:60055 60G15 (62M99)
- Pist, L. A survey of papers on the oscillations of nonlinear mechanical systems developed in Czechoslovakia. (Russian) Proceedings of the VIIIth International Conference Nonlinear Oscillations, Vol. I (Prague, 1978), pp. 10-38, Academia, Prague, 1979. (See 82k:70002a) 01A73
- Pustomel'nikov, I. P. (with Bodnarčuk, P. I.; Krovickii, I. I.) Representation of algebraic irrationals by branching continued fractions. (Russian) Vestnik L'vov. Politehn. Inst. No. 141 Differencial' nye Uravnenija i ih Priložen. (1980), 11–12, 111. (R. Steiner) 10A32 (10F35)
- tovoitov, M. O. Ljapunov's second method and the design of control systems. (Russian) Dynamics and stability of mechanical systems (Russian), pp. 134-136, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (V. B. Smirnova) 82k:93049 93D05 (34D20)
- Pustyl'nikov, L. D. Rapid calculations in certain problems of linear algebra connected with Toeplitz and Hankel matrices. (Russian) Uspehi Mat. Nauk 35 (1980), no. 5(215), 241-242. (Zdeněk Dostál) 82a:65026 65F05 (65F15)
- Pustyl'nikov, L. M. (with Butkovskii, A. G.) ★Теория подвижного управления системами с распределенными параметрами. (Russian) [Theory of moving control of systems with distributed parameters] Теоретические Основы Технической Кибернетики. [Series in Theoretical Foundations of Engineering Cybernetics] "Nauka", Moscow, 1980. 384 pp. (Françoise Berquier) 82h:93039 93C10
- PustyTalkova, E. I. (with Butkovskii, A. G.) Theory of mobile control of distributed parameter systems. Automat. i Telemeh. 1980, no. 6, 5-13 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 6, part 1, 741-747. (E. G. Al'breht) 82m:49027 49B22
- Pusz, W. (with Napiórkowski, K.) On averaging of time evolution of quantum spin lattice systems. Lett. Math. Phys. 4 (1980), no. 5, 413-416. (Gérard G. Emch) 82c:82023 82A15 (46L60, 82A35)
- (with Górecki, J.) Passive states for finite classical systems. Lett. Math. Phys. 4 (1980), no. 6, 433-443. (Etang Chen) 82b:82011 82A05
- van der Put, Marius Schottky groups and Schottky curves. Algebraic geometry (Proc. Summer Meeting, Univ. Copenhagen, Copenhagen, 1978), pp. 518-526, Lecture Notes in Math., 732, Springer, Berlin, 1979. (Author's introduction) 82a:14007 14H15 (30G25) (with Gerritzen, Lothar) ★Schottky groups and Mumford curves. Lecture Notes in
 - Mathematics, 817. Springer-Verlag, Berlin-New York, 1980. viii + 317 pp. ISBN 3-540-10229-9 (V. V. Šokurov) 82j:10053 10D30 (14H25, 32J) 10D30 (14H25, 32J99, 32K15) La conjecture de la couronne en analyse complexe et p-adique. Seminar on Nu
 - Theory, 1979-1980 (French), Exp. No. 6, 8 pp., Univ. Bo rdeaux I, Talence, 1980. (W. Bartenwerfer) 82i:32042 32E25 (30G05, 32E27, 46H15)
 - The class group of a one-dimensional affinoid space. Ann. Inst. Fourier (Grenoble) 30 (1980), no. 4, 155-164. (W. Bartenwerfer) 82h:14018 14H25 (10D30, 13F15) Meromorphic differential equations over valued fields. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 3, 327–332. (R. Wallisser) 82m:34064 34G10 (12840). 34G10 (12B40.
- Puta, Mircea The stability of de Rham currents. Proc. Amer. Math. Soc. 80 (1980), no. 3,
 - 536. (Stere Ianus) 82a:58005 58A25 Sur la stabilité des tenseurs. (English summary) C. R. Acad. Sci. Paris Sér. I Math.
 - 292 (1981), no. 9, 485–486. (Robert Roussarie) 82g:58004 58A10 (49F20)
 Some remarks about the currents on a Lie group. (French summary) Rend. Mat. (7)
 1 (1981), no. 1, 121–126. (M. Craioveanu) 82h:58002 58A25
- ntcha, Mohan S. Generalization of Lentin's theory of principal solutions of word equations in free semigroups to free product of copies of positive reals under addition.

 Pacific J. Math. 83 (1979), no. 1, 253-268. (Author's summary) 82;20105 20M05
- (with Hartwig, Robert E.) Semisimilarity for matrices over a division ring. Linear Algebra Appl. 39 (1981), 125–132. (J. L. Zemmer) 82h:15024 15A33 (15A09)
- Linear algebraic semigroups. Semigroup Forum 22 (1981), no. 4, 287-309. (P. G. Trotter) 82g:20108 20M99 (20G99) Rings which are semilattices of Archimedean semigrou
- (1981), no. 1, 1-5. (I. Gy. Maurer) 82:16031 16A45 (06A12, 20M10)
 erman, M. L. On the convergence of policy iteration for controlled diffusions. J. Optim.
- Theory Appl. 33 (1981), no. 1, 137-144. (Jean-Michel Bismut) 82e:93134 93E20 Putinar, Mihai Functional calculus with sections of an analytic space. J. Operator Theory 4 (1980), no. 2, 297–306. (A. Mallios) 82i:32033 32C35 (16A80, 32E25, 46H30, 46M99)
 - (with Bănică, Constantin; Schumacher, Georg) Variation der globalen Ext in Deformationen kompakter komplexer Räume. Math. Ann. 250 (1980), no. 2, 135–155. (K. Wolffhardt) 82e:32015 32C35 (14F05, 32G05)
 - A remark on the sheaf of distributions. (Romanian. French summary) Stud. Cerc. Mat. 32 (1980), no. 6, 709-713. (Ioana Cioranescu) 82j:46055 46F10 (46A99, 46M20)

nen, Anne The order of merging operations for queries in inverted file systems. iternat. J. Comput. Inform. Sci. 9 (1980), no. 5, 351-369. (Author's summary) 82b:68065

nam, C. R. The F. and M. Riesz theorem revisited. Integral Equations Operator Theory 3 (1980), no. 4, 508-514. (R. G. Douglas) 82b:47026 47B15 (47A15)

Absolute continuity and hyponormal operators. Internat. J. Math. Math. Sci. 4 (1981), no. 2, 321–335. (John B. Conway) 82547029 47820

mam, Hilary (with Friedman, Michael) Quantum logic, conditional probability, and interference. Dialectica 32 (1978), no. 3-4, 305–315. (Editors) 82g:63108 03G12

★Philosophical papers. Vol. 2. Mind, language and reality. Cambridge University Press, Cambridge-New York, 1979. xvii+457 pp. ISBN 0-521-20668-5, 0-521-29551-3 (Alex Blum) 82c01071b 01A75 (00A25, 03-06, 03A05)

★Philosophical papers. Vol. 1. Mathematics, matter and method. Second edition.

Cambridge University Press, Cambridge-New York, 1980. xiv+364 pp.

ISBN 0-521-22553-1, 0-521-29550-5 (Alex Blum) 82c:01071a 01A75 (00A25, 03-06,

03A05, 81B05) The impact of science on modern conceptions of rationality. With a comment by

Thomas W. Simon. Synthese 46 (1981), no. 3, 359-387. (Evandro Agazzi) 82f:00013 00A25 (03A05) tnick, Leonard J. (with Matkowsky, Bernard J.; Reiss, Edward L.) Secondary states of

vibrating plates. J. Acoust. Soc. Amer. 69 (1981), no. 6, 1682-1687. (Authors' on) 82k:73048 73K12 (58E07, 73D99, 73H10)

introduction) 82a: 3908 / 3812 (3829), 33110) | Hamadaish, C. (with Unni, K. R.) On orthogonality in s.i.p. spaces. Tsukuba J. Math. 5 (1981), no. 1, 15–19. (Shaligram Singh) 82a:46036 46C99 (46B99) | Herill, Martin S. Appraisal of the commercial potential of the New Zealand deepwater

ment (Proc. Workshop, Univ. Canterbury, Christchurch, 1980), pp. 174–188, Lecture Notes in Biomath., 40, Springer, Berlin, 1981. (See 822:90001) 90A30

n, S. (with Cabot, M.) Renormalized classical nonlinear hydrodynamics mode coupling and quantum theory of interacting phonons. *Phys. Lett. A* 83 (1981), no. 3, 91-94. (Authors' summary) 82i:76106 76Y05 (81H99, 82A40)

ock, J. S. (with Hunt, J. C. R.; Britter, R. E.) Mathematical models of dispersion of air pollution around buildings and hills. Mathematical modelling of turbulent diffusion in the environment (Proc. Conf., Univ. Liverpool, Liverpool, 1978), pp. 145–200, Academic Press, London, 1979. (Authors' summary) 82a:76076 76R99 (76F99) tt. Robert B. (with Korányi, Adam) An area theorem for products of symmetric spaces of rank one. (French summary) Bull. Sci. Math. (2) 105 (1981), no. 1, 3–16. (Norman J. Wisch) 2012-2013.

usema, P. On the determination of a torsion abelian group by its semigroup of endomorphisms. (Russian. Estonian and English summaries) Eesti NSV Tead. Akad. Toimetised Füür.-Mat. 29 (1980), no. 3, 241–245, 345. (Alexander Soifer) 82h:20065a

On the determination of a torsion abelian group by its semigroup of endomorphisms in the class of all periodic abelian groups. (Russian. Estonian and English summaries) Eesti NSV Tead. Akad. Toimetised Fiitis.-Mat. 29 (1980), no. 3, 246-253, 345. (Alexander 20K30 Soifer) 82h:20065b

Pula, B. Solvability of some boundary value problems for systems of ordinary differential La Solvatomity of some obtaining proteins for systems of outmany differential equations. (Russian) Scripta Fac. Sci. Natur. ULEP Brunensis.—Math. 10 (1980), no. 8, 411–425. (Michal Čverčko) 82m:34017 34B10 (34B15)
 La Solvatomity of Solvatomity. Acta Phys. Austriaca 50 (1978/79), no. 1, 45–52. (Author's summary) 82m:81139 81G20

On-shell superc arrent multiplet for supergravity in six dime

(1981), no. 8, 1977-1981. (Author's summary) 82e:83037 83E15 (83E99) ranov, V. P. (with Vereščagin, A. F.; Medvedev, V. S.) Algorithms for optimizing the tories of motion in the case of controllable search for objects. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 2, 146-153, 222 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 2, 115-122 (1981). (Authors' summary) 82d:93014

io, Zazisław Sur un problème généralisé de Fourier pour un système d'équations intégro-différentielles. Demonstratio Math. 11 (1978), no. 3, 751-766. (Author's review (Zbl 396:45010)) 82m:45019 45K05

W. C. (with Jeter, Melvyn W.) A note on nonnegative rank fa Algebra Appl. 38 (1981), 171-173. (E. Deutsch) 82m:15017 15A23 (15A48)

Pyenson, Lewis Einstein's education: mathematics and the laws of nature. Isis 71 (1980), no. 258, 399-425. (H. Treder) 82f:01134 01A70

Pyhel, N. Distribution-free r sample tests for the hypothesis of parallelism of response profiles. (German summary) Biometrical J. 22 (1980), no. 8, 703-714. (W. J. R. Eplett)

teer, G. N. A case of convergence of the iteration method and its application in the theory of jets. (Russian) Dinamika Splošn. Sredy No. 42 Dinamika Neodnorod. Židkosti (1979), 122-127, 131. (L. B. Rall) 82c:47074 47H12 (45L05, 76B10)

*Tourine meronin narmanenna unterpanon rana Koma. (Russian) [Exact methods for calculating integrals of Cauchy type] "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. 121 pp. (R. V. Duduchava) 82m:44006 44A15 (30E20, 45E05)

(with Sokamolov, I.) Some methods for the exact calculation of Cauchy-type

integrals of a special form with weight function $\omega(x) = -i\sqrt{z^2 - 1}$. (Russian. Tajiki summary) Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk 1981, no. 1(79), 10-19. (D. Mitrovic) 82j:30060 30E20 (65D30)

Pyke, Ronald (with Schaufele, Ronald A.) Correction to: "The existence and uniqueness of stationary measures for Markov renewal processes" [Ann. Math. Statist. 37 (1966), 1439–1462; MR 34 #3658]. Ann. Probab. 9 (1981), no. 2, 348. (Editors) 82c:60156 60K15

urinos, Othon Sur une classe de congruences de normales associées aux fonctions harmoniques de deux variables. (Greek summary) Prakt. Akad. Athēnōn 54 (1979), 228-252 (1980). (Bernard Rouxel) 82m:53011 53A25 Sur les surfaces représentatives des fonctions harmoniques. Bull. Soc. Roy. Sci. Liège

49 (1980), no. 11-12, 393-399. (Froim Marcus) 82h:53005 53A05

Pyle, L. Duane The weighted generalized inverse in nonlinear programming—ac selection using a variable-metric generalization of the simple algorithm. Extremal methods and systems analysis (Internat. Sympos., Univ. Texas, Austin, Tex., 1977), pp. 197-230, Lecture Notes in Econom. and Math. Systems, 174, Springer, Berlin, 1980. 90C30 on W. Tolle) 82g:90073

Pym, J. S. (with Oshobi, E. O.) Banach algebras whose duals are multiplier algebras. Bull. London Math. Soc. 13 (1981), no. 1, 66-68. (B. E. Johnson) 82i:46071 46H05

Pyr'ev, Ju. A. See Pir'ev, Ju. O.

Pyra, R. Mechanical behaviour and stability of motion for the one-dimensional rheological system. Mech. Res. Comm. 7 (1980), no. 6, 395-399. (From the introduction) 82e:73034

Pytel-Kudela, Marzenna On Fourier's problem for the heat equation and for the exterior of the sphere. Fasc. Math. No. 11 (1979), 179-192. (William Rundell) 82g:35022 35C15 (35K05)

Pyt'ev, Ju. P. Suppression of false signals in the problem of resolution improvement. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 3, 540-544. (Ezio M. Biglieri) 821:94007 94A14 (93E10)

Pytkeev, E. G. (with Makovlev, N. N.) On bicompacta which are unions of spaces defined by means of coverings. Comment. Math. Univ. Carolin. 21 (1980), no. 2, 247–261. (Thomas 54D20 (54D55) E. Gantner) 82c:54019

Hereditarily plumed spaces. (Russian) Mat. Zametki 28 (1980), no. 4, 603-618, 636. 54E18 (54A25) (Y. Kodama) 82c:54026

Pytte, E. (with Imry, Y.; Mukamel, D.) Lower critical dimension and the roughening transition of the random-field Ising model. *Phys. Rev. Lett.* 46 (1981), *no.* 18, 1173–1177. (Authors' summary) 824:82034 82A25 (82A42, 82A67, 82A68)

Pyž, V. M. The geometric approach to the problem of strong interactions. I. Strong gravitation. (Russian) Problemy Jadern. Fiz. i Kosm. Lučei No. 12 (1980), 60-73, ii. (Author's summary) 82f:81079a 81G05 (53C80, 83E99) 81G05 (53C80, 83E99)

The geometric approach to the problem of strong interactions. II. Conformal

invariance. (Russian) Problemy Jadem. Fiz. i Kosm. Lučei No. 12 (1980), 74–105, ii. (Author's summary) 82f:81079b 81G05 (53C80, 58E99, 83C47)

Conformal deformations of Riemannian spaces and torsion. (Russian) Problemy

Conformal deformations of Riemannian spaces and torsion. (Russian) Problemy Jadern. Fiz. i Kosm. Lučei No. 14 (1981), 11-24, 110. (J. D. Zund) 82m:53012 53A30 (53B50)

Pyžkova, N. V. (with Sadovskii, A. P.) A method for solving the problem of isochronism of the center. (Russian) Differencial nye Uravnenija 16 (1980), no. 10, 1893-1895, 1919. (Mark Levi) 824:34047 34C20 (34C25, 58F22)
Solution of the problem of isochronism of the center for a system of nonlinear

cillations. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1981, no. 1, 52-54, 80. (G. V. Hmelevskaja-Plotnikova) 82f:34041 34C15 (70K99)

- Q -

- Qudir, A. (with Malik, H. N.) Break-up of integers and bracket functions in terms of bracket functions. A collection of manuscripts related to the Fibonacci sequence,
 - pp. 172-175, Fibonacci Assoc., Santa Clara, Calif., 1980. (C. Small) 82h:10007 (with Malik, H. N.) Pseudoperiodic difference equations. A collection of manuscripts related to the Fibonacci sequence, pp. 176–179, Fibonacci Assoc., Santa Clara, Calif., 1980. (André Hautot) 82h:39002a 39A10

(with Malik, H. N.) Solution of pseudoperiodic difference equations. A collection of

- (with Mank, H. N.) Somution of pseudoperiodic difference equations. A collection of manuscripts related to the Fibonacci sequence, pp. 179–186, Fibonacci Assoc., Santa Clara, Calif., 1980. (André Hautot) 82h:39002b 39A10

 Qi, Jing Tai (with Cai, Shu Tang) The relation between crack opening displacement and strain. Sci. Sinica 23 (1980), no. 10, 1326–1338. (K. S. Parihar) 82c:73072 73M05
- QI, Li Qun (with Chi, Zong Tao) Some global inverse function theorems. (Chinese) Num. Math. J. Chinese Univ. 1 (1979), no. 2, 214-215. (From the text) 82e:26009 26E 26B10

An improved Krawczyk-Moore interval iteration method. (Chinese. English

summary) Numer. Math. J. Chinese Univ. 2 (1980), no. 1, 26-34. (Author's summary) 65H10

Interval boxes of solutions of nonlinear systems. (German summary) Computing 27 (1981), no. 2, 137-144. (Author's summary) 82m:65044 65G10

Qi, Min You On a class of linear partial differential equations with critical points in the

niltonian field. (Chinese) Acta Math. Sinica 23 (1980), no. 3, 454-470. (Kotik K. Lee) 82h:35035 35G30 (35S05, 58F05, 58G15)

Qian, Kang (with Qian, Wen Han) Fitting an ellipse by four circular arcs. (Chinese) Knowledge Practice Math. 1981, no. 2, 23-31. 82a:65023 65D99

m, Min Extension of an elliptic differential operator and \hat{C} semigroups. (Chinese. English summary) Acta Math. Sinica 22 (1979), no. 4, 471-486. (Author's summary) 35J30 (60J25)

The invariant measure and ergodic property of a Markov semigroup. (Chinese. English summary) Beijing Daxue Xuebao No. 2 (1979), 46-59. (Author's summary) 60J35 (47D07)

(with Qian, Min Ping) The decomposition into a detailed balance part and a circulation part of an irreversible stationary Markov chain. Sci. Sinica 1979, Special Issue II on Math., 69-79. (A. Fuchs) 82a:60102 60J10 (82A35)

Qian, Min Ping (with Qian, Min) The decomposition into a detailed balance part and a circulation part of an irreversible stationary Markov chain. Sci. Sinica 1979, Special Issue II on Math., 69-79. (A. Fuchs) 82a:60102 60J10 (82A35)

Qian, Wei Chang Finite element analysis of axisymmetric elastic body problems. (Chinese. English summary) Appl. Math. Mech. 1 (1980), no. 1, 25-35. (Author's summary) 82k:73055 73K25

Qian, Wen Han (with Qian, Kang) Fitting an ellipse by four circular arcs. (Chinese) Knowledge Practice Math. 1981, no. 2, 23-31. 82h:65023 65D99

Qin, Bo Liang (with Zhu, You Lan; Chen, Bing Mu; Zhang, Zuo Min; Zhong, Xi Chang; Zhang, Guan Quan) Difference schemes for initial-boundary value problems of

hyperbolic systems and examples of application. Sci. Sinica 1979, Special Issue II on Math., 261-280. (Robert Pearson) 82j-65070 65N05 (65N10)

Qin, Gan (with Jiang, Li Shang; Shen, Shu Min; Wu, Mao Qing; Yan, Da Kang) Finite element methods for solving structures composed of plate-beams, with their error estimate. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 2, 154-171. (From the summary) 82:73033 73K25

Qin, Guo Guang Fuzzy approximation theory. I. The fuzzy space $FL_p(X)$ and a commentary on the selection-nearness principle. (Chinese. English summary) J. Huazhong Inst. Tech. 1980, no. 2, Special Issue on Fuzzy Math, iii, 44-52. (Editors) 82a:03054 03E72 (46E99)

Qin, Meng Zhao (with Tu, Gui Zhang) Relationship between symmetries and conservation laws of nonlinear evolution equations. (Chinese English summary) Kexue Tongbao 24 (1979), no. 20, 913-917. (Tai Ping Liu) 82m:35100 35L65 (58F07)
 A second-order difference scheme for calculations in a problem concerning fast-slow

aves. (Chinese. English summary) Math. Numer. Sinica 3 (1981), no. 2, 183-187. (Author's summary) 82k:65052 65M05

(Author's summary) 82a:co592 co5M05 (with Tu, Gui Zhang) The invariant groups and conservation laws of nonlinear evolution equations—an approach of symmetric function. Sci. Sinica 24 (1981), no. 1, 13–26. (Ryogo Hirota) 82a:38076 35Q20 (351.63) (Ryogo Hirota) 82a:38076 35Q20 (351.63) (Ryogo Hirota) 82a:38076 (Ryogo Hiro no. 8, 337-339. Kexue Tongbao (English) 25 (1980), no. 4, 273-276. (A. A. Reinfelds) 34C05 (58F14, 92A09)

(with Liu, Zun Quan; Hu, Wen Rui) Numerical solutions of unsteady

two-dimensional hydrodynamics of spiral nebula in a self-gravitational field. (Chin English summary) Acta Math. Sci. 1 (1981), no. 1, 31-42. (Authors' summary) 82j:85001

Qin, Zeng Fu Romberg algorithm by Fibonacci sequence. (Chinese) Numer. Math. J. ese Univ. 2 (1980), no. 1, 87-89. (From the introduction) 82i:65015 65D30

Qing, Cheng Rui (with Shen, Jie Wu; Zhou, Yu Mei) A new method for solving the free-boundary magnetic surface equation without conducting shells. (Chinese, English nary) Acta Phys. Sinica 29 (1980), no. 8, 1058-1062. (Authors' summary) 82h:76044 76W05 (65P05, 76A60, 82A45)

(with Zhang, Chun Yuan; Sun, Ji Guang) Calculation of the current needed to maintain an equilibrium field in a toroidal plasma. (Chinese. English summary) Acta Phys. Sinica 29 (1980), no. 9, 1110-1120. (From the summary) 82e:76078 (45B05, 82A45)

Qiu, Qing Jiu On a class of non-Fuchsian hyperbolic pseudodifferential operators with multiple characteristics. (Chinese. English summary) Nanjing Daxue Xuebao 1980, no. 4, 1–15. (Author's summary) 82h:35103 35S05

Quaas, Werner Berechnung eines Integrals, das bei der Bestimmung des Ranges der Schar

der Siegelschen Modulformen auftritt. Acta Arith. 36 (1980), no. 4, 367-375. (Günter

Köhler) 82b:10031 10D20 Ouackenbush, R. W. (with Fried, E.; Grätzer, G.) The equational class generated by weakly associative lattices with the unique bound property. Ann. Unic. Sci. Budapest. Eðreðs Sect. Math. 22/23 (1979/80), 205–211. (Joel Berman) 82a-06008 06A99 (08B05)

(with Grätzer, G.; Lakser, Harry) On the lattice of quasivarieties of distributive lattices with pseudocomplementation. Acta Sci. Math. (Szeged) 42 (1980), no. 3-4, 257-263. (M. E. Adams) 82c:06023 06D15 (08C15)

(with McKenzie, R.) The spectrum of a lattice-primal algebra. Discrete Math. 35 (1981), 157-163. (Evelyn Nelson) 82j:08004 08A40 (06C05)

Quade, Dana Regression analysis based on the signs of the residuals. J. Amer. Statist. Assoc. 74 (1979), no. 366, part 1, 411-417. (Hira L. Koul) 82e:62094 62J02

Quadrat, Jean Pierre (with Colleter, Pierre; Delebecque, François; Falgarone, François)
Application of stochastic control methods to the management of energy production in New Caledonia. Applied stochastic control in econometrics and ma pp. 203-232, Contrib. Econom. Anal., 130, North-Holland, Amsterdam, 1980. (From the introduction) 82c:90023 90A30

(with Verbeure, A.) Stability for mean field models. Ann. Inst. H. Poin Sect. A (N.S.) 32 (1980), no. 4, 343-349. (Authors' summary) 82a:82014 82A15

Quaisser, Erhard Zum Aufbau affiner Ebenen aus dem Spiegelungsbegriff. Z. Math. Logik dlag. Math. 27 (1981), no. 2, 131-140. (Frieder Knüppel) 82k:51021 (51A40)

Quandt, Richard E. See Kumar, K. D.; et al., 82h:62048

nguyen-Quang-Do Thong See Nguyen-Quang-Do Thong dinh Quang Luu See Dinh Quang Luu dão Quang Tuyên See Đão Quang Tuyên

araishi, R. (with Mishra, Ratan Shanker) Collineation and motion in relativistic thermodynamics. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 2, 129-132. (Authors' summary) 82c:83050 83C99 (80A99)

(Authors summary 82cs,8500 835,79 (80639) Quart, George (with Baum, Paul; Fulton, William) Lefschetz-Riemann-Roch for singular varieties. Acta Math. 143 (1979), no. 3-4, 193-211. (Allen B. Altman) 82c:14022a 14F12 (14C40)

Localization theorem in K-theory for singular varieties. Acta Math. 143 (1979),

no. 3-4, 213-217. (Allen B. Altman) 82c:14022b 14F12 (14C40)
Quartapelle, L. (with Valz-Gris, F.) Projection conditions on the vorticity in viscous incompressible flows. Internat. J. Numer. Methods Fluids 1 (1981), no. 2, 129-144. (Authors' summary) 82c:76015 76D05 (65P05, 76A60)
Vorticity conditioning in the construction.

Vorticity conditioning in the computation of two-dimensional viscous flows. J. Comput. Phys. 40 (1981), no. 2, 453-477. (Author's summary) 82i:76035 76D99

arteroni, A. (with Canuto, Claudio) Approximation results for orthogonal polynomials in Sobolev spaces. Math. Comp. 38 (1982), no. 157, 67-86. (H. Triebel) 82m:41003 41A10

ntieri, Thomas F., Jr. (with Tom, Victor T.; Hayes, Monson H.; McClellan, James H.) Convergence of iterative nonexpansive signal reconstruction algorithms. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 5, 1052-1058. (Authors' summary)

(with Oppenheim, Alan V.) Iterative techniques for minimum phase signal

reconstruction from phase or magnitude. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 6, 1187–1193. (Authors' summary) 82m:34014 94A05 attrocchi, Gaetano A problem of J. Dénes on certain finite sequences. (Italian. English summary) Atti Sem. Mat. Fis. Univ. Modema 29 (1980), no. 1, 1–9. (Mauro Cerasoli) 05A05 (20B25)

Relations between major sequences and complete cycles of degree n. (Italian. English summary) Atti Sem. Mat. Fis. Univ. Modena 29 (1980), no. 1, 34–47. (Mauro Cerasoli) 05A05 (20B25)

attrocchi, Pasquale (with Pellegrino, Consolato) Latin rectangles and "transversal designs" with parallelism. (Italian. English summary) Atti Sem. Mat. Fis. Univ. Modena 28 (1979), no. 2, 441-449 (1980). (Giordano Gallina) 82h:05035 05B15 (with Fiori, Carla) A result concerning the existence of certain finite

Minkowski-2-structures. J. Geom. 14 (1980), no. 2, 139-142. (Tibor Bisztriczky) 51E30 (05B30, 20B25)

Jubanchi, A. H. A. See Al-Qubanchi, A. H. A. ebbemann, Heinz-Georg (with Scharlau, Winfried; Schulte, M.) Quadratic and Hermitian forms in additive and abelian categories. J. Algebra 59 (1979), no. 2, 264–289.

(A. A. Ranicki) 824:18015 18F25 (10C05) Zur Klassifikation unim dularer Gitter mit Isometrie von Primzahlordnung. J. Reis Angew. Math. 326 (1981), 158-170. (C. G. Lekkerkerker) 82m:10039 10C07 (10C05,

10E05, 12A35, 20C10) en, Larissa Modular functions and finite simple groups. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 561-566, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (Editors) 82g:20042

20D08 (10D05, 20G30) 2000. (1020), 2030, 1

Queffélec, Hervé Propriétés presque sûres et quasi-sûres des séries de Dirichlet et des produits d'Euler. Canad. J. Math. 32 (1980), no. 3, 531-558. (Christian Radoux) 82c:10050 10H08 (10D24, 30B50)

Queiroz, S. L. A. Polymer statistics on a Cayley tree. J. Phys. A 14 (1981), no. 9,

L339-L344. (Author's summary) 82:82055 82A51 (05C05)

Quek, T. S. (with Yap, Leonard Y. H.) Multipliers from L_i(G) to a Lipschitz-Zygmund class. J. Math. Anal. Appl. 81 (1981), no. 1, 278-289. (Hans G. Feichtinger) 82:43006 43A22 (43A70)

sada Paloma, Vicente (with García Pérez, Alfonso) A model of measurement error as a problem of nonparametric Bayesian decision. (Spanish. English summary) Estadist.

Problem of Indiparativetic September (Spanish: Capasis Lagustic Standard No. 87 (1980), 29–36. (Authors' summary) 821-62019 62C10 (62G05) Nonparametric Bayesian decision processes. (Spanish: French summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 1, 123–125. (Author's summary) 62C12 (62A15)

sne, C. Matrix elements of operators in symmetrical U(6)⊃U(3)⊃U(2)⊃U(1) and U(6)⊃SU(3)⊃SO(3)⊃SO(2) basis. J. Math. Phys. 22 (1981), no. 7, 1482–1496. (Kurt Bernardo Wolf) 82j:81061 81G30 (20C35, 22E70) Bernardo Wolf) 82j:81061 81G30 (20C artin Quetglas, G. See Martin Quetglas, G.

Queyranne, Maurice (with Picard, Jean-Claude) On the structure of all minimum cuts in a network and applications. Combinatorial optimization, II (Proc. Conf., Univ. East Anglia, Norwich, 1979). Math. Programming Stud. No. 13 (1980), 8-16. (Jacques A. Ferland) 82a:90054 90B10

(with Houck, David J., Jr.; Picard, Jean-Claude; Vemuganti, R. R.) The travelling salesman problem as a constrained shortest path problem: theory and computational Opsearch 17 (1980), no. 2-3, 93-109. (Claude Benzaken) 82h:90076 90C10 (90C08)

(with Picard, Jean-Claude) Errata: "On the structure of all min m cuts in a network and applications" [Math. Programming Stud. No. 13 (1980), 8–16; MR 82a:90054]. Math. Programming 22 (1982), no. 1, 121. (Editors) 82k:90052 (05C20)

Queyrut, Jacques Structure galoisienne des anneaux d'entiers d'extensions s ramifièes. Seminar on Number Theory, 1979-1980 (French), Exp. No. 2, 8 pp., Univ. Bordeaux I, Talence, 1980. (Editors) 82k:12809 12A55 (12A62)

Structure galoisienne des anneaux d'entiers d'extensions sauvagement ramifiées. I. [Galois structure of rings of integers with wildly branching extensions. I] Seminar on Number Theory, Paris 1979-80, pp. 245-254, Progress in Math., 12, Birkhäuser, Boston, Mass., 1981. (See 82]:10004) 12A55

bui huy Qui See Bui Huy Qui

Quigg, C. (with Kwong, Waikwok; Rosner, Jonathan L.; Schonfeld, Jonathan F.; Thacker, H. B.) Degeneracy in one-dimensional quantum mechanics. Amer. J. Phys. 48 (1980), no. 11, 926-930. (Authors' summary) 82c:81020 81C05 (34B25, 81F99)

(with Schonfeld, Jonathan F.; Kwong, Waikwok; Rosner, Jonathan L.; Thacker, H. B.) On the convergence of reflectionless approximations to confining potentials. Ann. Physics 128 (1980), no. 1, 1-28. (Marcel Coz) 82b:81104 81F05 (34B25, 81G05)

| Quillen, Daniel See James, I. M., 82g:01057 |
| Quine, J. R. | Plücker equations for curves. Amer. Math. Monthly 88 (1981), no. 1, 21-29. (S. L. Kleiman) 82k:14052 | 14N10 (53A20)

Quine, W. V. O. See Largeault, Jean, 82e:03014 Quinkert, R. Korrektur und Ergänzung: "Über Schreiersche Gruppenerweiterung ihre Kommutatorgruppen" [Acta Sci. Math. (Szeged) 40 (1978), no. 3-4, 327-345; MR 81k:20051]. Acta Sci. Math. (Szeged) 43 (1981), no. 1-2, 105-106. (From the text) 82h-20044 20F12

Quinn, B. G. (with Nicholls, D. F.) The estimation of random coefficient autoregressive models. I. J. Time Ser. Anal. 1 (1980), no. 1, 37-46. (William D. Ray) 82e:62148 62M10

(with Nicholls, D. F.) The stability of random coefficient autoregressive models. Internat. Econom. Rev. 22 (1981), no. 3, 741-744. (From the introduction) 82m:62205

inn, Frank Ends of maps. I. Ann. of Math. (2) 110 (1979), no. 2, 275-331. (R. C. Kirby) 82k:57009 57N15

(with Freedman, Michael Hartley) A quick proof of the 4-dimensional stable surgery theorem. Comment. Math. Helv. 55 (1980), no. 4, 668-671. (R. C. Kirby) 82f:57006 57M99 (57R65)

meey, D. A. On computing travelling wave solutions in a model for the Belousov-Zhabotinskii reaction. J. Inst. Math. Appl. 23 (1979), no. 2, 193–201. (Author's summary) 824:80034 80A30 (65P05)

m, V. H. (with Mayorga, R. V.) A family of variable metric methods in function space, without exact line searches. J. Optim. Theory Appl. 31 (1980), no. 3, 303-329. (Ja. I. Al'ber) 82is49029 49D15 (49D37, 65K10, 90C30)

Three Basewas 49D15 (49D3), 65Rt, 59C.30) intest, Louis V. (with Yarmish, Joshua) The number of chiral alkanes having given diameter and carbon automorphism group, a symmetric group. Second International Conference on Combinatorial Mathematics (New York, 1978), pp. 436–443, Ann. New York Acad. Sci., 319, New York Acad. Sci., New York, 1979. (D. H. Rouvray) 82m:05058 05C30 (05A15, 05C05, 92A40)

(with Bloom, Gary S.; Kennedy, J. W.) Distance degree regular graphs. The theory and applications of graphs (Kalamazoo, Mich., 1980), pp. 95–108, Wiley, New York, 1981. (Geoffrey Exoo) 322-65058 05C25 into, Eric Todd Topological restrictions on double fibrations and Radon transforms. Proc. Amer. Math. Soc. 81 (1981), no. 4, 570–574. (G. M. Henkin) 32g:59084 58G15 (32M15, 44A05, 55R25)

k, James Qualitative stability of matrices and economic theory: a survey article puter-assisted analysis and model simplification (Proc. First Sympos., Univ. Colorado, der, Colo., 1980), pp. 113–164, Academic Press, New York, 1981. (See 82g:00016)

rés, M. (with de Urries, F. J.; Hoyos, J.; Mazón, M. L.; Rodriguez, E.) Geometrical structure of Faddeev-Popov fields and invariance properties of gauge theories. J. Math. Phys. 22 (1981), no. 8, 1767-1774. (Authors' summary) 82m:81657 81E10 (53C80)

spel, G. R. W. (with Capel, H. W.) Equation of motion for the Heisenberg spin chain. Phys. Lett. A 85 (1981), no. 4, 248-250. (Authors' summary) 82j:82016

khu Quoc Anh See Khu Quoc Anh

phan Quoc Khanh See Phan Quoc Khanh nguyen Quoc Son See Nguyen Quoc Son Qureshi, K. On the degree of approximation of functions belonging to the Lipschitz class by means of a conjugate series. Indian J. Pure Appl. Math. 12 (1981), no. 9, 1120-1123. (H. P. Dikshit) 82k:42005 42A24 (40G05)

A class of continuous functions and their degree of approximation. J. Sci. Res. 3 (1981), no. 1, 5-8. (Author's summary) 82j:40004 rauf Qureshi, M. A. See Rauf Qureshi, M. A. 40C05 (42A10)

Qureshi, Zahid H. (with Ng, Tung Sang) Optimal experiment design for autoregressive model with output power constraints. IEEE Trans. Automat. Control 26 (1981), no. 3, 739-742. (Authors' summary) 82i:62110 62K05 (62M10) nguyễn Quý Hỷ See Nguyễn Quý Hỷ

- R -

parcia R., Catherine See Garcia R., Catherine

sab, Gillian M. (with Jewell, Nicholas P.) Difficulties in obtaining consistent estimators of neters. Biometrika 68 (1981), no. 1, 221-226. (D. A. Sprott) 82g:62054

hb, Werner Kubische und biquadratische Thetafunktionen. I. Österreich. Ak. Math.-Natur. Kl. Sitzungsber. II 188 (1979), no. 1-3, 47-77. (Larry J. Goldstein) 82h:10040a 10D20 (14K25, 33A25) dratische Thetafunktionen. I. Österreich. Akad. Wiss.

Kubische und biquadratische Thetafunktionen. II. Österreich. Akad. Wiss. Math.-Natur. KI. Sitzungsber. II 188 (1979), no. 4-7, 231-246. (Larry J. Goldstein)

10D20 (14K25, 33A25) 82h:10040b nan, Joseph (with Billera, Louis J.) Cores of nonatomic linear production games. Math.

Oper. Res. 6 (1981), no. 3, 420-423. (Authors' summary) 82i:90125 90D13 (90C05) Systems 28 (1981), no. 3, 186–195. (Authors' summary) 82a:94124 94C10

(with Vandewalle, Joos; De Man, Hugo J.) The adjoint switched capacitor network and its application to frequency, noise and sensitivity analysis. *Internat. J. Circuit Theory*Appl. 9 (1981), no. 1, 77-88. (Authors' summary) 82a:94108

94C05

h, R. (with Prihod'ko, A. P.) Some properties of linear controllable equations in infinite-dimensional spaces. (Russian) Vestnik Har'kov. Gos. Univ. No. 174 vyp. 43 (1978), 37-43, 104. (E. S. Čičkin) 821:34078 34H05 (93B05)

Exact controllability and stabilization in infinite-dimensional spaces. (Russian)
Vestnik Har'kov. Ges. Univ. No. 174 vpp. 43 (1978), 43–50, 104. (E. S. Čičkin) 82i:34079 34H05 (93B05)

Relative controllability of linear differential equations with lag in Banach space. (Russian) Vestnik Har'kov. Gos. Univ. No. 177, vyp. 44 (1979), 36-41, 96. (Author's summary) 82c:34094 34K35 (34H05)

(Kussian) Festinik Titur Nov. 1905. Similar States Ausgewählte Modelle und Methoden mit Ziel- und Ressourcenvorgaben. [Selected models and methods with goal- and resource data]. Mathematical Systems in Economics, 46. Verlag Anton Hain, Meisenheim, 1979. vii+255 pp. ISBN 3-445-01962-2 (Peter Bod) 90A17 (90C31)

sier, Patrick (with Ciarlet, Philippe G.) *Les équations de von Karmán. (French) [The von Karmán equations] Lecture Notes in Mathematics, 826. Springer-Verlag, Berlin-New York, 1980. vi + 181 pp. ISBN 3-540-10248-5 (Joachim Naumann) 82g:73030 (35B32, 73-02)

inkov, G. A. (with Artykov, A. R.) Investigation of movable singular points by the method of the qualitative theory of differential equations. (Russian) Differencial 'nye Uravnenija 17 (1981), no. 9, 1674–1677, 1726. (K. R. Schneider) 82k:34030 34C05

Rabinovič, M. I. (with Gaponov-Grehov, A. V.) Stochastic auto-oscillations in radiophysics and hydrodynamics. (Russian) Vestnik Akad. Nauk SSSR 1980, no. 10, 15-24. (G. V. Hmelevskaja-Plotnikova) 82d:58042 58F13 (00A69, 70L05)

Rabinovič, V. L. (with Rahmetžanov, S. R.) Compatibility and independence of properties

of binary relations. (Russian) Qualitative theory of differential equations (Russian) pp. 74-80, Kazah. Gos. Ped. Inst., Alma-Ata, 1979. (M. S. Popadić) 82k:04002 04A03

inovič, V. S. Differential-difference equations in a half space. (Russian) Different Uravnenija 16 (1980), no. 11, 2030-2038, 2110. (V. G. Angelov) 82m:35139 (35\$15)

Rabinovici, Eliezer (with Haber, H. E.; Hinchliffe, Ian) The CP^{N-1} model with unconstrained variables. Nuclear Phys. B 172 (1980), no. 2-3, 458–474. (Authors' summary) 82g:81080 81E99

(with Samuel, Stuart) The CP^{N-1} model: a strong coupling lattice approach. Phys.

Lett. B 101 (1981), no. 5, 323-326. (Authors' summary) 824.81110 81E99 inovitch, Issie (with Maurer, Stephen B.; Trotter, William T., Jr.) Partially ordered sets with equal rank and dimension. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 627-637. (Authors' summary) 82b:06004

(with Maurer, Stephen B.; Trotter, William T., Jr.) Large minimal realizers of a partial order. II. Discrete Math. 31 (1980), no. 3, 297-313. (Author's review (W.T.T.)) 06A10 (05C35)

(with Maurer, Stephen B.; Trotter, William T., Jr.) A generalization of Turán's theorem to directed graphs. Discrete Math. 32 (1980), no. 2, 167–189. (Aldo G. S. Ventre) 82c:05061 05C35 (04A05, 05C20, 06A10)

inowitz, Joshua H. Positivity notions for holomorphic line bundles over compact Riemann surfaces. Bull. Austral. Math. Soc. 23 (1981), no. 1, 5-22. (Shigeo Nakano)

32L15 (30F10) 82k:32069

Finsler structures of negative curvature in C-linear fibre spaces. Manuscripta Math. 34 (1981), no. 2-3, 121–133. (Shoshichi Kobayashi) 82k:32068 32L05 (53C55, 53C60) binowitz, Paul H. Critical points of indefinite functionals and periodic solutions of differential equations. Proceedings of the International Congress of Mathematicians (Helsinki, 1978), pp. 791-796, Acad. Sci. Fennica, Helsinki, 1980. (Editors) 82e:58043 58F05 (35B10, 49A40)

On periodic solutions of Hamiltonian systems of ordinary differential equations.

Recent advances in differential equations (Triste, 1978), pp. 379–385, Academic Press, New York, 1981. (See 82m:34003) 58F05 (49A40, 58E30)

Rabitz, Herschel (with Loeser, J. G.; DePristo, A. E.; Rohlfing, E. A.) A simple model for inclastic scattering. Amer. J. Phys. 49 (1981), no. 11, 1046–1050. (Authors' summary) 82k:81082 81F20

(with Demiralp, Metin) Chemical kinetic functional sensitivity analysis: elementary sensitivities. J. Chem. Phys. 74 (1981), no. 6, 3362-3375. (Authors' summary) 82d:80027

Rabl, Karl Über die Koinzidenzgebilde von linearen Zweibilderverfahren für den n-dimensionalen Raum. II. Österreich. Akad. Wiss. Math.-Natur. Kl. Sitzungsber. 11 188 (1979), no. 1-3, 79-100. (O. Bottema) 82a:51016 51N05

Rabotin, V. V. Finiteness of the number of holomorphic mappings into some algebraic varieties. (Russian) Some problems of multidimensional complex analysis (Russian), pp. 129-138, 268, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Fiz., Krasnoyarsk, 1980. (R. R. Simha) 82k:32061 32H25 (32H20)

Rabson, G. (with Lovass-Nagy, Victor; O'Kennon, Martha R.) Pole assignment using matrix generalized inverses. *Internat. J. Systems Sci.* 12 (1981), no. 3, 383–392. (Authors' summary) 82c:93012 93B55 (65F15)

(with Lovass-Nagy, Victor; O'Kennon, Martha R.) Corrigendum: "Pole assignment of the control of using matrix generalized inverses" [Internat. J. Systems Sci. 12 (1981), no. 3, 383-392; MR 82c:93012]. Internat. J. Systems Sci. 12 (1981), no. 8, 1029-1030. (Editors) 93B55 82i:93019

Race, David m(λ)-functions for complex Sturm-Liouville operators. Proc. Roy. Soc. Edinburgh Sect. A 86 (1980), no. 3-4, 275–289. (William N. Everitt) 82e:34026

Račev, S. The Lévy-Prohorov distance in a space of semicontinuous set functions. (Russian) Problems of stability of stochastic models (Proc. Fourth All-Union Sem., Palanga, 1979) (Russian), pp. 76–88, 124, "Vsesojuz. Nauč.-Issled. Inst. Sistem. Issled.", Moscow, 1980. (A. Ja. Dorogovcev) 82h:60009 60B10 (60B05)

Rachdi, M'hamed (with Gabay, Daniel; Nepomiastchy, Pierre; Ravelli, Alain) Numerical methods for simulation and optimal control of large-scale macroeconomic models. Applied stochastic control in econometrics and management science, pp. 115–158, Contrib. Econom. Anal., 130, North-Holland, Amsterdam, 1980. (From the introduction) 82k:90040 90A16 (62P20, 65C99)

Racher, Gerhard On the continuity of convolution in $L^p(G)$. (Italian summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 1, 122-126. (Anna Maria Mantero) 82g:43006 On the dual of a certain operator ideal. *Proc. Amer. Math. Soc.* **82** (1981), *no.* 1, 36–38. (A. Pietsch) **82e:47061** 47D35 (46M35)

chunek, Jiří Extensions of semi-orders of groups. (Serbo-Croatian summary) Glas. Mat. Ser. III 14(34) (1979), no. 1, 17-20. (Keith R. Pierce) 82b:06019 06F15

Reflexive and antisymmetric relations and their systems. Czechoslovak Math. J. 31(106) (1981), no. 4, 521–530. (J. R. Isbell) 82j:08002 08A02 (04A05, 06A12) Translations des ensembles ordonnés. (Russian summary) [Translations of ordered

sets] With a loose English summary. Math. Slovaca 31 (1981), no. 4, 337-340. (F. Lapscher) 82m:06004 06A10

nková, Irena (with Kiguradze, I. T.) On a certain nonlinear problem for two-dimensional differential systems. Arch. Math. (Brno) 16 (1980), no. 1, 15-37. (G. S. Ladde) 82e:34007 34A10 (34D05)

On a Kneser problem for a system of nonlinear ordinary differential equations. With summary. Czechoslovak Math. J. 31(106) (1981), no. 1, 114-126. (I. Kiguradze) 82d:34005 34A10

Račkauskas, A. Asymptotic analysis of probability measures in Banach spaces. (Russian. Lithuanian and English summaries) Litovsk. Mat. Sb. 20 (1980), no. 3, 99-106, 218.

(Rastislav Potocký) 82a:60014 60B11 (01A74, 60B12)

(with Paulauskas, V. I.) Infinitely divisible and stable laws in separable Banach spaces. II. (Russian. Lithuanian and English summaries) Litovsk. Mat. Sb. 20 (1980),

no. 4, 97-113, 210. (S. A. Čobanjan) 82h:60016 60B12 (46B99, 60B11)

A family of stable measures in some Banach spaces. (Russian. Lithuanian and English summaries) Litousk. Mat. Sb. 20 (1980), no. 4, 133-145, 210. (Werner Linde) 60B11 (28C20, 46G15)

- Rackoff, Charles (with Aleliunas, Romas; Karp, Richard M.; Lipton, Richard J.; Lovász, Lazzlo) Random walks, universal traversal sequences, and the complexity of maze problems. 20th Annual Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 218–223, IEEE, New York, 1979. (From the introduction) 82t:68084 68E10 (68C25, 90C35)
- BELIU (100-L2), 20-L3) cehan-Racovijā, M. Sec Cehan-Racovijā, M. Racugno, W. (with Cabras, A.) Equivalence of the Weierstrass and Lebesgue integrals in the problem of the integrability of compound functions. (Italian. English summary) Rend. Sem. Fac. Sci. Univ. Cagliari 48 (1978), suppl., 9-17. (Authors' summary) 82m:26009 26A42 (49F25)
- Raczka, Ryszard (with Barut, Asim O.) ★Теория представлений групп и ее приложения.

 1. (Russian) [Theory of group representations and its applications. 1] Translated from the English by A. U. Klimik and O. M. Gavrilik. "Mir", Moscow, 1980. 456 pp. (Jiří 22E45 (22E60, 22E70, 81C40, 81Gxx) Niederle) 82g:22014a
 - (with Barut, Asim O.) ★Теория представлений групп и ее приложения. 2 (Russian) [Theory of group representations and its applications. 2] Translated from the English by A. U. Klimik and O. M. Gavrilik. "Mir", Moscow, 1980. 396 pp. (Jiří 22E45 (22E60, 22E70, 81C40, 81Gxx)
 - (with Adamczyk, A.) New relativistic wave equations associated with
 - indecomposable representations of the Poincaré group. Rep. Math. Phys. 17 (1980), no. 2, 145-160. (M. Sachs) 82k:81037 81D25 (22D35, 81G20)
 - Excited states of fundamental particles in some models of quantum field theory. Lett. Math. Phys. 5 (1981), no. 4, 263-275. (R. L. Ingraham) 82i:81119 (81C35)
- Raczyński, S. On optimal control and reachable sets in a Banach space. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 439-448, Lecture Notes in Control and Information Sci., 22, Springer, Berlin, 1980. (J. Jarnik) 821:49042 49E10 On control systems in a Banach space without compactivity assumptions. (Russian nary) Systems Sci. 6 (1980), no. 2, 143-157. (V. Popescu) 82h:49025
- Radaelli, Giorgio (with Meloni, Gian Carlo) A natural deduction system for residuated categories. (Italian. English summary) Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 45-53 (1981). (Anna Labella) 82h:18001 18A15 (03G30)
- daševič, Ju. B. (with Sidorov, I. M.) Statistical method of estimating the value of the optimum in approximate solution of linear integer programming problems. Avtomat, i Vyčisl. Tehn. (Riga) 1979, no. 6, 37-43, 91 (Russian); translated as Automat. Control Comput. Sci. 13 (1979), no. 6, 33-38. (Authors' summary) 82j:90053
- Radavičius, M. On the problem of generalizing a theorem of P. Lévy. (Russian Lithuanian and English summaries) Litovsk. Mat. Sb. 20 (1980), no. 4, 129-131, 210. (Author's summary) 82b:60050 60G44 (60G10)
 - Probabilities of large and moderate deviations for maximum likelihood estimates. (Russian. English summary) Studies in mathematical statistics, V. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 108 (1981), 154–169, 196, 199. (Jana
- Jurečková) 82m:62066 62F10 (60F10, 62F12)

 Radčenko, O. M. The relation between the mean length of the level line of a homogeneous random field and the mean number of its intersections by an arbitrary line. (Ukrainian. English and Russian summaries) Visnik Kiïv. Unïv. Ser. Mat. Meh. No. 21 (1979), 134-138, 167. (Ju. S. Mišura) 82m:60061 60G60 (60G10, 60G17)
- Radecke, W. Some mean value relations on stationary random mosaics in the space. Math. Nachr. 97 (1980), 203-210. (Marc Moore) 82e:60020 60D05 (52A22, 60G10)
- Rademacher, Hans See Grosswald, Emil, 82g:01053 Rademaker, Fred (with Antle, Charles E.) Amendments and corrections: "An upper confidence limit on the maximum of m future observations from a type I extreme value distribution" [Biometrika 59 (1972), 475-477; MR 49 #4143]. Biometrika 68 (1981), no. 3, 738. (Editors) 82m:62080 62F25
- Rader, Trout Factor price equalization with more industries than factors. General equilibrium, growth, and trade, pp. 347-354, Academic Press, New York, 1979. (From the
- introduction) 824:90025 90A12
 Radev, S. (with Rakadjiev, R.; Gospodinov, P.; Penchev, I.) Numerical method for heat and mass transfer problems for a laminar jet in immiscible liquid-liquid systems. Numerical methods in thermal problems (Proc. First Internat. Conf., Univ. College, Swansea, 1979), pp. 893–902, Pineridge, Swansea, 1979. (See 82g:80001) 76D25 (80A20)
- deva, R. (with Denkova, V.; Atanasov, Atanas Ivanov) Operational calculus on the quasispectra of operator functions. Generalized functions and operational calculus (Proc. Conf., Varna, 1975), pp. 61-63, Bulgar, Acad. Sci., Sofia, 1979. (From the text) 47A10 (34K30, 47A60)
- dhakrishna, A. (with Bhandari, M. C.) On ordered Jordan algebras. Publ. Math
- Debrecen 27 (1980), no. 3-4, 279-281. (R. Iordănescu) 82::17027 17C99 (06F25)
 thakrishna, L. (with Katkar, L. N.; Date, T. H.) Jaumann transport in relativistic continuum mechanics. Gen. Relativity Gravitation 13 (1981), no. 10, 939-946. (Authors' summary) 82m:83028 83C55 (73B99, 73F99)
- dhakrishnan, R. (with Kshirsagar, A. M.) Influence functions for certain parameters in ultivariate analysis. Comm. Statist. A-Theory Methods 10 (1981), no. 6, 515-529. (Yasuko Chikuse) 82m:62129 62H20
- Radić, Mirko (with Alajbegović, Jusuf; Kulenović, Mustafa; Miller, Harry I.) On a result of Carathéodory. (Serbo-Croatian summary) Akad. Nauka Umjet. Bosne Hercegov. Rad. Odjelj. Prirod. Mat. Nauka No. 19 (1980), 91-94. (B. Rodríguez-Salinas) 82a:28001 28A12 (26A30)
- Radicati di Brozolo, Luigi Einstein and the role of symmetry in modern physics. Relativity. quanta, and cosmology in the development of the scientific thought of Albert Einstein, Vol. I, II, pp. 523-535, Johnson, New York, 1979. (See 82bc83002) 83Exx Radil-Welss, T. (with Lânský, P.; Hrubant, K.; Indra, M.) A note to the selective
- interaction models of single neuron firing trains. Point processes and queuing problems (Colloq., Keszthely, 1978), pp. 243-256, Colloq. Math. Soc. János Bolyai, 24, North-Holland, Amsterdam, 1981. (G. R. Grimmett) 82j:60181 60K30 din, Charles (with Gardner, Clifford S.) The infinite-volume ground state of the
- Lennard-Jones potential. J. Statist. Phys. 20 (1979), no. 6, 719-724. (Authors' sum 82A60 (31C15)
- 82h:82062 82A60 (31C15)
 Radjavi, Heydar Proof of Ballantine's conjecture on simplic cosquares. Linear an near Algebra 9 (1980), no. 3, 193-194. (From the text) 82h:15011 (15A23)

- (with Choi, Man Duen; Laurie, Cecelia) On commutators and invariant subspaces. Linear and Multilinear Algebra 9 (1980/81), no. 4, 329-340. (John P. Daughtry)
- 82d:47010 47A15 (15A21)
 Radjuhin, V. T. Statistical significance of inferences based on values of mea quality of probabilistic forecasts. (Russian) Trudy Vsesojus. Naučno-Issled. Inst. Gidrometeorolog. Informac. Mirovogo Centra Dannyh No. 58 Statist. Metody Anal. i Prognoza v Meteor (1979), 21-40, 114. (M. Mişicu) 82£86004 86A10 (62M20)
- Radjuškin, A. V. (with Efremov, A. V.) Field-theoretic approach to high momentum transfer processes. I. Deep inelastic scattering. (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 1, 17–33. (Authors' summary) 824:81138 81F20 (81C30)
 Radner, Roy Collusive behavior in noncooperative epsilon-equilibria of oligopolies with long but finite lives. Noncooperative approaches to the theory of perfect competition. J.
 Economy Theory 27 (1980) no. 2 126, 154 (58.28.28.00.033). (2014) (2015) (2015)
- m. Theory 22 (1980), no. 2, 136-154. (See 82e:90023) Monitoring cooperative agreements in a repeated principal-agent relationship Econometrica 49 (1981), no. 5, 1127–1148. (Author's summary) \$2g:90082
- (90D12, 90D45) Radnev, Petko (with Baljučev, Paskal) Polygons over distributive lattices. (Bulgarian. Russian and English summaries) Ploediv. Univ. Naučn. Trud. 15 (1977), no. 1, 37–48 (1979). (Authors' summary) 82h:06016 06D99
- (with Baljučev, Paskal) Abian's order in p-rings. (Bulgarian. Russian and English summaries) Ploediv. Univ. Naučn. Trud. 16 (1978), no. 1, 187-200 (1980). (Authors' summary) 82f:06028 06F25
 - Loops which admit only one linear order. (Bulgarian. Russian and English summaries) Plovdiv. Univ. Naučn. Trud. 16 (1978), no. 1, 259-272 (1980). (Author's
- summary) 82f:20102 20N05 (06F99) Projective objects in a category of p-rings. (Russian) Serdica 6 (1980), no. 2,
- 182-184. (Petr Němec) 82j:16009 16A12 (16A90) hotzle, (retrivemenc) agriculty to the comparing theories and selecting questions. Popper's alternative to foundationalism and scepticism. Philosophy of science:
- mporary issues. Rev. Internat. Philos. 34 (1980), no. 1-2, 179-228. (See 82e:00034) 00A25
- Radó, F. Affine Barbilian structures. J. Geom. 14 (1980), no. 1, 75-102. (G. J. Schellekens) 82e:51015 51C05
- On the characterization of plane affine isometries. Resultate Math. 3 (1980), no. 1, 70-73. (Olga M. Košeleva) 82g:51009 51B20 (53C50)
- p, Richard Selective families of sets. Proc. Roy. Soc. London Ser. A 372 (1980), no. 1750, 307-315. (E. C. Milner) 82g:04005 04A20
 Theorems on intervals of ordered sets. Discrete Math. 35 (1981), 199-201. (Curtis
- Greene) 82i:05037 05C15 (05C99, 06A05) Radochová, Drahoslava (with Tryhuk, Václav) Die asymptotischen Formeln für die
- Lösungen der kanonischen Differentialgleichung 3. Ordnung. Arch. Math. (Brno) 16 (1980), no. 1, 51-58. (E. Meister) 824:34059 34D05 (34E05) ňová-Radochová, Věra See Holaňová-Radochová, Věra
- Rådoi, Ion On the number of antisymmetric graphs having the same kernel. (Romanian. French summary) Stud. Cerc. Mat. 31 (1979), no. 1, 105-112. (S. Marcus) 82f:05055 05C30 (05C20)
- dosavljević, Mirjana Quasibarrelled and bornological vector groups. Mat. Vesnik 2(15)(30) (1978), no. 4, 403-408. (Theodore S. Bolis) 82f:46002a 46A07 (46A09) Correction of some printing mistakes in the paper: "Quasibarrelled and bornological vector groups". Mat. Vesnik 3(16)(31) (1979), no. 4, 529. (Editors) 82f:46002b
- Joux, Christian Calcul effectif de certains déterminants de Hankel. Bull. Soc. Math. Belg. Sér. B 31 (1979), no. 1, 49-55. (Yvette Amice) 82J:05016 05A15 (10A40) Quelques propriétés arithmétiques des nombres d'Apéry. (English summary) Acad. Sci. Paris Sér. A-B 291 (1980), no. 10, A567-A569. (Author's summary) 82g: 10031 10A40 (10D05)
- Radovici, Paul Sur la densité naturelle des nominateurs des réduites des fractions continues régulières. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 2,
- reguieres. Bull. Main. Sci. Sci. Main. N. S. Rollmanie (N.S.) 24(12) (1980), No. 2, 195-197. (B. Volkmann) 82:16009 10A32 lu, Alexandru Gh. ★Teoria toposurilor. Vol. I. (Romanian) [Theory of topoi. Vol. I] With an English summary. Editura Academiei Republicii Socialiste România, Bucharest, 1981. 316 pp. (N. Popescu) 82;18001 18-02 (03G30, 14-02, 14F20) (with Radu, Gheorghe Gh.) Existential and universal quantifiers in an elementary
- topos. An. Ştiinţ. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 27 (1981), no. 1, 19-30. (Michel Coste) 82k:18003 18B20 (03G30)
- lu, Gheorghe Gh. (with Stefanescu, Mirela; Tofan, I.) On algebraic theories. An. Stiing. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 27 (1981), no. 1, 7-11. (Jiří Adámek) 82i:18011 18C10 (08A99)
- (with Radu, Alexandru Gh.) Existential and universal quantifiers in an elementary topos. An. Științ. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.) 27 (1981), no. 1, 19-30.
- (Michel Coste) 82k:18003 18B20 (03G30)

 Radu, N. Sur la structure des algèbres locales noethériennes formellement lisses. An. Univ. Bucureşti Mat. 29 (1980), 81-84. (Hamet Seydi) 82g:13007 13B30 (13J10)
- Radu, Viorel (with Bocşan, Gh.; Constantin, Gh.) On existence and uniquen solution of random differential equations in Banach spaces. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 3, 381–384. (H. Salehi) 82m:60064 60H10
- (with Constantin, Gh.) On probabilistic 8-continuity and proximate fixed points for multivalued functions in PM-spaces. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 3, 393-397. (R. E. Smithson) 82k:54067 54H25 (08A02, 54C60, 60H25)
- On an approximation method for random operator equations. Rev. Rosmaine Math.
 Pures Appl. 26 (1981), no. 3, 469-473. (A. T. Bharucha-Reid) 82j:60115 60H25 (47A50)
- seu, Florin On the frontier operator. Bull. Math. Soc. Sci. Math. R. S. Rou (N.S.) 24(72) (1980), no. 4, 401–406. (Yuh-Ching Chen) 82d:54002 54A05 Derivatives and analytic functions. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 1, 141–142. (Richard J. O'Malley) 82g:26011 26A24 (26E05)
- Richilesca, Marius (with Ridulescu, Sorin) Approximation, existence and uniqueness of solutions to ordinary differential equations in Banach spaces. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 2, 199-204. (Eugenio Sinestrari)

34G20 (34A45)

ative operator of C(X). Bull. Math. Soc. Sci. Math. R. S. Roun mie (N.S.) 24(72) (1980), no. 3, 303-305. (Mieczyslaw Altman) 47B38 (54C40)

Indescu, Sorin (with Rădulescu, Marius) Approximation, existence and uniqueness of solutions to ordinary differential equations in Banach spaces. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 2, 199–204. (Eugenio Sinestrari) 34G20 (34A45)

Critères de dimension finie pour les sous-espaces linéaires de fonctions continues sur un espace compact. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 3, 307-308. (J. B. Prolla) 82h:46044 46E15

no. 3, 301-308, (J. B. Frona) **3.104-0044** 46EL5
with Saltenis, Vydūnas) Investigation of an algorithm for the separation of essential variables. (Russian. Lithuanian and English summaries) *Teor. Optimal. Relenii—Trady Sem. Processy Optimal. Upravlenija VI Sekcija No.* 6 (1980), 41-47, 153. (A. I. Schiop) **82c:65040** 65K10

rogin, Ju. B. Flow in the neighborhood of a sharp stagnation point. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 151, 20 pp. (Author's

ary) 82i:76006

(with Babenko, K. I.; Ivanova, V. N.; Kosorukov, A. L.) Supersonic flow around smooth bodies with regard for chemical reactions that are not in equilibrium. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 54, 32 pp. (G. W. Hedstrom) 65N05 (76K05, 80A32)

Rajisbow, B. A. (with Verdiev, İ. A.) The maximally degenerate representations of the de Sitter group SO(4, I) and the Wigner coefficients. (Russian. English and Azerbaijani summaries) Izv. Akad. Nauk Azerbaijani SSR Ser. Fiz.-Tehn. Mat. Nauk 1979, no. 1, 19-26. (From the text) Szm.81033 81C40 (22E70)
Radizabov, E. L. A class of pseudodifferential operators. (Russian. Tajiki summary) Dokl. Akad. Nauk Tadžik. SSR 23 (1980), no. 8, 428-430. (Ju. V. Egorov) 82d:35108 35S05

(47G05)

diabov, N. Limit equivalence of the large and small canonical Gibbs states for quantum lattice models (the small density case). (Russian) Trudy Moskov. Mat. Obšč. 42 (1981), 105-141. (Gheorghe Nenciu) 821:82015 82A15 (60F99, 81C35)

diabor, N. R. (with Rasulov, A.) Representation of a manifold of solutions of a class of a system of higher-order differential equations with a singular line. (Russian) Differential and integral equations, No. 3, pp. 72-76, Tadžik. Gos. Univ., Dushanbe, 1980. (See 82m:34002)

(with Boltaev, K. S.) The solution of boundary value problems for the Euler-Poisson-Darboux equation in the case of a strip. (Russian) Differential and integral equations, No. 3, pp. 106-119, Tadžik. Gos. Univ., Dushanbe, 1980. (See 82m:34002) 35Q05 (35C15)

See also Differential and integral equations, 82m:34002

Radzin's, G. A. On equations for determining the induction of a stationary plane-parallel magnetic field. (Russian) Late. Mat. Ežegodnik No. 25 (1981), 65-70, 247. (Author's nary) 82m:78007 78A25 (35Q20)

burn, lain (with Phillips, John) Automorphisms of C*-algebras and second Čech cohomology. Indiana Univ. Math. J. 29 (1980), no. 6, 799–822. (Christopher Lance) 82b:46089 46M20 (18F25, 46L40, 58G12)

(with Crocker, David) Toeplitz operators on certain weakly pseudoconvex domains. J. Austral. Math. Soc. Ser. A 31 (1981), no. 1, 1-14. (Nicholas P. Jewell) 82j:47043

On the Picard group of a continuous trace C*-algebra. Trans. Amer. Math. Soc. 263 (1981), no. 1, 183-205. (Jun Tomiyama) 82h:46690 46M20 (18F25, 46L05, 58G12)

s See De Raedt, Ha

side, David E. (with Morin, Richard L.) A reappraisal of distance-weighted k-nearest neighbor classification for pattern recognition with missing data. IEEE Trans. Systems Man Cybernet. 11 (1981), no. 3, 241-243. (Authors' summary) 821:68094 68G10

resklii, V. Ja. (with Djakin, V. V.) The method of penalty functions in eigenvalue problems. (Russian) 2. Vyëisl. Mat. i Mat. Fiz. 21 (1981), no. 3, 779–782, 814. (Erich Miersemann) 822:49056 49G05 (65J10)

Relian, S. G. A class of entire functions of finite growth. (Russian. Armenian summary Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 2, 65-71. (L. I. Ronkin) 82e:30042 30D15

Rafaj, Pavel See Source material for the history of natural science and tech

Rafsky, Lawrence C. (with Friedman, Jerome H.) Graphics for the multivariate two-sample problem. With comments by William F. Eddy, Jane F. Gentleman, Daryl Pregibon and C. L. Mallows. With a reply by the authors. J. Amer. Statist. Assoc. 76 (1981), no. 374, 277-295. (C. Havashi) 82h:62092 62H30 (62E30)

Ragab, S. A. (with Nayfeh, Ali Hasan) Görtler instability. Phys. Fluids 24 (1981), no. 8,

1405-1417. (Authors' summary) 82j:76039 76E05 (76D10)
Raggert, G. F. On the iterative solution of the limiting susceptible population in a model of epidemiology. Appl. Math. Modelling 4 (1980), no. 6, 479-482. (H. W. Hethcote) 82c-92025 92A15 (34A45)

egio, Andrea (with Aymerich, Guiseppe; Taton, René; Gratton, Livio) Opening session: welcoming addresses. Newton and the Enlightenment (Proc. Internat. Sympos., Cagliari, 1977). Vistas Astronom. 22 (1978), no. 4, 395–404 (1979). (Editors) 82e:00020 00A25

Raggio, Andrés R. A proof-theoretic analysis of da Costa's C. Mathematical logic (Proc. First Brazilian Conf., State Univ. Campinas, Campinas, 1977), pp. 233–240, Lecture Notes in Pure and Appl. Math., 39, Dekker, New York, 1978. (Herman R. Jervell) 82a:03055

wan, Sekhar (with Mathews, P. M.; Seetharaman, M.; Bhargava, V. T. A.) A simp accurate formula for the energy levels of oscillators with a quartic potential. Phys. Lett. A 83 (1981), no. 3, 118-120. (Authors' summary) 82k81632 81C12

acharya (with Rangachari, S. S.) Poisson formulae of Hecke type Geometry and analysis, pp. 129-149, Indian Acad. Sci., Bangalore, 1980. (T. Ono) 82m:12011 12A85 (10C15)

(with Dani, S. G.) Orbits of Euclidean frames under discrete linear groups. Israel J. Math. 36 (1980), no. 3-4, 300-320. (James W. England) 82j:10040 10C30 (22E40, 58F11)

Estimates of coefficients of modular forms and generalized modular relati

Tata Inst. Fund. Res. Studies in Math., 10, Tata Inst. Fundamental Res., Bo (Editors) 82;:10048 10D12 (10C15)

thavan, T. G. Quasi-ordered bitopological spaces. II. Kyungpook Math. J. 20 (1980), no. 2, 145-158. (From the text) 82i:54053 54E55 (54F05)

(with Reilly, I. L.) Uniformization of quasi-uniform spaces. Bull. A Soc. 23 (1981), no. 3, 413-422. (P. Fletcher) 82h:54047 54E55 (54E15)

Raghavarao, D. (with Blaisdell, E. A., Jr.) Partially balanced change-over designs by -associate class PBIB designs. J. Roy. Statist. Soc. Ser. B 42 (1980), no. 3, 334-338.
Bhagwandas) 82e:62113 62K10 (Bhagwandas) 82e:62113

conegwanuas) 62e56115 O.E.R.IU chavendra, V. A remark on an integral inequality. Bull. Austral. Math. Soc. 23 (1981), no. 2, 195-197. (Paul R. Beesack) 82g:26023 26D10 (34A10) chunathan, M. S. Principal bundles on affine space. C. P. Ramanujam—a tribute, pp. 187-206, Tata Inst. Fund. Res. Studies in Math., 8, Springer, Berlin, 1978. (Manfred Knebusch) 82g:14021 14F05 (14L30, 20G05)

Knebusch) 82g:14021 14FUS (14L.50, 20505) jhunathan, T. E. (with Karade, T. M.) On a generalized queueing model. J. Indian Soc. Statist. Oper. Res. 1 (1980), no. 1-4, 13-14. 82e:60153 60K25

wanshi, S. S. (with Sharma, L. K.) Three-body problem for general even power potential with applications. Proc. Indian Nat. Sci. Acad. Part A 44 (1978), no. 3, 177-185. (Authors' summary) 82d:81128 81F10 (81H99)

Ragimov, M. B. Overdetermined systems of partial differential equations in a Banach

algebra. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1979, no. 5, 110-116. (From the introduction) 82f:35140 35N99 (35R99, 39B05)

Spectral theory of mappings of topological space into the algebra of endomorphisms of a Banach space. I. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1979, no. 6, 99-105. (P. A. Kučment) 82e:47005 47A10

On the spectral theory of an infinite number of closed commuting linear operators. (Russian, Azerbaijani and English summaries) Akad, Nauk Azerbaidžan, SSR Dokl. 36 (1980), no. 2, 13-17. (Boris Pavlov) 82f:47009 47A10 (22A10)

(1960), no. 2, 13-17. (Boins Pavior) 62/34/10 (22/10)

(with Guseïnov, Z. I.) Bounded, periodic and almost periodic solutions of quasilinear differential equations in a Banach space. (Russian. Azerbaijani and English summaries)

Akad. Nauk Azerbaidtan. SSR Dokl. 36 (1980), no. 8, 7-9. (I. Kubiaczyk) 82d:34090 34G20

Ragimov, M. R. Some questions of functional and overdetermined systems of partial differential equations. I. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1977, no. 4, 67-75. (Wolfgang Tutschke) 824:35072 35N10 (39B60)
Ragionieri, Rodolfo (with Ricci, Riccardo) Hamiltonian formalism in the calculus of

variations. (Italian summary) Boll. Un. Mat. Ital. B (5) 18 (1981), no. 1, 119-130. (Demeter Krupka) 82g:58025 58E15 (49F99, 58F05)

edda, F. (with Grimaldi Piro, A.) On a Cauchy problem for the bicaloric operator with initial data in subspaces of BMO. (Italian. English summary) Rend. Sem. Fac. Sci. Univ. Cagliari 49 (1979), no. 1-2, 105–111. (F. Haimo) 82m:35066 35K05 (31A30)

Ragni, Marcello Approximating measures in variation, in length, in area and conditions for absolute continuity. (Italian) Atti Sem. Mat. Fis. Univ. Modena 27 (1978), no. 1, 1-13 (1979). (E. Baiada (Zbl 418:26007)) 82m:49087 49F25
 Ragnisco, O. (with Bruschi, Massimo; Manakov, S. V.; Levi, D.) The nonabelian Toda

lattice-discrete analogue of the matrix Schrödinger spectral problem. J. Math. Phys. 21 (1980), no. 12, 2749-2753. (Francesco Calogero) 82b:58041 58F07 (35Q20)

(with Levi, D.; Bruschi, Massimo) Extension of the Zakharov-Shabat generalized inverse method to solve differential-difference and difference-difference equations (Italian and Russian summaries) Nuovo Cimento A (11) 58 (1980), no. 1, 56-66. (B. A. Kupershmidt) 82b:58042 58F07 (35Q20, 81C05)

(with Bruschi, Massimo) Nonlinear differential-difference equations, associated Bäcklund transformations and Lax technique. J. Phys. A 14 (1981), no. 5, 1075–1081. (Yvette Kosmann-Schwarzbach) 82j:58060 58F07 (35Q20, 35R10)

Ragsdell, K. M. (with Root, R. R.) On the relationship between a continuous update method of multipliers and the generalized reduced gradient method. Internat. J. Numer. Methods Engrg. 15 (1980), no. 12, 1735-1745. (Authors' summary) 82d:90112

Ragulin, V. V. On a flow problem for equations of an ideal fluid. (Russian) Dinamik Splošn. Sredy No. 43 Mat. Problemy Meh. (1979), 79-90, 185. (S. S. Titov) 82;76026

Ragusa, Alfio (with Massaza, Carla) On some conditions of regularity, in terms of existen of a good basis of syzygies. J. Algebra 70 (1981), no. 2, 493-516. (Mieo Nishi) 82k:13023 13H99 (13D25)

Raguso, Grazia (with Abatangelo, L. Maria) A characterization of the closed arcs contained in a conic of a Pascal plane of characteristic two. (Italian. English summary) Rend. Mat. (7) 1 (1981), no. 1, 39-45. (W. R. Heise) 82h:51016 51E20 (51A30)

ta, Asit Baran (with Srivastava, Shashi Mohan) Spaces for which Dini's theorem holds. (Russian summary) Bull. Acad. Polon. Sci. Ser. Sci. Math. 29 (1981), no. 5-6, 275-278. (R. M. Stephenson, Jr.) 82m:54009 54C40 (54C30)

el, Hamid Sur la série de Poincaré de certains anneaux locaux noethériens. (English summary) Bull. Sci. Math. (2) 104 (1980), no. 3, 305-322. (Şerban Bărcănescu) 82e-13020 13H10 (13D03)

Rahe, Maurice (with Swanson, Laif) Loose block independence. Israel J. Math. 38 (1981), no. 1-2, 100-106. (Nathaniel Friedman) 824:28015 28D05

(with Kieffer, John C.) Markov channels are asymptotically mean stationary. SIAM J. Math. Anal. 12 (1981), no. 3, 293-305. (Shunsuke Ihara) 82i:94013 94A24 (28D05,

Rahimberdiev, M. I. (with Sultangazin, U. M.) Stability of the equilibrium state of a discrete Boltzmann equation. (Russian. Kazakh summary) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mai. 1981, no. 1, 42-46, 86. (Authors' summary) 82d:82050

mian, Mohammad (with Nguyen Quoc Son) Mouvement permanent d'une fissure en milieu élastoplastique. (English summary) J. Méc. Appl. 5 (1981), no. 1, 95-120. ors' summary) 82e:73076 73M05

mov, G. M. On the estimate of the correlation function of a homogeneous and isotropic random field on the sphere. I. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 24 (1981), 125-129, 155. (From the text) 82k:60118 60G60 Rahimov, I. Supercritical branching processes with immigration of decreasing intensity. (Russian) Limit theorems, random processes and their applications (Russian), pp. 171-175, 235, "Fan", Tashkent, 1979. (G. A. Skorobogatov) 82g:60111 60J80

The branching of random processes with increasing immigration. (Russian) Dokl. Akad. Nauk UzSSR 1981, no. 1, 3-5. (Harry I. Cohn) 82h:60161 60J80 (60F05)

imov, R. M. A singular integral and an integral of Cauchy type over a system of nonintersecting nonsmooth closed contours. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1979, no. 5, 39-47. (V. B. Dybin) 82d:30037 30E20

A remark on the Riemann boundary value problem in the case of intersecting contours. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1979, no. 6, 25-28. (Zbigniew Binderman) 82e:30058 30E25 (45E05)

Direct and inverse estimates for the derivative of the potential of a simple layer. (Russian. Tajiki summary) Dokl. Akad. Nauk Tadžik. SSR 24 (1981), no. 3, 155-159. (W. H. J. Fuchs) 82j:31003 31A20

uman, Matiur (with Debnath, Lokenath) A theory of nonlinear wave loading on offshore structures. Internat. J. Math. Math. Sci. 4 (1981), no. 3, 589-613. (From the summary) 76B15 (76B20)

(with Chakravarrty, I. C.) Hydrodynamic loading calculations for offshore structures. SIAM J. Appl. Math. 41 (1981), no. 3, 445-458. (From the introduction)

(with Chehil, Dalip S.) Salt concentration in tidal estuaries. Tensor (N.S.) 35 (1981), no. 1, 86-90. (From the introduction) 82d:86003 86A05 (76R99) (with Chehil, Dalip S.) Effect of inertia and shear forces on the longitudinal

ribration of tapered bars. Tensor (N.S.) 35 (1981), no. 3, 287-292. (Authors' summary) 82m:73051 73K12

- Rahman, Mizan A product formula and a nonnegative Poisson kernel for Racah-Wilson Canad. J. Math. 32 (1980), no. 6, 1501-1517. (G. Gasper) 82e:33012 33A65 (42A82)
 - A stochastic matrix and bilinear sums for Racah-Wilson polynomials. SIAM J. Math. Anal. 12 (1981), no. 2, 145-160. (R. C. Varma) 82e:33007 33A35 (81C40) Families of biorthogonal rational functions in a discrete variable. SIAM J. Math.

Anal. 12 (1981), no. 3, 355-367. (G. Gasper) 82j:33020 33A65 (33A35) 128 (1981), no. 4, 222. (Author's summary) 82f:94013 94825 (05807)

nan, Q. I. Some questions of uniqueness concerning interpolation by entire functions of exponential type. Aspects of contemporary complex analysis (Proc. NATO Adv. Study Inst., Univ. Durham, Durham, 1979), pp. 475-483, Academic Press, London, 1980. (P. Lappan) 82g:30069 30E10 (41A05, 65D05)

(with Gervais, Robert; Schmeisser, G.) Approximation by (0,2)-interpolating entire functions of exponential type. J. Math. Anal. Appl. 82 (1981), no. 1, 184-199. (Helmut 30E05 (30D15, 41A05)

manov, E. A. On V. A. Steklov's problem in the theory of orthogonal polynomials. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 4, 802-806. (Paul Nevai) 82h:42029a

Convergence of Padé approximations in classes of holomorphic functions. (Russian) Mat. Sb. (N.S.) 112(154) (1980), no. 2(6), 162-169. (D. L. Berman) 82f:30037

Estimates of the growth of orthogonal polynomials whose weight is bounded away from zero. (Russian) Mat. Sb. (N.S.) 114(156) (1981), no. 2, 269-298, 335. (Paul Nevai) 82h:42029b 42C05

- Rahmatov, A. S. (with Abdullaev, F. H.) Accounting for the finiteness of the radius of correlation of fluctuations in the problem of propagation of nonlinear waves in randomly inhomogeneous media. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 6, 31-34. (Andrzej
- Zardecki) 82c:78013 78A40 (82A42)
 metžanov, S. R. (with Rabinovič, V. L.) Compatibility and independence of properties of binary relations. (Russian) Qualitative theory of differential equations (Russian), pp. 74-80, Kazah. Gos. Ped. Inst., Alma-Ata, 1979. (M. S. Popadić) 82k:04002 04A05
- navard, M. H. (with Bhat, Kabekode V. S.) Initial vertex partitioning and testing isomorphism of graphs and digraphs. Internat. J. Circuit Theory Appl. 9 (1981), no. 1, 67-75. (Marianne Gardner) 82h:68045 68C05 (68E10, 92A40)

Rahula, M. O. Lie differentiation on manifolds. (Russian) Ukrain. Geo.

- 120-134, iii. (I. Kolât) 82k:53094 53C99 (53C30)

 Rai, Arisudan (with Sharma, Rishi Ram; Pandey, B. D.) On the global behaviour of sonic waves of arbitrary shape in gas flows with vibrational relaxation. Acad. Roy. Belg. Bull. 76N15 (35L67) Cl. Sci. (5) 66 (1980), no. 3, 256-264. (Tai Ping Liu) 82d:76066
- Rai, L. N. (with Singh, Triloki) on stationary axially symmetric Einstein-Maxwell scalar and Brans-Dicke-Maxwell fields. J. Math. Phys. 22 (1981), no. 1, 136–141. (Authors' summary) 82a:83030 83C50 (83D05)
- Rai, P. N. (with Singh, Surya Narain) Certain properties of a set of generalized polynomials. Bull. Calcutta Math. Soc. 71 (1979), no. 1, 55-59. (C. M. Joshi) 82i:33020
- Rai, R. P. (with Ojha, S. N.) On growth and decay of weak discontinuities in presence of thermal radiation. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 5, 771–775. (Authors' summary) 82c:80009 80A20 ammary) 82c:80009
- Rai, S. N. Spectral resolution of hyponormal operator with the spectrum on a curve. J. Math. Sci. 9 (1974), 69-70 (1976). (Author's summary) 82e:47036 47B20 (47B15) Hyponormal derivation on B(H). Indian J. Math. 20 (1978), no. 3, 221-224. (Bernard B. Morrel) 82e:47046 47B47 (47B20)
- nan, N. S. (with Varlaky, P.) Subjective variance functions from a posteriori information and their application in the identification problem for nonlinear systems. I. Automat. i Telemeh. 1979, no. 9, 43-51 (Russian. English summary); translated as Automat. Remote Control 40 (1979), no. 9, part 1, 1292-1299 (1980). (Authors' summary) 831-93086. 93E12 (92A25, 93C10)

(with Varlaky, P.) Subjective variance functions from a posteriori information and their application in the identification problem for nonlinear systems. II. Automat. i Telemeh. 1979, no. 10, 32-41 (Russian. English summary); translated as Automat. Remote Control 40 (1979), no. 10, part 1, 1427-1434 (1980). (Authors' summary) 82i:930866 93E12 (92A25, 93C10)

Dispersion identification of nonlinear systems (survey). Systems analysis and

- ulation, 1980 (Proc. Internat. Sympos., Berlin, 1980), pp. 19-35, Math. Research, 5, udemie-Verlag, Berlin, 1980. (See 81):93009) 93E12 Akademie-Verlag, Berlin, 1980. (See 81j:93009)
- Raicinov, I. (with B'rakov, D. G.) Solvability of an integro-differential equation in some classes of entire functions. (Bulgarian. Russian and English summaries) Godišnik Viai maries) Godišnik Visš. Učebn. Zaved. Priložna Mat. 14 (1978), no. 2, 183-190 (1979). (D. Bainov) 82h:45016 45J05 (30D20)
- ik, A. E. *Очерки по истории математики в древности. (Russian) [Outlines of a history of mathematics in antiquity] Second edition, corrected and augmented. Mordooskoe Knižnoe Izdatel'stvo, Saransk, 1977. 370 pp. (loose errata; loose table). (RŽMat 1978:3 A18 K) 82a:01003 01A15

ov, D. A. See Pólya, G.; et al., 82c:26001

maxim-Ràileanu, Liliana See Maxim-Ràileanu, Liliana Railton, Peter Probability, explanation, and information. Synthese 48 (1981), no. 2, 233-256. (Dennis J. Packard) 82m:03028 03B48 (62P99, 94A15)

ndo, Mario On the global ring of Nash functions. (Italian summ Ital. A (5) 18 (1981), no. 2, 317-321. (J. Bochnak) 82f:32013 32B05 (13C11, 13E05) na, B. K. Generalized Taylor's series and summation. J. Math. Sci. 12(13) (1977/78), 80-85 (1981). (Author's summary) 82m:40002 40A05 (30B10, 33A30)

Raina, Neelam The multiple access coding theorem for partial received informat Combin. Inform. System Sci. 5 (1980), no. 2, 73-79. (Andrea Sgarro) 82h:94010

Raina, R. K. (with Srivastava, Hari M.) New generating functions for certain polynomials of the property of the state of t systems associated with the H-functions. Hokkaido Math. J. 10 (1981), no. 1, 34-45. (C. L. Koul) 82h:33012 33A35 (42C15)

A variant of the method of discrete velocities in the aerodynamics of rarefied gases. (Russian) Aerodynamics of rarefied gases, No. 10 (Russian), pp. 40-49, 230, Leningrad. Univ., Leningrad, 1980. (Author's summary) 824:76075 76P05 (65P05)

Rainville, Earl David (with Bedient, Phillip Edward) *Elementary differential equations Sixth edition. Macmillan, Inc., New York; Collier-Macmillan Publishers, London, 1981. xiv+529 pp. ISBN 0-02-397770-1 (Editors) 82c:34001 34-01 (with Bedient, Phillip Edward) *A short course in differential equations. Sixth

edition. Macmillan, Inc., New York; Collier-Macmillan Publishers, London, 1981. xii + 335 pp. ISBN 0-02-397760-4 (Editors) 82c:34002 34-01

Raisonnier, Jean Composantes connexes et quasi-composantes connexes itérées dans les

espaces polonais. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 2, 167-169. (Author's summary) 82j:54025 54D05 (04A15, 54H05)
Raith, Karlheinz (with Schönauer, Willi; Glotz, Gerhard) The principle of the difference of

difference quotients as a key to the self-adaptive solution of nonlinear partial differential equations. Comput. Methods Appl. Mech. Engrg. 28 (1981), no. 3, 327-359. (Authors' summary) 82k:65041 65L05 (65N15)

Raith, M. Existence and uniqueness of inclusion isotonic centered ball extensions. (German

nary) Computing 24 (1980), no. 2-3, 195-202. (Author's summary) 821:65053 65G10

Raitums, U. (with Bärzdigš, J.) A. P. Liepa. (Russian) Lato. Mat. Ežegodnik No. 24 (1980), 250–252. (Editors) 82e:01082 01A70

Raitzin, Carlos Exact formulae for $\Pi(x)$ and the number of Goldbach's decompositions of an even integer. Bull. Number Theory Related Topics 3 (1978), no. 1, 15-20, 14. (Don Redmond) 82d:10059 10H15

The exact count of the prime numbers that do not exceed a given upp (Spanish) Rev. Ingr. 1 (1979), no. 0, 37-43. (E. Grosswald) 82e:10074 (10A20)

Memoir on Dirichlet series and the analytic representation of arithmetic function (Spanish) Rev. Ingr. 1 (1979), no. 1, 5-15. (E. Grosswald) 82e:10075 10A20 (10J20) Raj, Rishi On the equation of particle motion in a generalized and relative system.

(N.S.) 34 (1980), no. 3, 360-366. (F. Feuillebois) 82::76093 76T05 (35L99, 76U05) pal, Krishnamurthy (with Lakshmanan, M.) A singular perturbation theory for the FitzHugh-Nagumo nerve conduction equation. Phys. Lett. A 82 (1981), no. 5, 266-270. (Authors' summary) 82f:35096 35K55 (35B25, 92A09)

Rajagopal, Kumbakons m R. Thermodynamics and stability of non-Newtonian fluids. Proceedings of the 16th Midwestern Mechanics Conference (Kansas State Univ., Manhattan, Kan., 1979), pp. 149–154, Develop. in Mech., 10, Kansas St. Univ., Manhattan, Kan., 1979. (R. R. Huilgol) 82a:76007 76A10 (35B35, 76A05)
On the stability of third-grade fluids. (Polish and Russian summaries) Arch. Mech. (Arch. Mech. Stos.) 32 (1980), no. 6, 867-875 (1981). (Author's summary) 82j:76001

palan, M. (with Kannan, V.) Constructions and applications of rigid spaces. I. Adv. in Math. 29 (1978), no. 1, 89-130. (Authors' summary) 82e:54045a 54B30 (with Kannan, V.) Constructions and applications of rigid spaces. II.

54H10 (54B99) Math. 100 (1978), no. 6, 1139-1172. (D. J. Lutzer) 82e:54045b (with Kannan, V.) Constructions and applications of rigid spaces. III. Canad. J. Math. 30 (1978), no. 5, 926-932. (From the text) 82e:54045c 54H10 (04A30, 06E15)

Main. 30 (1975), no. 3, 926–932. (From the text) 82e-3908cs 48H10 (04A30, 06E15) (with Soundararajan, T.; Jakel, D.) On perfect images of ordinals. Topology Appl. 11 (1980), no. 3, 305–318. (Authors' summary) 82i:54004 54A05 (54E35)

Rajagopalan, P. K. (with Naidu, D. S.) Singular perturbation method for a closed-loop optimal control problem. Proc. IEE-D 127 (1980), no. 1, 1–6. (Asen L. Dončev)

49D30 (34E05) (with Naidu, D. S.) Singular-perturbation analysis of a closed-loop fixed-endpoint optimal-control problem. Proc. IEE-D 127 (1980), no. 5, 194-203. (V. L. Bakke)

49D05 (34E15) (with Naidu, D. S.) Singular-perturbation method for discrete models of continuous systems in optimal control. Proc. IEE-D 128 (1981), no. 4, 142-148. (P. Sannuti)

Rajan, P. K. (with Reddy, C. H.; Swamy, M. N. S.; Reddy, C. P.) Simplified testing procedure for very strict Hurwitz polynomials-some applications. Fourteenth Asile Conference on Circuits, Systems and Computers (Facific Grove, Callf., 1980), pp. 124–127, IEEE, New York, 1981. (See 824:93001) 93D05

Rajaram, Navaratna S. (with Puri, Madan L.) Asymptotic normality and convergence rates of linear rank statistics under alternatives. Mathematical statistics, pp. 267-277, Banach Center Publ., 6, PWN, Warsaw, 1980. (Jana Jurečková) 82e:62070 62G10

Rajarshi, M. B. Simpler proofs of two threshold theorems for a general stochastic epidemic.

Combin. Inform. System Sci. 5 (1980), no. 2, 91-103. (Authors' summary) 82a:68153 68F05

on decomposability semigroups for certain probability measures. (Russian Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 7-8, 415-418 (1981). (Barthel W. Huff) 82i:60035 60E07 (60E10)

m, N. S. n, N. S. See Raibma

endra Prasad, V. n×2 flowshop sequencing problem with random processing time

Opsearch 18 (1981), no. 1, 1-14. (From the introduction) 82h:90067 90B35
hans, B. K. (with Mishra, S. K.) Diffraction of impulsive elastic waves by a fluid
cylinder. Proc. Indian Acad. Sci. Sect. A Math. Sci. 89 (1980), no. 3, 159-170. (Authors' ary) 82x:73016 73D25 (73J06)

Rajput, Balram S. (with Louie, Donald) Support and seminorm integrability theorems for r-semistable probability measures on LCTVS. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Blażejewko, 1979), pp. 179–195, Lecture Notes in Math., 828, Springer, Berlin, 1980. (A. Bozorgnia) 82i:60013 60B11

(with Chung, Dong M.) Equivalent Gaussian measure whose R-N derivative is the exponential of a diagonal form. J. Math. Anal. Appl. 81 (1981), no. 1, 219–233. (Constance Elson) 82;60069 60G30 (60B11, 60G15)

(Constance Elson) 82;60009 60G30 (60B11, 60G15)

Rajski, Czesław Variational principle for dissipative dynamic systems. I. Theoretical background. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Tech. 27 (1979), no. 10-11, 831–836 (1981). (Author's summary) 82a:70014a 70G99 (49H05, 70H30) Variational principle for dissipative dynamic systems. II. Examples of application. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Tech. 27 (1979), no. 10-11, 857–866 (1981). (Author's summary) 82k:70014b 70G99 (49H05, 78A25)

ski, Janusz (with Jajszczyk, Andrzej) The effect of choosing the switches for

rearrangements in switching networks. IEEE Trans. Comm. 28 (1980), no. 10, 1832–1834. (Authors' summary) 82a:94114 94C10
Raju, B. Syam Prasad (with Sastry, D. V. S.) Some nonisomorphic graphs. Indian J. Pure Appl. Math. 12 (1981), no. 2, 191–192. (J. Sedláček) 82a:485115 05C99

Raju, K. Venu (with Hanumanthachari, J.) A note on maximal and minimal prime ideals belonging to an ideal in semigroups. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1566-1571. (M. K. Sen) 821:20093 20M12

chari, J.) A note on generalized con

(with Hanumantancana1, 3.) A note on generatized commutative semigroups. Semigroup Forum 22 (1981), no. 4, 311–323. (G. Szász) 82g:20098 20M12 Rajwade, A. R. (with Parnami, J. C.; Agrawal, M. K.) On some trigonometric Diophantine equations of the type $\sqrt{n} = c_1 \cos \pi d_1 + \cdots + c_{\Lambda} \cos \pi d_{\Lambda}$. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 4, 423–432. (Ming-Chit Liu) 82j:10034 10B25 (10B35)

(with Parnami, J. C.; Agrawal, M. K.) A congruence relation between the coefficients of the Jacobi sum. *Indian J. Pure Appl. Math.* 12 (1981), no. 7, 804-806. (R.

10G05 (12C20) J. Evans) 82g:10054

Raka, Madhu (with Hans-Gill, R. J.) An inequality for indefinite ternary quadratic forms of type (2, 1). Indian J. Pure Appl. Math. 11 (1980), no. 8, 994-1006. (A. C. Woods)

The inhomogeneous minimum of quadratic forms of signature ±1. Math. Proc Cambridge Philos. Soc. 89 (1981), no. 2, 225-235. (T. H. Jackson) 82h:10045 10E20 (10C25)

Rakadjiev, R. (with Radev, S.; Gospodinov, P.; Penchev, I.) Numerical method for heat and mass transfer problems for a laminar jet in immiscible liquid-liquid systems.

Numerical methods in thermal problems (Proc. First Internat. Conf., Unio. College,
Swansea, 1979), pp. 893–902, Pineridge, Swansea, 1979. (See 82g:80001)

76D25 (80A20)

Rakesh, S. L. Integrals involving the H-function of two variables. Indian J. Math. 21 (1979), no. 1, 63-67. (Ram Kishore Saxena) 82g:33005 33A30

Kosnik, Jiří Some remarks to anisotropic Sobolev spaces. II. Beiträge Anal. No. 15 (1980), 127–140 (1981). (Philippe-A. Dionne) 82m:46034 46E35
 (with Kufner, Alois) Boundary value problems for nonlinear partial differential

equations in anisotropic Sobolev spaces. (Czech summary) With a loose Russian summary. Časopis Pēst. Mat. 106 (1981), no. 2, 170–185, 210. (Sadakazu Aizawa) 35G30 (35D05)

vec, Janez Mathematical structures. (Slovenian. English summary) Obzornik Mat. Fiz.

28 (1981), no. 1, 19-23. (Author's summary) 82x-09001 08-01

Raković, Branko D. (with Popović, M. V.) A predistortion technique for increasing the element tolerances in elliptic and general parameter filters. Internat. J. Electron. 50 (1981), no. 1, 27-36. (From the summary) 82b:94005 94A05

Rakowski, Z. M. A characterization of compactness. Acta Sci. Math. (Szeged) 43 (1981), no. 1-2, 107-108. (E. Halfar) 82g:54035 54D30

Raktoe, B. L. (with Pesotan, H.; Federer, Walter T.) On aliasing and generalized defining relationships of factorial arrangements. (French summary) Canad. J. Statist. 8 (1980), no. 1, 65-77. (U. B. Paik) 82a:62124 62K15

(with Joiner, J.; Federer, Walter T.) On sum composition of fractional factorial designs. Comm. Statist. A-Theory Methods 9 (1980), no. 18, 1875-1899. (Masahide Kuwada) 82c:62105 62K15

(with Pesotan, H.) Further results on invariance and randomization in fractional replication. Ann. Statist. 9 (1981), no. 2, 418-423. (U. B. Paik) 82g:62111 62K15

Rakviašvili, G. G. Cohomology, extensions and abstract kernels of Lie algebras. (Russian. Avinsvin, U. U. Conomology, extensions and abstract kernels of Lie algebras. (Russian. Georgian and English summaries) Soobië. Akad. Nauk Gruzin. SSR 93 (1979), no. 3, 529–532. (From the text) 82c:17008 17B56

Periodicity of the Tate cohomologies of crossed group rings. (Russian. Georgian and English summaries) Soobië. Akad. Nauk Gruzin. SSR 100 (1980), no. 1, 17–20. (Author's summary) 82c:16018 16A61 (18G40)

On the construction of projective modules over crossed group rings. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 101 (1981), no. 3, 549-552. (Author's summary) 82h:16015 16A50

549-552. (Author's summary) 82k:16015 16A50 eseu, Dan A. (with Adams, Gregory) The fuzzy integral. J. Math. Anal. Appl. 75 (1980), no. 2, 562-570. (Authors' summary) 82k:28005 28A99 (03E72) (with Ralescu, Stefan) A class of nonlinear admissible estimators in the

one-parameter exponential family. Ann. Statist. 9 (1981), no. 1, 177-183. (Malay Ghosh) 82m62012 62C15 (62F10)

(with Puri, Madan L.) Différentielle d'une fonction floue. (English summary [Differential of a fuzzy function] C. R. Acad. Sci. Paris Ser. I Math. 293 (1981), no. 4, 237-239. (Authors' summary) 82m:58006 58C20 (03E72, 26E99, 90C15)

Ralescu, Stefan (with Ralescu, Dan A.) A class of nonlinear admissible estimators in the

one-parameter exponential family. Ann. Statist. 9 (1981), no. 1, 177-183. (Malay Ghosh) 62C15 (62F10)

Rall, Louis B. *Computational solu ution of nonlinear operator equations. Corrected reprint of the 1969 original. Robert E. Krieger Publishing Co., Inc., Huntington, N.Y., 1979. viii+226 pp. ISBN 0-88275-667-2 (Editors) 82a:65041 65J15 (47H17)

Applications of software for automatic differentiation in numerical computation. Fundamentals of numerical computation (computer-oriented numerical analysis) (Proc. Conf., Tech. Univ. Berlin, Berlin, 1979), pp. 141–156, Comput. Suppl., 2, Springer, Vienna, 1980. (Francesco G. Lerda) 82e:65021 65D25 (65–04)

(with Caprani, Ole; Madsen, Kaj) Integration of interval functions. SIAM J. Math. Anal. 12 (1981), no. 3, 321-341. (M. I. Levin) 82e:65050 65G10 (65R20)

Interval analysis: a new tool for applied mathematics. Transactions of the seventh Conference of Army Mathematicians (West Point, N.Y., 1981),

pp. 283-301, ARO Rep. 82, 1, U. S. Army Res. Office, Research Triangle Park, N.C., 65G10 1982. (See 82k:00010)

Rallis, S. (with Schiffmann, G.) On a relation between SL₂ cusp forms and cusp forms on tube domains associated to orthogonal groups. Trans. Amer. Math. Soc. 263 (1981), no. 1, 1-58. (Martin L. Karel) 82c:10040 10D40 (22E50, 32N10)

Ralston, Elizabeth W. (with Jacobs, Ernest) Ambiguity resolution in interferometry. IEEE Trans. Aerospace Electron. Systems 17 (1981), no. 6, 766-780. (Authors' summary) 82m:78022 78A55

Ralston, James V. Correction: "Approximate eigenfunctions of the Laplacian" [J.

Differential Geom. 12 (1977), no. 1, 87-100; MR 57 #10741]. J. Differential Geom. 14 (1979), no. 3, 487 (1980). (From the text) 82a:58053 58G25 (58E10)

(with Majda, Andrew) Geometry in the scattering phase. Geometry of the Laplace tor (Proc. Sympos. Pure Math., Univ. Hawaii, Honohilu, Hawaii, 1979),

pp. 253-255, Proc. Sympos. Pure Math., XXXVI, Amer. Math. Soc., Providence, R.I., 1980. (A. A. Laptev) 82b:58100 58G25 (35P25, 47A40)

(with Bardos, Claude; Guillot, Jean-Claude) Relation de Poisson pour l'équation des ondes dans un ouvert non borné. Séminaire Goulaouic-Schwartz, 1979-1980 (French), Exp. No. 13, 10 pp., École Polytech., Palaiseau, 1980. (Authors' introduction) 82f:35104 35L05 (35P25, 49G05, 81F05)

Propagation of singularities and the scattering matrix. Singularities in boundary value problems (Proc. NATO Adv. Study Inst., Maratea, 1980), pp. 169–184, NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci., 65, Reidel, Dordrecht, 1981. (A. G. Ramm) 82j:35121 35P25

(with Guillot, Jean-Claude) Les ondes latérales comme phénomènes de propagation de singularités. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 43-46. (Authors' summary) 82b:35099 35L30

Ralston, Tom On the embeddability of the complement of a complete triangle in a finite projective plane. Ars Combin. 11 (1981), 271–274. (R. A. Bailey) 82m:05020 05B05

Ram, Jai (with Bedi, Surinder Singh) Jacobson radical of skew polynomial rings and skew group rings. Israel J. Math. 35 (1980), no. 4, 327–338. (M. M. Parmenter) 82d:16006 16A21 (16A05)

Ram, R. Analytical solutions of the problem of violent explosions in a plasma of varying density. (German summary) Acta Mech. 40 (1981), no. 1-2, 75-83. (Author's summary) 76L05 (76W05)

Ram, Siya (with Lal, Shiva Narain) The absolute summability of infinite integrals by functional Nörlund methods. Indian J. Math. 17 (1975), no. 2, 101-105. (From the text) 82c:40009 40G05

Rama Bala, D. V. (with Sastry, K. P. R.) Additive set functions with values in a complete lattice ordered group. Math. Student 45 (1977), no. 4, 7-12 (1979). (Editors) 82a:06030 06F15 (28B10)

machandra, K. Some remarks on the mean value of the Riemann zeta function and other Dirichlet series. I. Hardy-Ramanujan J. 1 (1978), 15 pp. (Matti Jutila) 82f:10054a 10H05 (10H10, 30B50)

Some aspects of Dirichlet series. II. Proceedings of the Conference on Number Theory (Mysore, 1979), pp. 82–92, Matscience Rep., 101, Inst. Math. Sci., Madras, 1980. (See 82d:10005) 10H05

Some aspects of Dirichlet series. Proceedings of the Queen's Number Theory Conference, 1979 (Kingston, Ont., 1979), pp. 421–435, Queen's Papers in Pure and Appl. Math., 54, Queen's Univ., Kingston, Ont., 1980. (See 82j:10003)

(with Narlikar, M. J.) Contributions to the Erdős-Szemerédi theory of sieved integers. Acta Arith. 38 (1980/81), no. 2, 157-165. (H.-E. Richert) 82m:10072

Some remarks on the mean value of the Riemann zeta function and other Dirichlet series. III. Ann. Acad. Sci. Fenn. Ser. A I Math. 5 (1980), no. 1, 145-158. (Matti Jutila) 82f:10054e 10H05 (10H10, 30B50)

Some remarks on the mean value of the Riemann zeta function and other Dirichlet series. II. Hardy-Ramanujan J. 3 (1980), 1-24. (Matti Jutila) 82f:10054b (10H10, 30B50)

chandran, B. On the "strong memorylessness property" of the exponential and geometric probability laws. Sankhyā Ser. A 41 (1979), no. 3-4, 244-251. (Javad Behboodian) 82h:62031 62E15

chandran, D. (with Nadkarni, M. G.) On a question of D. Maharam concerning tail fields. Sankhyā Ser. A 40 (1978), no. 4, 313-318. (J. D. Knowles) 82d:28004 28A05 A note on regular conditional probabilities in Doob's sense. Ann. Probab. 9 (1981), no. 5, 907-908. (Jan Pachl) 82k:60007 60A10 (28A50)

nachandran, G. (with Murthy, M. V. N.) A new representation for the density matrix Nuclear Phys. A 323 (1979), no. 2-3, 403-412. (Authors' summary) 82f:81030 81C40

machandran, S. On a new digraph reconstruction conjecture. J. Combin. Theory Ser. B 31 (1981), no. 2, 143-149. (B. Manvel) 82k:05083 05C60 (05C20)

ran, Venkat (with Ahmad, M. O.; Reddy, C. H.; Swamy, M. N. S.) A class of

multivariable positive real functions realizable by resistively-terminated lossless ladder networks. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 322–325, IEEE, New York, 1979. (See 82e:94002) 94C10

(with Murthy, K. V. V.) On the ranks of certain matrices. Matrix Tensor Quart. 31 (1980/81), no. 3, 67-69. (Donald W. Robinson) 82k:15008

(with Murthy, K. V. V.) Bounds of the ranks of the real and imaginary parts of a Hermitian matrix. Matrix Tensor Quart. 31 (1980/81), no. 4, 100-101. (Authors summary) 82m:15023 15A57

summary, 84m:15025 12A57
nachandran, Vijaya (with Krishnamurthy, E. V.) A cryptographic system based on finite field transforms. Proc. Indian Acad. Sci. Sect. A Math. Sci. 89 (1980), no. 2, 75–93.

(Melvin M. Sweet) 82e:94062 94B99 (12C05, 94A99)
nadge, Peter J. (with Goodwin, Graham C.; Caines, Peter E.) A globally convergent aptive predictor. Automatica-J. IFAC 17 (1981), no. 1, 135-140. (Authors' summary) 93C40 (62M10)

igliano Ramaglia, V. See Marigliano Ramaglia, V.

naiah, V. See Sita Ramaiah, V.

nakotaiah, D. (with Anjaneyulu, A.) On a class of semigroups. Simon Stevin 54 (1980), no. 3-4, 241-249. (L. Márki) 82b:20094 20M12 makrishna, A. (with Viswanadham, N.) Decentralized regulation of large dynam

systems with engineering applications. Large Scale Systems 2 (1981), no. 3, 191-204. (Authors' summary) 82k:93009 93A15

Ramakrishnan, Alladi A new concept in probability theory. J. Math. Anal. Appl. 83 (1981), no. 2, 408-410. (Author's summary) 82m:60027 60E05

Duality in stochastic processes. J. Math. Anal. Appl. 84 (1981), no. 2, 483-485. (From the text) 82k:60217 60K99

akrishnan, C. S. A note on the M/D/ ∞ queue. Opsearch 17 (1980), no. 2-3, 118. (Author's introduction) 82c:60172 60K25

nakrishnan, Dinakar A regulator for curves via the Heisenberg group. Bull. Amer. Math Soc. (N.S.) 5 (1981), no. 2, 191-195. (From the text) 82m:12008 12A70 (14C35.

nakrishnan, K. G. (with McKenna, J.; Mitra, Debasis) A class of closed Markovian queuing networks: integral representations, asymptotic expansions, and generalizations Bell System Tech. J. 60 (1981), no. 5, 599-641. (J. Chandramohan) 82g:60117 60K2

nakrishnan, S. (with Rao, B. V.) B-spaces are standard Borel. Ann. Probab. 8 (1980),
 no. 6, 1191. (Authors' summary) 82k:28023 28D99 (04A15)
 Finitely additive Markov chains. Trans. Amer. Math. Soc. 265 (1981), no. 1,

60J05 (60G05) 247-272. (Anthony G. Pakes) 82i:60121

makrishna Sarma, Y. (with Adhikari, B. P.) Some tests of hypotheses for cluster sampling. Sankhyā Ser. B 40 (1978), no. 1-2, 29-37. (D. S. Tracy) 82e:62029

(with Bell, C. B.) A characterization of exponential distributions based on order statistics. Metrika 27 (1980), no. 4, 263-269. (Ludwig Baringhaus) 82b:62012 62F10

Rama Mohana Rao, M. *Ordinary differential equations. Theory and applications. With a foreword by V. Lakshmikantham. Affiliated East-West Press Pot. Ltd., New Delhi, 1980. xii + 266 pp. (N. Chafee) 82f:34001 34-01 amoorthy, P. (with Sheela, B. V.) Optimal control via mathematical programming

Guidance Control 4 (1981), no. 4, 443-444. (From the introduction) 82h:49020 Vector measures and the ring of continuous functions. Aligarh Bull. Math. 7

(1977), 73-75 (1980), (J. Diestel) **82k:46056** 46E40 (28B05) man, Parimala (with Sridharan, R.) Quadratic forms over rings of dimension 1. nent. Math. Helv. 55 (1980), no. 4, 634-644. (Manuel Ojanguren) 82i:13012 13C10 (10C05, 15A63)

nanan, S. A note on C. P. Ramanujam. C. P. Ramanujam—a tribute, pp. 11-13, Tata Inst. Fund. Res. Studies in Math., 8, Springer, Berlin, 1978. (P. E. Newstead) 82j:01070 01A70 (14A99, 14C20, 14D25, 15A99)

Orthogonal and spin bundles over hyperelliptic curves. Geometry and analysis, pp. 151-166, Indian Acad. Sci., Bangalore, 1980. (H. Lange) 82g:14022 14F05

(14J99, 32L05) nanathan, K. G. C. P. Ramanujam. C. P. Ramanujam—a tribute, pp. 1-7, Tata Inst. Fund. Res. Studies in Math., 8, Springer, Berlin, 1978. (S. L. Kleiman) 82i:01058 01A70 (12-03)

(with Subbarao, M. V.) Some generalizations of Ramanujan's sum. Canad. J. Math. 32 (1980), no. 5, 1250-1260. (V. C. Harris) 82e:10067 10G05 (10H99, 15A36) Ramanujan and the congruence properties of partitions. Proc. Indian Acad. Sci.

Sect. A Math. Sci. 89 (1980), no. 3, 133-157. (Christian Radoux) 82e:10003 (01A60, 10A45)

mani, A. (with Ablowitz, Mark J.; Segur, Harvey) A connection between nonlinear evolution equations and ordinary differential equations of P-type. I. J. Math. Phys. 21 (1980), no. 4, 715-721. (Hélène Airault) 82i:35148a 35Q20 (34C05, 58A15)

(with Ablowitz, Mark J.; Segur, Harvey) A connection between nonlinear evolution equations and ordinary differential equations of P-type. II. J. Math. Phys. 21 (1980), no. 5, 1006-1015. (Hélène Airault) 82i:35148b 35Q20 (58A15)

than, K. G., 82i:01058: Mumford am, Chidambaram Padmanabhan See Ran David, 82i:01059 and Ramanan, S., 82j:01070

nanujam, N. (with Srivastava, U. N.) Singular perturbation problems for systems of partial differential equations of elliptic type. J. Math. Anal. Appl. 71 (1979), no. 1, 18–35. (Frederick A. Howes) 82a:35044 35J65 (35B25)

(with Srivastava, U. N.) Singular perturbation problems for systems of partial differential equations of parabolic type. Funkcial. Ekvac. 23 (1980), no. 3, 245-258. (L. E. Bobisud) 82j:35013 35B25 (35K40) E. Bobisud) 82j:35013

Math. Soc. 23 (1981), no. 3, 471–475. (J. W. Bunce) 82k:47052 47B47 (47A10 nanujan, Srinivasa See Fiala, Jiří, 82e:01074; Askey, Richard A., 82g:01030 and 47B47 (47A10)

erndt, Bruce C.; et al., 82j:01051

na Rao, V. (with Kekre, H. B.; Sahasrabudhe, S. C.) Synthesis procedure for p-symmetric Boolean functions. Proc. IEE-E 127 (1980), no. 3, 93–96. (Authors' summary) 82h-94042 94C10

masubramanian, S. An elementary proof of Girsanov's formula. Sankhyā Ser. A 41 (1979), no. 3-4, 263–270. (Adhir K. Basu) 82j:60095 60G57 (60G30)

ii, V. Algorithms for a continuous-review (s, S) inventory system. J. Appl.

Probab. 18 (1981), no. 2, 461-472. (Author's summary) 82m:90064 Ramaswamy, Mythily On a nonlinear elliptic equation with periodic coefficients. SIAM J. Appl. Math. 40 (1981), no. 3, 409-418. (Jesús Hernández) 82j:35065 35J65 (80A30)

vamy, Ramakrishna (with Marcus, R. A.) Perturbative examination of avoid crossings. J. Chem. Phys. 74 (1981), no. 2, 1379-1384. (Joseph Ford) 82g:58055 58F13 (70K99, 81C99)

(with Marcus, R. A.) On the onset of chaotic motion in deterministic systems. Chem. Phys. 74 (1981), no. 2, 1385-1393. (Joseph Ford) 82g:58056 58F13 (70K50, 81C99)

CO9)
wanny, S. The Lax-Milgram th...tem for Banach spaces. I. Proc. Japan Acad. Ser. A
ord. Sci. 46 (1980), no. 10. 462–464. (Erich Miersemann) 82e47015a 47A50 Math. Sci. 56 (1980), no. 10, 462-464. (Erich Miersemann) 82e:47015a (46B99, 49A29)

The Lax-Milgram theorem for Banach spaces. II. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 1, 29-33. (Erich Miersemann) 82e:47015b

3G. 37 (1761), no. 1, 27-33. (Erich Micrisemann) 8263 (1913) 47A20 (46B9), 49A29) mazanov, M. D. The problem of the flow around a thin wing with a sharp trailing edge of inviscid incompressible fluid. (Russian) Mathematical analysis and related mathematical estions (Russian), pp. 224-236, 354, "Nauka" Sibirsk. Otdel., Novosibirsk, 1978. 76B05 (35J05) (Author's summary) 82a:76009

(Author's summary) 842:78009 76303 (3303)

hazanov, M. I. (with Kim, E. I.) An integral equation of Volterra type of the second kind. (Russian. Kazakh summary) 1zv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1980, no. 1, 42-48, 92. (D. Przeworska-Rolewicz). 82h:45003 45D05

(with Kim, E. I.) Solution of a singular integral equation of Volterra type of the second kind. (Russian. Kazakh summary) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1980, no. 3, 44-50, 88-89. (R. V. Duduchava) 82b:45004 45D05

nazanov, S. K. (with Semesenko, M. P.) Identification and parameter estimation in complex dynamic systems. Automatika 1979, no. 6, 42-53, 95 (Russian, English nary); translated as Soviet Automat. Control 12 (1979), no. 6, 33-43. (Y. Cherruault) 93E25 (65R20)

esan, T. (with Harinath, K. S.) Certain semigroups satisfying permutation identities. Vignana Bharathi 4 (1978), no. 2, 67-71. (Authors' summary) 82g:20087

Ramirez, Hebertt See Sira-Ramirez, Hebertt nirez, Ricardo (with Orszag, Miguel) Exact solution of the Dicke model for the interaction of one atom with the electromagnetic field. J. Math. Phys. 22 (1981), no. 6, 1306-1310. (Authors' summary) 82h:81163 81K05

nis, Jean-Pierre À propos du théorème de Borel-Ritt à plusieurs variables. Appendice à l'article: "Étude de certains systèmes de Pfaff avec singularités" (Équations différentielles et systèmes de Pfaff dans le champ complexe, pp. 131-288, Lecture Notes in Math., 712, Springer, Berlin, 1979; MR 82m:34008a] de R. Gérard et Y. Sibuya. Équations

differentielles et systèmes de Pfaff dans le champ complexe (Sem., Inst. Rech. Math. Acancée, Strasbourg, 1975), pp. 289–292, Lecture Notes in Math., 712, Springer, Berlin, 1979. (V. A. Golubeva) 82m:34008b 34A20 (32A99, 34E05, 58A17) Frobenius avec singularités [d'après B. Malgrange, J. F. Mattei et R. Moussu].

Séminaire Bourbaki, 30e année (1977/78), Exp. No. 523, pp. 290-299, Lecture Notes in Math., 710, Springer, Berlin, 1979. (Editors) 82b:58004 58A10 (32L05, 57R30)

Les séries k-sommables et leurs applications. Complex analysis, microlocal calculus and relativistic quantum theory (Proc. Internat. Colloq., Centre Phys., Les Houches, 1979), pp. 178-199, Lecture Notes in Phys., 126, Springer, Berlin, 1980. (V. A. Golubeva) 32C36 (14D05)

Une remarque sur les complexes différentiels de fibrés holomorphes. (English summary) Bull. Soc. Math. France 108 (1980), no. 3, 337-340. (C. Bănică) 82f:32044 32L05 (32C10, 58G05)

nkissoon, H. A paradox in microcontinuum fluid mechanics. Quart. Appl. Math. 38 (1980/81), no. 3, 357-362. (Giovanni P. Galdi) 82c:76006 76A05 (76D99)

(with Majumdar, S. R.) Potentials and Green's functions in micropolar fluid theory. (German and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 5, 249-255. (L. Debnath) 82a:76004 76A05 (35Q20, 76Z05)

Ramkrishna, Doraiswami Normal operators in chemical engineering. Proceedings of the Second International Conference on Mathematical Modelling (St. Louis, Mo., 1979), Vol. I. II, pp. 645–655, Univ. Missouri-Rolla, Rolla, Mo., 1980. (Author's summary) 82b:80013 80A20

(with Papoutsakis, Eleftherios; Lim, Henry C.) The extended Graetz problem with scribed wall flux. AIChE J. 26 (1980), no. 5, 779–787. (Authors' summary) 82h:80010 80A20 (35K55)

m, Alexander G. Approximation by entire functions. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1978, no. 10(197), 72-76. (From the text) 82j:41025 41A50

Linear filtering of certain vector-valued nonstationary random processes. (Russian)

Math. Nachr. 91 (1979), 269-280. (P. S. Knopov) 82a:60056 60G25 (62M20, 94A12) Electromagnetic wave scattering by small bodies of an arbitrary shape. Acoustic, electromagnetic and elastic wave scattering—focus on the T-matrix approach (Proc. Internat. Sympos., Ohio State Unio., Columbus, Ohio, 1979), pp. 537-546, Pergai Oxford, 1980. (See 82h:78002) 78A45

Existence, uniqueness and stability of solutions to some nonlinear oscillations problems. Applicable Anal. 11 (1980/81), no. 3, 223-232. (Yiannis Sficas) 82b:34055 34C25 (34G20, 45G10)

Theoretical and practical aspects of singularity and eigenmode expansion methods. IEEE Trans. Antennas and Propagation 28 (1980), no. 6, 897-901. (P. A. Mišnaevskii) 78A45

Investigation of a class of systems of integral equations. J. Math. Anal. Appl. 76 (1980), no. 2, 303-308. (T. Sasakawa) 82c:45004 45A05 (with Taylor, B. A.) A new proof of absence of positive discrete spectrum of the Schrödinger operator. J. Math. Phys. 21 (1980), no. 9, 2395-2397. (Evans M. Harrell) 82b:35112 35P05 (35J10, 81C10)

Investigation of the spectrum of the operator Schrödinger equation. (Russian) Rev. maine Math. Pures Appl. 25 (1980), no. 5, 789-795. (D. A. Herrero) 82e:47064 47E05 (34B25)

Expansion in eigenfunctions of nonselfadjoint operators. (Russian) Rev. Ros Math. Pures Appl. 25 (1980), no. 5, 797-809. (H. Baumgärtel) 82i:47019

Analytical results in random fields filtering theory. Z. Angew. Math. Mech. 60 (1980), no. 7, T361-T363. (Editors) 820:60075 60G35 (45M10)

Spectral properties of some nonselfadjoint operators. Bull. Amer. Math. Soc. (N.S.) 5 (1981), no. 3, 313-315. (Author's summary) 82i:47020 47A55 (47A10, 47A70,

On the basis property for the root vectors of some nonselfadjoint operators Anal. Appl. 80 (1981), no. 1, 57-66. (James S. Howland) 82j:47019 47A55 (47A70)
On some properties of solutions of Helmholtz equation. J. Math. Phys. 22 (1981), no. 2, 275-276. (Author's summary) 82j:35062 35J05 (78A25)

Isidro See Formalization of progr

ryva-Ramos, J. See Leyva-Ramos, J. autista Ramos, Raymundo See Bautista Ramos, Raym

sta Ramos, Raymundo See Bautista Ramos, Raymundo ad, Anita (with Datta, Kamal Kumar) Asymptotic series for wave functions a energy levels of doubly anharmonic oscillators. Phys. Rev. D (3) 23 (1981), no. 12, 2875-2883. (Authors' summary) 82g.81010 81C05 (81C15)

ay, J. O. (with Winsberg, S.) Monotonic transformations to a additivity using splin Biometrika 67 (1980), no. 3, 669-674. (Authors' summary) 82k:62112 62J05 (with Novick, Melvin R.) PLU robust Bayesian decision theory: point estimation. J. Amer. Statist. Assoc. 75 (1980), no. 372, 901-907. (M. M. Siddiqui) 82c:62049 62F15

nsay, Robert T. (with Dean, Donald L.) Field analysis of models with multiple node sets along one coordinate. SIAM J. Appl. Math. 40 (1981), no. 3, 563-568. (Authors'

nsey, Fred L. (with Johansen, Søren) A bang-bang representation for 3×3 embeddable stochastic matrices. Z. Wahrsch. Verw. Gebiete 47 (1979), no. 1, 107-118. (Robert Kertz) 60J35 (15A51)

nsey, James B. See Kumar, K. D.; et al., 82h:62048 nsey, L. Thomas A theorem of C. Ryll-Nardzewski and metrizable l.c.a. groups. Proc. Amer. Math. Soc. 78 (1980), no. 2, 221–224. (A. Hulanicki) 82a:43008 43A46 (03E50) (with Graham, Colin C.) Sidon sets with extremal Sidon constants. Proc. Amer. Math. Soc. 83 (1981), no. 3, 522-526. (John R. McMullen) 82j:43006 43A46 (20F99)

ushaw, John D. (with Cloutman, Lawrence D.) Numerical method for partial equilibrium flow. J. Comput. Phys. 39 (1981), no. 2, 405-417. (Authors' summary) 82465083 65P05 (80A30)

ushaw, Lyle (with Lasser, William T.) Probing the rotating table. The mathematical Gardner, pp. 285–307, Wadsworth, Belmont, Calif., 1981. (See 82b:00003) 90D05 On the discrepancy of the sequence formed by the multiples of an irrational number. J. Number Theory 13 (1981), no. 2, 138-175. (Henri Faure) 82k:10071 10K30 (10K05)

Ran, Ziv Cycles on Fermat hypersurfaces. Compositio Math. 42 (1980/81), no. 1, 121-142.
 (William E. Lang) 82d:14005 14C30 (14J40)
 On subvarieties of abelian varieties. Invent. Math. 62 (1981), no. 3, 459-479. (T.

Matsusaka) 82d:14024 14K05 (14H40, 14K10)

us, Inder K. Determination of probability measures through group actions. Z. Wahrsch. Verw. Gebiete 53 (1980), no. 2, 197-206. (J. P. R. Christensen) 82c:28025

(28A12) Rana, S. P. (with Arora, Radha Krishan) Scheduling in a semi-ordered flow-shop without

intermediate queues. AIIE Trans. 12 (1980), no. 3, 263–272. (Authors' summary) 82i:90056 90B35 live, V. S. (with Deshpande, N. V.) A note on the Hamiltonian properties of the total

s. Math. Ed. (Siwan) 14 (1980), no. 2, A25-A26. (C. Hoede) 82e:05092 nalli, G. A stochastic model for strike-slip faulting. J. Internat. Assoc. Math. Geol. 12 (1980), no. 4, 399–412. (C. C. Tscherning) 82h:86006 86A15 (62P99, 86A99)

serie, V. A. (with Janovic, L. A.) A note on the asymptotic expansion of a type of continual integral. (Russian. English summary) Verci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1978, no. 6, 26-30 139. (Authors' summary) 82e:41047 41A60 (28C20, 65D30)

ad, David A. (with Holmes, Philip J.) Phase portraits and bifurcations of the nonlinear oscillator: $\ddot{x} + (\alpha + \gamma x^2) \dot{x} + \beta x + \delta x^3 = 0$. (French summary) Internat. J. Non-Linear Mech. 15 (1980), no. 6, 449–458. (Ju. E. Gliklih) 82e:58073 58F14 (34C35, 70K05) (with Gorman, M.; Swinney, Harry L.) Doubly periodic circular Couette flow: riments compared with predictions from dynamics and symmetry. Phys. Rev. Lett. 46 (1981), no. 15, 992–995. (Authors' summary) 82F-8961. SSF13 (7629), 76U05)
nd, R. H. (with Holmes, Philip J.) Bifurcation of periodic motions in two weakly coupled

an der Pol oscillators. (French and German summaries) Internat. J. Non-Line 15 (1980), no. 4-5, 387-399. (Zdeněk Ertinger) 82g:58057 58F13 (34C15, 70K30) (with Month, L. A.) An application of the Poincaré map to the stability of nonlinear al modes. Trans. ASME Ser. E.J. Appl. Mech. 47 (1980), no. 3, 645-651. (François Aribaud) 82a:34047 34C15 (34D10, 58F14, 70K20)

dall, Duane Remarks on vector fields. Proceedings of the Tenth Brazilian Colloquium (Poços de Caldas, 1975), Vol. II (Portuguese), pp. 441-446, Cons. Nac. Desenvolvimento Ci. Tec., Inst. Mat. Pura Apl., Rio de Janeiro, 1978. (From the text) 82g:57010 57R25

ndall, T. J. (with Sharples, H.) A useful recurrence relation. Math. Gaz. 64 (1980), no. 430, 279–280. (Editors) 82c:15009 15A15

no. 430, 279–280. (Editors) 82c:15009 15A15

dell, Brian An annotated bibliography on the origins of digital computers. Ann. Hist.

Comput. 1 (1979), no. 2, 101–207. (Herbert J. Bernstein) 82a:68003 68–03 (01A75)

Fault tolerant computing systems. Proceedings of the 1980 CERN School of

Computing (Vraona, 1980), pp. 362–389, CERN 81, 3, CERN, Geneva, 1981. (Author's summary) 82e:68007 68A05 (68–02, 68B99, 94C99)

Randers, Jurgen See Elements of the system dynamics method, 82e:90030 Randles, Ronald H. (with Wolfe, Douglas A.) *Introduction to the theory of

nonparametric statistics. Wiley Series in Probability and Mathematical Statistics. John Wiley & Sons, New York-Chichester-Brisbane, 1979. xiii+450 pp. ISBN 0-471-04245-5 (From the preface) 82c:62071 62G99 (62-01)

Nonparametric statistical tests of hypotheses. Modern statistics: methods an applications (Amer. Math. Soc. Short Course, San Antonio, Tex., 1980), pp. 31-40, Proc. Sympos. Appl. Math., XXIII, Amer. Math. Soc., Providence, R.I., 1980. (See 82c:62003) 62G10

dol, Burton The ellipsoid method in linear programming. Adv. in Appl. Math. 1 (1980), no. 1, 1-6. (K. G. Murty) 824:90077 90C05

A Dirichlet series of eigenvalue type with applications to asymptotic estimates. Bull. don Math. Soc. 13 (1981), no. 4, 309-315. (Ekkehard Krätzel) 82j:10082 10J25

A remark on the multiplicity of the discrete spectrum of congruence groups.

Amer. Math. Soc. 81 (1981), no. 2, 339-340. (Scott Wolpert) 82c:58057 58G25

Rands, B. M. L. (with Welsh, D. J. A.) Animals, trees and renewal sequences. IMA J. Appl. Math. 27 (1981), no. 1, 1-17. (R. M. Cormack) 82;05049 05B50 (82A67)

Randvee, I. Decentralized control problems. Survey. (Russian. Estonian and English aries) Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. 30 (1981), no. 1, 35-46, 91. (Author's summary) 82k:93005 93A13

Rane, V. V. A note on the mean value of L-series. Proc. Indian Acad. Sci. Math. Sci. 90 (1981), no. 3, 273-286. (Don Redmond) 82k:10051 10H08 (10H25)

ng, B. (with Thomas, Wolfgang) Zermelo's discovery of the "Russell paradox". (German and French summaries) Historia Math. 8 (1981), no. 1, 15–22. (E. Mendelson) 82k:04001

ngachari, S. S. (with Raghavan, Srinivasacharya) Poisson formulae of Hecke type. Geometry and analysis, pp. 129-149, Indian Acad. Sci., Bangalore, 1980. (T. Ono) 82m:12011 12A85 (10C15)

n, Sucharita (with Gupta, Vijay Kumar) Common fixed points for mappings Sect. Math. Phys. 4 (1978), no. 1, 131–140. (Roman Mañka) 82a:54090 54H25
gaswamy, K. M. (with Boyer, D.) Intersections of pure subgroups in abelian groups.

Proc. Amer. Math. Soc. 81 (1981), no. 2, 178–180. (K. Honda) 82b:20076 20K27

Range, R. Michael (with Lieb, Ingo) Lösungsoperatoren für den Cauchy-Riemann-Komplex mit C^k-Abschätzungen. Math. Ann. 253 (1980), no. 2, 145-164. (G. Berg) 826-23012 32F15 (32F10) (with Beatrous, Frank, Jr.) On holomorphic approximation in weakly pseudodomains. Pacific J. Math. 89 (1980), no. 2, 249-255. (Eric Amar) 82h:32022 32E30

A remark on bounded strictly plurisubharmonic exhaustion functions. Proc. Amer.

Math. Soc. 81 (1981), no. 2, 220-222. (B. Wong) 82e:32030 32F05
ngelova, P. Hypersurfaces in almost Hermitian manifolds. (Bulgarian. Russian and English summaries) Plovdiv. Univ. Naučn. Trud. 16 (1978), no. 1, 407-415 (1980). (V. Mihova-Nehmer) 82j:53069 53C15

Ranger, K. B. (with O'Neill, M. E.) On the slow motion of a fluid coated sphere in an immiscible viscous fluid. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 5, 261-266. (From the text) 82i:76092 76T05

(From the text) 3627 hers/2 10105 (with O'Neill, M. E.) Flow past a sphere straddling the interface of a two-phase system. (French summary) Z. Angew. Math. Phys. 32 (1981), no. 4, 474–477. (Authors' summary) 82j:76084 76T05

nicki, Andrew The algebraic theory of surgery. I. Foundations. Proc. London Math. Soc. (3) 40 (1980), no. 1, 87-192. (R. J. Milgram) 82f:57024a 57R67

The algebraic theory of surgery. II. Applications to topology. Proc. London Math. Soc. (3) 40 (1980), no. 2, 193-283. (R. J. Milgram) 82f:57024b 57R67

*Exact sequences in the algebraic theory of surgery. Mathematical Notes, 26.

Princeton University Press, Princeton, N.J.; University of Tokyo Press, Tokyo, 1981. xvii + 864 pp. ISBN 0-691-08276-6 (F. T. Farrell) 82h:57027 57R67 (18F25, 57-02)

iecki, Bogdan Uniqueness criteria in solids with nonassociated plastic flow laws at finite deformations. (Russian summary) Bull. Acad. Polon. Sci. Sci. Sci. Tech. 27 (1979), no. 8-9, 721-729 (1980). (D. Durban) 82g:73023 73E99 (73Q05)

Raniecki, R. (with Bruhns, O. T.) Bounds to bifurcation stresses in solids with nonassociated plastic flow law at finite strain. J. Mech. Phys. Solids 29 (1981), no. 2, 73E99 153-172. (Authors' summary) 82d:73025

njan, Alok (with Chaurasia, A. R.) Weak convergence of empirical processes. Cienc. Indica 6 (1980), no. 3, 167–172. (M. D. Burke) 82e:60052 60F17 (62G99)

Ranjan, G. V. (with Steele, C. R.) Nonlinear corrections for edge bending of shells. Trans. ASME Ser. E.J. Appl. Mech. 47 (1980), no. 4, 861-865. (Authors' summary) 82a:73047 731.99

Rankin, Donald W. Use of the bilinear Z-transform in implementing digital filters. Proceedings of the Twenty-sixth Conference on the Design of Experiments in Army Research, Development and Testing (New Mexico State Univ., Las Cruces, N.M., 1980), pp. 63-84, ARO Rep. 81, 2, U. S. Army Res. Office, Research Triangle Park, N.C., 1981. (Author's summary) 82i:93075 93E11 (93E05)

Methods for approximating mathematical functions. Proceedings of the Twenty-sixth Conference on the Design of Experiments in Army Research, Development and Testing (New Mexico State Univ., Las Cruces, N.M., 1980), pp. 181-234, ARO Rep. 81, 2, U. S. Army Res. Office, Research Triangle Park, N.C., 1981. (From the summary) 82h:65015

kin, J. E. Dual geometric field theory. Internat. J. Theoret. Phys. 20 (1981), no. 4, 231–256. (Author's summary) 82:83062 83D05 231-256. (Author's summary) 82i:83062

Rankin, R. A. The vanishing of Poincaré series. Proc. Edinburgh Math. Soc. (2) 23 (1980), no. 2, 151–161. (Roy Fuller) 82e:10041 10D15

kin, Samuel M., III Boundary value problems for partial functional differential equations. Pacific J. Math. 90 (1980), no. 2, 459-468. (Sergiu Aizicovici) 82b:34091 34K10 (45K05)

(with Lightbourne, James H., III) Global existence for a delay differential equation. tial Equations 40 (1981), no. 2, 186-192. (Curtis C. Travis) 82f:35086 35K05 (35R10)

See also Integral and functional differential equations, 826:45001 her, R. On finite element approximation of general boundary value problems in nonlinear elasticity. Calcolo 17 (1980), no. 2, 175-193 (1981). (Author's summary) 73C50 (65N30)

(with Blum, H.) On the boundary value problem of the biharmonic operator on domains with angular corners. Math. Methods Appl. Sci. 2 (1980), no. 4, 556-581. (G. Wildenhain) 82æ35022 35D10 (31A30, 35J40)

Rantala, Veikko Correspondence and nonstandard models: a case study. The logic and ology of scientific change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn. 30 (1978), no. 2-4, 366-378 (1979). (See 82:00024) 00A25 (03A05)

Rao, A. Kailasa (with Naidu, D. S.) Singularly perturbed boundary value problems in

discrete systems. Internat. J. Control 34 (1981), no. 6, 1163-1173. (Authors' summary) 93C55

Rao, A. N. V. (with Tsokos, Chris P.) Controllability of stochastic systems with random

delay. Math. Nachr. 96 (1980), 151-157. (Authors' summary) 82f:93082 93E15 (93B05)

(with Tsokos, Chris P.) Sensitivity analysis of the Bayesian estimators of the intensity arameter and reliability function of the Poisson failure model. (Italian and French immaries) Statistica (Bologna) 40 (1980), no. 3, 309-328. (Authors' summary) 82bc62132 62N05

Rao, A. S. (with Lamba, S. S.) Time-domain simplification of scalar unstable systems. Internat. J. Systems Sci. 12 (1981), no. 8, 1015-1027. (Authors' summary) 82h:93062 93D99 (65L07)

(with Rao, D. R. K. S.; Murty, K. Narasimha) Three-point boundary value problems associated with third order differential equations. Nonlinear Anal. 5 (1981), no. 6, 669-673. (Brian D. Sleeman) 82f:34016 34B10

kasa Rao, B. L. S. See Prakasa Rao, B. L. S.
b, B. V. (with Maitra, Ashok) Generalizations of Castaing's theorem on selectors. Rao, B. V. Collog. Math. 42 (1979), 295-300. (J. E. Jayne (Zbl 427:28010)) 82m:28024 28B20 (with Ramakrishnan, S.) B-spaces are standard Borel. Ann. Probab. 8 (1980), no. 6, 1191. (Authors' summary) 82k:28023 28D99 (04A15)

(with Yamada, Sakutarō) Note on a problem of Diepenbroc (1980), no. 2, 325-327. (P. Gérard) 82b:28026 28C15 (60B05) enbrock. Osaka J. Math. 17

a Rao, B. V. See Subba Rao, B. V.

Rao, C. R. Theory of optimal selection of prey species. Texas J. Sci. 32 (1980), no. 2, 143-149. (Hal Leslie Smith) 82e:92046 92A17
Rao, C. R. A. Epstein profiles and the Riemann P-functions. Wave Motion 3 (1981), no. 3,

237-241. (L. Debnath) 82j:73026 73D99 (73C40)

Rao, C. Radhakrishna (with Kleffe, Jürgen) Estimation of variance components. Analysis of variance, pp. 1-40, Handbook of Statistics, 1, North-Holland, Amsterdam, 1980. (See

Matrix approximations and reduction of dimensionality in multivariate statistical analysis. Multivariate analysis, V (Proc. Fifth Internat. Sympos., Univ. Pittsburgh, Pa., 1978), pp. 3-22, North-Holland, Amsterdam, 1980. (Author's summary) 15A09 (62H99)

A lemma on G-inverse of a matrix and computation of correlation coefficients in the singular case. Comm. Statist. A—Theory Methods 10 (1981), no. 1, 1-10. (A. K. Gupta) 62H20 (15A09)

See also Arthanari, T. S.; et al., 82f:62001

Rao, C. V. (with Saxena, K. P.) On approximation of power of a test procedure based on preliminary tests of significance. Comm. Statist. A—Theory Methods 10 (1981), no. 13, 1305–1321. (Authors' summary) 82h:62117 62J10

Rao, D. R. K. S. (with Murty, K. Narasimha; Rao, A. S.) Three-point boundary value problems associated with third order differential equations. Nonlinear Anal. 5 (1981), no. 6, 669-673. (Brian D. Sleeman) 82f:34016 34B10

Rao, Daljit (with Mohanty, S. P.) A family of hypo-Hamiltonian generalized prisms. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1554-1560. (G. Chartrand) 82m:05068 05C45 (with Mohanty, S. P.) Different shortest permutation strings T(n) for n=3,4,5,6and 7. J. Combin. Inform. System Sci. 5 (1980), no. 2, 80-87. (Wayne M. Dymacek) 82g:05004 05A10 (05A05)

82g:05004 05A10 (05A05) sada Rao, G. See Prasada Rao, G.

Rao, G. C. (with Swamy, U. Maddana; Manikyamba, P.) Prime ideal characterization of chain based lattices. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 1, 98-106. (Mary Katherine Bennett) 82h:06017 06D99

(with Krishna Murty, M.) Neutrality in posets. Algebra Universalis 13 (1981), no. 3, 401–404. (Derek C. J. Burgess) 82m:06002 06A10 (with Swamy, U. Maddana) Almost distributive lattices. J. Austral. Math. Soc. Ser. A 31 (1981), no. 1, 77–91. (R. Beazer) 82g:06022 06D99

Rao, G. Teeka (with Moizuddin, Mohammed) Steady flow of micropolar income fluid between two parallel porous plates. Defence Sci. J. 30 (1980), no. 3, 105-112. (Authors' summary) 82c:76007 76A05 (76S05)

Geetha S. (with Muthukumar, S.) A note on the semicontinuity properties of the farthest point map. Indian J. Pure Appl. Math. 11 (1980), no. 10, 1293-1296. (O. P. Kapoor) 82b:46023 46B99

ibba Rao, Gita See Subba Rao, Gita

madhusudana Rao, J. See Madhusudana Rao, J. Rao, J. N. K. On deriving mean square errors and their nonnegative unbiased estimators in lation sampling. Professor Huzurbazar felicitation volume. J. Indian Statist. finite popu Assoc. 17 (1979), 125-136. (Jon Stene) 82f:62027 62D05

(with Bellhouse, David R.) Amendments and corrections: "Systematic sampling in the presence of a trend" [Biometrika 62 (1975), no. 3, 694-697; MR 52 #15763]. Biometrika 68 (1981), no. 2, 576. (Editors) 82i:62021 62D05 metrika 68 (1981), no. 2, 576. (Editors) 82i:62021 62D05

(with Scott, Alastair) The analysis of categorical data from complex sample surveys: chi-squared tests for goodness of fit and independence in two-way tables. J. Amer. Statist. Assoc. 76 (1981), no. 374, 221-230. (Nanak Chand) 82j-62042 62H17

b. Jammalamadaka Sreenivasa (with Puri, Madan L.; Yoon, Youngjoo) A simple test for goodness-of-fit based on spacings with some efficiency comparisons. Contributions to statistics, pp. 197-209, Reidel, Dordrecht, 1979. (From the introduction) 82i:62070 , Jame

(with Robertson, James B.) A characterization of Gaussian spaces. J. Multivariate Anal. 10 (1980), no. 4, 599-602. (Manfred Denker) 82b:28028 28C20

(with Sobel, Milton) Incomplete Dirichlet integrals with applications to ordered uniform spacings. J. Multivariate Anal. 10 (1980), no. 4, 603-610. (C. A. Robertson) 62E15 (62G30)

ndrasekhara Rao, K. See Chandrasekhara Rao, K.

kuppuswamy Rao, K. See Kuppuswamy Rao, K. Rao, K. Murali See Rao, Murali

 S. Bhaskara (with Rao, M. Bhaskara) Some characterisations of nonate res. Indian J. Math. 17 (1975), no. 1, 1-7. (Editors) 82d:28005 28A12 (with Rao, M. Bhaskara) On the separating number of a finite family of charges.

Math. Nachr. 101 (1981), 215-217. (Pedro Jiménez Guerra) 82m:28007 dhava Rao, K. S. See Madhava Rao, K. S. na mohana Rao, M. See Rama Mohana Rao, M.

o, M. Bhaskara (with Rao, K. P. S. Bhaskara) Some characterisations of nonatomic

measures. Indian J. Math. 17 (1975), no. 1, 1-7. (Editors) 82d:28005 28A12 (with Rao, K. P. S. Bhaskara) On the separating number of a finite family of charges.

Math. Nachr. 101 (1981), 215-217. (Pedro Jiménez Guerra) 82m:28007 28A12

Rao, M. G. (with Ivalnenko, O. G.) Prediction and extrapolation of meteorological fields

by model self-organization. Automatika 1979, no. 6, 18-35, 94 (Russian. English summary); translated as Soviet Automat. Control 12 (1979), no. 6, 13-27. (Menachem Dishon) 82b:86004 86A10 (65C20, 92A05, 93A10)

urayana Rao, M. L. See Narayana Rao, M. L.
ao, M. M. Local functionals. Measure theory, Oberwolfach 1979 (Proc. Conf.,
Oberwolfach, 1979), pp. 484-496, Lecture Notes in Math., 794, Springer, Berlin, 1980. (W. A. Woyczyński) 82a:46038 46E99 (60J55)

Correction to: "Asymptotic distribution of an estimator of the boundary parameter of an unstable process" [Ann. Statist. 6 (1978), no. 1, 185–190; MR 56 #16876]. Ann. Statist. 8 (1980), no. 6, 1403. (Editors) 82hc62022 62E20

Local functionals on Coo(G) and probability. J. Funct. Anal. 39 (1980), no. 1, 23-41. (D. J. H. Garling) 82b.46027 46E10 (60G07) Convolutions of vector fields. I. Math. Z. 174 (1980), no. 1, 63-79. (G. L. Litvinov)

82b:22006 22D15 (22D20, 43A65, 46E30)

Structure and convexity of Orlicz spaces of vector fields. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 457–473, Academic Press, New York, 1981. (J. J. Uhl, Jr.) 82g Representation of weakly harmonizable processes. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 9, part 1, 5288-5289. (Author's summary) 82i:60059 60G10 (47B15)

See also General topology and modern analysis, 82e:54001

Rao, M. V. C. (with Baliga, G. V.) On symmetric and unity interconnections between three

nonlinear subsystems. Automatica summary) 82a:93044 93D10 tica-J. IFAC 16 (1980), no. 6, 711-713. (Authors'

Rao, Murali A note on Revuz measure. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 418-436, Lecture Notes in Math., 784, Springer, Berlin, 1980. (L. Stoica) 824:60142 60145

(with Chung, Kai Lai) A new setting for potential theory. I. Ann. Inst. Fourier (Grenoble) 30 (1980), no. 3, 167–198. (Mamoru Kanda) 82k:60150a 60J45 (60J40) (with Chung, Kai Lai) Erratum: "A new setting for potential theory. I". Ann. Inst. Fourier (Grenoble) 31 (1981), no. 2, loose errata. (Mamoru Kanda) 821:60150b 60345

Rao, N. Nagesha (with Varma, Ram K.) Modified Korteweg - de Vries equation for spatially inhomogeneous plasmas. Phys. Lett. A 70 (1979), no. 1, 9-11. (D. ter Haar) 82c:82081 82A45 (35Q20)

Rao, N. V. (with Ahern, Patrick) The rational defect of a plane domain. J. Approx. Theory

30 (1980), no. 1, 37-40. (D. M. Campbell) 82b:30041 30E10 (41A20)
Rao, P. R. (with Vartak, M. N.) Solutions of some graph equations. J. Combin. Inform.
System Sci. 5 (1980), no. 2, 112-117. (E. A. Nordhaus) 82c:05062 05C35 (05C99) (with Vartak, M. N.) On the characterization of the line graphs of some graph products. Ars Combin. 11 (1981), 107-121. (Slobodan Simić) 82mc05084 05C99

Rao, P. V. (with Kumar, S. N.) Optimal control of sampled data systems by geometric g. Comput. Electr. Engrg. 8 (1981), no. 1, 11-19. (S. E. Aidarous) 82e:49057 49D49 (93C57)

Rao, P. V. (with Hill, David L.) Tests of symmetry based on Watson statistics. Comm. Statist. A-Theory Methods 10 (1981), no. 11, 1111-1125. (E. F. Schuster) 82m:62101 62G10

Rao, Poduri S. R. S. (with Kaplan, Jack; Cochran, William G.) Estimators for the one-way random effects model with unequal error variances. J. Amer. Statist. Assoc. 76 (1981), no. 373, 89-97. (Friedrich Pukelsheim) 82g:62097 62J05

Efficiencies of nine two-phase ratio estimators for the mean. J. Amer. Statist. Assoc. 76 (1981), no. 374, 434-442. (Author's summary) 82k-62019 62D05

ndra Rao, R. See Sitaramachandra Rao, R.

Rao, R. G. (with Ahson, S. I.) Control of interconnected power systems using two-level methods. Internat. J. Control 34 (1981), no. 6, 1195-1205. (Authors' summary) 82m:93001 93A13

bba Rao, S. See Subba Rao, S.

Rao, S. S. ★Optimization: theory and applications. Wiley Eastern Ltd., New Delhi, 1978. xiv+711 pp. ISBN 0-85226-756-8 (F. M. Kirillova) 82e:90080 90Cxx (90-01) subba Rao, T. See Subba Rao, T. Rao, T. C. Kaladhar (with Hamid, M. A. K.) G.T.D. analysis of scattering from a

dielectric-coated conducting cylinder. Proc. IEE-H 127 (1980), no. 3, 143-153. (Authors' summary) 82c:78020 78A45

Diffraction of a plane wave by a half plane under mixed boundary conditions. (French summary) Canad. J. Phys. 59 (1981), no. 8, 974-984. (Author's summary)

Rao, T. J. On a class of almost unbiased ratio estimators. Ann. Inst. Statist. Math. 33 (1981), no. 2, 225-231. (Victor K. T. Tang) 82m:62018 62D05

o, T. R. N. (with Bose, Bella) Unidirectional error codes for shift register memories FTCS-10 (Tenth Internat. Sympos. Fault-Tolerant Comput., Kyoto, 1980), pp. 26-28, IEEE, New York, 1980. (Authors' summary) 82a:94684 94B99 (68A05)

Rao, T. S. S. R. K. (with Ellis, A. J.; Roy, A. K.; Uttersrud, U.) Facial characterizations of complex Lindenstrauss spaces. Trans. Amer. Math. Soc. 268 (1981), no. 1, 173-186. (A. J. Lazar) 82j:46015 46B10 (46A55)

Rao, U. M. (with Atherton, Derek P.) Periodic oscillations in pulse-modulated systems. Proc. IEE-D 128 (1981), no. 4, 129-136. (Authors' summary) 82g:93030 93C15 (34C15, 70K40)

dhananjaya Rao, V. See Dhanan rama Rao, V. See Rama Rao, V.

ngopal Rao, V. See Venugopal Rao, V. Ila Rao, V. R. See Gopala Rao, V. R.

o, V. U. M. (with Reddy, D. R. K.) Field of a charged particle in Brans-Dicke theory of gravitation. J. Phys. A 14 (1981), no. 8, 1973-1976. (Authors' summary) 82f:83072

Rao, V. V. (with Prakash, S.) Comments on: "Very fast Fourier transform algorithm hardware for implementation" [IEEE Trans. Comput. 28 (1979), no. 5, 333-341; MR 80h:68026] by A. M. Despain. With a reply by Despain. IEEE Trans. Comput. 30 (1981), no. 6, 452. (Editors) 822c68050 68C05 (with Reddy, D. Raghu Ram) Two-dimen aghu Ram) Two-dimensional chirp z-transform. (German and al Process. 4 (1982), no. 1, 17-24. (Authors' summary) nmaries) Signal Pro-

V. V. L. N. A class of self-reciprocal functions. J. Math. Sci. 11 (1976), 11–14 (1979). (From the introduction) 82:33010 33A40

(From the introduction) 82:33010 33A40

al, Robert (with Duchon, Jean) Évolution d'une interface solide-liquide sous l'effet de forces capillaires. (English summary) [Evolution of a solid-liquid interface under capillary forces] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 2, 183–185. (Authors' ry) 82m:35144 35R35 (35O20)

ht, Jean-Claude (with Courcelle, Bruno) Completions of ordered magmas. Fund. Inform. (4) 3 (1980), no. 1, 105–115. (Henner Kröger) 82h:68041 68C99 (06A10, 06F99, 08C05, 18C99)

(with Vuillemin, Jean E.) Operational and semantic equivalence between recursive grams. J. Assoc. Comput. Mach. 27 (1980), no. 4, 772-796. (Klaus Indermark)

ht. Jean-Pierre See N

t, Jean-Pierre See Nonparametric asymptotic statistics, 82a:62007 ed, Louise (with Diamond, Harvey; Kon, Mark) Stable summa class of singular Sturm-Liouville expansions. Proc. Amer. Math. Soc. 81 (1981), no. 2, 279-286. (M. S. P. Eastham) 82a:34020 34B25

m. Algebra 7 (1979), no. 6, 547-563. hael, R. Fully idempotent factorization rings. Comm. Al (Robert Gordon) 82h:16005a 16A12 (16A30, 16A66)

Erratum: "Fully idempotent factorization rings". Comm. Algebra 7 (1979), no. 12, 1329. (Robert Gordon) 82k:16005b 16A12 (16A30, 16A66) A class of rings with an arithmetic. Comm. Algebra 9 (1981), no. 6, 561–567. (Kwangil Koh) 82k:16006 16A12 (16A15) inicus, A. S. (with Platonov, V. P.; Bondarenko, A. A.) Numbers and groups of classes.

braic groups. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 43 (1979), no. 3,

603-627, 734. (D. J. Lewis) 82k:20074 20G30 (10C30)
Platonov's conjecture on genus in arithmetic groups. (Russian. English summary
Dokl. Akad. Nauk BSSR 25 (1981), no. 2, 101-104, 187. (V. L. Popov) 82i:20053 20G30 (20G35, 22E40)

apisarda, V. A. (with Garuccio, A.) Bell's inequalities and the four-coincidence experiment. (Italian and Russian summaries) Nuoco Cimento A (11) 65 (1981), no. 3, 269-297. (Authors' summary) 82m:81009 81B10
 apoport, Amnon (with Kahan, James P.) Coalition formation in the triad when two are

reak and one is strong. Math. Social Sci. 1 (1980/81), no. 1, 11-37. (G. Duru)

[Mathematical methods in the social sciences] Physica paperback. Physica Verlag Würzburg, 1980. 377 pp. ISBN 3-7908-0218-2 (Manfred Kochen) 82a:00016 00A65

upoport, David Splitting of linear operators applied to the stationary Navier-Stokes equation. J. Comput. Phys. 35 (1980), no. 3, 393-407. (Christopher Caldwell) 82c:76035

t, E. F. A problem of static hydroelasticity. (Russian) Trudy Sem. Kraev. Zadačo

No. 16 (1979), 127-136, 244. (I. Aganović) 82e:73051 73J06

Rapoport, E. O. The best approximation of probabilistic measures on a straight line by screte ones. (Russian) Optimizacija No. 23(40) (1979), 17-24, 128. (G. Simboan) 28A12

Rapoport, I. S. See Rappoport, I. S.
Rapp, P. E. (with Bard, Jonathan L. B.; Ghozlan, Aline; Goldbeter, Albert; Hardt, Shoshana; Levitzki, Alexander; Liron, Nadav; Odell, Garrett M.; Parnas, Han Perelson, Alan S.; Rubinow, Sol I.; Segel, Lee A.; Tolkovsky, Aviva M.; Wehrhahn, Christian; Yagil, Gad; Zeigler, Bernard P.) *Mathematical models in molecular and cellular biology. Cambridge University Press, Cambridge-New York, 1980. x+757 pp. ISBN 0-521-22925-1 (John J. Tyson) 82c:92001 92-01 (92A09)

ISBN 0-521-22925-1 (John J. Tyson) 82e-92001 92-01 (92A09)
Rappaz, J. Spectral pollution of a noncompact operator. Comput. Phys. Comm. 24 (1981), no. 3-4, 323-327. (Author's summary) 82mc7012 47A50 (65J10)
(with Mercier, Bertrand; Osborn, John E.; Raviart, P.-A.) Eigenvalue approximation by mixed and hybrid methods. Math. Comp. 36 (1981), no. 154, 427-453. uthors' summary) 82h:65108 65N25 (65N15, 65N30)

spoldt, C. (with Hogeweg, P.) Niche packing and number of species. Amer. Natur. 116 (1980), no. 4, 480-492. (Ronald E. Harrell) 82g;92053 92A17 (92A15)

proport, I. S. (with Pšeničnyi, B. N.) A problem of group pursuit. Kibernetika (Kiev) 1979, no. 6, 145–146 (Russian); translated as Cybernetics 15 (1979), no. 6, 939–940 (1980). (From the text) 82a-90190 90D26

port, Ju. M. Integral equations and Parseval equalities for modified integral Kontorovič-Lebedev transforms. (Russian) Differencial'nye Uravnenija 17 (1981), no. 9, 1696-1699, 1727. (Hans-Jürgen Glaeske) 82j:44004 44A15

Rapport, David J. Optimal foraging for complementary resources. Amer. Natur. 116 (1980), no. 3, 324-346. (Curtis C. Travis) 82g:92054 92A17

Raptis, A. D. Exponential-fitting methods for the numerical integration of the fourth-order differential equation $y^{IV}+f\cdot y=g$. (German summary) Computing 24 (1980), no. 2-3, 241–250. (Author's summary) 82f:65089 65L10

fin, Ronald L. (with Lin, Benjamin W.) What makes integer programming hard to solve: an empirical study. Opsearch 15 (1978), no. 2-3, 65–77. (Authors ng problems 90C10

(with Karwan, Mark H.) Searchability of the composite and multiple surrogate dual functions. Oper. Res. 28 (1980), no. 5, 1251-1257. (Ferenc Forgó) 82a:90096

(with Karwan, Mark H.) Surrogate duality in a branch-and-bound procedure. Naval Res. Logist. Quart. 28 (1981), no. 1, 93–101. (Authors' summary) 82b;90078 90C10 sq. 1. On some results of C. A. Micchelli. Anal. Numer. Théor. Approx. 9 (1980), no. 1, 125–127. (Francesco Altomare) 82g;46025 46A55 (41A36) sakhoo, Nima (with Kalaba, Robert) Analytical aspects of computational linear algebra. Appl. Math. Comput. 8 (1981), no. 2, 83–109. (Dennis D. Berkey) 82k;34011 34A25 (15-04)

sche, G. (with Nenciu, G.; Woolcock, W. S.) General solution of multichannel n relations. II. Noncoincident thresholds, one pole approxim Helv. Phys. Acta 53 (1980), no. 1, 134-158. (Authors' summary) 82b:81119

Raschman, Pavel (with Kubiček, Milan; Marek, Miloš) Waves in distributed chemical systems: experiments and computations. New approaches to nonlinear problems in wimunities (Proc. Conf., Pacific Grove, Calif., 1979), pp. 271-288, SIAM, Philadelphia, Pa., 1980. (Authors' summary) 82h:80023 80A30 (35K55, 92A09)

Action of the department of the property of the department of the (O. Diekmann) 82g:35056 35K55 (92A05)

(O. Dickmann) 822:35856 35K55 (92A05) etti, M. (with Regge, Tullio) Dimer covering and Ising model on lattices homogeneous under the icosahedral group. Riv. Nuovo Cimento (3) 4 (1981), no. 1, 34 pp. (C. A. Hurst) 82A67 (20F10, 51F15)

Raševskii, P. K. (with Efimov, N. V.; Liber, A. E.; Ljapin, E. S.) Viktor Vladimirovič Vagner (on the occasion of his seventieth birthday). (Russian) Uspehi Mat. Nauk 34 (1979), no. 4(208), 227-229. (Editors) 82h01047 01A70

Criterion for connectability by a geodesic segment of two points of a global symmetric space with affine connection. (Russian) Trudy Moskov. Mat. Obšč. 42 (1981), 225-233. (S. S. Singh) 82k:53071 53C35

al-Rashed, Abdallah M. See Al-Rashed, Abdallah M.

Räshed, Roshdi Un problème arithmètico-géomètrique de Sharaf al-Din al-Tüsi. (Arabic summary) With an Arabic text based on a work by al-Tüsi and a French translation. J. Hist. Arabic Sci. 2 (1978), no. 2, 233-254, 429-430. (Editors) 82m:01017

Ibn al-Haytham's construction of the regular heptagon (Arabic) With a French summary. J. Hist. Arabic Sci. 3 (1979), no. 2, 387-309. (J. L. Berggren) 82b:01009 01A30 (51-03)

10 al-Haytham et le théorème de Wilson. Arch. Hist. Exact Sci. 22 (1980), no. 4, 305–321. (William C. Waterhouse) 82e:01015 01A30 (10–03)

Expansion of a function about a displaced center. J. Math. Phys. 22 (1981), Rashid, M. A. no. 2, 271-274. (Author's summary) 82f:81091

Rashwan, D. R. (with Ashour, S. K.) Bayesian predictions for compound Weibull model. Comm. Statist. A—Theory Methods 10 (1981), no. 16, 1613–1624. (R. D. Gill) 82i:62136 62N05 (62F15)

Rashwan, Hamza (with George, Alan) On symbolic factorization of partitioned sparse symmetric matrices. Proceedings of the Ninth Manitoba Conference on Numerical Mathematics and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 219-239, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (Jo Ann Howell) 65F05 (15A23)

(with George, Alan) On symbolic factorization of partitioned sparse symmetric matrices. Linear Algebra Appl. 34 (1980), 145-157. (Iain S. Duff) 82g:65019 65F05 (15A23)

Rasin, V. V. Finitely attainable varieties of inverse semigroups. (Russian) Izv. Vysš. Učebn. Zaved, Matematika 1978, no. 8, 80-87, (Anna Ja, Aizenštat) 82i:20106b

ina, I. V. (with Orlov, A. G.) Relative optimality of discontinuous and discrete processes with parameters. (Russian) Numerical methods of optimization (applied math (Russian), pp. 66-75, Akad. Nauk SSSR Sibirsk. Otdel., Energet. Inst., Irkutsk, 1978. (K. B. Mansimov) 82b:49035 49B36

(with Orlov, A. G.) Complex processes and sufficient conditions of relative optimality. (Russian) Upravljaemye Sistemy No. 18 (1979), 39-46, 76-77. (O. E. 49B10 Citrickii) 82b:49027

wa, Helena Algorithmic logic and its extensions, a survey. Proceedings from 5th Scandinavian Logic Symposium (Aalborg, 1979), pp. 163-174, Aalborg Univ. Press, Aalborg, 1979. (John Cherniavsky) 82m:68029 68B10 (03B99)

de, O. S. Interaction of point sources with a Higgs field in one-dimensional space. (Russian. English summary) Teoret. Mat. Fiz. 48 (1981), no. 2, 197-209. (Author's summary) 82i:81120 81E99

Rašković, Miodrag On existence of expansion of a complex function. Publ. Inst. Math. ograd) (N.S.) 26(40) (1979), 269-271. (M. S. Rangachari) 82d:30051 (26F35)

wskii, E. B. * Науковедение и Восток. (Russian) [Scientific knowledge and the East] Edited and with a preface by L. I. Reisner. "Nauka", Moscow, 1980. 191 pp. (Editors) 82i:01042 01A65

son, D. M. (with Srivastava, J. N.) Some good new confounded designs with two or three factors. Essays in probability and statistics, pp. 95-103, Shinko Tsusho, Tokyo, 1976. (From the introduction) 82h:62095 62K15

mussen, H. (with Forsyth, P., Jr.) Comparison of variational inequality and front-tracking solution of an electrochemical machining problem. Utilitas Math. 17 (1980), 3-15. (S. Bhargava) 82b:78028 78A55 (49D30, 65K10)

sen, Ole Hiorth Continuous variation of foliations in codimension two. Topology 19 (1980), no. 4, 335-349. (Author's introduction) 82i:57027 57R32

ssen, Shelley L. A Bayesian approach to a problem in sequential estimation. Ann. Statist. 8 (1980), no. 6, 1229-1243. (Prem K. Goel) 82a:62131 62L12 (62L15)

Raspopov, B. M. Efficiency of control in problems of synthesis with approximate quality criteria. (Russian) Optimization and adaptive control in large-scale systems (Russian),

pp. 35-40, 106-107, "Ilim", Frunze, 1980. (Author's summary) 82a:49008 49A10 spopov, V. E. (with Sapeev, V. P.) D-properties of certain second-order equations. (Russian) Čisl. Metody Meh. Splošn. Sredy 9 (1978), no. 6 Mat. Modelirovanie, 119-124. (Russell C. Thompson) 82f:35045 35C99 (65P05)

Raspopov, V. N. (with Čečin, G. M.; Popov, V. P.) Irreducible representations of hexagonal space groups. Kristallografija 25 (1980), no. 4, 661-674 (Russian); translated as Soviet Phys. Cryst. 25 (1980), no. 4, 383-389 (1981). (Authors' summary) 82b:20069 (20C25)

Raspopova, N. S. On the question of uniform convergence of the quasireversibility method. (Russian) Ural. Gas. Univ. Mat. Zap. 11 (1978/79), no. 4, 83-87, 132. (O. V. Vasil'ev) 82m:35016 35C99 (65P05)

Rasputin, G. G. Exact error estimates for quadrature formulas. (Russian) Theory of cubature formulas and the application of functional analysis to problems of mathematical physics (Russian), pp. 110–115, 166, Trudy Sem. S. L. Soboleva, No. 1, 1978, Akad. Nauk SSSR

Sibirsk. Oidel., Inst. Mat., Novosibirsk, 1978. (Gheorghe Coman) 82d:65031 65D32
Rassias, George M. Remarks on Heegaard splittings and the Poincaré conjecture. (Greek summary) Prakt. Akad. Athēnōn 53 (1978), 191–196 (1979). (Benny Evans) 82c:57006

Stallings homomorphisms and the simply connectedness problem. Eleutheria 1979, no. 2, 459-462. (From the text) 82i:57001 57M05 (03D40, 03D80, 20F10, 57N10)

On the homotopy equivalence of CW-complexes. Eleutheria 1979, no. 2, 463–467. (Author's summary) 82g:55005 55P10 (55P05)

(with Rassias, John Michael; Rassias, Themistocles M.) Some fixed point theorems in nonlinear analysis. Functional differential systems and related topics (Proc. First Internat. Conf., Blażejewko, 1979), pp. 302–305, Higher College Engrg., Zielona Góra, 1980. (Ju. G. Borisovič) 82e:47075 47H10

Counterexamples to a conjecture of René Thom. Geometry and differential geometry (Proc. Conf., Univ. Haifa, Haifa, 1979), pp. 414-421, Lecture Notes in Math., 792, Springer, Berlin, 1980. (See 81i:53003) 57R70 Springer, Berlin, 1980. (See 81i:53003)

Morse functions on compact differentiable manifolds. Bull. Soc. Roy. Sci. Liège 49 (1980), no. 3-4, 125–127. (Yasuyuki Tsukui) 82k:57023 57R65 (57N10)

Homotopy properties of CW-complexes. Bull. Soc. Roy. Sci. Liège 49 (1980), no. 9-10, 386-389. (Author's summary) 82e:55014 55P10

Rassias, John Michael Weak and semistrong solutions of the Schneider-Tricomi problem in

the Euclidean plane. Bull. Austral. Math. Soc. 20 (1979), no. 2, 187-192. (Megumi Saigo) 35M05

A uniqueness theorem for the Chaplygin-Frankl problem. Bull. Austral. Math. Soc. (1979), no. 2, 217-226. (Megumi Saigo) 82f:35138b 35M05

The Cauchy problem for a second-order nonlinear hyperbolic equation with initial 20 (1979), no. 2, 217-226. (Megumi Saigo) 82f:35138b

data on a line of parabolicity. Bull. Austral. Math. Soc. 20 (1979), no. 3, 345-365. (Dale 35L70 (35L80)

On the Frank!' problem of second kind. Tamkang J. Math. 10 (1979), no. 2, 231-236. (Maria Cinquini-Cibrario) 82x35676 35M05

The survey on equations of mixed type. Functional differential systems

nd related topics (Proc. First Internat. Conf., Blażejewko, 1979), pp. 295–301, Higher College Energ. Zielona Góra. 1980. (A. P. Soldatov) 82g;33061 35M05

College Engrg., Zielona Góra, 1980. (A. P. Soldatov) 82g:35061 35M05 (with Rassias, George M.; Rassias, Themistocles M.) Some fixed point theorems in nonlinear analysis. Functional differential systems and related topics (Proc. First Internat. Conf., Błażejewko, 1979), pp. 302-305, Higher College Engrg., Zielona Góra, 1980. (Ju. G. Borisovič) 82e:47075 47H10

On a defective theorem on elliptic-hyperbolic equations. Bull. Soc. Roy. Sci. Liège 49 (1980), no. 9-10, 307-309. (Manfred W. Kracht) 82i:35129

A mixed type equation in a doubly connected domain. Bull. Soc. Roy. Sci. Liège 49 (1980), no. 9-10, 310-311. (Manfred W. Kracht) 82i:35130 35M05

Corrigenda: "Weak and semistrong solutions of the Schneider-Tricomi problem in the Euclidean space"; "A uniqueness theorem for the Chaplygin-Frankl problem". Bull. the Euclidean space; 'A uniqueness theorem for the Chaptygin-Franki proble Austral. Math. Soc. 23 (1981), no. 1, 159–160. (Megumi Saigo) 82f:35138c sias, Themistocles M. Global analysis of the Morse-Smale index for a minimal 35M05

immersion in \mathbb{R}^n , $n \ge 3$ and its application to the classification problem of unstable minimal immersions. Eleutheria 1979, no. 2, 233-300. (A. J. Tromba) 82i:53007 53A10 (49F15, 58E12)

On the theory of inner product spaces. Eleutheria 1979, no. 2, 481-484. (M. M. Day) 82f:46023 46C05

On fixed point theorems. Eleutheria 1979, no. 2, 485-492. (M. Edelstein) 82a:54073

(with Rassias, George M.; Rassias, John Michael) Some fixed point theorems in nonlinear analysis. Functional differential systems and related topics (Proc. First Internat. Conf., Blażejewko, 1979), pp. 302-305, Higher College Engrg., Zielona Góra, 1980. (Ju. G. 47H10 Borisovič) 82e:47075

On Hilbert's sixteenth problem for real algebraic curves. Bull. Soc. Roy. Sci. Liège 49 (1980), no. 9-10, 304-306. (A. Duma) 82f:14034 14J25 (14N10)

son, J.-P. Some geometrical aspects of the entropy of line-processes. Point processes and queuing problems (Colloq., Keszthely, 1978), pp. 301-323, Cottog. main. 222, A. North-Holland, Amsterdam, 1981. (J. Fritz) 82j:60094 60G55

Rastall, Peter Approximate gravitational field equations. (French summary) Canad. J. Phys. 58 (1980), no. 11, 1599-1613. (Larry L. Smalley) 82c:83059 83D05 (83C25) ruing problems (Colloq., Keszthely, 1978), pp. 307-323, Colloq. Math. Soc. János Bolyai,

Rastogi, B. M. (with Agrawal, S. C.) Instability in a sheared plasma with finite Larmor radius. Math. Student 45 (1977), no. 2, 87-100 (1979). (F. C. Auluck) 82f:76044 76X05 (76E25)

(with Agrawal, S. C.) A note on the reduction of Howard's semicircle. Math. Student 45 (1977), no. 4, 77-82 (1979). (From the text) 824:76045 76E99

Rastogi, S. C. On Finsler space of recurrent curvature tensors. Kyungpook Math. J. 20 (1980), no. 1, 37-45. (H. D. Pande) 82e:53047 53B40

(1980), no. 1, 37-45. (H. D. Fance) 8228-3047 5358-0 stovic, Damilo On the space of linear controllable systems, operator algebras and controllability. An. Unio. Timiçoara Ser. Ştiinţ. Mat. 17 (1979), no. 2, 159-162. (T. R. Gičev) 82a:93012 93B05 (47A99)

Rastrigin, L. A. Two decades of the problem. (Russian) Problemy Slučain. Poiska No. 8 Voprosy Strukturnoï Adaptacii (1980), 5-14, 332. (Editors) 82æ01045 01A70

(with Erenštein, R. H.) *Метод коллективного распознавания. (Russian) [A method of collective pattern recognition] **BitGriffort** no Arromatime [Library of Automation], 615. Énergoizdat, Mascow, 1981. 80 pp. (Publisher's description) **82k:68056** 68G10 (90A05, 92A25)

ulkulov, M. S. (with Maksimov, Ju. M.; Mednis, P. M.) Time and phase means of dynamical systems. (Russian) Izo. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 5, 73-77, 101. (Authors' summary) 82c:82015 82A05 (70G35)

ulov, A. (with Radžabov, N. R.) Representation of a manifold of solutions of a class of a system of higher-order differential equations with a singular line. (Russian) Differential and integral equations, No. 3, pp. 72-76, Tadžik. Gos. Univ., Dushanbe, 1980. (See 35L80

Rasvan, V. Existence, stability and computation of forced oscillations in nonlinear distributed electrical networks. Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. II (Prague, 1978), pp. 589-594, Academia, Prague, 1979. (See 82k:70002b) 94C05 (34K15, 78A55)

Ratcliff, D. (with Williams, E. R.) A note on the analysis of lattice designs with repeats. Biometrika 67 (1980), no. 3, 706-708. (Bhagwandas) 82e:62107 62K99

cliffe, John G. On the ends of higher-dimensional knot groups. J. Pure Appl. Algebra 20 (1981), no. 3, 317–324. (J. P. Levine) 82j:57019 57Q45

On one-relator groups which satisfy Poincaré duality. Math. Z. 177 (1981), no. 3,

425-438. (D. E. Cohen) 82j:20094 20J05 (57M05)

(with Gutièrrez, Mauricio A.) On the second homotopy group. Qu Oxford Ser. (2) 32 (1981), no. 125, 45-55. (Ronald Brown) 82g:57003 57M20 (55Q05) e, A. K. On an integral involving H-function. (Spanish summary) Rev. Tecn. Fac. Ingr. Univ. Zulia 3 (1980), no. 2, 203-212 (1981). (V. P. Mainra) 82k:33012

Identities for the H-function. (Hindi. English summary) Vijnana Parishaa wandhan Patrika 24 (1981), no. 1, 77-79. (C. L. Koul) 82g:33014 33A 33A35

Rathie, Navratna Integrals involving the H-function. II. (Hindi. English summary) Parishad Anusandhan Patrika 23 (1980), no. 4, 331-337. (Rekha Srivastava) 82f:33004

Rathie, Pushpa N. (with Mathai, A. M.) Recent contributions to axiomatic definitions of information and statistical measures through functional equations. Essays in probability and statistics, pp. 607-633, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 824:94022

(with Kannappan, Pl.) On the measurable solution of a functional equation in two variables. Indian J. Math. 20 (1978), no. 2, 187-192. (From the text) 82c:39007

On some enumeration problems in graph theory. Combinatorial mathematics, optimal designs and their applications (Proc. Sympos. Combin. Math. and Optimal Design, Colorado State Univ., Fort Collins, Colo., 1978). Ann. Discrete Math. 6 (1980), 281-288. (Mauro Cerasoli) 82b:05075 05C30

Rathore, R. K. S. (with Singh, O. P.) Determination of certain asymptotic constants related with the post-Widder inversion of Laplace transform. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 155-160. (V. P. Mainra) 82g:41018 41A35 (44A10)

(with Karuppan Chetty, C. S.) Some angularity and inertia theorems related to normal matrices. Linear Algebra Appl. 40 (1981), 69-77. (Bryan E. Cain) 82i:15011

(with Singh, O. P.) Limits of certain iterates of Post-Widder operators. Mo Math. 91 (1981), no. 2, 131-138. (Mourad E. H. Ismail) 82h:41030 41A35 (41A25,

Ratinov, V. A. Semiperfect rings with nilpotent adjoint group. (Russian) Mat. Zametki 29 (1981), no. 2, 171–180, 316. (J. Jirásko) 82g:16022 16A51 (16A48)

Rafiu, Tudor Involution theorems. Geometric methods in mathematical physics (Proc. NSF-CBMS Corf., Univ. Lowell, Lowell, Mass., 1979), pp. 219-257, Lecture Notes in Math., 775, Springer, Berlin, 1980. (William Symes) 821:58047 58F07 (70H15)
Euler-Poisson equations on Lie algebras and the N-dimensional heavy rigid body. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 3, part 1, 1327-1328. (A. Morimoto)

58F05 (58F07, 70E99)

Ratliff, L. J., Jr. Maximal chains of prime ideals in integral extension domains. III. Illin J. Math. 23 (1979), no. 3, 469-475. (Author's introduction) 82g:13001 13A15 Integrally closed ideals and asymptotic prime divisors. Pacific J. Math. 91 (1980),

no. 2, 445-456. (Stephen McAdam) 82i:13005 13A17 (13E05) A brief history and survey of the catenary chain conjectures. Amer. Math. Monthly 88 (1981), no. 3, 169–178. (Stephen McAdam) 82::13004 13-02 (01A65, 13E05)

Independent elements, integrally closed ideals, and quasi-unmixedn sess. J. Algebra 73 (1981), no. 2, 327-343. (Markus Brodmann) 82m:13006 13C15 (13A15)

Note on asymptotic prime divisors, analytic spreads and the altitude formula. Proc. ner. Math. Soc. 82 (1981), no. 1, 1-6. (Stephen McAdam) 82h:13001 13A17

parkhi, M. V. (with Patil, Ganapati P.) On additive and multiplicative damage models and the characterizations of linear and logarithmic exponential families. (French nary) Canad. J. Statist. 7 (1979), no. 1, 61-64. (Authors' summary) 82f:62036

Ratschek, H. (with Schröder, Gunnar) Centered forms for functions in several variables. J. Math. Anal. Appl. 82 (1981), no. 2, 543-552. (Authors' summary) 82m:65045 65G10

Rattey, Paul A. (with Lindgren, Allen G.) Sampling the 2-D Radon transform. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 5, 994-1002. (Authors' summary) 65R10 (92A07, 94A12)

Ratti, J. S. The radius of convexity of certain analytic functions. II. Internat. J. Math. Math. Sci. 3 (1980), no. 3, 483–489. (V. Linis) 82b:30013 30C45

Ratz, Jürg Zur Charakterisierung des Skalarproduktes. Elem. Math. 36 (1981), no. 4, 94-97. (W. Ledermann) 82i:15026 15A63

Rau, V. G. (with Sedov, B. B.; Iljuhin, V. V.; Belov, N. V.) On an incomplete Patterson function. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1400-1403. (From the text) 82j:82064 82A60 (52A25)

(with Parhomov, L. G.; Iljuhin, V. V.; Belov, N. V.) On the number of possible Patterson cyclotomic sets. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 4, 859-862. 10A45 (05B05, 12C20) (J. B. Roberts) 82e:10023

(with Parhomov, L. G.; Iljuhin, V. V.; Belov, N. V.) On the calculation of Patterson cyclotomic sets. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 5, 1110-1113. (J. B. Roberts) 82i:10016 10A45 (05B05, 12C20)

(with Iljuhin, V. V.; Belov, N. V.) Homor

function. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 4, 876-879. (H. W. Guggenheimer) 82g:82049 82A60 (51M20) ch, Jeffrey Asymptotic behavior of solutions to hyperbolic partial differential equal

with zero speeds. Comm. Pure Appl. Math. 31 (1978), no. 4, 431-480. (Gustavo Perla Menzala) 824:35061 35L45 (35B40, 35L55)

(with Reed, Michael) Jump discontinuities of semilinear, strictly hyperbolic system in two variables: creation and propagation. Comm. Math. Phys. 81 (1981), no. 2, 203-227. (H. C. Kranzer) 82m:35104 35L75

(with Sjöstrand, Johannes) Propagation of analytic singularities along diffracted Indiana Univ. Math. J. 30 (1981), no. 3, 389-401. (K. A. Jagdžjan) 82j:35145

Birkhoff's theorem. Phys. Lett. A 81 (1981), no. 2-3, 113-115. (Authors' summary)

(with Nieh. H. T.) Birkhoff's horemanners)

(with Nieh. H. T.) Birkhoff's Birkhoff's Salton (1981), no. 2-3, 113-115. (Authors' summary) Rauch, Richard T. (with Nieh, H. T.) Riema

(with Nieh, H. T.) Birkhoff's theorem for general Riemann-Cartan-type R+R cories of gravity. Phys. Rev. D (3) 24 (1981), no. 8, 2029-2048. (R. Soldati) 82k:83045

Asymptotic flatness, reflection symmetry, and Birkhoff's theorem for $R + R^2$ actions

containing quadratic torsion terms. Phys. Rev. D (3) 25 (1982), no. 2, 577-580. (Author's summary) 82m:R3046 83E10 (83C40)
schenschwandtner, Berthold #Gibbsprozesse und Papangeloukerne. (German) [Gibbsian processes and Papangeloukernels] Dissertationen der Johannes-Kepler-Universität Linz [Dissertations of the Johannes Kepler University of Linz], 17. Verbund der Wissenschaftlichen Gesellschaften Osterreichs (VWGO), Vienna, 1980. ii + 120 pp.
ISBN 3-85369-422-5 (Hans-Otto Georgii) 82f:60232 60K35 (60G55, 82A05)

(with Wakolbinger, Anton) Some aspects of the Papangelou kernel. Point process and queuing problems (Colloq., Keszthely, 1978), pp. 325-336, Colloq. Math. Soc. Ján Bolyai, 24, North-Holland, Amsterdam, 1981. (Walter Warmuth) 82k:66213 60K:

- (60G55)

 why, Sarūnas Classification errors when selecting features. (Russian. Lithuanian and English summaries) Statist Problemy Upravlenija—Trudy Sem. Processy Optimal.

 Upravlenija V Sekcija No. 38 (1979), 9-25. (Z. Šidák) \$22xc52074 62H30 (68G10)

 d Qureshi, M. A. Rings embeddable in a right field. Punjab Univ. J. Math. (Lahore)

 10/11 (1977/78), 51-53. (From the text) \$22x-16001 16A02

 On (f₀/f₁, ····/f_k)-extensions of an entire ring. Karachi Univ. J. Sci. 7 (1979),

 no. 1-2, 1-7. (Harry F. Smith) \$22x-17007 17A99 (16A56)
- - Ore extensions of an entire ring. Karachi Math. Assoc. Riazi (Souvenir) 3 (1980), 5-10. (L. G. Makar-Limanov) 824:16002 16A05 (16A56)
- liuca Raugei, Anna Maria See Pagliuca Raugei, Anna Maria agi, Albert (with Crépel, Pierre) Théorème central limite sur le (English summary) Ann. Inst. H. Poincaré Sect. B (N.S.) 14 (1978), no. 2, 145-164. (Wilfried Hazod) \$2a:60016 60B15 (22E25, 43A99, 60F05) ah, A. (with Andrade, R. F. S.) The Lorenz model and the method of Carleman embedding. Phys. Lett. A \$2 (1981), no. 6, 276-278. (Richard C. Churchill) \$2g:53049
- 58F13 (44A10, 49C99, 76E20)
- dest, Peter (with Hornung, Günter) Initial and terminal algebra semantics of parameterized abstract data type specifications with inequalities. CAAP '81 (Proc. Sixth Colloq., Genoa, 1981), pp. 224–237, Lecture Notes in Comput. Sci., 112, Springer, Berlin, 1981. (From the introduction) 82j:68011 68815

 upp. Marco A. (with Moura, Carlos A.; Fejio, Raúl A.) Analysis of a mathematical condition of the motion of a nile throat into the cell. Seminger on Numerical Ambrits and its
- model for the motion of a pile thrust into the soil. Seminar on Numerical Analysis and its Applications to Continuum Physics (Rio de Janeiro, 1980), pp. 125-134, Soc. Brasil. Mat., Rio de Janeiro, 1980, pp. 125-134, Soc. Brasil. Mat., Rio de Janeiro, 1980, CR. D. Bhargava) 824:73028 73F99 (49A29, 73Q05) (with Do, Claude; Feijóo, Raúl A.) The dynamics of a bar in the presence of obstacles. Bol. Soc. Brasil. Mat. 11 (1980), no. 1, 55-77. (Authors' summary) 82b:73028
 - 73F15 (35R35, 49A29)
 - (with Frémond, Michel; Frial, Ahmed) Analyse limite d'un circuit RLC. Analogie mécanique. (English summary) [Limit analysis of an RLC circuit. Mechanical analogy] mecanique (Eaglas Salman) [Earli alarges of all reference received and alarges]
 C. R. Acad. Sci. Paris Sèr. II Méc. Phys. Chim. Sci. Univers Sci. Terre 292 (1981), no. 1,
 21–24. (Authors' summary) 82m:94046 94C05 (73B99)
 szer, Cecylia ★Rozmaitości matematyczne. (Polish) [Mathematical miscellanies]
- "Nasza Księgarni ia", Warsaw, 1979. 275 pp. ISBN 83-10-07641-X (M. Stojaković) MANS
- An algebraic and Kripke-style approach to a certain extension of intuitionistic logic. sertationes Math. (Rozprawy Mat.) 167 (1980), 62 pp. (Dirk van Dalen) 82k:03100 03G25 (03B20, 03C99)
- ntela, S. S. On the degree of approximation to the generating function by its ultraspherical expansion on a sphere. (Hindi. English summary) Vijna herical expansion on a sphere. (Hindi. English summary) Vijnana k dhan Patrika 23 (1980), no. 4, 323–330. (C. L. Koul) 82c:33015 33A45 (41A25)
- tenberg, Wolfgang Splitting lattices of logics. Arch. Math. Logik Grundlag. 20 (1980), no. 3-4, 155-159. (David Makinson) 82e:03021 03B45
- , Reimund Eine Fehlerschranke für Galerkinapproximationen lokaler Navier-Stokes-Lösungen. Constructive methods for nonlinear boundary value problems and nonlinear oscillations (Proc. Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 110-125, at. Ser. Numer. Math., 48, Birkhäuser, Basel, 1979. (Reinhard Scholz) 82a:65092 65N30 (35Q10)
- Das Cauchyproblem der Helmholtzschen Wirbelgleichung mit einer Differenzennaherung. Recent developments in theoretical and experimental fluid mechanics, pp. 295–308, Springer, Berlin, 1979. (See 82c:76004) 76C05
- mechanics, pp. 295-308, Springer, Berlin, 1979. (See 82c:70004) 76C05

 key, Gérard Échanges d'intervalles et transformations induites. Acta Arith. 34, no. 4, 315-328 (1979). (F. M. Dekking (Zbl 414:28018)) 82m:10076 10K10 (28D05, 58F11) (with Christol, Gilles; Kamae, Teturo; Mendès-France, Michel) Suites algébriques, ornates et substitutions. (English summary) Bull. Soc. Math. France 108 (1980), no. 4, 401-419. (Maurice Mignotte) 82e:10092 10K99
- (with Keane, Michael S.) Stricte ergodicité des échan ges d'intervalles. Math. Z. 174 (1980), no. 3, 203-212. (Alan Saleski) 82d:28014 28D05 (05A05, 10K99, 58F11) (1980), no. 3, 203-212. (viail saiesa) of 222014 (2000) (2000) (108.79, 36711) Iteration des endomorphisms d'un intervalle. [Iteration of the endomorphisms of an interval] Seminar on Number Theory, Paris 1979-80, pp. 255-261, Progress in Math., 12,
- Birkhäuser, Boston, Mass., 1981. (See 82j:10004) 28D05 (10K05, 58F11)
 Ravaska, Timo On a theory of surfaces based on tangent spaces of the second kind. Acta
- Unio. Oulu. Ser. A Sci. Rerum Natur. Math. No. 23 (1980), 34 pp. (Mihai Anastasie) 58009 58B20 (44A99)
 On helical and Δ-helical surfaces in Hilbert space. J. Math. Anal. Appl. 76 (1980),
- no. 1, 18-36. (F. H. Szafraniec) 82g:60068 60G60 (47D99) reché, H. J. See Perspectives in statistical physics, 82h:82001
- Ravelli, Alain (with Gabay, Daniel: Nepomiastchy, Pierre; Rachdi, M'hamed) Numerical methods for simulation and optimal control of large-scale macroecon Applied stochastic control in econometrics and management science, pp. 115-15
 Econom. Anal., 130, North-Holland, Amsterdam, 1980. (From the introduction)
 822:9000 90A16 (62P20, 65C99) ent science, pp. 115-158, Contrib.
- velo Martin, Armando A queueing system with n servers and batch arrivals. (Spanish)
 Investigación Oper. 1 (1980), no. 1, 21-25. (Author's summary)
 821:60225 60K25
 venel, Douglas C. The Segal conjecture for cyclic groups. Bull. London Math. Soc. 13
- (1981), no. 1, 42-44. (J. F. Adams) 82e:55017 55P42 (55Q55)
- wart, P.-A. On the finite element approximation of nonlinear problems. Computational methods in nonlinear mechanics (Proc. Second Internat. Conf., Univ. Texas, Austin, Tex., 1979), pp. 413-425, North-Holland, Amsterdam, 1980. (Christopher Caldwell) 82e:65115 65N30 (76D05)

- (with Mercier, Bertrand; Osborn, John E.; Rappaz, J.) Eigenvalue approximation
- (with Metical, Berthad, Oscolin, John E., Nolli E., Napaz, J.) Elgenvalue approximation
 by mixed and hybrid methods. Math. Comp. 36 (1981), no. 154, 427–453. (Authors' summary) 82b:65108 65N25 (65N15, 65N30)
 Ravichandran, N. (with Subramanian, Ramachandran) An n-unit priority redundant system.
 J. Math. Phys. Sci. 14 (1980), no. 1, 85–94. (H. Taylor) 82g:90054 90B25 (60K15, 90B25)
 - (with Subramanian, Ramachandran) Probabilistic analysis of a two-unit standby redundant system with finite repair capacity. Opsearch 17 (1980), no. 2-3, 71-80. (Masafumi Sasaki) 824:60174 60K10 (62N05, 90825) (with Subramanian, Ramachandran) A redundant system with bulk replacement. Z. Angew. Math. Mech. 60 (1980), no. 11, 632-634. (Authors' introduction) 825:60147
 - 60K10 (90B25)
- rindran, A. (with Lee, Harvey K.) Computer experiments on quadratic programming algorithms. European J. Oper. Res. 8 (1981), no. 2, 166-174. (Authors' summary) 82k-90083 90C20
- Ravvin, I. S. Acoustic-wave instabilities in anisotropic piezosemicor International Conference on Collective Phenomena (Moscow, 1978), pp. 173-184, Ann. New York Acad. Sci., 337, New York Acad. Sci., New York, 1980. (See 82;82602)
- wlings, Don Generalized Worpitzky identities with applications to permutation enumeration. European J. Combin. 2 (1981), no. 1, 67-78. (D. P. Roselle) 82d:05021 05A19 (05A15, 33A70)
- Hins, A. D. Simultaneous Wiener-Hopf equations. (French summary) Canad. J. Phys. 58 (1980), no. 3, 420-428. (F.-O. Speck) 82c:45012 45F10 (45E10, 76Q05)
 A note on the factorization of matrices occurring in Wiener-Hopf problems. IEEE
 - and Propagation 28 (1980), no. 6, 933-934. (L. Rodman) 82a:15013 15A23 (15A54, 45E10)
 - (with Williams, W. E.) Matrix Wiener-Hopf factorisation. Quart. J. Mech. Appl. Math. 34 (1981), no. 1, 1-8. (Thomas Laffey) 82e:15020 15A90 (30E20, 45E10)
 - The explicit Wiener-Hopf factorisation of a special matrix. Z. Angew. Math. Mech. 61 (1981), no. 10, 527-528. (Editors) 82m:15018 15A23 (30C99)
- Alisson, Kim T. (with Entringer, Roger C.) Class of graphs with restricted neighborhoods. J. Graph Theory 3 (1979), no. 3, 257–262. (Authors' summary) 824:05073 05C35 (94C15)
- wasley, J. H. Nonpositive polarizations and half-forms. Differential geometrical methods natical physics (Proc. Conf., Aix-en-Provence/Salamanca, 1979), pp. 145-152, Lecture Notes in Math., 836, Springer, Berlin, 1980. (Virgil Obădeanu) 82j:58058
- Ray, A. K. (with Nelson, Paul, Jr.) An automatic error-control technique for computation of eigenlengths. J J. Comput. Phys. 37 (1980), no. 3, 388-398. (A. J. Zajta) 82b:65075
 - (with Anderson, Ronald M.) Oscillation and comparison theorems for "+\(\lambda(x)y=0\). J. Math. Anal. Appl. 83 (1981), no. 1, 100-109. (C. A. Swanson)
- 82k:34021 34B25 (34C10) Ray, Alan Everton (with Blaquière, Augustin) Sufficient conditions for optimality of threat strategies in a differential game. J. Optim. Theory Appl. 33 (1981), no. 1, 99-109. (L. Mikolajczyk) 82e:49023 49A45 (90D25)
- Ray, Barada Kinkar On a theorem of Brian Fisher. Indian J. Pure Appl. Math. 10 (1979), no. 5, 629-632. (Author's summary) 82j:54100 54H25
- (with Nigam, G. D.) Quick enumeration of independent tensor components of physical properties of crystals in trigonal and hexagonal point groups. Proc. Indian Nat. Sci. Acad. Part A 45 (1979), no. 5, 387-391. (Vojtěch Kopský) 82e:20013
- On fixed points for a class of mappings. Bull. Math. Soc. Sci. Math. R. S. R. (N.S.) 24(72) (1980), no. 2, 205-207. (Silvio Massa) 82d:54055 54H25
- On common fixed points in a locally convex space. Pure Appl. Math. Sci. 12 (1980), no. 1-2, 117–120. (Gary Faulkner) 82g:47041 47H10
- (with Singh, M. Nayan) On an extension of a theorem of M. Furi and A. Vignoli. th. Sem. Notes Kobe Univ. 9 (1981), no. 1, 191-194. (Kok Keong Tan) 82m:54060 54H25
- Ray, Brajakishore Fourier analysis: summability $|R, \log \omega, 1|$. Indian J. Math. 16 (1974), no. 1, 57-66. (Editors) 821:42015 42A24

 On the bounded variation of the first logarithmic mean of a function. Indian J.
 - Math. 16 (1974), no. 3, 173-179. (From the text) 82j:42008 42A28

 (with Misra, Arati) On the absolute matrix summability of the series conjugate to a
 - Fourier series. Indian J. Pure Appl. Math. 11 (1980), no. 11, 1482-1496. (B. Kuttner)
 - 82b:42007 42A50 (42A28)
 (with Samal, M.) On the summability of a sequence associated with the Fourier coefficients of a monotonic function with an infinite limit. Bull. Inst. Math. Acad. Sinica 9 (1981), no. 1, 93-99. (Shri Nivas Bhatt) 82h:42007 42A16 (42A24)
- Ray, Dipankar Comment on: "On the possibility of a three-temporal Lorentz transformation" [Phys. Lett. A 70 (1979), no. 2, 87-88] by G. Ziino. Phys. Lett. A 73
 - (1979), no. 1, 4. (Author's summary) 82a:83005b 83A05 (51B20) Solutions for a relativistic string in a uniform static external field. J. Phys. A 13 (1980), no. 4, 1287-1295. (J. D. McCrea) 82f:83002 83A05 (53B30)
 - olutions for the two-dimensional Heisenberg ferromagnet. Phys. Lett. A 76 (1980),
 - no. 3-4, 274-276. (Author's summary) 82b:82083 82A67 (35Q20) Colliding plane gravitational waves. Phys. Lett. A 78 (1980), no. 4, 315-316.
 - (Author's summary) 824:83026 83C35
 (with Kumar De, Utpal) Some solutions for Yang's equations for self-dual SU(2) gauge fields. Phys. Lett. B 101 (1981), no. 5, 335–336. (Authors' summary) 824:81083 81E10 (35Q20, 58A15)
- Ray, G. Deb (with Chakraborty, T. K.; Banerjee, S. N.) Propagation of axisym relativistic shock waves. Astrophys. and Space Sci. 72 (1980), no. 2, 323-345. (Rishi Ram Sharma) 82e:85002 85A15 (76L05)
- Ray, Goshaidas (with Mahalanabis, A. K.) On the state estimation of large-scale continuous-time linear systems. Proc. IEE-D 128 (1981), no. 4, 137-141. (Authors' summary) 82g:93042 93E10
- Ray, John R. (with Reid, James L.) Noether's theorem and Ermakov systems for nonli equations of motion. Nuovo Cimento A (11) 59 (1980), no. 2, 134-140. (Dominic G. B.

Edelen) 82c:70025 70H99 (49C99)

1982

Nonlinear superposition law for generalized Ermakov systems. Phys. Lett. A 78 (1980), no. 1, 4-6. (Author's summary) 82d:70031 70F99 (34A34)

(with Reid, James L.) Ermakov systems, velocity-dependent potentials, and linear superposition. J. Math. Phys. 22 (1981), no. 1, 91-95. (Ll. G. Chambers)

(with Moody, Michael C.) On the application of energy conditions and algebraic classification in general relativity. J. Math. Phys. 22 (1981), no. 8, 1727–1735. (Alan Barnes) 82j:83022 83C40 (83C55)

Solitary waves in a generalized time-dependent sine-Gordon equation. Lett. Nuovo Cimento (2) 30 (1981), no. 12, 372-374. (From the text) 82k:35158 35Q20 (35C05,

(with Graben, H. W.) Direct calculation of fluctuation formulae in the microcanonical ensemble. Molecular Phys. 43 (1981), no. 6, 1293-1297. (Authors' summary) 82:82017 82A05

(with Hartley, John G.) Ermakov systems and quantum-mechanical superposition Phys. Rev. A (3) 24 (1981), no. 6, 2873-2876. (Authors' summary) 82m:81011 81C05 (70K05)

Invariants for nonlinear equations of motion. Progr. Theoret. Phys. 65 (1981), no. 3,

877-882. (Author's summary) 82g:70043 70H99 (49C15, 58F05, 58F07, 81C05)
Ray, M. K. (with Banerji, S.) Perfectly conducting ferrofluid in general relativity. Gen. Relativity Gravitation 12 (1980), no. 9, 709-718. (Authors' summary) 82a:83035

Ray, Nigel (with Pedersen, Erik Kjaer) A fibration for Diff 2". Topology Symposia Siegen 1979 (Proc. Sympos., Univ. Siegen, Siegen, 1979), pp. 165-171, Lecture Notes in Math., 788, Springer, Berlin, 1980. (Francis Clarke) 82c:57019 57R50 (55Q45) (with Mahowald, Mark) A note on the Thom isomorphism. Proc. Amer. Math. Soc. 82 (1981), no. 2, 307-308. (R. M. Vogt) 82e:55006 55N20

Ray, S. K. (with Sahai, Ajit) An efficient estimator using auxiliary information. Metrika 27 (1980), no. 4, 271-275. (C. H. Kapadia) 82i:62024 62D05

(with Singh, R. Karan) Product cum difference method of estimation using two auxiliary variables. Biometrical J. 23 (1981), no. 6, 563-571. (Authors' summary)

(with Singh, R. Karan) A product-type estimator in double san oling. Bio

23 (1981), no. 7, 721-724. (Authors' summary) 82m:62019 62D05 (with Kamthan, P. K.) Schauder bases and the Köthe structure of associated sequence spaces. (Italian summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 2, 299–303. (Authors' summary) 82h:46011 46A45 (46A35)

thors' summary) 82k:46011 46A45 (46A35) (with Pandey, S. K.) On the distribution of sample mean from a mixture of probability distributions. Pure Appl. Math. Sci. 13 (1981), no. 1-2, 31-34. (Authors' mmary) 82d:62039 62E15

Rayburn, Marlon C. (with Henriksen, Melvin) On nearly pseudocompact spaces. *Topology Appl.* 11 (1980), no. 2, 161–172. (A. W. Hager) 82b;54035 54D30 (54D40)

udhuri, A. (with Sarkar, U.) New solutions of Yang-Mills equations with static external sources. Phys. Lett. B 102 (1981), no. 6, 421-425. (Authors' summary) 81E10 (81G05)

Ray-Chaudhuri, D. K. (with Chan, Agnes Hui) Embedding of a pseudoresidual design into a Möbius plane. J. Combin. Theory Ser. A 32 (1982), no. 1, 73-98. (E. J. F. Primrose) 82k:05018 05B05 (51E05)

Raychowdhury, P. N. (with Boyd, J. N.) Group theoretical aspects of solutions of a two-dimensional steady-state heat equation. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 4, 617–622. (I. Lojczyk-Królikiewicz) 82m:35064 35K05 (35A30, 80A20) mon, L. Piecewise monotone interpolation in polynomial time. SIAM J. Math. Anal. 12

(1981), no. 1, 110–114. (G. L. Iliev) 82&41005 41A05

Raymond, David J. (with Glaviano, Michael C.) Validity of the diffusion approximation in relativistic fluids. Astrophys. J. 243 (1980/81), no. 1, part 1, 271-278. (V. Protopopescu) 82c:85002 85A25 (76Y05)

Raymond, Frank (with Vasquez, Alphonse T.) 3-manifolds whose universal coverings are Lie groups. Topology Appl. 12 (1981), no. 2, 161-179. (W. D. Neumann) 82i:57011 57N10 (22E40, 55R55, 57S15)

Raynal, Marie-Lise Homogénéisation d'un problème de diffusion non linéaire du type de Volterra. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 7, 421–424. (Author's summary) 821:49039 49D50 (45N05, 80A20)

Raynaud, H. Erratum: "A propos de quelques conditions de transitivité de la méthode majoritaire bien connues" [Cahiers Centre Études Rech. Opér. 22 (1980), no. 1, 17-21; MR 81g:90014]. Math. Sci. Humaines No. 73 (1981), 122. (Editors) 82g:90014

Raynaud, Michel See Surfaces algébriques, 82j:10052

Raynaud, Yves Espaces de Banach superstables. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 14, 671-673. (Bernard Beauzamy) 82k:46026b 46B20 (03C20, 46E30)

Deux nouveaux exemples d'espaces de Banach stables. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 15, 715-717. (Bernard Beauzamy) 46B20 (03C20, 46E30)

Rayner, J. C. W. (with Best, D. J.) On Hühn's notion of optimal sample size in the χ² goodness of fit test. Biometrical J. 23 (1981), no. 7, 705-707. (Authors' summary) 62G10

Razar, Michael J. (with Adams, William W.) Multiples of points on elliptic curves and continued fractions. Proc. London Math. Soc. (3) 41 (1980), no. 3, 481-498. (Richard T. Bumby) 82c:14031 14K07 (10F20)

Razavy, M. (with Hron, M.) Time-delay caused by scattering from an oscillating center of force. (French summary) Canad. J. Phys. 59 (1981), no. 3, 394-402. (Authors' summary)

thaev, I. V. Spaces of von Neumann-Gale models. (Russian) Optimizacija No. 21(38) Raznaevi, I. V. Spaces of von Neumann-Case models. (Russian) Optimizacija No. 21(38) (1978), 127-138, 180. (Author's summary) 82m:90855 90A16

Razevig, V. D. Digital modeling of multidimensional dynamic systems subject to random

signals. Actomat. Telemek. 1980, no. 4, 177-186 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 4, part 2, 584-591. (Author's summary) al-Riri, Abu Bakr See Marupov, N. N.; et al., 82b:01008

Razina, G. K. (with Ternov, I. M.; Bordovicyn, V. A.) Spin dynamics in orthogonal fields. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1981, no. 1, 44-48. (Authors' sum 81C99 (78A25)

Razi Naqvi, K. (with Waldenstrom, S.; Mork, K. J.) Unification of the methods of Onsager and Monchick for calculating the probabilities of various fates in diffusion-controlled reactions, with applications to diffusion in space and in a plane. J. Chem. Phys. 71 (1979), no. 1, 73–80. (Authors' summary) 82c:82117 82A99 (80A30)

Raziogova, E. E. See Frege, Gottlob, 82d:00010

Razmadze, S. A. Optimization of the longitudinal profile of a span of a subway tunnel route without special constraints. (Russian) Trudy Vyčisl. Centra Akad. Nauk Gruzin. SSR 20

(1980), no. 2 Mat. Tehn. Kibernet., 47-62. (Editors) 82a-90641 90.30 (49A99)
Razmyskov, Ju. P. Algebras satisfying identity relations of Capelli type. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 45 (1981), no. 1, 143-166, 240. (A. A. Iskander) 82e:17013 17B35 (17C25)

Razmyslovič, G. P. (with Krahotko, V. V.; Al'sevič, V. V.) On the control theory of dynamic systems with delay. Functional differential systems and related topics (Proc. First Internat. Conf., Błażejewko, 1979), pp. 207-216, Higher College Engrg., Zielona Góra,

1980. (Erwin Kozakiewicz) 82a:34095 34K35
Razumeiko, B. G. (with Trenogin, V. A.) Regularization of approximation schemes in the case of a Fredholm equation. (Russian) Differencial npe Uraonenija 16 (1980), no. 6, 1132–1134, 1150–1151. (G. Marinescu) 82c:47013 47A50 (65J10)

numovskii, S. N. A system for synthesis of algorithms ensuring a specified accuracy of computations. Programmirovanie 1981, no. 1, 66-73, 96 (Russian); translated as Programming and Comput. Software 7 (1981), no. 1, 51-57. (Author's summary)

82m:68014 68B05 (65G05)

Razzaghi, M. Solution of the matrix Riccati equation in optimal control. Inform. Sci. 16 (1978), no. 1, 61-73. (Author's summary) 82k:93084 93E99

ibn al-Razzāz al-Jazari, Badī' al-Zamān Abū al-'Izz Isma'il See Al-Hassan, Ahr

Razževaikin, V. N. On the rise of dissipative structures in a system of two reaction-diffusion uations. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 6, 1321-1322. (V.-V. ariu) 82m:35080 35K55 (76V05, 80A32) Olariu) 82m:35080

The instability of stationary inhomogenous solutions of the Cauchy problems for a quasilinear parabolic equation and its ecological applications. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 5, 1328–1333, 1360. (V. S. Rabinovič) 82g:35057 35K55

Re, Pia Maria See Lo Re, Pia Maria

Read, C. J. A Banach space with, up to equivalence, precisely two symmetric bases. Israel J. Math. 40 (1981), no. 1, 33-53. (J. R. Holub) 82m:46012 46B15

Read, Robert R. Representation of certain covariance matrices with application to

asymptotic efficiency. J. Amer. Statist. Assoc. 76 (1981), no. 373, 148-154. (I. Olkin)

82g:62051 62F10

Read, Ron The graph theorists who count—and what they count. The mathematical Gardner, pp. 326-345, Wadsworth, Belmont, Calif., 1981. (See 82b:00003) 05C30

nd, Stephen (with Priest, Graham) Ockham's rejection of ampliation. Mind 90 (1981), no. 358, 274-279. (From the introduction) 82d:03005 03-03 (01A35, 03A05, 03B45) Read, Thomas T. Dirichlet solutions of fourth order differential equations. Spectral theory of differential operators (Birmingham, Ala., 1981), pp. 355-359, North-Holland Math

Studies, 55, North-Holland, Amsterdam, 1981. (Author's summary) 82m:34023 34B25

d-Derchain, Colette Sur les grilles hyperboliques associées à des congruences non W de droites. (English summary) Bull. Soc. Roy. Sci. Liège 48 (1979), no. 9-10, 268-274. (Froim Marcus) 82f:53018 53A20

ade, Maxwell O. (with Umezawa, Toshio) Functions whose derivative has a positive real part. Collections of articles on mathematics and mathematical education, No. 1, pp. 103–108, Saitama Univ., Urawa, 1980. (W. C. Royster) 82k:30019 (30D50)

shaw, J. L. (with Cuff, W. R.) A model of Nicholson's blowfly cycles and its relevance to predation theory. J. Animal Ecology 49 (1980), no. 3, 1005-1010. (Authors' summary) 824:92034 92A17 (34K05)

Reagan, Ronald S. Finite deformations of circular arches. Codes for boundary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 347-355, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 73G05

Reas, Pier Giorgio (with Di Pisa, Giovanni; Michelucci, M. L.) A mathematical-statistical model concerning a biological community of harbor pollution. (Italian) Attà Accad. Sci. Lett. Arti Palermo Parte I (4) 36 (1976/77), 249-257 (1978). (From the text) 828:92940

(with Di Pisa, Giovanni) A mathematical model of age type relative to the expansion of r biological sp.cies. Numerical approximation. (Italian) Atti Accad. Sci. Lett. Arti rmo Parte I (4) 37 (1977/78), 439-450 (1980). (Authors' summary) 82i:92030 92A15

Rebbi, C. (with Fucito, F.: Marinari, E.: Parisi, Giorgio) A proposal for Monte Carlo simulations of fermionic systems. Nuclear Phys. B 180 (1981), no. 3, FS 2, 369-377. (Authors' summary) 82k81045 81C35 (65C20, 81-04, 81C99)

Rebman, Kenneth How to get (at least) a fair share of the cake. Mathematical plums,

pp. 22-37, Dolciani Math. Exp., 4, Math. Assoc. America, Washington, D.C., 1979. (See 82e:0006) 52A45

Rebolledo, Rolando Décomposition de martingales locales et raréfaction des sauts.

Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 138-146, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Ju. S. Millura) 82c:600 60G44 (60F05)

Corrections à: "Décomposition de martingales locales et raréfaction des sau Seminar on Probability. VIV (Paris, 1978/1979) (French), p. 255, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Ju. S. Mišura) 82c:60086b 60G44 (60F05)

Recaml, Erssmo Relativity and beyond. Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein, Vol. 1, 11, pp. 537–597, Johnson, New York, 1979. (See 82b:83002) 83A05

(with Caldirola, P.) Causality and tachyons in relativity. Italian studies in the focuphy of science, pp. 249–298, Boston Studies Philos. Sci., 47, Reidel, Dordrecht, 1981. in Chevalier) 82e:83663 83A05 (Jean Chevalier) 82e:83003

(with Rosenbluth, M. N.; White, Roscoe Beryl) Fourier-space paths applied to the rulation of diffusion for the Chirikov-Taylor model. *Phys. Rev. A* (3) 23 (1981), no. 5,

(with Rosenolum, Ind. N.; White, Roscoe Berty); Portier-space pains applied to the calculation of diffusion for the Chirikov-Taylor model. Phys. Rev. A (3) 23 (1981), no. 5, 2664–2772. (Authors' summary) 824:82663 82.445 (58F13, 60K35) 82:445 (58F13, 60K35) 82:445 (58F13, 60K35) 82:45 (58F13, 60K35) 82

On the problem whether the image of a given differentiable map into a Riemannian nifold is contained in a submanifold with parallel second fundamental form. J. Reine

manuou is contained in a submantiou with parallel second fundamental form. J. Reine Angew. Math. 325 (1981), 87–104. (Bang-yen Chen) 82h:53076 53C42 (53C40) 8ziegel, Ingeborg (with Tasche, Manfred) Über die Lösung entarteter Operatorgleichungen mit Matrixkoeffizienten. Rostock. Math. Kolloq. No. 13 (1980), 81–96. (D. Przeworska-Rolewicz) 82h:47013 47A50

cski, Améria Applications of graph theory to network analysis—a survey. Cot to graph theory and its applications (Internat. Colloq., Oberhof, 1977) (German), pp. 193–200, Tech. Hockschule Ilmenau, Ilmenau, 1977. (Author's introduction) 8242-94699 94C15 (08383, 05C99) a survey. Cont

Terminal Solvability and the n-port interconnection problem. 1979 International prosium on Circuits and Systems (Tokyo, 1979), pp. 988-991, IEEE, New York, 1979.

Some remarks on the arboricity of the tree-complements. Proc. Fac. Sci. Tokai Univ. 15 (1980), 71–74. (Takashi Hamada) 82ac6946 05C05 (with Takacs, Judit) On the combinatorial sufficient conditions for linear network solvability. Internat. J. Circuit Theory Appl. 9 (1981), no. 3, 351–354. (András Frank) 94C05 (05B35, 68C25)

Reddien, G. W. Projection methods. Codes for boundary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 206–227, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 822:65974) 65L10

(with Doedel, Eusebius J.) Finite-difference collocation methods for singular boundary value problems. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 349-354, Academic Press, New York, 1980. (Joachim A. Nitsche) 651.10

(with Doedel, Euseb us I.) Computation of bifurcation branches using projection methods. Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 223-231, ARO Rep. 80, 3, U. S. Army Res. Office, Research Triangle Park, N.C., 1980. (Authors' summary) 82g:34015 34A45 (65L99)

6dy, B. D. Dual extremum principles in the dynamics of rigid perfectly plastic bodies undergoing finite deformations. J. Mech. Phys. Solids 29 (1981), no. 3, 199-210. (Author's summary) 82h:73037 73E99 (49H05, 73G99)

Reddy, C. H. (with Ahmad, M. O.; Ramachandran, Venkat; Swamy, M. N. S.) A class of multivariable positive real functions realizable by resistively-terminated lossless ladder networks. 1979 International Symposium on Circuits and Systems (Tokyo, 1979),
pp. 322-325, IEEE, New York, 1979. (See 82e:94002) 94C10
(with Rajan, P. K.; Swamy, M. N. S.; Reddy, C. P.) Simplified testing procedure for

very strict Hurwitz polynomials-some applications. Fourteenth Asilo Circuits, Systems at d Computers (Pacific Grove, Calif., 1980), pp. 124-127, IEEE, New York, 1981. (See 824:93001) 93D05

ddy, C. P. (with Reddy, C. H.; Rajan, P. K.; Swamy, M. N. S.) Simplified testing procedure for very strict Hurwitz polynomials-some applications. Fourteenth Asilo Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 124–127, IEEE, New York, 1981. (See 824:93001) 93D05

eddy, C. T. (with Shippy, D. J.) Alternative integration formulae for triangular finite elements. Internat. J. Numer. Methods Engrg. 17 (1981), no. 1, 133-139. (Authors' summary) 82a:65020 65D30

ddy, D. R. K. (with Rao, V. U. M.) Field of a charged particle in Brans-Dicke theory of avitation. J. Phys. A 14 (1981), no. 8, 1973-1976. (Authors' summary) 82f:83672

Reddy, D. Raghu Ram (with Rao, V. V.) Two-dimensional chirp z-transform. (German and French summaries) Signal Process. 4 (1982), no. 1, 17-24. (Authors' sum 82m:94015 94A05 (68A05)

Reddy, J. N. A penalty finite element for nonlinear analysis of thin and moderately thick lates. Proceedings of the 16th Midwestern Mechanics Conference (Kansas State Univ., Manhattan, Kan., 1979), pp. 213–217, Develop. in Mech., 10, Kansas St. Univ., Manhattan, Kan., 1979. (N. Gass) 82a:49039 49D30 (49H05, 73K25)

oddy, K. C. A projection method based on Gaussian quadratures with application to compressible Navier-Stokes equations. Seventh International Conference on Numerical Methods in Fluid Dynamics (Stanford Univ., Stanford, Calif.; NASA/Ames Res. Center, Moffett Field, Calif., 1980), pp. 342-348, Lecture Notes in Phys., 141, Springer, Berlin, 1981. (Author's summary) 82i:65078 65P05 (76A60, 76D05)

Reddy, Sudhakar M. (with Parthasarathy, R.) A testable design of iterative logic arrays. IEEE Trans. Circuits and Systems 28 (1981), no. 11, 1037-1045. (Authors' summary) 94C30 (68B20)

Reddy, William L. (with Coven, Ethan M.) Positively expansive maps of compact manifolds. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 96-110, Lecture Notes in Math., 819, Springer, Berlin, 1980. (E. Hemmingsen) 82h:58024 58F11 (28D20, 54H20)

Rédei, L. To the mathematical theory of "fifteenth-puzzle". Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 123-124. (From the introduction) 82e:05058 05B99 (20B25)

Redekopp, L. G. (with Maslowe, S. A.) Long nonlinear waves in stratified shear flows. J. Fluid Mech. 101 (1980), no. 2, 321-348. (Authors' summary) 82b:76062 76V05

Redhead, M. L. G. Experimental tests of the sum rule. Philos. Sci. 48 (1981), no. 1, 50-64. (Lawrence Sklar) 82j:81004 81B05

ffer, Raymond M. (with Walter, Wolfgang) Uniqueness, stability and error estimation for parabolic functional-differential equations. (Russian summary) Complex analysis and

its applications (Russian), pp. 494-513, 670, "Nauka", Moscow, 1978. (J. Kalinowski (Zbl 425:35053)) 82d:35164 35R10

(with Walter, Wolfgang) Invariant sets for systems of partial differential equations. I. Parabolic equations. Arch. Rational Mech. Anal. 67 (1978), no. 1, 41–52. (I. Lojczyk-Królikiewicz) 82h:35050 35K55 (35B99)

(with Smith, Carey) The case n=2 of the Goldberg-Straus inequality. inequalities, 2 (Proc. Second Internat. Conf., Obervolfach, 1978), pp. 47–51, Birkhäuser, Basel, 1980. (Abbas A. El Gamal) 82e:05025 05A20 (15A99)

(with Walter, Wolfgang) Invariant sets for systems of partial differential equations.

II. First-order and elliptic equations. Arch. Rational Mech. Anal. 73 (1980), no. 1, 19–29.

(I. Lojczyk-Królikiewicz) 82h:35051 35K55 (35B99, 35J60)

Red'ko, S. F. (with Jakovlev, V. P.) A method for the decomposition of the problem of identifying mechanical systems. (Russian). Oscillations, durability and stability of complex mechanical systems (Russian), pp. 49–57, 159, "Naukova Dumka", Kiev, 1979. (Françoise Berquier) 828-830259 93B30

Red'ko, V. N. (with Lisovik, L. P.) Regular events in semigroups. (Russian) Problemy Kibernet. No. 37 (1980), 155-184, 239. (Hubert Grassmann) 82b:20101 20M35 (03D05, 03D40)

llih, S. M. (with Povolockii, A. I.) On the selection of a locally convex space for a Hammerstein-type operator. (Russian) Functional analysis, No. 15, pp. 127-134, Ul' janousk. Gos. Ped. Inst., Ul' yanousk, 1980. (R. V. Duduchava) 82j:47085

dlin, Lothar (with Davison, T. M. K.) Hosszú's function onal equation over rings generated by their units. Aequationes Math. 21 (1980), no. 2-3, 121-128. (P. Javor) 82h:39004 39B50

on, Lynn T. (with Shavitt, Isaiah) Quasidegenerate perturbation theories. A canonical Van Vleck formalism and its relationship to other approaches. J. Chem. Phys. 73 (1980), no. 11, 5711-5717. (Authors' summary) 82g:81016 81C12 (81G55)

Redmond, D. B. On doubly transitive permutation groups of degree pq+1. Proc. Roy. Irish Acad. Sect. A 80 (1980), no. 2, 127-130. (Cheryl E. Praeger) 82g:20006 20B20

Redner, S. (with Reynolds, P. J.) Single-scaling-field approach for an isolated polymer chain. J. Phys. A 14 (1981), no. 3, L55-L61. (Authors' summary) 82c:82074 82A42 (with Brown, Alan C.) Percolation properties of a three-dimensional random

resistor-diode network. J. Phys. A 14 (1981), no. 8, L285-L290. (Authors' summary) 82f:82046 82A43

One-dimensional Ising chain with competing interactions: exact results and connection with other statistical models. J. Statist. Phys. 25 (1981), no. 1, 15-23. (Author's summary) 82c:82100 82A67

Redozubova, O. S. O-pairs of congruences with special location of focal surfaces. (Russian) Geometry of imbedded manifolds (Russian), pp. 72-78, Moskov. Gos. Ped. Inst., Moscow, 1979. (Vladislav Goldberg) 82g:53017 53A25

1979. (Vianisiav Goldberg) adgr.5041 / 557-25.
Ree, Francis H. (with Yoon, Kyonggeun; Chae, Dong Ghi; Ree, Taikyue) Computer simulation of a grand canonical ensemble of rodlike molecules. J. Chem. Phys. 74 (1981), no. 2, 1412-1423. (Authors' summary) 82c:82001 82-04 (65C05, 82A67)

Ree, Taikyue (with Yoon, Kyonggeun; Chae, Dong Ghi; Ree, Francis H.) Computer simulation of a grand canonical ensemble of rodlike molecules. J. Chem. Phys. 74 (1981), no. 2, 1412-1423. (Authors' summary) 82c:82001 82-04 (65C05, 82A67)

Reed, C. C. (with Anderson, John L.) Hindered settling of a suspension at low Reynolds number. AIChE J. 26 (1980), no. 5, 816-827. (Authors' summary) 82h:76060

Reed, G. A. L. (with Sander, K. F.) *Transmission and propagation of electromagnetic waves. Electronics Texts for Engineers and Scientists. Cambridge University Press, Cambridge-New York, 1978. x+410 pp. ISBN 0-521-21924-8, 0-521-29312-X (R. Kress) 78A40 (78-01, 78A40)

Reed, G. M. On normality and countable paracompactness. Fund. Math. 110 (1980), no. 2, 145–152. (Teodor Przymusiński) 824:54033 54E30 (54D15)

See also Proceedings Topology Conference, 82:5-9002

Reed, I. S. (with Truong, T. K.) Simple proof of the continued fraction algorithm for decoding Reed-Solomon codes. Proc. Inst. Electr. Engrs. 125 (1978), no. 12, 1318–1320. (Authors' summary) 82m:94039 94B15

(with Miller, Robert L.; Truong, T. K.) A theorem for computing primitive elements in the field of complex integers of a characteristic Mersenne prime. *IEEE Trans. Acoust.*Speech Signal Process. 29 (1981), no. 1, 119–120. (Bart Rice) 82b:12022 12C15

(with Truong, T. K.; Benjauthrit, B.) Addendum to: "A new hybrid algorithm for computing a fast discrete Fourier transform" [IEEE Trans. Comput. 28 (1979), no. 7, -492; MR 80e:68078] by Reed and Truong. IEEE Trans. Comput. 30 (1981), no. 6,

454. (From the text) 82h:68051 68C05 (10-04, 65T05)
(with Truong, T. K.; Miller, Robert L.; Huang, J. P.) Fast transforms for decoding Reed-Solomon codes. Proc. IEE-F 128 (1981), no. 1, 9-14. (Prem Nath) 82j:94020

Reed, K. W. (with Murakawa, Hide; Atluri, Satya N.; Rubenstein, R.) Stability analysis of structures via a new complementary energy method. Comput. & Structures 13 (1981), no. 1-3, 11-18. (Authors' summary) 82j:73055 73K25 (73H99)

Reed, Michael (with Rauch, Jeffrey) Jump discontinuities of semilinear, strictly hyperbolic systems in two variables: creation and propagation. Comm. Math. Phys. 81 (1981), no. 2, 203-227. (H. C. Kranzer) 82m:35104 35L75 (with Illner, R.) The decay of solutions of the Carleman model. Math. Methods

Appl. Sci. 3 (1981), no. 1, 121-127. (Authors' summary) 82e:76052 76P05 (35O20,

Reed, Myra Jean Shrinkable decompositions. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979). Topology Proc. 4 (1979), no. 2, 515-532 (1980). (H. Roslaniec) 82h:54010 54B15

e Morley and more. Math. Gaz. 65 (1981), no. 431, 34-36. (Editors) 82i:51027 51M15

Reeder, John (with Shinbrot, Marvin) Three-dimensional, nonlinear wave interaction in Nonlinear Anal. 5 (1981), no. 3, 303-323. (Alberto Valli) ter of constant depth. 82i:35168 35R35 (76B15)

(with Hewgill, Denton E.; Shinbrot, Marvin) Some exact solutions of the nonlinear blem of water waves. Pacific J. Math. 92 (1981), no. 1, 87-109. (Alberto Valli) 82j-35169 35R35 (76B15)

(with Shinbrot, Marvin) On Wilton ripples. I. Formal derivation of the phenom Wave Motion 3 (1981), no. 2, 115-135. (E. G. Broadbent) 82e:76015

eds, James Monotonicity of an integral of M. Klass. Ann. Probab. 8 (1980), no. 2, 368-371. (H. Teicher) 82h:60098 60G50 (26A99)

Reeh, H. (with Requardt, Manfred) Some properties of the electric charge operator. Rep. Math. Phys. 17 (1980), no. 1, 55-58. (Franco Strocchi) 82g81126 81L05

Reemtsen, R. (with Lozano, C. J.) An approximation technique for the numerical solution of a Stefan problem. Numer. Math. 38 (1981/82), no. 1, 141-154. (Authors' summary) 65N15

sents, G. (with Polley, L.; Streater, R. F.) Some covariant representations of massle boson fields. J. Phys. A 14 (1981), no. 9, 2479-2488. (Wolfgang Lücke) 82k:81034 81D05 (46L60, 81E05)

ss, Charles Sparks (with Rees, Paul K.) Concerning transforms of Fuchsian groups. Indian J. Math. 18 (1976), no. 1, 57-60. (Editors) 82d:30050 30F25 (with Shah, Swarupchand M.; Stanojević, Časlav V.) ★Theory and applications of

Fourier analysis. Monographs and Textbooks in Pure and Applied Math. Dekker, Inc., New York, 1981. viii + 419 pp. ISBN 0-8247-6903-1 (Paul Nevai) 82a:42001 42-01 (44-01)

Math. Chronicle 10 (1981), no. 1-2, 13-30. (Bruno Poizat) Egyptian fractions. 10A30 (01A15)

(with Dikshit, G. D.) Absolute Riesz summability of Fourier series. I. Proc. Amer. Math. Soc. 82 (1981), no. 2, 231-238. (R. N. Mohapatra) 82k:42007 42A28 (40F05)
Rees, David (with Boratyński, Maksymillian; Eisenbud, David) On the number of

generators of ideals in local Cohen-Macaulay rings. J. Algebra 57 (1979), no. 1, 77-81. (From the introduction) 82k:13021 13H10 (14M05)

Rings associated with ideals and analytic spread. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 3, 423-432. (W. Vogel) 82(:13002 13C13 (13E05. 13H99)

Rees, Elmer Framings on hypersurfaces. J. London Math. Soc. (2) 22 (1980), no. 1, 161-167. (Peter J. Eccles) 82e:57011 57R15

van Rees, G. H. J. See Van Rees, G. H. J.

Rees, M. (with Ord, K.) Spatial processes: recent developments with applications to matics of hydrology and water resources (Proc. Conf., Unit hydrology. The math Lancaster, Lancaster, 1976), pp. 95-118, Academic Press, London, 1979. (See 82k:86001) 86A05 (60K30)

Rees, Martin J. The size and shape of the universe. Some strangeness in the proportion (Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 291-301, Addison-Wesley, Reading, Mass., 1980. (See 82d:83002) 01A65 (83-03)

Rees, Mary Tangentially distal flows. Israel J. Math. 35 (1980), no. 1-2, 9-31. (Peter Walters) 82b:58070 58F18 (54H20)

A minimal positive entropy homeomorphism of the 2-torus. J. London Math. Soc. (2) 23 (1981), no. 3, 537-550. (Carmen Chicone) 82h:58045 58F99 (28D20, 58F11)

Rees, Mina The mathematical sciences and World War II. Amer. Math. Monthly 87 (1980),

no. 8, 607-621. (F. J. Murray) 82;:01059 01A60 (01A80)

Rees, Paul K. (with Rees, Charles Sparks) Concerning transforms of Fuchsian groups.

Indian J. Math. 18 (1976), no. 1, 57-60. (Editors) 82d:30050 30F25

eetz, D. Punctuated and truncated annuities for expanding Markovian decision processes. Recent developments in Markov decision processes (Proc. Internat. Conf., Univ. Manchester, Manchester, 1978), pp. 35-56, Academic Press, London, 1980. (See

Reeve, J. S. (with Guttmann, A. J.) Semi-infinite φ⁴ systems: ε expansions for susceptibility exponents. J. Phys. A 14 (1981), no. 3, 687-692. (Authors' summary) 82c:82035

de Reffye, J. Applications des distributions et des distributions aléatoires à la théorie du signal. (English summary) [Applications of distributions and random distributions to signal theory] Rev. CETHEDEC No. 68 (1981), 79-98. (Author's summary) 82k:60095 60G35 (94A12)

Regazzini, Eugenio Errata corrige: "Some observations on a theoretical indicator of association between components of a random vector with special emphasis on the convergence in probability of random numbers" [Rend. Sem. Mat. Univ. Politec. Torino 36 (1977/78), 279-291 (1979); MR 80i:60026a]. (Italian) Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 2, 163 (1981). (Editors) 82g:60039 60F05 Regener, E. (with Lam, C. W. H.; Swiercz, S.; Thiel, L.) A computer search for

(α,ω)-graphs. Proceedings of the Ninth Manitoba Conference on Numerical Math and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 285–289, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (Editors) 82b:05002 05-04 (05C99)

Regev, Amitai The Kronecker product of S_n-characters and an A⊗B theorem for Capelli

identities. J. Algebra 66 (1980), no. 2, 505-510. (Wolfgang Knapp) 82f:16015 (20C30)

Asymptotic values for degrees associated with strips of Young diagrams. Adv. in Math. 41 (1981), no. 2, 115-136. (M. L. Mehta) 82h:20015 20C30 (05A17, 16A64, 68E99)

Regge, Tullio Mathematics and physics. Some strangeness in the proportion (Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 281-283 Addison-Wesley, Reading, Mass., 1980. (See 82d:83002) 83C45 (53C20)

Mathematics in the natural sciences. (Italian) Boll. Un. Mat. Ital. A (5) 17 (1980), no. 3, 365-375. (K. Jacobs) 82e:00041 00A69

(with D'Auria, R.; Fré, P.) Coupling of matter to supergravity from the rheonomic symmetry point of view and the origin of the auxiliary fields. Nuclear Phys. B 176 (1980), no. 1, 243–268. (Minco Ikeda) 82e:83038 83E99 (17A70, 58A30, 81G99) (with D'Auria, R.; Fré, P.) Graded-Lie-algebra cohomology and supergravity. Nuovo Cimento (3) 3 (1980), no. 12, 37 pp. (A. Verona) 82i:17012 17870 (83E50)

(with D'Auria, R.; Frè, P.) The supergroup manifold formulation of the Wess-Zumino multiplet revisited: the supercurrent and the supergravity auxiliary fields. Nuclear Phys. B 188 (1981), no. 2, 342–354. (Authors' summary) 82:83671 83E5

(with Rasetti, M.) Dimer covering and Ising model on lattices homogeneous under the icosahedral group. Riv. Nuovo Cimento (3) 4 (1981), no. 1, 34 pp. (C. A. Hurst) 82i:82065 82A67 (20F10, 51F15)

Reghis, M. (with Hiris, Viorel) Equally controlled systems. Systems theory (Proc. Nat. Conf., Univ. Brazov, Brazov, 1977) (Romanian), pp. 88–93, Univ. Brazov, Brazov, 1978. (A. S. C. Sinha) 82j:93008

es See Hamann, Günther, 82h:01024 and L'Huillier, Ghislai

Regirer, S. A. On the problem of continuous models of suspensions. Prikl. Mat. Meh. 42 (1978), no. 4, 679-688 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 4, 722-732 (1979). (K. S. Harinath) 82g:80005 80A15 (76Z05, 92A09)

(with Sadrina, N. H.) On models of thixotropic fluids. Prikl. Mat. Meh. 42 (1978), no. 5, 856-865 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 5, 925-936 (1979). (Authors' summary) 82f:76002 76A05 (82A35) (1979). (Authors' summary) 82f:76002

Regoli, Giuliana (with Coletti, Giulianella) On the distribution function of a finitely additive probability measure. (Italian. English summary) Rend. Mat. (7) 1 (1981), no. 2, 319–329. (Giorgio Dall'Aglio) 82ị:60029 60E99 (28A12, 60A05)
Regoliosi, Giuseppe (with Barone, Piero) ★Una procedura di calcolo per la scelta

automatica e la valutazione in linea di un modello lineare, appartenente a una classe data, relativo al rumore additivo presente in dati generati da una strumentazione elettronica. (Italian) [A calculation procedure for automatic selection and on-line estimation of a linear model belonging to a given class, relative to the additive noise present in data generated by an electronic instrument] Quaderni Serie III [Study Series III], 112. Istituto per le Applicazioni del Calcolo "Mauro Picone" (IAC), Rome, 1979. 19 pp. 82m:94002 94A05 (68J10)

(with Barone, Piero) *Analisi statistica del disturbo causato dal campo elettromagnetico di rete su dati digitali rilevati con una strumentazione elettronica. (Italian) [Statistical analysis of the disturbance caused to relevant digital data in the electromagnetic field of a network by an electronic instrument] Pubblicazioni Serie III [Publication Series III], 189. Istituto per le Applicazioni del Calcolo "Mauro Picone" (IAC), Rome, 1979. 31 pp. 82m:94021 94A12
hm, Ronald G. (with Lewis, John Gregg) The numerical solution of a nonseparable

elliptic partial differential equation by preconditioned conjugate gradients. J. Res. Nat. Bur. Standards 85 (1980), no. 5, 367-390. (Luciano Biasini) 824:65067 65N20

m, U. Kommutatoren in GL_n(D). SK₁ of division algebras (Sem., Bielefeld/Göttingen, 1976) (German), pp. 117-123, Lecture Notes in Math., 778, Springer,

Berlin, 1980. (See 82b:16014) 18F25 (20G35)
ibiger, Albrecht (with Straube, Bernd) Isomorphiedefinitionen für allgemeine Netzwerke. Wiss. Z. Tech. Univ. Dresden 29 (1980), no. 1, 239-248. (H.-J. Voss) 82c:94015 94C15

Reibold, Reinhard (with Hegerfeldt, Gerhard C.) The asymptotic fall-off of a Stark-broadened spectral line in the classical path model. Phys. Lett. A 82 (1981), no. 7,

340-344. (Authors' summary) 82d:82062 82A45 (85A25)

Reich, Axel Werteverteilung von Zetafunktionen. Arch. Math. (Basel) 34 (1980), no. 5, 440-451. (H.-J. Bentz) 82h:10051 10H10 (10H05, 12A70, 30E10) Eulerprodukte und diskrete Mittelwerte. (English summary) Monatsh. Math. 90

(1980), no. 4, 303-309. (S. L. Segal) 82a:10056 10H45 (30B50)

Reich, Edgar L¹-approximation of meromorphic functions. J. Approx. Theory 31 (1981), no. 1, 1-5. (S. Fisher) 82f:30038 30E10 (41A20)

Reich, Jakob I. Random ergodic sequences on LCA groups. Trans. Amer. Math. Soc. 265 (1981), no. 1, 59-68. (Pierre Crépel) 82e:60016 60B15
Reich, Ludwig Neuere Ergebnisse über kontinuierliche Iteration formaler Potenzreihen.

Lectures from the Colloquium on the Occasion of Ernst Peschl's 70th birthday (Gern pp. 62-79, Bonner Math. Schriften, 121, Univ. Bonn, Bonn, 1980. (D. A. Lutz) 82i:13026 13J05 (32A30, 32B05, 34A25)

(with Schwaiger, Jens) Linearisierung formal-biholomorpher Abbildungen und Iterationsprobleme. Aequationes Math. 20 (1980), no. 2-3, 224-243. (G. N. Himšiašvili) 82g:39008 39B60 (15A24, 22E05, 32A10)

Analytische und fraktionelle Iteration formal-biholomorpher Abbildungen und Differenzenrechnung. Publ. Math. Debrecen 27 (1980), no. 1-2, 49-60. (R. I. Bogdanov) 32B10 (22E05, 58F18) 82b:32011

Reich, Simeon Iterative methods for accretive sets. Nonlinear equations in abstract spaces (Proc. Internat. Sympos., Univ. Texas, Arlington, Tex., 1977), pp. 317–326, Academic Press, New York, 1978. (Dan Tiba) 82c:47065 47H06 (47H10)

Constructing zeros of accretive operators. Applicable Anal. 8 (1978/79), no. 4,

349-352. (R. Kannan) 82d:65052a 65J15 (47H06)

Constructing zeros of accretive operators. II. Applicable Anal. 9 (1979), no. 3, 159-163. (R. Kannan) 824:65052b 65J15 (47H06)

Asymptotic behavior of resolvents in Banach spaces. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 27-30 (1980). (Gheorghe Moroşanu) 82i:47064 47H06 (47H20)
A remark on a problem of Asplund. (Italian summary) Atti Accad. Naz. Lincei Rend.

Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 3-4, 204-205 (1980). (F. Deutsch) 82i:41042 41A65 (46B10)

Strong convergence theorems for resolvents of accretive operators in Banach spaces Math. Anal. Appl. 75 (1980), no. 1, 287-292. (A. Pazy) 82a:47050 47H06 (47H20) A fixed point theorem for Fréchet spaces. J. Math. Anal. Appl. 78 (1980), no. 1, 32 (Lunge Cariol) 82. J. Math. Anal. Appl. 75 (1980), no. 1, 287-292. (A. Pazy) 82a:47050 33-35. (James Caristi) 820:47055 47H10

On the asymptotic behavior of nonlinear semigroups and the range of accretive erators. J. Math. Anal. Appl. 79 (1981), no. 1, 113-126. (Dan Tiba) 82c:47066 47H06 (47H20)

(with Calvert, Bruce) A characterization of smooth Banach spaces. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 9, 450-453. (S. Swaminathan) 82m:46014 46B20 (47H06)

Reichard, Klaus C[∞]-Diffeomorphismen semianalytischer und subanalytischer Mengen.

Compositio Math. 42 (1980/81), no. 3, 401-416. (M. Herrera) 82f:32014

32B20

Reichardt, Hans Festvortrag, Festakt und Tagung aus Aniad des 200. Geburtstages von Carl Friedrich Gauß (Berlin, 1977), pp. 17–31, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1978, 3, Akademie-Verlag, Berlin, 1978. (Albert C. Lewis) 82c:01052 See also Toth, Imre, 82g:01029

Reichardt, W. Figure-ground discrimination by the visual system of the fly. Pattern formation by dynamic systems and pattern recognition (Proc. Internat. Sympos. Synerget., Garmisch-Partenkirchen, 1979), pp. 100-121, Springer Ser. Synergetics, 5, Springer, 92A27 (92A09) Berlin, 1979. (See 82k:00028)

(with Poggio, T.) Visual fixation and tracking by flies: mathematical properties of Biol. Cybernet. 40 (1981), no. 2, 101-112. (Authors' 92A09 (34H05)

(with Nyikos, Peter J.) Some results on cardinal functions in metrization theory. tho-Croatian summary) Glas. Mat. Ser. III 15(35) (1980), no. 1, 183-202. (R. Hodel) 54008 54A25 (54E35)

Zur Entwicklung des Dimensionsbegriffes. Math.-Phys. Semesterber. 27 (1980), no. 1, 16-54. (Roman Duda) 82c:01040 01A60 (54F45, 55M10) chel, Lothur The determination of boundary collocation points for solving some problems for the Laplace operator. 18th Scandinavian Congress of Mathematicians (Aarhus, 1980), pp. 416-429, Progress in Math., 11, Birkhäuser, Boston, Mass., 1981. (See 82:00012) 65N35

Alexandra, Hans *Elements of symbolic logic. Reprint of the 1947 original. Dover Books on Western Philosophy. Dover Publications, Inc., New York, 1980. xiv+444 pp. ISBN 0-486-24004-5 (Editors) 82a:03001 03-01

L. E. Microscopic modes in a Fermi superfluid. I. Linearized kinetic equations. J. Statist. Phys. 23 (1980), no. 1, 83-110. (Author's summary) 824:81180a 81J05
 Microscopic modes in a Fermi superfluid. II. Dispersion relations. J. Statist. Phys. 23 (1980), no. 1, 111-125. (Author's summary) 824:81180b 81J05

Translational Brownian motion in a fluid with internal degrees of freedom. Phys. Rev. A (3) 24 (1981), no. 3, 1609–1616. (Author's summary) 82k:82027a 82A40

Rotational Brownian motion in a fluid with internal degrees of freedom. Phys. Rev. A (3) 24 (1981), no. 3, 1617–1620. (Author's summary) 82i:820276 82A40 (76P05)

Reichmann, K. Abbruch beim Intervall-Gauß-Algorithmus. (English summary) Computing 22 (1979), no. 4, 355–361. (Author's summary) 82i:65054 65G10

blanucha-Reid, A. T. See Bharucha-Reid, A. T.

Reid, Constance Reid, A. T. See Rharucha-Reid, A. T.

Zeitgenosse. Translated from the English by Jeannette Zehnder-Reitinger. er-Verlag, Berlin-New York, 1979. iv+373 pp. ISBN 3-540-09177-7 (D. J. Struik) 821:01135 01A70 (01A60)

deltails of the Christian and Christian a

(with Teo, K. L.) Hitting a target with maximum probability. Internat. J. Systems Sci. 11 (1980), no. 9, 1075-1081. (Vladimir Katkovnik) 82i:93097 93E20 (49A60) (with Teo, K. L.) Optimal parameter selection of parabolic systems. Math. Oper. Res. 5 (1980), no. 3, 467-479. (Ekkehard W. Sachs) 82c:49013 49B22 (49D07)

Reid, J. K. A survey of sparse matrix computation. Electric power problems: the mathematical challenge (Proc. Conf., Seattle, Wash., 1980), pp. 41–68, SIAM, Philadelphia, Pa., 1980. (Author's summary) 82bc5619 65F05 (with Pariett, B. N.) Tracking the progress of the Lanczos algorithm

mmetric eigenproblems. IMA J. Numer. Anal. 1 (1981), no. 2, 135–155. (Authors' mmary) 82ec5039 65F15

Reid, James L. (with Ray, John R.) Noether's theorem and Ermakov systems for nonlinear ons of motion. Nuovo Cimento A (11) 59 (1980), no. 2, 134-140. (Dominic G. B. Edelen) 82c:70025 70H99 (49C99)

(with Ray, John R.). Ermakov systems, velocity-dependent potentials, and nonline superposition. J. Math. Phys. 22 (1981), no. 1, 91–95. (Ll. G. Chambers) 82e:70029

Reid, K. B. Tournaments with prescribed numbers of kings and serfs. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980),

809-826. (J. W. Moon) 82±05064 05C20 (05C50)
id, M. F. (with Butler, P. H.) Orientations of point groups—phase choices in th
Racah-Wigner algebra. J. Phys. A 13 (1980), no. 9, 2889-2901. (T. Janssen) 82e:81059 -phase choices in the 81G40 (22E70, 82A60)

id, Miles Bogomolov's theorem $c_1^2 \le 4c_2$. Proceedings of the International Symposium on Algebraic Geometry (Kyoto Univ., Kyoto, 1977), pp. 623–642, Kinokuniya Book Store, Tokyo, 1978. (Ulf Persson) 823:14014 14F05 (32J15)

Canonical 3-folds. Journess de Géometrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers, 1979, pp. 273-310, Sijthoff & Noordhoff, Alphen aan den Rijn, 1980. (Jayant M. Shah) 82:14025 1430 (14B07, 14J17)

Reid, Nancy Influence functions for censored data. Ann. Statist. 9 (1981), no. 1, 78-92. (Rudolph J. Beran) 82c:62136 62N05

(with Lagakos, S. W.) Estimating convolutions from partially censored data.

metrika 68 (1981), no. 1, 113–117. (G. K. Bhattacharyya) 82m:62092 62G05

Estimating the median survival time. Biometrika 68 (1981), no. 3, 601–608. (Author's nmary) 82m:62231 62N05 (62G05)

d, William Hill Turning-point problems for ordinary differential equations of hydrodynamic type. Singular perturbations and asymptotics (Proc. Adv. Sem., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1980), pp. 297–315, Publ. Math. Res. Center Univ. Wisconsin, 45, Academic Press, New York, 1980, (From the introduction) Reid. William

76E05 (34E20) 824:76038 (with Ng, B. S.) On the numerical solution of the Orr-Sommerfeld problem:

with Ng. B. S. On the numerical solution of the Ort-Sommerted problem: asymptotic initial conditions for shooting methods. J. Comput. Phys. 38 (1980), no. 3, 275–293. (Alan D. Sloan) 82h:76022 76E05 (65L10, 76A60) (with Drazin, P. G.) ★Hydrodynamic stability. Cambridge Monographs on Mechanics and Applied Mathematics. Cambridge University Press, Cambridge-New York, 1981. xiv+525 pp. ISBN 0-521-22798-4 (Adelina Georgescu) 82h:76021 76Exx (34E20, 35B35, 76-02)

William T. ★ Sturmian theory for ordinary differential equations. With a preface by John Burns. Applied Mathematical Sciences, 31. Springer-Verlag, New York-Berlin, 1980. xv+559 pp. ISBN 0-387-90542-1 (K. Kreith) 82f:34002 34-02 (34Bxx, 34Cxx)

xv+559 pp. ISBN 0-381-9042-1 (K. Kreith) 822:34002 34-02 (34Bxx, 34Cxx) Reil, Jiif (Py-sets, quasipolyhedra and stability. Comment. Math. Univ. Carolin. 20 (1979), no. 4, 757-763. (Author's summary) 82j:46021 46B20 (46A55)
Reil, John H. (with Peterson, Gary L.) Mültiple-person alternation. 20th Annual Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 348-363, IEEE, New York, 1979. (Authors' summary) 82h:90099 90D45 (68D27)

Reifart, Arthur (with Stroth, Gernot) Some simple groups with 2-local 3-rank at most 3. J.

Algebra 64 (1980), no. 1, 102-139. (Stephen D. Smith) 82d:20019 20D05 (20D08)

Reiland, Thomas W. (with Hanson, Morgan A.) Generalized Kuhn-Tucker conditions and

duality for continuous nonlinear programming problems. J. Math. Anal. Appl. 74 (1980), no. 2, 578-598. (A. D. Ioffe) 82a:90146 90C30

Optimality conditions and duality in continuous programming. I. Convex programs and a theorem of the alternative. J. Math. Anal. Appl. 77 (1980), no. 1, 297–325. (H. Voigt) 82c:90077a 90C25 (90C30, 90C48)

Optimality conditions and duality in continuous programming. II. The linear problem revisited. J. Math. Anal. Appl. 77 (1980), no. 2, 329–343. (H. Voigt) 82c:90077b 90C25 (90C05, 90C48)

(with Hanson, Morgan A.) A class of continuous nonlinear programm with time-delayed constraints. Naval Res. Logist. Quart. 27 (1980), no. 4, 573-588. (W. F. Tyndall) 82e:90093 90C30

Lagrangian duality for a class of infinite programming problems. Numer. Funct.

Anal. Optim. 2 (1980), no. 6, 507-530 (1981). (From the introduction) 82i:90099 90C30

Reilly, I. L. (with Vamanamurthy, M. K.) On hereditarily Lindelöf spaces. Bull. Austral.

Math. Soc. 21 (1980), no. 3, 357-362. (R. M. Stephenson, Jr.) 82a:54034 54D20

(with Subrahmanyam, P. V.) Fixed point theorems in Tychonoff spaces. Indian J. Pure Appl. Math. 11 (1980), no. 5, 565-571. (Alessio Volčič) 82c:54042 54H25 (with Gauld, David B.; Vamanamurthy, M. K.) On normal subspaces. Bull. Austral Math. Soc. 23 (1981), no. 1, 1-4. (Paul Bankston) 82e:54021 54D15

(with Raghavan, T. G.) Uniformization of quasi-uniform spaces. Bull. Math. Soc. 23 (1981), no. 3, 413-422. (P. Fletcher) 82h:54047 54E55 (54E15)

(with Konstadilaki-Savopoulou, Ch.) On Datta's bitopological paracor Indian J. Pure Appl. Math. 12 (1981), no. 7, 799-803. (William Lindgren) 82i:54051 54E55

lly, Norman R. Free inverse semigroups. Algebraic theory of semigroups (Proc. Sixth Algebraic Conf., Szeged, 1976), pp. 479–508, Colloq. Math. Soc. János Bolyai, 20, North-Holland, Amsterdam, 1979. (Editors) 82m:20067 20M10 Reilly, Norm

(with Petrich, Mario) Idempotent congruences classes in bisimple inverse semigroups. Proceedings of a Symposium on Regular Semigroups (Northern Illinois Univ., De Kalb, Ill., 1979), pp. 139–145, Northern Illinois Univ., DeKalb, Ill., 1979. (See 82i:20120) 20M10

Varieties of completely semisimple inverse semigroups. J. Algebra 65 (1980), no. 2, 427-444. (Phullendu Das) 82h:20085 20M07

Modular sublattices of the lattice of varieties of inverse semigroups. Pacific J. Math. 89 (1980), no. 2, 405-417. (P. R. Jones) 82a:20066 20M07 (08B15)

(with Petrich, Mario) Varieties of groups and of completely simple sen Austral. Math. Soc. 23 (1981), no. 3, 339-359. (G. Čupona) 82j:20107 20M07 (08B15,

(with Wroblewski, Roger) Suprema of classes of generalized Scrimger varieties of lattice ordered groups. Math. Z. 176 (1981), no. 3, 293-309. (Marlow Anderson) 82k:06023 06F15 (08B15)

(with Petrich, Mario) Certain Rees matrix semigroups with universal properties. nigroup Forum 22 (1981), no. 2, 101-118. (G. B. Preston) 82d:20055 (20M07)

Reilly, Park M. (with Patino-Leal, Hugo) A Bayesian study of the error-in-variables model.

Technometrics 23 (1981), no. 3, 221–231. (Authors' summary) 82:62055 62F15 (62H12)

nan, A. G. (with Semenov-Tjan-Šanskii, M. A.) Algebras of flows and nonlinear partial differential equations (Russian) Dol. Akad. Nauk SSSR 251 (1980), no. 6, 1310–1314. (Virgil Obădeanu) 82e:58050

Integrable Hamiltonian systems connected with graded Lie algebras. (Russian) Differential geometry, Lie groups and mechanics, III. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 95 (1980), 3-54, 161. (Eugene Gutkin) 82j:58048 58F05 (58F07, 70H05)

(with Semenov-Tjan-Šanskii, M. A.) Reduction of Hamiltonian systems, affine Lie algebras and Lax equations. II. Invent. Math. 63 (1981), no. 3, 423-432. (P. A. Kučment)

algebra and SREOT (35Q20)

man, Allan Computer-aided closure of the Lie algebra associated with a nonlinear partial differential equation. Comput. Math. Appl. 7 (1981), no. 5, 387–393. (David J. Kaup)

82j:58006

58A20 (35–04, 35A20, 88–04, 68C20, 82–04)

58A20 (35–04, 35A20, 88–04, 68C20)

58A20 (35–04, 35A20, 88–04, 68C20)

58A20 (35–64)

58A20 (35–64)

58A20 (35–64)

58A20 (35–64)

58A20 (35–64)

58A20 (35–64)

58A20 (35–64)

58A20 (35–64)

58A20 (35–64)

(with Kaup, D. J.) Multishock solutions of random phase three-wave interactions. Phys. Fhiids 24 (1981), no. 2, 228-232. (Authors' summary) 82b:76075 76X05

Taylor relaxation in a torus of arbitrary aspect ratio and cross section. Phys. Fluids 24 (1981), no. 5, 956-963. (Author's summary) 82e:76084 76X05 man, Martin I. (with Harrison, J. Michael) Reflected Brownian motion on an orthant.

Ann. Probab. 9 (1981), no. 2, 302-308. (D. Kannan) 82c:60141 60J65 (with Harrison, J. Michael) On the distribution of multidimensional reflected

Brownian motion. SIAM J. Appl. Math. 41 (1981), no. 2, 345–361. (Barthel W. Huff) 82j:60154 60165 (60K20, 90B22)

Reimer, Manfred Extremal bases for normed vector spaces. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 723-728, Academic Press, New York, 1980. (M. M. Day) 82c:46015 46B15 (41A65, 46B20)

Reineke, J. (with Podewski, K.-P.) On algebraically closed commutative indecomposable rings. Algebra Universalis 12 (1981), no. 1, 123-131. (J. M. Plotkin) 82c:03050 03C60

Reiner, David L. Eulerian binomial type revisited. Stud. Appl. Math. 64 (1981), no. 1, 89-93. (S. G. Williamson) 82d:05023 05A99 (05A10)
 Reiner, Irving An overview of integral representation theory. Ring theory and algebra, III (Proc. Third Conf., Univ. Oklahoma, Norman, Okla., 1979), pp. 269-300, Lecture Notes in

(Proc. Third Conf., Univ. Oklahoma, Norman, Okla., 1979), pp. 269–300, Lecture Notes in Pure and Appl. Math., 55, Dekker, New York, 1980. (Editors) 82c:16001 16–02 (16A64)

(with Curtis, Charles W.) *Methods of representation theory. Vol. I. With applications to finite groups and orders. Pure and Applied Mathematics. A Wiley-Interscience Publication. John Wiley & Sons, Inc., New York, 1981. xxi+819 pp. ISBN 0-471-18994-4 (J. L. Alperin) 82i:20001 20-02 (10C30, 12A57, 20Cxx)

(with Bushnell, Colin J.) L-functions of arithmetic orders. C. R. Math. Rep. Acad.

Sci. Canada 3 (1981), no. 1, 13-18. (Editors) 824:12008 12A80 (16A18, 16A64) (with Gustafson, William H.; Moore, Marion E.) Matrix completions over Dedekind rings. Linear and Multilinear Algebra 10 (1981), no. 2, 141-144. (Lawrence S. Levy) 82k-15013 15A33

mert, Dietmar *Prüftheorie diskreter Systeme. (German) [Fault testing of discrete systems] Kybernetik Informationsverarbeitung. [Cybernetics Information Processing] VEB Verlag Technik, Berlin, 1979. 168 pp. (Editors) 82c:68002 68-01 (68B99, 94C15)

Infeld, A. A. Dynamic equivalence of differential equations in the neighborhood of an invariant manifold. (Russian) Lato. Mat. Ežegodnik No. 24 (1980), 156-171, 260. (L. Reizipš) 82h:34051 34C20 Reinfeld, A. A. Dynan

Reingold, Edward M. (with Nievergelt, Jurg; Deo, Narsingh) ★Комбинатория атгоризма. (Russian) [Combinatorial algorithms] Теория и практика. [Theory and practice] Translated from the English by E. P. Lipatov. Edited and with a preface by V. B. Alekseev. "Mir", Moscow, 1980. 478 pp. (Editors) 82ac68056 68C05 (68-01) проіd, Nathan Refugee mathematicians in the United States of America, 1933—1941:

eception and reaction. Ann. of Sci. 38 (1981), no. 3, 313-338. (Joong Fang) 82f:01190 01A80

Reinhard, J. M. A semi-Markovian game of economic survival. Scand. Actuar. J. 1981, no. 1, 23-38. (Ralph L. Disney) 82k:90044 90A16 (60K15, 93E20)

Reinhardt, Hans-Jürgen Stability of singularly perturbed linear difference equation Numerical analysis of singular perturbation problems (Proc. Conf., Math. Inst., Catholic Unio., Nijmegen, 1978), pp. 485–492, Academic Press, London, 1979. (A. Bleyer)

82h:65065 65L07 (34D15)

A posteriori error estimates and adaptive finite element computations for singularly perturbed one space dimensional parabolic equations. Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ. Nijmegen, Nijmegen, 1980), pp. 213–233, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (Vassilios A. Dougalis) 82e:65095 65M15 (65L10, 65N30)

(Vassinos A. Dougaiis) 82e-80995 DMI3 (65LU), 65N30)
Reinhardt, Hugo Semiclassical theory of nuclear fission. Nuclear Phys. A 367 (1981), no. 2, 269-312. (Author's summary) 82i:81158 81G35 (81H10)
Reinisch, Gilbert (with Fernandez, Jean-Claude; Bondeson, A.; Weiland, J.) Collapse of a Korteweg-de-Vries soliton into a weak noise shelf. Phys. Lett. A 66 (1978), no. 3, 175-178. (From the text) 82e-76020 76B25 (35Q20)
(with Fernandez, Jean-Claude) A mechanical model for weakly damped solitons.

Phys. Lett. A 67 (1978), no. 4, 259-262. (Authors' summary) 82c:81025

(with Fernandez, Jean-Claude) Specific sine-Gordon soliton dynamics in the presence of external driving forces. Phys. Rev. B (3) 24 (1981), no. 2, 835-844. (David J. 35Q20 (81C05)

(with Fernandez, Jean-Claude; Gambaudo, Jean-Marc; Gauthier, Serge) Sine-Gordon solitons do not behave like Newtonian particles. Phys. Rev. Lett. 46 (1981), no. 12, 753-756. (Authors' summary) 82d:81018 81C05 (35Q20) noehl, John H. Lie algebras and Hopf algebras. Pacific J. Math. 93 (1981), no. 1,

181-192. (Andy R. Magid) 82i:17010 17B10 (14L25, 16A24)

Reinov, O. I. RN-sets in Banach spaces. (Russian) Funkcional. Anal. i Priložen. 12 (1978), no. 1, 80-81, 96. (From the text) 82d:46031 46B20 (47B99)

On some Banach ideals of operators. Studia Math. 69 (1980/81), no. 2, 123-131. (Bernd Rosenberger) 82:47074 47D30 (47B10)

Properties of p-order approximation and the existence of non-p-nuclear operators

with p-nuclear second conjugate operators. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 1, 43-47. (A. Pietsch) 82e47032 47B10

Some remarks on the properties of Radon-Nikodým operators with applications to a

roblem of M. Talagrand. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 1, 120-128, 229. (M.

M. Malamud) 82i-7031 47B10 (46B99)

Reinoza, Alfonso A Sard theorem for generalized equations. (Spanish. English summacta Cient. Venezolana 32 (1981), no. 1, 57-61. (Christian Fenske) 82m:58010 (49F99, 57Q65)

Reinschke, K. Structurally complete systems with minimal input and output vectors. Large Scale Systems 2 (1981), no. 4, 235-242. (Author's summary) 82m:93011 (93B07)

Reis, C. M. (with Thierrin, G.) Reflective star languages and codes. Inform. and Control 42 (1979), no. 1, 1-9. (Authors' summary) 82i:94034 94B99 (68F05)

(with Lallement, Gérard) Team tournaments and finite elementary codes. Inform. and Control 48 (1981), no. 1, 11-29. (Authors' summary) 82j:05064 05C20 (68E10. 68F10)

da costa Reis, M. Raquel P. See da Costa Reis, M. Raquel P. Reischer, Corina (with Guiaşu, Silviu; Martin, Louise) Réseaux modulaires aléatoires avec retard. Ann. Sci. Math. Québec 3 (1979), no. 1, 81-94. (From the introduction)

(with Martin, Louise) Sur une application du principe pour minimis l'interdépendance dans les automates probabilistes. Combinatories 79 (Proc. Colloq., Univ. Montréal, Montreal, Que., 1979), Part I. Ann. Discrete Math. 8 (1980), 189-193.

(Authors' summary) 82a:68101 68D25 (Adunots summary) december 68125 (Adunots Summary) december 68125

pp. 222-223, Exture votes in Comput. 361, 37, 3pringer, Berlin, 1932. Claus-Peter Schnorry 82a:68081 68C25
(with Paul, Wolfgang J.; Prauß, Ernst-Jürgen) On alternation. Acta Inform. 14
(1980), no. 3, 243-255. (Ryszard Janicki) 82e:68048a 68C40 (03D10)
(with Paul, Wolfgang J.) On alternation. II. A graph-theoretic approach to determinism versus nondeterminism. Acta Inform. 14 (1980), no. 4, 391-403. (Ryszard Janicki) 82e:68048b 68C40 (03D10)

Improved bounds on the problem of time-space trade-off in the pebble game.

Assoc. Comput. Mach. 27 (1980), no. 4, 839–849. (R. E. Stearns) 82c:68025 686

Reiser, Angelika (with Majster-Cederbaum, Mila E.) An efficient on-line position tree construction algorithm. Theoretical computer science (Fourth GI Conf., Aachen, 1979), pp. 190-198, Lecture Notes in Comput. Sci., 67, Springer, Berlin, 1979. (Andrzej Proskurowski) 82b:68027 68C05 (68C25)

(with Weihrauch, Klaus) Natural numberings and generalized computability. (German and Russian summaries) Elektron. Informationsverarb. Kybernet. 16 (1980), no. 1-3, 11-20. (Horst Reichel) 82h:03083 03D45 (68C30)

(with Majster-Cederbaum, Mila E.) Efficient on-line construction and correction of position trees. SIAM J. Comput. 9 (1980), no. 4, 785-807. (Authors' summary) 82e:68124 68E10

Reiser, Martin (with Lavenberg, S. S.) Corrigendum: "Mean-value analysis of closed multichain queuing networks" [J. Assoc. Comput. Mach. 27 (1980), no. 2, 313-322; MR 81d:60107]. J. Assoc. Comput. Mach. 28 (1981), no. 3, 629. (From the text) 82g:60127 60K25

Mean-value analysis and convolution method for queue-dependent servers in closed eueing networks. Performance Evaluation 1 (1981), no. 1, 7-18. (Adam Wolisz)

82m:69074 68C15 (60K20)
isser, Peter M. A modified integer labeling for complementarity algorithms. Math. Oper.

Res. 6 (1981), no. 1, 129-139. (Author's summary) 82j-96074 90C33

Reisig, Wolfgang Interactive schemes. Parallel computers—parallel mathematics (Munich, 1977), pp. 225-228, North-Holland, Amsterdam, 1977. (See 82k:68003) 68B10

Zur Verwendung von Petrinetz-Morphismen bei der System Konstruktion. Formal model for information systems (GI Conf., Tutzing, 1979) (German), pp. 220-235, Informatik-Fachber., 21, Springer, Berlin, 1979. (From the introduction) 82j:68039

On solving conflicts in Petri nets. (German summary) Discrete structures and algorithms (Proc. Conf., Berlin, 1979), pp. 241–253, Hanser, Munich, 1980. (Author's summary) 82;68040 68D90

A graph grammar representation of nonsequential processes. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 318–325, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Author's summary) 82t-68082 68D90 (68F05)

Reisner, L. I. See Raškovskii, E. B., 82i:01042

Reisner, Shlomo Operators which factor through convex Banach lattices. Canad. J. Math. 32 (1980), no. 6, 1482-1500. (T. Figiel) 82a:47031 47B10 (46B99, 47D30)

A factorization theorem in Banach lattices and its application to Lorentz spaces.

(French summary) Ann. Inst. Fourier (Grenoble) 31 (1981), no. 1, viii, 239-255. (G. Schechtman) 82a:46066 46E30

Reiss, Edward L. Jump phenomena. Nonlinear partial differential equations in engineering and applied science (Proc. Conf., Univ. Rhode Island, Kingston, R. I., 1979), pp. 415–428, Lecture Notes in Pure and Appl. Math., 54, Dekker, New York, 1980. (R. J. Knops) 82e:35010 35B32 (35C99, 58E07)

A modified two-time method for the dynamic transitions of bifurcation. SIAM J. Appl. Math. 38 (1980), no. 2, 249-260. (S. Burýšek) 82e:47084 47H15 (34E05, 58E07, 65L99, 65P05, 73M10)

A new asymptotic method for jump phenomena. SIAM J. Appl. Math. 39 (1980), no. 3, 440-455. (B. V. Loginov) 82h:58031 58E07 (65D10, 80A25, 92A15)

no. 3, 440-435. (B. V. Lögmöv) 220:35027 (32170, 50725, 52715) (with Sinay, Leon R.) Perturbed panel flutter: a simple model. AIAA J. 19 (1981), no. 11, 1476-1483. (Authors' summary) 82i:73027 73110

(with Putnick, Leonard J.; Matkowsky, Bernard J.) Secondary states of vibrating J. Acoust. Soc. Amer. 69 (1981), no. 6, 1682-1687. (Authors' introduction) 048 73K12 (58E07, 73D99, 73H10)

Reiss, Howard (with Montroll, Elliott W.) Phase transition versus disorder: a criterion derived from a two-dimensional dynamic ferromagnetic model. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 5, part 1, 2659-2663. (Authors' summary) 82f:82066 82A68

Reiss, R.-D. Approximation of product measures with an application to order statistics. Ann. Probab. 9 (1981), no. 2, 335-341. (M. Csörgő) 821:60072 60F99 (62G30) Nonparametric estimation of smooth distribution functions. Scand. J. Statist. 8

(1981), no. 2, 116-119. (Wolfgang Wertz) 82k:62080 62G05 (60E05) ssner, E. On finite pure bending of curved tubes. Internat. J. Solids and Structures 17 (1981), no. 9, 839-844. (Author's summary) 82g:73027 73G99 (53A10)

Reiten, Idun (with Auslander, Maurice) Uniserial functors. Representation theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 1-47, Lecture Notes in Math., 832, Springer, Berlin, 1980. (Sverre O. Smalo) 82j:16049 16A64 (16A46)

Reiter, George Lie groups, spin equations and the geometrical interpretation of solitons. J. Math. Phys. 21 (1980), no. 12, 2704-2714. (G. L. Lamb, Jr.) 82g:58045 58F07 (35020)

ter, Raymond Equality and domain closure in first-order databases. J. Assoc. Comput. Mach. 27 (1980), no. 2, 235-249. (Robert M. Baer) 82b:68017 68B15 (68G15) iter, Rayn On the integrity of typed first order data bases. Advances in data base theory, Vol. 1 (Proc. Workshop, Toulouse, 1979), pp. 137-157, Plenum, New York, 1981. (See 68B15

Relterman, Jan (with Pelant, Jan) Complements in the lattice of uniformities. Com Math. Univ. Carolin. 22 (1981), no. 2, 399-412. (O. Frink) 82h:54042 54E15 (06C15) der-Reitinger, Jeannette See Zehnder-Reitinger, Jeannette

Reizes, J. A. (with Leonardi, E.) Natural convection in compressible fluids with variable properties. Numerical methods in thermal problems (Proc. First Internat. Conf., Univ. College, Swansea, 1979), pp. 297–306, Pineridge, Swansea, 1979. (See 82g:80001) 76R 10

Rejewski, Marian See Obituary: Rejewski, Marian, 82f:01173

Rejtő, Lidia (with Földes, Antónia) Asymptotic properties of the nonparametric survival curve estimators under variable ceasoring. The First Pannonian Symposium on Mathematical Statistics (Bad Tatzmannsdorf, 1979), pp. 54–72, Lecture Notes in Statist., 8, Springer, New York, 1981. (V. Susaria) 82ks62183 62N05 (62G05) (with Földes, Antônia) Strong uniform consistency for nonparametric survival curve

estimators from randomly censored data. Ann. Statist. 9 (1981), no. 1, 122-129. (André Antille) 82j:62071 62N05 (60F05, 62G05)

(with Földes, Antônia) A LIL type result for the product limit estimator. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 1, 75-86. (Jana Jurečková) 82i:62060 62G05

Rejto, P. A. (with Landgren, J. J.) An application of the maximum principle to the study of essential selfadjointness of Dirac operators. I. J. Math. Phys. 20 (1979), no. 11, 2204–2211. (Authors' summary) 82f:81016a 81C10 (47F05)

(with Landgren, J. J.; Klaus, Martin) An application of the maximu the study of essential selfadjointness of Dirac operators. II. J. Math. Phys. 21 (1980), no. 5, 1210-1217. (David Pearson) 82f:81016b 81C10 (47F05)

(with Landgren, J. J.) On a theorem of Jörgens and Chernoff concerning essential adjointness of Dirac operators. J. Reine Angew. Math. 322 (1981), 1-14. (K. R. thasarathy) 82j:81620 81C10 (47A55)

aa, Sveimmg (with Skaugen, Erik) Firing behavior in a nerve membrane model with long-term changes of a potassium conductance component. Math. Biosci. 55 (1981), no. 1-2, 65-87. (Authors' summary) 82h-92018 92A09

rys, Karel See Valešová, Marie, 82f:01151

ge construct allowing m, Martin The closure statement: a program ultraconcurrent execution. J. Assoc. Comput. Mach. 28 (1981), no. 2, 393-410. (Author's

arry 82469019 68820 S. (with Dorai, P.) Prime ideals in a Lie algebra. J. Algebra 66 (1980), no. 2,

492-504. (A. A. Sagle) 82i:17022 17B60 (17B05)

anud, B. (with Hernández, E. S.) Constants of motion and nonstationary wave functions for the damped, time-dependent harmonic oscillator. Phys. A 103 (1980), no. 1-2, 35-54. mary) 82g:81012 81C05

(with Hernández, E. S.) General properties of gausson-conserving descriptions of intal damped motion. *Phys. A* **105** (1981), *no.* 1-2, 130-146. (Authors' summary) 81C99

ski, J. (with Kulesza, J.) New relations between the Clebsch-Gordan coefficien of SU(2). J. Phys. A 13 (1980), no. 4, 1189-1195. (A. U. Klimyk) 82h:81053 (22E70)

On the structure of the free field equations. J. Phys. A 13 (1980), no. 12, 3619-3633. (W. Cox) 824:81064 81D25

Algebraical confinement of coloured states. J. Phys. A 14 (1981), no. 10, 2609-2624. (Author's summary) 82h:81140 81G20

arthe, J.-J., 82h:81054

neskennikov, V. N. Example of a finitely presented pro-p-group, the center of which is not finitely generated. (Russian). Sixth All-Union Symposium on Group Theory (Čerkassy, 1978) (Russian), pp. 111-115, 221, "Naukova Dumka", Kiev, 1980. (Charles S. Holmes) 32:20071 20F05 (20E18)

ake, R. (with Kaspar, W.) Die numerische Behandlung der Poisson-Gleicht Gebiet mit einspringenden Ecken. (English summary) Computing 22 (1979), no. 2, 141-151. (Erich Bohl) 82j:65074 65N10 (65N05)

hali-151. (Ench Bonl) 8439-8294 ONIU (ONUS)
hake, Werner Lösung eines dreistufigen Transportproblems mit Hilfe von
Subgradientenverfahren. (English and Russian summaries) Math. Operationsforsch.

Statist. Ser. Optim. 11 (1980), no. 1, 95–108. (Author's summary) 82c:90058 90C08

umel, Jeffrey B. (with Manaster, Alfred B.) Co-simple higher-order indecomposable isols. Z. Math. Logik Grundlag. Math. 26 (1980), no. 3, 279-288. (Thomas McLaughlin) 823:e3041 03D50

(with Manaster, Alfred B.) Some decision problems for subtheories of

two-dimensional partial orderings. Logic Vear 1979-80 (Proc. Seminars and Conf. Math. Logic, Univ. Connecticut, Storra, Conn., 1979/80), pp. 202-214, Lecture Notes in Math., 859, Springer, Berlin, 1981. (Detlef G. Seese) 82e:63911 03B25 (03C65, 06A10) Recursive Boolean algebras with recursive atoms. J. Symbolic Logic 46 (1981), no. 3, 595-616. (S. S. Goncarov) 82;40955 03D45 (06E99)

(with Garsia, Adriano M.) Symmetric functions and raising operators. Linear a Multilinear Algebra 10 (1981), no. 1, 15-23. (J. Désarménien) 82g:20026 (05A17)

Recursively categorical linear orderings. Proc. Amer. Math. Soc. 83 (1981), no. 2, 387–391. (S. S. Gončarov) 82;40807 03C57 (03C65, 03D45, 06A05) numert, Reinhold (with Grauert, Hans) *Theory of Stein spaces. Translated from the German by Alan Huckleberry. Grundlehren der Mathematischen Wissenschaften [Fundamental Principles of Mathematical Sciences], 236. Springer-Verlag, Berlin-New York, 1979. xxi+249 pp. ISBN 3-540-90388-7 (Editors) 824:32001 32-01 (with Grauert, Hans) In memoriam Heinrich Behnke. (German) Math. Ann. 255

(1981), no. 1, 1-4. (Editors) 82f:01105 01A70

pel, Stephan *Eine analytische Indexformel für elliptische Randwertprobleme für Pseudodifferentialoperatoren. (German) [An analytic index formula for elliptic boundary value problems for pseudodifferential operators] With English and Russian summaries. Report 1978, 6. Akademie der Wissenschaften der DDR, Institut für Mathematik, Berlin, 1978. 183 pp. (J. Lawrynowicz) 82e:58090 58G10 Eine analytische Indexformel für elliptische Randwertprobleme für

eudodifferentialoperatoren. Elliptische Differentialgleichungen (Meeting, Rostock, 1977), pp. 217-230, Wilhelm-Pieck-Univ., Rostock, 1978. (From the introduction) 47 58G10

ulska, Lucyna On the (A,p)-summability of orthonormal series. Dem 13 (1980), no. 4, 919-925. (L. Leindler) 82e:42023 42C15 (40G05, 40G10) On some means of Fourier series. Funct. Approx. Comment. Math. 8 (1980), 3-7. (R. N. Mohapatra) 82c:42003 42A10

n, Fu Yao Coefficients of inverses of mer orphic univalent functions. A translation of

Kexue Tongbao (Chinese) 25 (1980), no. 5, 193–195. Kexue Tongbao (English) 25 (1980), no. 4, 277–280. (G. Schober) 82f:30015 30C50

Ren, Hong Shuo Automorphisms of SL₂(k) over a class of skew fields. (Chinese) Acta Math. Sinica 24 (1981), no. 4, 566-577. (From the introduction) 82k:20071 20G15

n, Jian Hua (with Wang, Yuan; Wang, Lian Xiang) A note on a transference theorem of the systems of linear congruences. Acta Math. Sinica 24 (1981), no. 2, 303-307. (J. H. H. Chalk) 82:10043 10F35 (10B05, 10F40)

Ren, Zeng Xun Dynamical response of elastic structures—on quadric eigenvalue problems and engineering solution for dynamical response problems of elastic structures. (Chinese. English summary) Acta Mech. Sinica (Beijing) 1980, no. 2, 169-176. (Yi-Yuan Yu)

nard, G. (with Caussade, B. H.) Contribution to the numerical solution of nonlinear parabolic partial differential equations. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos, Lehigh Univ., Bethlehem, Pa., 1977), pp. 62–64, IMACS, New Brunswick, N.J., 1977. (See 82a:65004)

Renardy, Michael On bounded solutions of a classical Yang-Mills equation. Con Phys. 76 (1980), no. 3, 277-287. (Francesco Guerra) 82e:81033 81E10 (35Q20,

with Handelman, David) Actions of finite groups on self-injective ring Pacific J. Math. 89 (1980), no. 1, 69-80. (Susan Montgomery) 82e:16031 (16A50)

nault, Jacques ★Formulaire de physique. (French) [Physics formulary] Dunod Université: Ouvrages de base. [Dunod University: Basic works] Dunod, Paris, 1980. x+158 pp. ISBN 2-04-011298-7 (From the perface) 82:00017 00A22 nault, Jean ★A groupoid approach to C*-algebras. Lecture Notes in Mathematics, 793. Springer-Verlag, Berlin-New York, 1980. ii+160 pp. ISBN 3-540-09977-8 (A. K. Seda)

46Lxx (22D25, 22D40)

in, A. See Pérez-Rend

neke, J. A. (with Fennell, R. E.) An identification problem for hereditary system Applicable Anal. 11 (1980/81), no. 3, 167-183. (Authors' summary) 82f:93023 93B30

Renfors, Markku (with Neuvo, Yrjö) The maximum sampling rate of digital filters under

hardware speed constraints. IEEE Trans. Circuits and Systems 28 (1981), no. 3, 196-202.

(Authors' summary) 82a:94024 94A12 ganathan, S. (with Janakiraman, P. A.) A new on-line identification method for discrete multivariable linear systems. Automatica-J. IFAC 17 (1981), no. 4, 653-655. (Authors' ary) 82h:93025 93B30

ner, Lex (with Douglas, Roy) Uniqueness of product and coproduct decompositions in rational homotopy theory. Trans. Amer. Math. Soc. 264 (1981), no. 1, 165–180. (Guido Mislin) 826:55010 55P62

er, G. H. (with Maxwell, J. A.) On the theory of synchronization of lateral optic-nerve responses in *Limulus*. I. Uniform excitation of the homogeneous retina. Math. Biosci. 52 (1980), no. 1-2, 117-130. (Authors' summary) 82a:92044 92A2 (92A07)

(with Maxwell, J. A.) On the theory of synchronization of lateral optic-nerve responses in Limulus. II. Nonuniform excitation and inhomogeneous inhibition. Math. Biasci. 52 (1980), no. 1-2, 131-139. (Authors' summary) 82a:92045 92A27 (92A09)

mo, Pasquale (with Lauro, Giuliana) On the Huyghens principle in a "cold" plasma. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 6, 533-539. (Authors' summary) 824:76100 76X05 (35L99)

(with Lauro, Giuliana) On the diffusion of electromagnetic waves in a "cold" plasma. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 124-129 (1980). (Authors' summary) 82f:78008 (35B40, 82A45)

On the theory of dissipative three-dimensional wave motion. Mech. Res. Comm. 8 (1981), no. 2, 83-92. (F. Ursell) 82m:76047 76N15 (35L05)

nolet, Charles Existence and boundedness results for abstract nonlinear Volterra equations of nonconvolution type. J. Integral Equations 3 (1981), no. 2, 137–151. (Gustaf Gripenberg). 82g:45024 45N05 (45D05, 47H15)

Reno, Mary Hall (with Crandall, R. E.) Ground state energy bounds for potentials |x|*. J. Math. Phys. 23 (1982), no. 1, 64-70. (Authors' summary) 82m:81021

nouard, Dominique Période des ondes internes engendrées dans un bassin fermé par un vent impulsionnel; écart par rapport à la période de Coriolis. Interprétation théorique. (English summary) [Period of internal waves generated in an ocean basin by a sudden strong wind; deviation with respect to Coriolis' period. Theoretical interpretation] C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci. Univers Sci. Terre 292 (1981), no. 3, 325-328. (Author's summary) 82k:86004 86A05

chuch, Bodo (with Bresinsky, Henrik) Basisbestimmung Vero

Projektionsideale mit allgemeiner Nullstelle $(t_0^m, t_0^{m-r}t_1^r, t_0^{m-s}t_1^s, t_1^m)$. Math. Nachr. 96 (1980), 257–269. (W. Burau) 82i:14032 14M20 (13H15)

w, Eric (with Henderson, Robin) The correlated random walk. J. Appl. Probab. 18 (1981), no. 2, 403-414. (Neil S. Barnett) **82f:60157** 60J15 Waveforms and velocities for models of spatial infection. *J. Appl. Probab.* **18** (1981), no. 3, 715-720. (Lutz Edler) **82h:60163** 60J80 (92A17)

von Renteln, Michael Zur Idealstruktur der Algebren F* und H*. Mitt. Math. Sem. Giessen No. 134 (1978), 71 pp. (D. Sarason) 82a:46056 46J15 (30H05)

A simple constructive proof of an analogue of the corona theorem. Proc. Amer. Math. Soc. 83 (1981), no. 2, 299-303. (E. L. Stout) 82h:46073 46J15 (30H05)

Renton, J. D. On the buckling of thick spherical shells under normal pressure. Intern Solids and Structures 17 (1981), no. 2, 145-153. (Author's summary) 82f:73027 7 (73K15, 73L99)

nschler, Rudolf Orbites dans le spectre primitif de l'algèbre enveloppante d'une algèbre de Lie. Séminaire d'Algèbre Paul Dubreil 31ème année (Paris, 1977-1978), pp. 88-98, Lecture Notes in Math., 740, Springer, Berlin, 1979. (Anthony Joseph) 82b:17012 17B35 (17B30)

Repka, Joe Tensor products of holomorphic discrete series representations. Canad. J. Math. 31 (1979), no. 4, 836-844. (A. U. Klimyk) 82c:22017 22E46

(with Asmuth, C.) Supercuspidal components of the quaternion Weil representation of SL₂(t). Pacific J. Math. 93 (1981), no. 1, 35-48. (Stephen Gelbart) 82j:22017 22E50 (10D30, 10D40)

se change for tempered irredu scible representations of $GL(n, \mathbf{R})$. Pacific J. Math. 93 (1981), no. 1, 193-200. (Stephen Gelbart) 82m:22016 22E45 (10D40)

Repko, Wayne W. (with Hostler, Levere C.) Bethe-Salpeter equation with instantaneous harmonic oscillator exchange. Ann. Physics 130 (1980), no. 2, 329-349. (Authors summary) 82i:81062 81D10 (81G05)

Repnikova, N. M. A boundary value problem with random perturbations. (Russian) Boundary value problems of mathematical physics (Russian), pp. 167-173, 182, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1978. (V. G. Kolomiec) 82b:60071 60H15 (35J65, 35R60)

Repperger, Daniel W. (with Jones, John, Jr.) Computer solutions of second order nonlinear differential inequalities using finite element methods. II. Advances in computer method for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 77–84, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82b:65127 65N30

ardt, Manfred (with Reeh, H.) Some properties of the electric charge operator. Rep. Math. Phys. 17 (1980), no. 1, 55-58. (Franco Strocchi) 82g:81126

How conclusive is the scaling argument? The connection between local and global scale variations of finite action solutions of classical Euler-Lagrange equations. Comm. Math. Phys. 80 (1981), no. 3, 369-379. (H. Rund) 82i:81095 81E10 (49H05) pitcha, A. A. G. (with Voelcker, H. B.) An introduction to geometric modeling and its

applications in mechanical design and production. Advances in information science, Vol. 8, pp. 293-328, Plenum, New York, 1981. (See 82k:68001) 0 cher, Nicholas The contributions of the Paris period (1672-1676) to Leibniz's

metaphysics. Leibniz in Paris (1672-1676) (Sympos. G. W. Leibniz Soc./CNRS Chantilly, 1976), Vol. II (French), pp. 43-53, Studia Leibnitiana Suppl., XVIII, Steiner, Wiesbaden, 1978. (F. C. Kreiling) 82e:01045 01A45 (03-03, 03A05)

Reschke, D. Die Anwendung von Richtungsdifferenzenverfahren zur Lösung hyperbolischer partieller Differentialgleichungen auf dem Hybridrechner Lectures from the Problem Seminar: Hybrid Computing (Weißig, 1979) (German), pp. 96–106, Weiterbildungszentrum Math. Kybernet. Rechentech. Informationsverarbeitung, 41, Tech. Unito. Dresden, Dresden, 1980. [Editors] 82m:65081 65400; esco. Richard Radicals of finite normalizing extensions. Comm. Algebra 9 (1981), no. 7,

16A20 (16A12) 713-725. (Charles Lanski) 82f:16005

etihin, N. Ju. (with Kuliš, P. P.) Quantum linear problem for the sine-Gordon equation and higher representations. (Russian) Questions in quantum field theory and statistical physics, 2. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 101 (1981), 101-110, 207. (Woodford W. Zachary) 82k:81072 81E99 (35Q20, 58F07)

Resetin, E. F. The method of 4×4 ray matrices in paraxial optics. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 450 (1980), 32-37, 85. (Author's summary) 82c:78002

Rešetnjak, Ju. G. ★Сборник задач по курсу математического анализа. (Russian) [A collection of problems for a course in mathematical analysis] Novosibirsk. Gos. Univ., Novosibirsk, 1979. 86 pp. (Editors) 82h:26002 26-01 (00A07)

Rešetnjak, V. M. A branching process with semi-Markov intervention of chance. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 24 Markov. Processy i Additiv. Funkcionaly of th Traektor., 47-51. (P. Jagers) 82k:60167 60180

Resibols, Pierre See Prigogine, Ilya; et al., 82/101132
Resina, C. Necessary and sufficient conditions for a nonlinear programming problem.
(Italian. English summary) Calcolo 15 (1978), no. 2, 161-169. (Author's summary) 90C30

Reske, E. J. (with Hecht, K. T.; Seligman, Thomas H.; Zahn, W.) Spectroscopic amplitudes for complex cluster systems. Nuclear Phys. A 356 (1981), no. 1, 146-222. (Authors' summary) 82b:81135 81G30 (35P25)

Reško, K. A. Finite groups with €-abnormal subgroups. (Russian) Subgroup structure of finite groups (Gomel', 1977-80), pp. 68-71, 229, "Nauka i Tehnika", Minsk, 1981. (Editors) 82k:20042 20D10

(with Harlamova, V. I) Characterization of finite groups with given maximal chains. (Russian) Subgroup structure of finite groups (Gomel', 1977–80), pp. 185–195, 232, 'Nauka i Tehnika", Minsk, 1981. (Authors' introduction) 82k:20040 20010

de Resmini, Marialuisa J. On k-sets of type (m,n) in a Steiner system S(2,l,v). Finite geometries and designs (Proc. Conf., Chelwood Gate, 1980), pp. 104-113, London Math. Soc. Lecture Note Ser., 49, Cambridge Univ. Press, Cambridge, 1981. (Charles J. Colbourn) 82i:51018 51E10 (05B07, 05B25) Colbourn) 82i:51018

Resnick, S. I. (with de Haan, L.) A simple asymptotic estimate for the index of a stable distribution. J. Roy. Statist. Soc. Ser. B 42 (1980), no. 1, 83-87. (Peter J. Brockwell) 62G30 (60F05)

(with de Haan, L.) On the observation closest to the origin. Stochastic Process. Appl. 11 (1981), no. 3, 301-308. (Anthony G. Pakes) 82f:60055 60F05 (62G05)

Resnik, Michael D. *Frege and the philosophy of mathematics. Cornell University Press, Ithaca, N.Y., 1980. 244 pp. ISBN 0-8014-1293-5 (J. Corcoran) 824:03013 03A05 (00A25, 01A55, 03-03)

ess, John (with Cheney, E. W.) Approximation problems in tensor product spa Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 729-734, Academic Press, New York, 1980. (Claudia S. Guerreiro) 82b:41040 41A65

spondek, Witold (with Jakubczyk, Bronisław) On linearization of control systems (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 9-10, 517-522 (1981). (Authors' summary) 82k:93020 93B10 (93C05)

Ressayre, Jean-Pierre Types remarquables et extensions de modèles dans l'arithmétique de Péano. II. With an appendix by M. A. Dickmann. Models of arithmetic (Sem., Univ. Paris VII, Paris, 1977) (French), pp. 119-155, Astérisque, 73, Soc. Math. France, Paris, 1980. (Andreas Blass) 82h:03030 03C62

See also Model theory and arithmetic, 82m:03004

le Rest, Evelyne See Le Rest, Evelyne le Rest, Michel See Le Rest, Michel

A set of necessary and sufficient conditions for the convergence of minimization algorithms. (Italian summary) Boll. Un. Mat. Ital. A (5) 15 (1978), no. 1, 167-175. (From the introduction) 82k:65037 65K10

Restivo, Antonio (with De Luca, Aldo) On some properties of local testability. Automa languages and programming (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 385-393, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (Manfred Armbrust) 82b:68061 68F05 (20M35)

(with Boë, Jean Marie; De Luca, Aldo) Minimal complete sets of words. Theoret. Comput. Sci. 12 (1980), no. 3, 325-332. (H. Jürgensen) 82e:94060 (68F99) 94B99 (20M05.

(with Mauceri, S.) A family of codes commutatively equivalent to prefix codes.

(with Mauceri, S.) A family of codes commutatively equivalent to prefix codes. Inform. Process. Lett. 12 (1981), no. 1, 1-4. (Aldo De Luca) 82j:94021 94B45
Restuccia, A. (with Garcia Palomares, U. M.) A global quadratic algorithm for solving a system of mixed equalities and inequalities. Math. Programming 21 (1981), no. 3, 290-300. (Authors' summary) 82j:90058 90C20
Restuccia, Gaetana On a complete intersection problem for algebroid surfaces. (Italian. English summary) Atti Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur. 55 (1980), 27-30. (Author's summary) 82g:14046 14M10
Restuccia, Liliana Reflected and transmitted discontinuity waves compatible with a mathematical model for shallow water in cylindrical coordinates. (Italian. English summary) Atti. Sem. Mat. Fis. Univ. Modern. 29 (1980), no. 1, 108-117. (Author's summary) Atti. Sem. Mat. Fis. Univ. Modern. 29 (1980), no. 1, 108-117. (Author's summary) Atti. Sem. Mat. Fis. Univ. Modern. 29 (1980), no. 1, 108-117. (Author's summary) Atti. Sem. Mat. Fis. Univ. Modern. 29 (1980).

summary) Atti Sem. Mat. Fis. Univ. Modena 29 (1980), no. 1, 108-117. (Author's summary) 82k:76014 76B15

Retah, V. S. Massey operations, obstructions to formality in Sullivan's sense and obstructions to Kodaira-Spencer deformations. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980). no. 3(213), 217-220. (K. Wolffhardt) 82e:32036 32G05 (55S30)

Retherford, J. R. Trace. Special topics of applied mathematics (Proc. Sem., Ges. Math. Datenverarb., Bonn, 1979), pp. 47–56, North-Holland, Amsterdam, 1980. (N. Tomczak-Jaegermann) 82k:47002 47–03 (01A99, 47B10, 47D30)

Retter, Kurt Relative komplexe Quotienten. (English summary) Ma (1981), no. 2-3, 279-291. (L. Andrew Campbell) 82i:32030 32C15 (54B15)

Rettrup, S. (with Sarma, C. R.) A program for the study of many-body correlations: matrix elements of the generators of U(n). J. Phys. A 13 (1980), no. 7, 2267-2274. (William H. 17B10 (22E70, 81C40) Klink) 82a:17006

Retzloft, David G. (with DeFacio, B.; Dennis, Phillip W.) Presymmetry of classical relativistic particles. Phys. Rev. D (3) 18 (1978), no. 8, 2813–2820. (Authors' summary) 83A05 (53B50)

(with DeFacio, B.) Cotangent bundle approach to noninertial frames. J. Math. Phys. 21 (1980), no. 4, 751-757. (Authors' summary) 82e:83005 83A05 (53C50,

echarte Reula, F. J. See Echarte Reula, F. J.

Reutenauer, Christophe Une bibliographie sur les séries formelles en variables non commutatives. Séries formelles en oariables non commutatives et applications (Proc. 5e L'.ole de Printemps Informat. Théorique, Vieux-Boucau les Bains, 1977), pp. 251–260, École Nat. Sup. Tech. Avancées, Paris, 1978. (From the text) 82g:00003

Sur les variétés de langages et de monoïdes. Theoretical computer science (Fourth GI Conf., Aachen, 1979), pp. 260-265, Lecture Notes in Comput. Sci., 67, Springer, Berlin, 1979. (Author's introduction) 82a:68154 68F05

(with Berstel, Jean) Séries formelles reconnaissables d'arbres et applications. Trees in algebra and programming (Proc. 5th Lille Colloq., Lille, 1980), pp. 11-21, Univ. Lille I,

Lille, 1980. (From the introduction) 82g:68080 68F20 (68B15)
Séries formelles et algèbres syntactiques. (English summary) J. Algebra 66 (1980),

no. 2, 448-483. (A. A. Iskander) 82g:68075 68F05 (16A46, 20M25) A new characterization of the regular languages. (French and German summaries)
Automata, languages and programming (Akko, 1981), pp. 177-183, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (Author's summary) 82k:68945

Sur l'algèbre associée à un code bipréfixe. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 11-13. (Author's summary) 82e:94058 94B45

Sur mon article: "Une topologie du monoïde libre" [Semigroup Forum 18 (1979), no. 1, 33-49; MR 80j:20075]. Semigroup Forum 22 (1981), no. 1, 93-95. (From the text) 20M35

Reuter, G. (with Yavin, Yaakov) Optimal bang-bang control of partially observable stochastic systems. *Internat. J. Systems Sci.* 12 (1981), no. 2, 147–161. (Norbert Christopeit) 82h-93091 93E20

Reuter, G. E. H. (with Atkinson, C.; Ridler-Rowe, C. J.) Traveling wave solution for sor nonlinear diffusion equations. SIAM J. Math. Anal. 12 (1981), no. 6, 880-892. (P. C. Fife) 82k:35058 35K55 Fife) 82k:35058

Reva (with Prabhakar, T. R.) A general Sheffer set of polynomials relevant to the theory of hyperbolic differential equations. Indian J. Pure Appl. Math. 12 (1981), no. 7, 889-897. (J. P. Singhal) 82h:33015 33A65

Reva, V. N. (with Burdjuk, V. Ja.) Method for optimizing functionals of permutations in the presence of constraints. Kibernetika (Kiev) 1980, no. 1, iii, 99-103, 151 (Russian); translated as Cybernetics 16 (1980), no. 1, 111-117. (J. R. Griggs) 82a:94112 (90B35)

wankar, Nagesh S. Error component models with serially correlated time effects. Professor Huzurbazar felicitation volume. J. Indian Statist. Assoc. 17 (1979), 137-160. (M. G. Akritas) 82k:62208 62P20 (62J05)

venko, E. Z. (with Ljubčenko, G. G.) Principle of the address retrieval system of a data base. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 3, 76-78, 96. (Authors' summary) 82h:68131 68H05 (68B15)
Reversat, Marc (with Matignon, Michel) Sur les automorphismes d'extensions

transcendantes de corps valués. [On the automorphisms of transcendental extensions of

valued fields] Seminar on Number Theory, 1980-1981 (Talence, 1980-1981), Exp. No. 6, 16 pp., Univ. Bordeaux 1, Talence, 1981. (See 82m:10006) 12B15
Révész, Pál (with Chan, A. H. C.; Csörgő, Miklós) Strassen type limit points for moving

averages of a Wiener process. (French summary) Canad. J. Statist. 6 (1978), no. 1, 57-75. (Endre Csáki) 82k:60061 60F15 (60G15) A generalization of Strassen's functional law of iterated logarithm. Z. Wahrsch. Verw. Gebiete 50 (1979), no. 3, 257-264. (Author's summary) 82c:60057

(with Csörgő, Miklós) On the nondifferentiability of the Wiener sheet. Contributions to probability, pp. 143-150, Academic Press, New York, 1981. (M. D. Burke) 82j:60064

60G17 (60J65) How small are the increments of a Wiener sheet? The First Pannonian Symposium on Mathematical Statistics (Bad Tatzmannsdorf, 1979), pp. 207-219, Lecture Notes in Statist.,

8, Springer, New York, 1981. (C. Park) 82::60133 60J65 (60F17, 60G60) See also Symposium: Pannonian, Mathematical Statistics, 82:62005

Revjakin, A. M. See Problems of combinatorial analysis, 824:05005

ilippe Algèbres de Lie métabéliennes. (English summary) Ann. Fac. Sci. Toulou Math. (5) 2 (1980), no. 2, 93-100. (E. M. Luks) 82g:17008 17B30 (17B05)

Groupes d'automorphismes d'algèbres graduées. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 4, 243-246. (Author's summary) 82c:13010 (15A75)

Remarques sur la forme trace. [Remarks on the trace form] Linear and Multilinear Algebra 10 (1981), no. 3, 223-233. (Enzo R. Gentile) 82k:10023 10C05 (13C10)

lachieze-Rey, M. See Lachieze-Rey, M.
Reyer, Steven E. (with Heinen, James A.) Quantization noise analysis of a general digital filter. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 4, 883-892. (Authors' mary) 82f:94004 94A05 (68J10)

Manipulation of multidimen onal polynomials. Internat. J. Systems Sci. 12 (1981), no. 7, 877-883. (Author's sum mary) 82i:93076 93E11 (65U05)

- no. 7, 877-883. (Author's summary) \$2±93676 93E11 (65U05)

 leyes, Gonzalo E. Logic and category theory. Modern logic—a survey, pp. 235-252,

 Synthese Library, 149, Reidel, Dordrecht, 1981. (See \$2±63602) 03G30 (18A15)

 leyher, Samuel See Bittner, Manfred, \$2±01012

 leyman, A. G. See Reiman, A. G.

 leyn, J. W. (with Bakker, P. G.; Bannink, W. J.) Potential flow near conical stagnation
 points. J. Fhial Mech. 165 (1981), 239-260. (Authors' summary) \$2±76853 76199

 leynolds, Albert C. A note on Carasso's method. Advances in computer methods for partial
 differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ.,

 Bethlehem, Pa., 1977), pp. 59-61, IMACS, New Brunswick, N.J., 1977. (From the
 introduction) \$2±65857 65M10

introduction) \$2e:65057 65M10 introduction) \$2e:65057 65M10 molds, Donald F. (with Schleusner, John W.) A note on the equiweak topology. The Proceedings of the 1980 Topology Conference (Univ. Alabama, Birmingham, Ala., 1980 Topology Proc. 5 (1980), 243-245 (1981). (C. M. Pareek) 82i:54032 54C35 (54A10)

ropoug rrue: 5 (1901), 243-243 (1961). (C. M. Parces) 82E:3433 (34A10) rnolds, Gladys H. (with Kramer, Mark A.) Evaluation of a gonorrhea vaccine and other gonorrhea control strategies based on computer simulation modeling. Differential equations and applications in ecology, epidemics, and population problems (Claremont, Calif., 1981), pp. 97-113, Academic Press, New York, 1981. (See 82m:92003) 92A15

molds, J. F. (with Dunstan, F. D. J.) Normal approximations for distributions arising in the stochastic approach to chemical reaction kinetics. J. Appl. Probab. 18 (1981), no. 1, 263–267. (Authors' summary) 82k:80020 80A30

nolds, Mary (with Tomber, Marvin L.; Norris, Diane M.; Balzer, Cindy; Trebilcott, Kathy; Terry, Tamara; Coryell, Hellen; Ordway, Judy) A nonassociative algebra ography. Proceedings of the Second Workshop on Lie-Admissible Formulations Center, Harvard Univ., Cambridge, Mass., 1979), Part B. Hadronic J. 3 (1979/80), (Sci. Ce

Reynolds, P. J. (with Redner, S.) Single-scaling-field approach for an isolated polymer chain. J. Phys. A 14 (1981), no. 3, L53-L61. (Authors' summary) 82c82074 82A42
Reynolds, William Craig. See Conference: Numerical Methods in Fluid Dynamics, 82h:76002
Reynov, O. I. See Reinov, O. I.

Reyssat, Éric Approximation algébrique de nombres liés aux fonctions elliptiques et nentielle. (English summary) Bull. Soc. Math. France 108 (1980), no. 1, 47-79. hel Laurent) 82;10064 10F35 (Michel Laurent) 82;:10064

Transcendance et fonctions ellipti es. [Transcendence and elliptic functions]

Transcendance et fonctions etilipiques. [Transcendence and etilipite functions]

Seminar on Number Theory, 1980-1981 (Talence, 1980-1981), Exp. No. 4, 14 pp., Unio.

Bordeaux I, Talence, 1981. (See 82m:10006) 10F35

Rezayi, E. H. (with Sak, J.; Sólyom, J.) Symmetry properties of one-dimensional Fermi systems: some nonperturbative results. Phys. Rev. B (3) 23 (1981), no. 3, 1342-1348. (Koichiro Matsuno) 82±82021 82A15 Rezničenko, V. A. ★Языки реджиношной модели баз данных. (Russian) [Languages of a

relational database model] Преприит 79-20. [Preprint 79-20] Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. 46 pp. (Author's summary) 82;68080 68F05 (68B15)
The connection between functional dependencies and hierarchical decompositions of

the first order. (Russian) Data banks and information retrieval systems (Russian), pp. 13–18, 127, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (See 82g:68003) 68D37

znickaja, K. G. (with Antonenko, O. F.) The Newton-Kantorovič method in an inverse dynamic problem of seismics. (Russian) Inverse problems for differential equations of dynamic problem of seismics. (Russian) Inverse problems for differential equations of mathematical physics (Russian), pp. 18–25, 155, Akad. Nauk SSSR Sibirsk. Otdel., Vyčisl. Centr., Novosibirsk, 1978. (A. S. Alekseev) 824:86006 86A15 (35R30)

A source problem. The linearized case when $a \neq 0$. (Russian) Inverse problems for differential equations of mathematical physics (Russian), pp. 69-78, 157-158, Akad. Nauk SSSR Sibirsk. Otdel., Vyčisl. Centr., Novosibirsk., 1978. (Author's summary) 824:35105

nikov, S. I. A new proof of a limit theorem of phase enlargement type for semi-Markov processes. (Russian) Theory of random processes, No. 7 (Russian), pp. 95-103, 132, "Naukova Dumka", Kieo, 1979. (A. B. Buche) 821:60195 60K15

Phase enlargement of random processes that are supplemental to Markov processes. (Russian) Ukrain. Mat. Ž. 31 (1979), no. 6, 698-704, 767. (Gh. Oprişan) 82d:60133 60J25 (60F05)

Limit theorems for singularly perturbed evolution operators. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 18, 3-12. (B. V. Loginov) 82g:47030 47D05 (47A55)

A limit theorem of phase enlargement type for Markov processes. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1960, no. 18, 42-50. (Heinz Langer) 82e:60114 60125

A limit theorem of phase enlargement type for random processes that are aponents of weakly inhomogeneous Markov processes. (Russian. English su Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 10, 17-19, 93. (D. A. Darling) 60J25 (60F05)

mikova, A. Ja. Fluctuations of the spectrum of one-dimensional random operators. (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 5, 1059–1062. (Gheorghe Bocsan)

824:60114 60H25 (34F05)

aboldt, Werner C. (with Babuška, Ivo) Reliable error estimation and mesh adaptation for the finite element method. Computational methods in nonlinear mechanics (Proc. Second Internat. Conf., Univ. Texas, Austin, Tex., 1979), pp. 67-108, North-Holland, Amsterdam, 1980. (Michael J. O'Carroll) 82f:65109 65N30 (65-04)

Amsterdam, 1980. (Michael J. O Carroll) 84705109 50N30 (65-04)

On a theory of mesh-refinement processes. SIAM J. Numer. Anal. 17 (1980), no. 6, 766-778. (C. Wayne Mastin) 82e:65052 65G99 (06B99, 68E10)

Numerical analysis of continuation methods for nonlinear structural problems. nput. & Structures 13 (1981), no. 1-3, 103-113. (Author's summary) 82i:73043 73K99 (65H10, 73K25, 90C30)

Adaptive mesh refinement processes for finite element solutions. Internat. J. Nun ods Engrg. 17 (1981), no. 5, 649-662. (Author's summary) 82f:73034 (65L60, 65N30)

(with Babuška, Ivo) A posteriori error analysis of finite element solutions for one-dimensional problems. SIAM J. Numer. Anal. 18 (1981), no. 3, 565-589. (P. G. Ciarlet) 82j-65062 65N30 (65L10)

(with den Heijer, C.) On steplength algorithms for a class of continuation methods.

- SIAM J. Numer. Anal. 18 (1981), no. 5, 925-948. (Authors' summary) 82h:65040
- mitulla, Akbar H. (with Cliff, Gerald H.) Permuting the elements of a finite solvable group. Canad. Math. Bull. 22 (1979), no. 3, 327-330. (Authors' summary) 82j:20042

(with Kim, Ann Chi; Neumann, Bernhard) More Fibonacci varieties. Bull. Austral. Math. Soc. 22 (1980), no. 3, 385-395. (Sheila Oates-Williams) 824:08009

Polycyclic right-ordered groups. Algebra, Carbondale 1980 (Proc. Conf., Southern Illinois Univ., Carbondale, Ill., 1980), pp. 230-234, Lecture Notes in Math., 848, Springer, Berlin, 1981. (Keith R. Pierce) 82:06025 06F15 (20F22)

Finitely generated non-Hopfian groups. Proc. Amer. Math. Soc. 81 (1981), no. 3, 382-384. (F. B. Cannonito) 82a:20039 20E34 (20F99)

382-384. (F. B. Cannonito) 822:20039

201:34 (20199)

van Rhijn, Johan G. (with Vodegel, Ron) Being honest about one's intentions: an evolutionary stable strategy for animal conflicts. J. Theoret. Biol. 85 (1980), no. 4, 623-641. (J. J. Buckley) 826:92026

92A15 (90D45)

Rho, Jae Chul Semiweakly decomposable and semi-analytically decomposable operators. Bull. Korean Math. Soc. 18 (1981), no. 1, 3-7. (Mehdi Radjabalipour) 82k:47050

47B40

nades, B. E. Generalized contractions. Bull. Calcutta Math. Soc. 71 (1979), no. 5, 323-330. (I. A. Rus) 82j:54101 54H25

Fixed point theorems for a contractive type mapping. Math. Sem. Notes Kobe Univ. 7 (1979), no. 1, 13-19. (From the text) 82j:54102 54H25

Some sequence spaces which include the IP spaces. Tamkang J. Math. 10 (1979),

no. 2, 263-267. (P. K. Jain) 82:46016 46A45 (40G05) (with Park, Sehie) Some general fixed point theorems. Acta Sci. Math. (Szegod) 42 (1980), no. 3-4, 299-304. (Silvio Massa) 82a:54089 54H25

(with Mayes, Vivienne) Some properties of the Leininger generalized Hausdorff matrix. Houston J. Math. 6 (1980), no. 2, 287-299. (J. Nemeth) 82e:40005

Comments on a paper of B. G. Pachpatte: "On some common fixed point theorems in metric spaces" [Mat. Vesnik 1(14)(29) (1977), no. 3, 289-293; MR 57 #17615]. Mat.

Vesnik 4(17)(32) (1980), no. 2, 221-222. (Editors) 82e:54057 54H25

(with Park, Schie) Meir-Keeler type contractive conditions. Math. Japon. 26 (1981), no. 1, 13-20. (Silvio Massa) 82e:54056 54H25 (with Park, Sehie) Extension of some fixed point theorems of Hegedüs and

Kasahara. Math. Sem. Notes Kobe Univ. 9 (1981), no. 1, 113-118. (Silvio Massa) 54H25

odes, Frank Kneading of Lorenz type for intervals and product spaces. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 1, 167-179. (Zbigniew Nitecki) 82j:58083 58F13

des, George F., Jr. Exact density functions and approximate critical regions for likelihood ratio identifiability test statistics. Econ (P. C. B. Phillips) 82k:62209 62P20 (60E05) netrica 49 (1981), no. 4, 1035-1055.

Riahi, N. Nonlinear hydromagnetic convection in a moderate Prandtl number fluid. Bull. Austral. Math. Soc. 23 (1981), no. 3, 321-338. (Author's summary) 82j:76096 (76R99)

Risuba, B. On the rate of convergence in the central limit theorem for m-dependent random fields. (Russian. Lithuanian and English summaries) Litovsk. Mat. Sb. 20 (1980), no. 1, 157-164, 220. (Zdzisław Rychlik) 82d:60043 60F05

Riazuddin, M. (with Khan, F. M.) Matrix transformation of sequences of bounded variation. Mat. Vesnik 3(16)(31) (1979), no. 3, 287-293. (E. Stipanić) 82j:40003

Ribaucour, Albert See Rouxel, Bernard, 82f:01054
Ribenboim, Paulo Fermat's last theorem: recent developments. Yearbook: surveys of thematics 1980 (German), pp. 75-92, Bibliographisches Inst., Mannheim, 1980.

mainematics 1990 (German), pp. 19–28, intercolographiscines Inst., standment, 1990. [Editors) 82h:10023 (10B15 (01-01, 10-03) (with Bouvier, Alain; Contessa, M.) Prime ideals in polynomial rings. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 2, 81–86. (From the text) 82e:13001 [13A15 (with Bouvier, Alain; Contessa, M.) On chains of prime ideals in polynomial rings. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 2, 87–92. (L. J. Ratliff, Jr.) 82g:13003 [13A17 (13E65)] 13A17 (13E05)

See also G n, Mostafa, 82i:16032 and Proceedings: Queen's Numb Conference, 82j:10003

Ribet, Kenneth A. Sur les variétés abéliennes à multiplications réelles. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A121-A123. (Ju. G. Zarhin) 82f:14021 14G13 (10D20, 14K15)

Twists of modular forms and endomorphisms of abelian varieties. Math. Ann. 253 (1980), no. 1, 43-62. (Wen Ch'ing Winnie Li) 82e:10043 10D15 (14G13)

Endomorphism algebras of abelian varieties attached to newforms of weight 2. Seminar on Number Theory, Paris 1979-80, pp. 263-276, Progress in Math., 12, Birkhäuser, Boston, Mass., 1981. (Wen Ch'ing Winnie Li) 82m:10044 10D1

Ricca, G. (with Puccio, L.; Termini, D.) On the construction of a table of BIBD for v from 4 to 10. (Italian. English summary) Atti Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur. 55 (1980), 59-78. (A. Barlotti) 82m:05019 05B05 (62K10)

(with Donato, Andrea) On the possibility of secondary shocks in a self-similar flow. (Italian. English summary) Boll. Un. Mat. Ital. A (5) 17 (1980), no. 3, 474-481. (A. Pozzi) 82h-76038 761.05

Riccardi, Gregory A. The independence of control structures in abstract programming systems. J. Comput. System Sci. 22 (1981), no. 2, 107-143. (A. Pliuškevičienė) 82m:03061 03D80 (68B05, 93A20)

Ricceri, Biagio Existence of solutions for ordinary differential equations in Banach space under Carathéodory hypotheses. (Italian. English summary) Boll. Un. Mat. Ital. C (5) 18 (1981), no. 1, 1-19. (Tomás Dominguez Benavides) 82j:34069 34G20 (58D25)
Ricci, F. (with Hulanicki, Andrzej) A Tauberian theorem and tangential convergence for

bounded harmonic functions on balls in C*. Invent. Math. 62 (1980/81), no. 2, 325-331. (Guy Laville) 82e:32008 32A40 (42B99)

Ricci, Gianni Adaptive control of linear decentralized econometric models. Analysis and optimization of systems (Proc. Fourth Internat. Conf., Versailles, 1980), pp. 677–697, Lecture Notes in Control and Information Sci., 28, Springer, Berlin, 1980. (Author's summary) 82k:90045 90A16

Ricci, Paolo Emilio (with Bruschi, Massimo) Lucas and Čebyšev polynomials in several variables. (Italian. English summary) Rend. Mat. (6) 13 (1980), no. 4, 507-529 (1981). (Authors' summary) 82k:33024 33A70
 Ricci, Riccardo (with Ragionieri, Rodolfo) Hamiltonian formalism in the calculus of

variations. (Italian summary) Boll. Un. Mat. Ital. B (5) 18 (1981), no. 1, 119-130.

(Demeter Krupka) 82g:58025 58E15 (49F99, 58F05)
(with Giachetti, Riccardo; Sorace, Emanuele) Tetrad fields and metric tensor in the gauge theory of gravitation. Lett. Math. Phys. 5 (1981), no. 2, 85-91. (Carl Brans) 83C99 (53C80, 83E10)

Ricciardi, Luigi M. (with Sacerdote, L.) The first passage time problem with applications to neuronal modeling. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. III, pp. 226-236, Reidel, Dordrecht, 1980. (Authors' 92A09

(with Nobile, Amelia G.) Growth and extinction in random environment. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. III, pp. 455-465, Reidel, Dordrecht, 1980. (Authors' summary) 82i:92829 92A15

(with Capocelli, Renato M.) Growth and extinction: a question of modeling? Progress in cybernetics and systems research, Vol. VI, pp. 23–24, Hemisphere, Washington, D.C., 1982. (Authors' summary) 82k:92061 92A17 (60J70)

Riccioni, R. (with Peano, A.; Fanelli, M.; Sardella, L.) Self-adaptive convergence at the crack tip of a dam buttress. Numerical methods in fracture mechanics (Swansea, 1978), pp. 268-280, Univ. College Swansea, Swansea, 1978. (See 82:73003) (73K25)

Winograd convolution algorithms over finite fields. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 827-857. (Author's summary) 82g:68031 68C05 (12C05)

The 0-1 integer programming problem in a finite ring with identity. Comput. Math. Appl. 7 (1981), no. 6, 497-502. (Author's summary) 82m:90121 90C10

Rice, James R. Some computational problems in elastic-plastic crack mechanics. Numerical methods in fracture mechanics (Swansea, 1978), pp. 434-449, Univ. College Swansea, Swansea, 1978. (Author's summary) 82k:73069 73M05

Rice, John R. (with Lynch, Robert E.) A high-order difference method for differential equations. Math. Comp. 34 (1980), no. 150, 333-372. (Robert D. Russell) 82b:65070

(with Houstis, Elias N.; Dyksen, Wayne R.) A population of linear, second order, elliptic partial differential equations on rectangular domains. I, II. Math. Comp. 36 (1981), no. 154, 475-484 (loose microfiche suppl.). (Authors' summary) 82c:65083 65N99 (65M99)

Rice, Michael D. Uniform ideas in analysis. Real Anal. Exchange 6 (1980/81), no. 2, 139–185. (A. H. Stone) 82i-54070 54H05 (28A05, 28A10, 28A35, 54E15)

(with Levy, Ronnie) The number of compact fibers of mappings on Banach spaces. The Proceedings of the 1980 Topology Conference (Univ. Alabama, Birmingham, Ala., 1980). Topology Proc. 5 (1980), 203-207 (1981). (J. Daneš) 82i:58010

(with Levy, Ronnie) U-embedded subsets of the plane. The Proceedings of the 1980 Topology Conference (Univ. Alabama, Birmingham, Ala., 1980). Topology Proc. 5 (1980), 209-213 (1981). (John G. Hocking) 82i:54067 54F99 (54C30)

e, P. M. Local strategies and equilibria with an application to the committee decision process. *Internat. J. Game Theory* 8 (1979), no. 1, 1-12. (Author's summary) 82m:90168 90D10 (90A08)

Rice, S. O. Distribution of quadratic forms in normal random variables-evaluation by numerical integration. SIAM J. Sci. Statist. Comput. 1 (1980), no. 4, 438-448. (James E. Gentle) 82g:62037 62E30 (65U05)

(with Lugannani, R.) Numerical evaluation of a class of integrals by integrating along a string of saddle points. J. Comput. Phys. 39 (1981), no. 2, 473–480. (C. Dagnino) 82e:65025 65D30

The integral of the absolute value of the pinned Wiener process-calculation of its robability density by numerical integration. Ann. Probab. 10 (1982), no. 1, 240-243. (D. Kannan) 82mc60099 60J65 (65D30)

Rice, Stuart A. (with Kosloff, Ronnie) The influence of quantization on the onset of chaos (1981), no. 2, 1340–1349. (Joseph Ford) **82g:58051** 58F13 (58G25, 81D99, 94A17)

(with Kosloff, Ronnie) Dynamical correlations and chaos in classical Hamiltonian systems. J. Chem. Phys. 74 (1981), no. 3, 1947-1955. (Joseph Ford) 82c:58038

Rich, Michael Erratum: "On alternative rings with involution" [Comm. Algebra 6 (1978), no. 13, 1383-1392; MR 58 #11051]. Comm. Algebra 9 (1981), no. 15, 1571. (Editors)

Richard, J.-F. Models with several regimes and changes in exogeneity. Rev. Econom. Stud. 47 (1980), no. 1, 1-20. (From the introduction) 82i:90021 90A16 (62P20, 90A19)

Richard, J. L. (with Rouet, A.) Complex saddle points versus dilute-gas approximation in the double-well anharmonic oscillator. Nuclear Phys. B 185 (1981), no. 1, 47-60. (J. S. Joel) 82h:81038 81C15 (58G15, 58G25, 81E15)

(with Rouet, A.) The saddle point method for the double well anharmonic oscillator. Phys. Lett. B 98 (1981), no. 4, 305-309. (Authors' summary) 82b:81067 81E10

Richard, Mark Temporalism and eternalism. Philos. Stud. 39 (1981), no. 1, 1-13. (Editors) 03B45 (03A05)

rds, Derek (with de Kertanguy, A.; Percival, Ian C.) Classical theory of the static Stark effect for weak fields. J. Phys. B 14 (1981), no. 4, 641-656. (Authors' summary) 81G45 (58G15, 78A25)

Richards, Donald St. P. A characterization of a matric-variate exponential distribution. Austral. J. Statist. 23 (1981), no. 2, 238-239. (Author's summary) 82k:62038

Richards, Ian (with Youn, Heekyung Kang) On the general definition of convolution for distributions. J. Korean Math. Soc. 17 (1980/81), no. 1, 13-37. (E. L. Koh) 82d:46065

(with Youn, Heekyung Kang) On the general definition of convolution for several distributions. J. Korean Math. Soc. 17 (1980/81), no. 2, 161-168. (E. L. Koh) 82f:46049

On the normal density of primes in short intervals. J. Number Theory 12 (1980), no. 3, 378-384. (G. Halász) 82c:10049 10H05 (10H15)

Continued fractions without tears. Math. Mag. 54 (1981), no. 4, 163-171. (Rodney T. Hansen) 82:10010 10A32 (10F20)

Richards, K. S. (with Anderson, M. G.) Statistical modelling of channel form and process. Statistical applications in the spatial sciences, pp. 205-228, Plon, London, 1979. (See 82f:90003) 86A05

Richards, L. Karamata-type operators on the space of uniformly convergent power series.

Acta Math. Acad. Sci. Hungar. 37 (1981), no. 1-3, 173-184. (C. Tanaka) 82f;30003 30B10 (30B30, 30H05)

Richards, P. J. (with Pagan, G.) A bound for solutions of a fourth order dynamical system Ordinary and partial differential equations (Proc. Sixth Conf., Univ. Dundee, Dundee, 1980), pp. 264-272, Lecture Notes in Math., 846, Springer, Berlin, 1981. (Authors' nary) 82g:70010 70E10

(with Pagan, G.) A bound for solutions of a fourth-order dynam nical system. IMA J. Appl. Math. 27 (1981), no. 2, 229-235. (Authors' summary) 82i:70032

on, Gary D. (with Fric, Roman; McKennon, Kelly) Sequential convergence in C(X). Convergence structures and applications to analysis (Proc. Internat. Summer School, Frankfurt a.d. Oder, 1978), pp. 57-65, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1979, 4, Akademie-Verlag, Berlin, 1980. (C. H. Cook) 82i:54009

(with Kent, Darrell C.) Completely regular and ω-regular spaces. Proceedings of the Conference on Convergence Structures (Cameron Univ., Lawton, Okla., 1980), pp. 84-90, on Univ., Lawton, Okla., 1980. (From the introduction) 82h:54008

(with Kent, Darrell C.) The star compactification. Proceedings of the Conference on Convergence Structures (Cameron Univ., Lawton, Okla., 1980), pp. 119–127, Cameron Convergence Structures (Cameron Univ., Lawton, Okla., 1980), pp. 119–127, Cameron Univ., Lawton, Okla., 1980, pp. 119–127, Cameron Univ., Individual Univ., Lawton, Okla., 1980. (From the introduction) 82h:54012 54A20 (54D35)

(with McKennon, Kelly) Convergence of certain probability distribution functions. Math. Nachr. 94 (1980), 51-56. (Balram S. Rajput) 82b:46029 46E27 (43A15, 60B10) (with Kent, Darrell C.) The star compactification. Internat. J. Math. Math. Sci. 4

(1981), no. 3, 451–472. (C. V. Riccke) 82g:54038 54D35 (54A20)
 (with Kent, Darrell C.) Completely regular and ω-regular spaces. Proc. Amer. Math.
 Soc. 82 (1981), no. 4, 649–652. (Roman Frič) 82i:54010 54A20 (54D15)

hardson, I. W. The method structure of aging (dissipative) systems. J. Theoret. Biol. 85 (1980), no. 4, 745-756. (C. P. Bruter) 82e:80002 80A10 (92A05)

Richardson, J. G. See Impact of modern scientific ideas on society, 82k:01046
Richardson, J. S. (with Havas, George; Sterling, Leon S.) The last of the Fibonacci groups Proc. Roy. Soc. Edinburgh Sect. A 83 (1979), no. 3-4, 199-203. (Authors' summary) 20F05 (20-04)

(with Hannah, John; Zeleznikow, John) Completely semisimple ring semigroups. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 2, 150-156. (K. S. S. Nambooripad) 82c:20114 20M25 (16A48, 20M12)

Richardson, Leonard F. Poisson summation on Kirillov orbits. Math. Ann. 239 (1979), no. 3, 229-240. (Jonathan M. Rosenberg) 82b:22018 22E27 (10D40, 14K25, 43A85) Richardson, M. B. (with Van Horn, H. M.; Savedoff, M. P.) A code for general relativistic stellar evolution. Astrophys. J. Suppl. 39 (1979), no. 1, 29–48. (Authors' summary)

82h:85004 85A15 (85-04) Richardson, S. Some Hele-Shaw flows with time-dependent free boundaries. J. Fluid Mech. 102 (1981), 263-278. (Author's summary) 824:76023

76B99 on, Sylvia (with Hemon, Denis) On the variance of the sample correlation between two independent lattice processes. J. Appl. Probab. 18 (1981), no. 4, 943-948. (M. Csörgö) 82k:60086 60G15 (60G10)

erg, R. A monotonicity property of Bessel functions. Math. Methods Appl. Sci. 2

(1980), no. 4, 480-488. (A. McD. Mercer) 82c;33012 33A40 (34E05) Riche, L. R. The ring R(X). J. Algebra 67 (1980), no. 2, 327-341. (J. T. Arnold)

Richens, P. J. (with Berry, M. V.) Pseudointegrable systems in classical and quantu mechanics. Phys. D 2 (1981), no. 3, 495-512. (Eugene Gutkin) 82k:58080 58F((34C35, 70F35, 81C99)

an, Fred (with Bridges, Douglas S.; Calder, Allan; Julian, William; Mines, Ray) Compactly generated Banach spaces. Arch. Math. (Basel) 36 (1981), no. 3, 239-243. (From the introduction) 82m:46013 46B15 (03F65)

(with Calder, Allan; Julian, William; Mines, Ray) e-covering dimension. Pacific J. Math. 95 (1981), no. 2, 257-262. (K. Nagami) 82j:54080 54F45 (with Hunter, Roger) Global Warfield groups. Trans. Amer. Math. Soc. 266 (1981).

no. 2, 555-572. (L. Fuchs) 82k:20091 20K21 See also Constructive mathematics, 82m:03003

hmond, L. Bruce (with Szekeres, G.) On the transformation equation for the partition generating function. Aequationes Math. 21 (1980), no. 1, 44-48. (M. D. Hirschhorn) 10J20 (05A15)

Richter, Claus Über Einbettungsverfahren der nichtlinearen Optimierung. Sixth Conference on Mathematical Methods in Economics (Vitte, 1980) (German), pp. 50-53, Seminarberichte, 29, Humboldt Unio., Berlin, 1980. (Wolfgang Wetterling) 821:49037 49D37 (65K05, 90C30)

Über Mehrschrittverfahren der nichtlinearen Optimierung. (English and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 3, 129-136. (Jon W. Tolle) 82g:49034

Richter, D. About handling large linear systems with respect to using external storage. Numerical methods (Third Collog., Keszthely, 1977), pp. 507-515, Collog. Math. Soc. J. Bolyai, 22, North-Holland, Amsterdam, 1980. (William W. Hager) 82bx65020

Richter, Gerard R. An integral equation method for the biharmonic equation. Advances in computer methods for partial differential equations, 11 (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 41-45, IMACS, New Brunswick, N.J., 65N99 (73C99) 1977. (Author's summary) 82b:65154

1977. (Author's summary) 82265154 05789 (752.99)

Numerical identification of a spatially varying diffusion coefficient. Math. Comp. 36 (1981), no. 154, 375–386. (J. R. Cannon) 82c65085 65M05 (65M10)

An inverse problem for the steady state diffusion equation. SIAM J. Appl. Math. 41 (1981), no. 2, 210-221. (S. Dümmel) 82m:35143 35R30 (76R99) hter, Gerhard Bemerkungen zu linearen Gleichungssystemen mit zufälligen

Koeffizienten. Sixth Scientific Conference of the College of Transport Engineering (College

- Transport Engrg., Žilina, 1979) (Slocak), pp. 3-9, College of Transport Engrg., Žilina, 1979. (A. T. Bharucha-Reid) 82c:60118 60H25 (15A06, 60F99)
- 1979. (A. T. Bharucha-Reid) 82:e60118 60H25 (15A06, 60F99)
 hter, Günther (with Bargenda, Hubertus) Varietal hulls of functors. Quaestione (1980/81), no. 2, 121–158. (H. Herrlich) 82h:18004 18C99 (18A40, 18D99)
 - hier, Herbert Zur Äquivalenz zweier Lösungsdarstellungen eine Anfangs-Randwertproblems für eine hyperbolische Differentialgleichung. Wiss. Z. Tech. Hocksch. Magdeburg 23 (1979), no. 7, 775–776. (Author's summary) 82j:35024
- hter, Knut Äquivalente Optimierungsaufgaben und Dekomposition. I. (English and Russian summaries) [Equivalent optimization problems and decomposition. I] Math. Operationsforsch. Statist. Ser. Optim. 11 (1980), no. 3, 389–402. (Author's summary) 82=90112a 90C06
 - Äquivalente Optimierungsaufgaben und Dekomposition. II. (English and Russian imaries) [Equivalent optimization problems and decomposition. II] Math. reationsforsch. Statist. Ser. Optim. 12 (1981), no. 1, 13–25. (Author's summary)
- Richter, Marcel K. (with Hurwicz, Leonid) Ville axioms and consumer theory. Econometrica 47 (1979), no. 3, 603-619. (Authors' summary) 82m:90025
 - (with Hurwicz, Leonid) An integrability condition with applications to utility theory thermodynamics. J. Math. Econom. 6 (1979), no. 1, 7-14. (Carl P. Simon) 82a:90025 and thermodynan 90A10 (58A10, 80A10)
- rbarkeit Gaußscher statistischer Strukturen in Hilberträu thias Dor und Berechnung der Likelihood-Funktion. Wiss. Z. Tech. Hochsch. Karl-Marx-Stadt 22 (1980), no. 4, 371-377. (V. K. Rohatgi) 82e:60007 60B11 (60G30, 62A10)
- pattern recognition (Proc. Internat. Sympos. Synerget., Garmisch-Partenkirchen, 1979), pp. 155–165, Springer Ser. Synergetics, 5, Springer, Berlin, 1979. (See 82k:00028) 92A07 ter, P. H. Patterns in the immune system. Pattern formation by dynamic sys
- Richter, Steffen *Wolfgang Pauli. (German) Die Jahre 1918-1930. Skizzen zu einer wissenschaftlichen Biographie. [The years 1918-1930. Sketches for a scientific biography] Veröffentlichungen der Schweizerischen Gesellschaft für Geschichte der Medizin und der Naturwissenschaften [Publications of the Swiss Society for the History of Medicine and Sciences], 32. Verlag Sauerländer, Aarau, 1979. 112 pp. ISBN 3-7941-1556-2 (D. ter Haar) 01A70 (01A60, 81-03, 83-03)
- Richter, Walter Mehrelektronen-Spin-Eigenfunktionen von Molekülen bei nichtorthogonaler Basis. (Russian and English summaries) Wiss. Z. Pādagog. Hochsch. "Karl Liebknecht" Potsdam 24 (1980), no. 1, 145-152. (Author's summary) 82i:81161
- Richter, Wolf Jürgen Prochiralität und symmetrische Induktion. Match No. 8 (1980), 353-363. (N. Trinajstić) 82j-92066 92A40 (52A25)
- Richter-Dyn, Nira A straightforward generalization of Diliberto and Straus' algorithm does not work. J. Approx. Theory 30 (1980), no. 4, 247-250. (Manfred v. Golitschek) 82;-41032 41A63 (41A30)
 - See also Tobler, Waldo R., 82b:62147
- Richters, Stephen P. (with Carmichael, Richard D.) Growth of HP functions in tubes Internat. J. Math. Math. Sci. 4 (1981), no. 3, 435-443. (E. L. Stout) 82h:32008 32A35 (32A07)
- m A. (with Hathaway, Neville J.; Murray, Ian W.) The stability of Bishop's warfare strategy. J. Austral. Math. Soc. Ser. B 21 (1979/80), no. 4, 418-432. (Authors' summary) 82k-90132 90D05 (90A14)
 - (with Gates, D. J.; Westcott, Mark) Exact co-operative solutions of a duopoly model without co-operation. J. Math. Econom. 9 (1982), no. 1-2, 27-35. (Authors' summary) 90A14
- Rickart, C. E. Some function algebras with common spectrum. J. Algebra 62 (1980), no. 2, 262-267. (Author's summary) 82j:46065 46J10
- Rickey, V. Frederick (with Tuchinsky, Philip M.) An application of geography to mathematics: history of the integral of the secant. *Math. Mag.* 53 (1980), *no.* 3, 162–166. (Bertram Ross) 82g:01019 01A45 (26-03)
- Rickman, Seppo Asymptotic values and angular limits of quasiregular mappings of a ball.
 Ann. Acad. Sci. Fenn. Ser. A I Math. 5 (1980), no. 1, 185-196. (P. Caraman) 82b;30019
- Ricner, V. S. Extension of dual pairs of subspaces. (Russian) Functional analysis, No. 15, pp. 135-139, Ul' janousk. Gos. Ped. Inst., Ul' yanousk, 1980. (F.-H. Vasilescu) 82j:47056
- Ridders, C. J. F. Fermat's last theorem. Internat. J. Math. Ed. Sci. Tech. 12 (1981), no. 4, 407-409. (Takeo Miyoshi) 82h:10024 10B15
- Riddle, Lawrence H. Weak Radon-Nikodým sets in conjugate Banach spaces. Measure theory and its applications (Proc. Conf., Northern Illinois Univ., De Kalb, Ill., 1980), pp. 245-251, Northern Illinois Univ., DeKalb, Ill., 1981. (See 82g:28002) 46B22
- eau, G. Covariant quantizations of the Maxwell field. (French summary) Field theory
- quantization and statistical physics, pp. 201–226, Math. Phys. Appl. Math., 6, Reidel, Dordrecht, 1981. (Author's summary) 82k-81071 81D25 (22E70, 58A10, 81E05) enhour, Jerry Green's functions and linear boundary value problems. J. Differential Equations 39 (1981), no. 2, 259–268. (G. B. Gustafson) 82k:34026 34B27 (34B05) On the sign of Green's functions for multipoint boundary value problems Pacific J.
- Math. 92 (1981), no. 1, 141-150. (G. B. Gustafson) 82k:34027 34B27 (34B10) idler-Rowe, C. J. (with Atkinson, C.; Reuter, G. E. H.) Traveling wave solution for some r diffu sion equations. SIAM J. Math. Anal. 12 (1981), no. 6, 880-892. (P. C. Fife) 82k:35058 35K55
- ley, J. N. Automorp m groups of symmetric tournaments. Algebra Symposium (Potchefstroom Univ., Potchefstroom, 1979), pp. 93-96, Potchefstroo m Univ. for Christian Higher Ed., Potchefstroom, 1980. (See 82i:16002) 05C25 (20B25)
- ecan, Beloslav On the unified measure and integration theory. (Slovak and Russian maries) Acta Fac. Rerum Natur. Univ. Comenian. Math. 35 (1979), 217-237 (1980). (L. Ja. Savel'ev) 82d:28012 28C99
 - The measure extension theorem for subadditive probability measures in orthomodular σ-continuous lattices. Comment. Math. Univ. Carolin. 20 (1979), no. 2, 309–316. (From the text) 82m:28013 28A60 (03G12, 06C15, 81B10)
 - (with Futáš, E.) A modification of the Carathéodory method for upper integrals.

- (Slovak and Russian summaries) Acta Fac. Rerum Natur. Univ. Comenian. Math. 36 (1980), 125-135. (S. N. Mukhopadhyay) 82g:26012 26A39
 On abstract characterization of Hausdorff measure. (Slovak and Russian summaries) Acta Math. Univ. Comenian. 39 (1980), 43-52. (J. D. Knowles) 82m:28014 28A60
- Riecke, C. V. Ideals in convergence structure lattices. Proceedings of the Conference on Convergence Structures (Cameron Univ., Lawton, Okla., 1980), pp. 128-138, Came Univ., Lawton, Okla., 1980. (From the introduction) 82d:06006 06B30 (54A20)
 - Properties of complements in the lattice of convergence structures. Internat. J. Math. Math. Sci. 3 (1980), no. 3, 433–443. (Piotr Antosik) 82a:54003 54A05 (06D15)
- Riedel, Eberhard K. The Potts and cubic models in two dimensions: a renormalization-group description. (French summary) Statphys 14 (Proc. Fourteenth Internat. Conf. Thermodynamics and Statist. Mech., Univ. Alberta, Edmonton, Alta., 1980). Phys. A 106 (1981), no. 1-2, 110-121. (Author's summary) 82g:82057 82A68 (82A25)
- sidel, M. Characterization of stable processes by identically distributed stochastic integrals. Adv. in Appl. Probab. 12 (1980), no. 3, 689-709. (B. L. S. Prakasa Rao) 82a:60109 60J30 (60H05, 62E15)
- Riedel, Norbert Classification of dimension groups and iterating systems. Math. Scand. 48 (1981), no. 2, 226–234. (David Handelman) 82k:46091 46L05 (06F20)
 - A counterexample to the unimodular conjecture on finitely generated dimension groups. Proc. Amer. Math. Soc. 83 (1981), no. 1, 11-15. (W. A. J. Luxemburg) 82f:06026 06F20 (10F10, 46L99)
 - On reduction of tracial states. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 6, 889-897. (J. W. Bunce) 82k:46095 46L30
 - On the Dixmier property of simple C*-algebras. Math. Proc. Cambridge Philos. Soc. 91 (1982), no. 1, 75–78. (Steve Wright) 82k:46092 46L05 (46K05)
- Riedel, Roland Asymptotische Darstellung verallgemeinerter Fourierintegrale. II. Beiträge Anal. No. 15 (1980), 109-116 (1981). (L. Berg) 82i:41037 41A60 (42A38)
- nn, Eike Hagen Automatical translation of sequential programs into parallel programs. Parallel computers—parallel mathematics (Munich, 1977), pp. 207-210, North-Holland, Amsterdam, 1977. (See 82k:68003) 68D15 (68B20)
- North-Holland, Amsterdam, 1971. (See Sandouse)
 Rieder, Helmut Robustness of one- and two-sample rank tests against gross errors. Ann.
 Scatter 9 (1981). no. 2. 245–265. (M. G. Akritas) 82e:62071 62G10 (62F35)
- On local asymptotic minimaxity and admissibility in robust estimation. Ann. Statist. 9 (1981), no. 2, 266-277. (A. L. Rukhin) 82d:62020 62C20
- (with Weinberg, Louis) Synthesis of lossy lumped-distributed cascade networks. IEEE Trans. Circuits and Systems 28 (1981), no. 12, 1137-1152. (Authors' 94C05 summary) 82m:94050
- r, Bruno (with Heinhold, Josef) *Lineare Algebra und Analytische Ge Teil I. (German) [Linear algebra and analytic geometry. Part I] Third edition. Mathematische Grundlagen für Mathematiker, Physiker und Ingenieure. [Basic mathematics for mathematicians, physicists and engineers] Carl Hanser Verlag, Munich, 1980. viii + 215 pp. ISBN 3-446-13049-7 (From the foreword) 82m:15001 15-01
- Riedtmann, Christine Representation-finite self-injective algebras of class A_n.
 Representation theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 449-520, Lecture Notes in Math., 832, Springer, Berlin, 1980. (Birge mermann-Huisgen) 82k:16040 16A64 (16A46, 16A48)
 Algebren, Darstellungsköcher, Überlagerungen und zurück. Comment. Math. Helv.
- 55 (1980), no. 2, 199-224. (V. Dlab) 82k:16039 16A64 (16A36, 16A46)
- Riedwy, Hams *Regressionsgerade und Verwandtes. (German) [Linear regression and related concepts] Uni-Taschenbücher [Uni Paperbacks], 923. Verlag Paul Haupt, Bern, 1980. 141 pp. ISBN 3-258-02864-8 (From the preface) 82m:62155
- Über Folgen gebrochener Potenzen. Abh. Math. Sem. Univ. Hamburg 49 (1979), 42-48. (Editors) 82d:10060 10H15 (10B35)
- Über Lipschitz-Folgen. Math. Scand. 45 (1979), no. 1, 168-176. (H. Halberstam) 10H30 (10A05)
- Einige Rekursionsformeln für Summen mit Binomialkoeffizienten. Abh nunschweig. Wiss. Ges. 31 (1980), 137-143. (D. H. Lehmer) 82e:10017
- Zu einem Satz von Estermann über Summen von Quadraten quadratfreier Zahlen Arch. Math. (Basel) 35 (1980), no. 5, 447-450. (R. W. K. Odoni) 82e:10083 1030
- Über große Werte der Riemannschen Funktion 5 in Winkelräumen. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 4, 399–403. (E. Grosswald) 82j:10069 10H05
- Riegert, Ronald J. (with Macrae, Kenneth I.) Effect of curvature-squared terms on cosmology. Phys. Rev. D (3) 24 (1981), no. 10, 2555-2560. (Authors' summary) 83F05
- Richm, C. Jordan splittings of almost unimodular integral quadratic forms. J. Number Theory 12 (1980), no. 3, 395-420. (J. S. Hsia) 82g:10042 10C02 (10C05)
 - The automorphism group of a composition of quadratic forms. Trans. Amer. Math. Soc. 269 (1982), no. 2, 403-414. (Daniel B. Shapiro) 82m:10038 10C05 (10C04.
- Riekstina, V. Uniform asymptotic expansion of a certain class of integrals with exponential kernels. (Russian) Latv. Mat. Ežegodnik No. 24 (1980), 12-29, 257. (L. Berg) 82e:41048 41A60
- Riekstiņš, E. *Обвертывающие ряды. І. (Russian) [Enveloping series. I] Свойства и построение обвертывающих рядов. [Properties and construction of enveloping series] With an English summary. JAAPH [LAFI], 18. Akad. Nauk Law. SSR, Inst. Fiz., Salaspits, 1980. 30 pp. (T. Šalát) 82h:40001a 40A30 (41A60)
 - ★Обвертывающие ряды. II. (Russian) [Enveloping series. II] Применения обвертывающих рядов. [Applications of enveloping series] With an English summary. ЛАФИ [LAFI], 19. Akad. Nauk Latv. SSR, Inst. Fiz., Salaspits, 1980. 31 pp. (T. Šalát) 40A30 (41A60)
 - Asymptotic expansions of integrals of functions with logarithmic singularities (Russian) Latv. Mat. Ežegodnik No. 24 (1980), 30-42, 257. (L. Berg) 82f:41038
- te Riele, Herman J. J. (with Iwaniec, Henryk; van de Lune, J.) The limits of Buchstab's iteration sieve. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 4, 409-417. (Mohan Nair) 82a:10054 10H30
 - Hyperperfect numbers with three different prime factors. Math. Comp. 36 (1981), no. 153, 297-298. (From the text) 82c:10006 10A20 (10A40)

m, Georg Friedrich Bernhard See Neuenschwander, E., 82j:01050

Riemenschneider, Oswald Die Katastrophentheorie von René Thom. Versuch einer Einführung. Mitt. Math. Ges. Hamburg 10, no. 7, 553-572 (1979). (Bill Watson) 58C28 (58-01, 92A20)

enschneider, S. D. (with Sharma, Ambikeshwar; Smith, Philip W.) Lacunary trigonometric interpolation: convergence. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 741-746, Academic Press, New York, 1980. (Jean Tzimbalario) 82b:42003 42A15

(with Smith, Philip W.) Approximation by discrete totally positive systems Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 847-855, Academic Press, New York, 1980. (Allan Pinkus) 82a:41026 41A50 (15A99) Academic Press, New York, 1980. (Allan Pinkus) 82a:41026

Riemer, E. (with Dautcourt, G.; Jann, K.-P.; Riemer, M.) User's guide to REDUCE subroutines for algebraic computations in general relativity. Astronom. Nachr. 302 (1981), no. 1, 1–13. (Authors' summary) 82m:83002 83–04

er, M. (with Dautcourt, G.; Jann, K.-P.; Riemer, E.) User's guide to REDUCE subroutines for algebraic computations in general relativity. Astronom. Nachr. 302 (1981), no. 1, 1–13. (Authors' summary) 82m:83002 83–04
mer, Roll-Ingraban Eine Verallgemeinerung topologischer Mannigfaltigkeiten. Rev.
Colombiana Mat. 13 (1979), no. 1, 49–62. (P. G. Walczak) 82e:58008 58A40 (32K99),

57P99)

enstra, S. W. Sound diffraction at a trailing edge. J. Fluid Mech. 108 (1981), 443-460. (Author's summary) 82;:76071 76Q05

Riera, T. How similarity matrices are?. Stochastica 2, no. 4, 77-80 (1978). (George P. H.

Styan) 82e:15018 15A57 (62H30)

(with Trillas Ruiz, Enrique) Note for the study of a concept of multivalued entropy for a finite fuzzy set. Proceedings of the First World Conference on Mathematics at the Service of Man (Barcelona, 1977), Vol. I, pp. 472-500, Univ. Politec., Barcelona, 1980. (S. Guiașu) 82j:94031 94D05 (94A17)

Ries, Vincent (with Gallardo, Léonard) Marches aléatoires sur les espaces homogènes du groupe des déplacements de Rⁿ. (English summary) Conference on Random Walks

groupe des déplacements de R.º. (English summary) Conference on Random Walks (Kleebach, 1979) (French), pp. 123-138, 4, Astérisque, 74, Soc. Math. France, 1980. (Yves Guivarc'h) 82e:60107b 60115 (60815) esbeck, Christopher K. (with Charniak, Eugene; McDermott, Drew V.) * Artificial intelligence programming. Lawrence Eribaum Associates, Inc., Hillsdale, N.J., 1980. xii + 323 pp. ISBN 0-89859-004-3 (F. Štépanck) 82k:68049 68C05 (68B20, 92A25) ese, Adam * Rechnung auff der Linien unnd Federn/Auff allerley Handtierung. (German) (Artithmetic "on the line" and "on pens"/for various uses! Facsimile respirit

(German) [Arithmetic "on the line" and "on pens"/for various uses] Facsimile reprint of the 1525 original. Curt R. Vincentz Verlag, Hannover, 1978. 144 pp. ISBN 3-87870-155-1 (J. S. Joel) 82f:01186 01A75

Riesz, F. See Fenyő, István, 82k:01032 Riesz, Marcel See Horváth, János, 82f:01114

Rietveld, Piet See Nijkamp, Peter, 82c:90090
Riffelmacher, Dave Sweedler's two-cocycles and Hochschild cohomology. Pacific J. Math.
89 (1980), no. 1, 181–188. (S. S. Page) 82g:16025 16A62 (16A46)

Rigas, A. (with Derdziński, Andrzej) Unflat connections in 3-sphere bundles over S4. Trans. Amer. Math. Soc. 265 (1981), no. 2, 485-493. (H. R. Gluck) 82i:53026 53C05 (55R 10)

toti Rigatelli, Laura See Toti Rigatelli, Laura

Rigby, J. F. Multiple intersections of diagonals of regular polygons, and related topics. Geom. Dedicata 9 (1980), no. 2, 207-238. (H. T. Croft) 82e:52004 52A25 (51M20) On the Money-Coutts configuration of nine antitangent cycles. Proc. London Math. Soc. (3) 43 (1981), no. 1, 110-132. (O. Giering) 82h:51012

Rigdon, Robert (with Williams, Bruce) Embeddings and immersions of manifolds. Geometric applications of homotopy theory (Proc. Conf., Evanston, Ill., 1977), I, pp. 423-454, Lecture Notes in Math., 657, Springer, Berlin, 1978. (From the text) 82i:57031 57R40 (57R42, 58D10)

Riha, W. O. J. (with Lau, K. K.) Characterization of best approximations in normed linear spaces of matrices by elements of finite-dimensional linear subspaces. Linear Algebra Appl. 35 (1981), 109-120. (Donald Kershaw) 82a:15023 15A60 (41A50)

Rihsiev, B. B. (with Satimov, N.) On a complete study of L. S. Pontrjagin's generalized control example. (Russian) Differencial'nye Uravnenija 15 (1979), no. 3, 436–443, 572. (Authors' summary) 82i:90131 90D26

Nonen, A. I. A note on perfect Lee-codes. Discrete Appl. Math. 2 (1980), no. 3, 259-260.
(N. L. Maney) 82a:94082a 94B60

See also Holdridge, D. B.; et al., 82a:94082b

Riis, Hanne (with Skyum, Sven) k-visit attribute grammars. Math. Systems Theory 15

(1981/82), no. 1, 17-28. (Authors' summary) 82;:68081 68F05
Rikards, R. B. Convexity of some classes of optimization problems for multilayer shells under conditions of stability and vibration. Izv. Akad. Nauk SSSR Meh. Toerd. Tela 15 (1980), no. 1, 145–154 (Russian); translated as Mech. Solids 15 (1980), no. 1, 130–137. (H. J. Weinitschke) 82b:73044 73K40 (49D35, 73L15)

Riker, William A mathematical theory of political coalitions. Ma for the social sciences, pp. 61-70, Gordon & Breach, New York, 1980. (See 82g:92002) 90A08 (92A20, 90D40)

Riley, Charles A note on strict convexity. Amer. Math. Monthly 88 (1981), no. 3, 198-199. (W. W. Breckner) 82i:46006 46A06

Riley, N. High Reynolds number flows with closed streamlines. J. Engrg. Math. 15 (1981), no. 1, 15-27. (Author's summary) 82b:76027 76D10

narenko, V. V. Application of the variation of constants to the estimation of the exactness of asymptotic solutions. (Russian) Asymptotic methods in the theory of nonlinear oscillations (Proc. All-Union Conf. Asymptotic Methods in Nonlinear Mech., Katsiveli, 1977) (Russian), pp. 209-211, 277, "Naukova Dumka", Kiev, 1979. (Author's summary) 34F05

Rimer, David Congruences de cônes quadratiques tangents à la surface support. An. Ştiinţ. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 26 (1980), no. 1, 133-135. (Froim Marcus) 82a:53009 53A20

La géomètrie différentielle des complexes de quadriques dans l'espace equiaffine A₃.

An. Ştiinţ. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 26 (1980), no. 2, 393-400. (Froim Marcus) 824:53009 53A15 (Froim Marcus) 824:53009

Compléments à l'étude différentielle des variétés de quadriques. (Romanian

ary) Bul. Inst. Politehn. Iași Sect. I 26(30) (1980), no. 1-2, 31-36. (Froim Marcus) 82e-53020 53A20

Rimini, A. (with Fonda, L.; Ghirardi, G. C.; Omero, C.; Weber, Tullio) Quantum dynamical semigroup description of sequential decays. Mathematical problems in the quantum theory of irreversible processes (Naples, 1978), pp. 99-114, Lab. Cibernet. CNR, ples, 1978. (See 82):82003) 82A15 (82A35)
(with Ghirardi, G. C.; Omero, C.; Weber, Tullio) The stochastic interpretation of Naples, 1978, (See 82i:82003)

m mechanics: a critical review. Riv. Nuovo Cimento (3) 1 (1978), no. 3, 1-34. (P.

(F) D. F. Ion) 82:81039 81C20 (81B99)

(with Ghirardi, G. C.; Omero, C.; Weber, Tullio) Quantum dynamical semigroups description of decay processes and Zeno's paradox in quantum mechanics. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 330-332, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81004) (with Ghirardi, G. C.; Miglietta, F.; Weber, Tullio) Limitations on quantum

arements. I. Determination of the minimal amount of nonideality and identification of the optimal measuring apparatuses. Phys. Rev. D (3) 24 (1981), No. 2, 347-352. (Authors' summary) 82m:81005a 81B05

(with Ghirardi, G. C.; Miglietta, F.; Weber, Tullio) Limitations on qu measurements. II. Analysis of a model example. *Phys. Rev. D* (3) **24** (1981), *no.* 2, 353–358. (Authors' summary) **82m:81005b** 81B05

Rimrott, F. P. J. See Theoretical and applied mechanics, 82d:00008 von Rimscha, Michael Das Kollektionsaxiom. Z. Math. Logik Grundlag. Math. 27 (1981),

no. 2, 189-192. (A. Lévy) 82e:03047 03E30 (03E35)

10. č. 107 124. (with Naval, I. K.) Elastic stress waves in an inhomogeneous layer. (Russian) Izo. Akad. Nauk Moldav. SSR Ser. Fiz.-Tehn. Mat. Nauk 1980, no. 2, 20-26, 94. (J. Ignaczak (Zbl 454:73018)) 82g:73020 73D30 (73C40)
A comparative characteristic of numerical methods of solution of contact problems

of dynamic elasticity theory. (Russian) Mathematical methods in mechanics. Mat. Issled. No. 57 (1980), 98-110, 137. (Author's summary) 82c:73083 73T05

(with Naval, I. K.) Investigation of transient elastic waves in a layered bar. (Russian) Boundary value problems for partial differential equations. Mat. Issled. No. 63 (1981). 93-106, 183. (Authors' summary) 82k:73019 73D05

Wave processes in a viscoelastic medium. (Russian) Boundary value problems for partial differential equations. Mat. Issled. No. 63 (1981), 164-169, 185. (Author's summary) 82g:73024 73F15 (73T05)

Rinaldi, M. G. (with Ferrero Cotti, Celestina) Near-rings whose proper ideals are maximal. (Italian. English summary) Rio. Mat. Univ. Parma (4) 6 (1980), 73-79 (1981). (Authors' summary) 82h:16027 16A76

Rindler, Harald (with Grosser, Michael; Losert, Viktor) "Double multipliers" und asymptotisch invariante approximierende Einheiten. Anz. Österreich. Akad. Wiss. Math.-Natur. Kl. 117 (1980), no. 1, 7-11. (B. Dreseler) 824:46069 46H05 (43A22) (with Losert, Viktor) Cyclic vectors for Lp(G). Pacific J. Math. 89 (1980), no. 1,

143-145. (A. Figà-Talamanca) 82b:43006 43A15 (43A65) (with Losert, Viktor) Almost invariant sets. Bull. London Math. Soc. 13 (1981), no. 2, 145-148. (Joseph Max Rosenblatt) 82i:43001 43A07 (28D05)

Ring, Peter (with Schuck, Peter) *The nuclear many-body problem. Texts and Monographs in Physics. Springer-Verlag, New York-Berlin, 1980. xvii+716 pp. ISBN 0-387-09820-8 (Chindhu S. Warke) 82h:81155 81H10 (81G35)

geisen, R. D. (with White, Arthur T.) On pseudosurface imbeddings of $K_{m,n}$ and certain joins of graphs. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 859-867. (Michael O. Albertson) 82j:05054 05C10 (55M15)

Ringel, Claus Michael (with Dlab, Vlastimil) A module theoretical interpretation of properties of the root system. Ring theory (Proc. Antwerp Conf. (NATO Adv. Study Inst.), Unio. Antwerp, Antwerp, 1978), pp. 435-451, Lecture Notes in Pure and Appl. Math., 51, Dekker, New York, 1979. (Sheila Brenner) 824:16025 16A64 (17B20)

The spectrum of a finite-dimensional algebra. Ring theory (Proc. Antwerp Conf. (NATO Adv. Study Inst.), Univ. Antwerp, Antwerp, 1978), pp. 535-597, Lecture Notes in Pure and Appl. Math., 51, Dekker, New York, 1979. (Ju. A. Drozd) 82g:16030 16A64 (16A46)

On algorithms for solving vector space problems. I. Report on the Brauer-Thrall conjectures: Rojter's theorem and the theorem of Nazarova and Rojter. Represe theory, I (Proc. Workshop, Carleton Univ., Ottawa, Ont., 1979), pp. 104-136, Lecture Notes in Math., 831, Springer, Berlin, 1980. (Sheila Brenner) 82j:16055

On algorithms for solving vector space problems. II. Tame algebras. Representation theory, I (Proc. Workshop, Carleton Unio., Ottawa, Ont., 1979), pp. 137-287, Lecture Notes in Math., 831, Springer, Berlin, 1980. (Sheila Brenner) 82j:16056 16A64 (15A21, 16-02)

(with Dowbor, P.; Simson, Daniel) Hereditary Artinian rings of finite representation type. Representation theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 232-241, Lecture Notes in Math., 832, Springer, Berlin, 1980. (From the text) 82i:16029 16A64

(with Happel, Dieter; Preiser, Udo) Vinberg's characterization of Dynkin diagrams using subadditive functions with application to DTr-periodic modules. Represent theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 280-294, Lecture Notes in Math., 832, Springer, Berlin, 1980. (Idun Reiten) 82g:16027 16A64

(with Dlab, Vlastimil) A remark on normal forms of matrices. Linear Algebra Appl. 30 (1980), 109-114. (Ju. A. Drozd) 82f:15007 15A21 (16A46) (with Happel, Dieter; Preiser, Udo) Binary polyhedral groups and Euclidean

grams. Manuscripta Math. 31 (1980), no. 1-3, 317-329. (Authors' sum 20C15 (16A64, 17B20)

(with Dlab, Vlastimil) Perfect elements in the free modular lattices. Math. Ann. 247

(1980), no. 2, 95-100. (H. A. Merklen (Zbl 443:06005)) 82k:06009 06C05 (16A64) agel, G. (with Jungerman, Mark) Minimal triangulations on orientable surfaces. Acta Math. 145 (1980), no. 1-2, 121-154. (Michael O. Albertson) 82b:57012 57Q15

gwood, G. A. Random walks and quantum currents in networks. J. Math. Phys. 22 (1981), no. 1, 96-101. (Author's summary) 824:82075 82A65 (82A42, 82A67)

- L199-L201. (Autor's summary) 8283111 81259

 sh. R. Spezielle Translationsebenen und ihre Homomorphismen. Geom. Dedicata 11
 (1981), no. 2, 147-175. (Elwyn H. Davis) 828:51007 51A40 (51A30)

 she, M. (with Kastrup, H. A.) Hamilton-Jacobi theories for strings. Phys. Lett. B 105
 (1981), no. 2-3, 191-196. (Masatsugu Minami) 82m:81052 81E10 (49C10, 70H99,
- me, Horst (with Thomas, Rainer) *Mathematik. I. (German) [Mathematics. I]
 Analysis. Reihe Uni-Papers. [Uni-Papers Series] Verlag Ölschläger, Munich, 1979. 271 pp.
 ISBN 3-88295-023-4 (From the text) *82m:00009n 00A06
 (with Preis, Albert; Thomas, Rainer) *Mathematik. II. (German) [Mathematics. II]
 Lineare Algebra. [Linear algebra] Reihe Uni-Papers. [Uni-Papers Series] Verlag
 Ölschläger, Munich, 1979. 230 pp. ISBN 3-88295-024-2 (From the text) *82m:00009b
- nnor, K. See Festschrift: Hubeny, Karl, 82h:86001
 nnooy Kan, Alexander H. G. (with Lageweg, Ben J.; Lenstra, Jan Karel) Minimizing maximum lateness on one machine: algorithms and applications. Combinatorial optimization (Lectures, Summer School, Urbino, 1977), pp. 371–388, Wiley, Chichester, 1979. (See 82a:90099) 90B35

 (with Lawler, Eugene L.; Lenstra, Jan Karel) Minimizing maximum lateness in a search of the control of t
- nachine open shop. Math. Oper. Res. 6 (1981), no. 1, 153-158. (Authors' summary) 90B35
- net, Yosef Convexity and optimization in certain problems in statistics. Recent results in ustic programming (Proc. Meeting, Oberwolfach, 1979), pp. 99-103, Lecture Notes in om. and Math. Systems, 179, Springer, Berlin, 1980. (Author's summary) 821:62093 62H10 (62F03, 62J02)
- w, Willi See Collogs ow, Willi, 82e:01002 and Bibliography: Ris 92k:01038
- Rinzel, John Impulse propagation in excitable systems. Dynamics and modelling of reactive systems (Proc. Adv. Sem., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1979), systems (Proc. Adv. Sem., Math. Res. Center, Univ. Wisconsin, mausson, rris., 1977, pp. 259-291, Publ. Math. Res. Center Univ. Wisconsin, 44, Academic Press, New York, 1980. (Gail A. Carpenter) 82f:92017 92A09 (35K55, 58F14, 80A32) (with Ermentrout, G. Bard) One-dimensional A-u target patterns: empirical stability tests. J. Math. Biol. 10 (1980), no. 1, 97-100. (C. V. Pao) 82d:35053 35K55 (35B35,
 - 65P05, 92A05)
 - (with Ermentrout, G. Bard) Waves in a simple, excitable or oscillatory,
 - reaction-diffusion model. J. Math. Biol. 11 (1981), no. 3, 269-294. (Piero de Mottoni) 82k:35061 35K60 (35B99, 80A30, 92A09)
- inez del Rio. Carlos See Martinez del Rio, Carlos
- del Rio, J. L. See Del Rio, J. L.
- Rio Bueno, Manuel Optimal designs for discrimination between linear regression models. (Spanish. English summary) Trabajos Estadist. Investigación Oper. 30 (1979), no. 1, 27-64. (Author's summary) 82b:62090 62K05
- tios, Hélène Une étude d'existence sur certains problèmes paraboliques. (English summary) Ann. Fac. Sci. Toulouse Math. (5) 1 (1979), no. 3, 235-255. (Author's summary) 82g:47042 47H15 (34G20, 35K22, 47H17, 49D45, 49H05)
- lette See Perrin-Riou, Berna rin-Riou, Bern ette
- ipa, P. On the theory of nonlinear wave-wave interactions ar ong geophysical waves. J. Fluid Mech. 103 (1981), 87-115. (Author's summary) 82d:76017 76B15 (76C20 86A05)
- eann, Dumitru Sur la fonctionnelle $f(z_1)/f'(z_2)$ au cas des fonctions typiquement réelles. II. Mathematica (Chij) 22(45) (1980), no. 1, 131–165. (M. S. Robertson) 82j:30020 30C45
- Ripka, G. (with Blaizot, J. P.) A variational principle for the calculation of transition ides. Phys. Lett. B 105 (1981), no. 1, 1-4. (Authors' summary) 82i:81017 81C05 (81F05)
- Rippon, P. J. On subharmonic functions which satisfy a growth restriction. Aspects of contemporary complex analysis (Proc. NATO Adv. Study Inst., Univ. Durham, 1979), pp. 485–492, Academic Press, London, 1980. (A. V. Bratiščev) 82i:30002 30B40 (31A05, 31A20)
- A boundary estimate for harmonic functions. Math. Proc. Cambridge Philos. Soc. 91 (1982), no. 1, 79–90. (Ü. Kuran) 82m;31004 31B05

 Rips, E. Another characterization of finitely generated groups with a solvable word problem. Bull. London Math. Soc. 14 (1982), no. 1, 43–44. (From the text) 82m;20038
- Risch, N. (with Lange, Kenneth) Comments of lack of interference in the four strand model of crossing over. J. Math. Biol. 5 (1977/78), no. 1, 55–59. (Authors' summary) 82m:92048 92A10 (60G55)
- 82m:92048 92A10 (60/US)
 eman, Edward M. (with Hanson, Allen R.) Processing cones: a computational structure for image analysis. Structured computer vision, pp. 101-149, Academic Press, New York, 1990 (80/US) 1980. (See 82m:68009) 68B20 (68G10)
- d A com nent on a dual control problem. IEEE Trans. Automat. Control 26
- (1981), no. 2, 606-609. (Author's summary) 82d:93073 93E20

 Risito, Corrado Existence theorems for almost periodic solutions of periodic systems. (Italian summary) Boll. Un. Mat. Ital. A (5) 16 (1979), no. 2, 412-417. (T. Yoshizawa) 82c:34052 34C27
- Riss, Jean La composition des formes quadratiques binaires (d'après Gauss). Séminaire de éorie des Nombres 1977-1978, Exp. No. 17/18, 16 pp., CNRS, Talence, 1978. (O. H. Körner) 82h:10022 10C02 (10C05)
- anen, Jorma (with Langdon, Glen G., Jr.) Universal modeling and coding. IEEE Trans. Inform. Theory 27 (1981), no. 1, 12–23. (Authors' summary) 82h:94019
 Rittby, Magnus (with Elander, Nils; Brāndas, Erkki) Weyl's theory and the
- complex-rotation method applied to phenomena associated with a contin Phys. Rev. A (3) 24 (1981), no. 3, 1636-1639. (Authors' summary) 82i:81128 81F05
- 17A70 (17B70)
 - (with Abresch, U.; Bovier, A.; Lechtenfeld, O.; Lüling, M.; Weymans, G.) Finite nonabelian subgroups of SU(n) with analytic expressions for the irreducible

- entations and the Clebsch-Gordan coefficients. J. Math. Phys. 21 (1980), no. 10,
- 2481-2486. (William H. Klink) 82a:20009 20C15 (20D15, 81C40)
 Ritter, Grant A. Growth of random walks conditioned to stay positive. Ann. Probab. 9 (1981), no. 4, 699-704. (Gérard Letac) 82j:60125 60J15 (60F17)
- (German summary) Computing 23 (1979), no. 3, 287-297. (Author's summary) 821:65071 65K 10
- Convergence and superlinear convergence of algorithms for linearly constrained minimization problems. Nonlinear optimization (Proc. Internat. Summer School, Unic. Bergamo, 1979), pp. 221-251, Birkhäuser, Boston, Mass., 1980. (R. H. Bartels) Bergamo, Bergamo, 1979), pp. 221-25 82c:65037 65K05 (49D37, 90C30)
- On the rate of superlinear convergence of a class of variable metric methods. Numer. Math. 35 (1980), no. 3, 293-313. (R. H. Bartels) 82b:65054 65K05 (49D37, 90C30)
- (with Best, M. J.; Bräuninger, Jürgen; Robinson, Stephen M.) A globally and quadratically convergent algorithm for general nonlinear programming problems. ry) Computing 26 (1981), no. 2, 141-153. (Authors' sum 90C30 (65K05)
- Global and superlinear convergence of a class of variable metric methods. Mathematical programming at Oberwolfach (Proc. Conf., Math. Forschungsinstitut, Oberwolfach, 1979). Math. Programming Stud. No. 14 (1981), 178-205. (Author's
- summary) 824:65054 65K10
- summary) 824-6509-4 0-35.10

 Ritter, N. E. Skeleta of solvable almost Cross varieties of Lie algebras. (Russian) Izv. Vysš.

 Učebn. Zaved. Matematika 1980, no. 3, 50-61. (I. Enescu) 82e:17009 17B05 (20E07)

 Rittgen, W. Positive recurrence of multidimensional population-dependent branching processes. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 98-108, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (Warren Esty) 821:60187 60J80
- Rival, Ivan The problem of fixed points in ordered sets. Combinatorics 79 (Proc. Colloq., Univ. Montréal, Montreal, Que., 1979), Part I. Ann. Discrete Math. 8 (1980), 283-292. (J. Kist) 82g:06002 06A10 (05C99)
 - (with Bisztriczky, Tibor) Continuous, slope-preserving maps of simple closed curves.

 Canad. J. Math. 32 (1980), no. 5, 1102-1113. (B. B. Phadke) 82b:51022 51L10
 - (with Duffus, Dwight; Simonovits, M.) Spanning retracts of a partially ordered set. Discrete Math. 32 (1980), no. 1, 1-7. (Derek C. J. Burgess) 82c:06005 06A10
 - (with Duffus, Dwight; Pouzet, Maurice) Complete ordered sets with no infinite antichains. Discrete Math. 35 (1981), 39-52. (R. P. Dilworth) 82i:06003 06A10 (06A23)
 - (with Duffus, Dwight) A structure theory for ordered sets. Discrete Math. 35 (1981),
 - 53-118. (Ki Hang Kim) 82f:06001 06A10 (08A99) (with Wille, Rudolf) The smallest order variety containing all chains. Discrete Math. 35 (1981), 203-212. (R. P. Dilworth) 82f:06009 06A10 (06B20)
 - (with Ruckelshausen, W.; Sands, Bill) On the ubiquity of herringbones in finitely rated lattices. Proc. Amer. Math. Soc. 82 (1981), no. 3, 335-340. (L. Beran) 82i:06014 06B05
- kálnay-Rivas, Eugenia See Kálnay-Rivas, Eugenia ruiz-Rivas Hernando, C. See Ruiz-Rivas Hern
- ando, C. Rivasseau, V. (with de Calan, C.; David, F.) Renormalization in the complete Mellin representation of Feynman amplitudes. Comm. Math. Phys. 78 (1980/81), no. 4, 531–544. (M. Demuth) 82:81045 81C30 (32A45)
- Rivelles, V. O. (with Taylor, John G.) Linearised N=2 superfield supergravity. J. Phys. A
- 15 (1982), no. 1, 163-175. (Authors' summary) 82;:83065 83E50 Rivera, J. J. (with Achari, J.) A fixed point theorem in metrically convex metric spaces. Kyungpook Math. J. 20 (1980), no. 1, 87-90. (Alessio Volčič) 82c:54038 541125
- Rivest, Louis-Paul On the sum of contaminated normals. Amer. Statist. 35 (1981), no. 3, 155-156. (Author's summary) 82k:62042 62E15
 - A probabilistic approach to the convolution transform. Canad. Math. Bull. 24
- (1981), no. 2, 205-211. (G. C. Jain) 82j:60020 60E05 (60J80)

 Rivest, Ronald L. (with LaPaugh, Andrea S.) The subgraph homeomorphism problem. ACM-SIGACT Symposium on the Theory of Computing (San Diego, Calif., 1978). J. Comput. System Sci. 20 (1980), no. 2, 133-149. (Mihalis Yannakakis) 82c:68044 68E10 (05C99, 68C25)
 - (with Yao, Andrew Chi Chih) On the polyhedral decision problem. SIAM J. mput. 9 (1980), no. 2, 343-347. (Jaroslav Morávek) 82h:68071 68C25 (52A25, 90C25)
 - (with Shamir, Adi; Adleman, Leonard M.) Mental poker. The mathematical Gardner, pp. 37-43, Wadsworth, Belmont, Calif., 1981. (See 82h:00003) (94B35)
- Rivière, A. C. (with Lichtenberg, A. J.; Edlington, T.; Todd, T. N.) The case for drift island diffusion: results from the Culham levitron. Intrinsic stochasticity in plasmas (Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 285–296, École Polytech., Palaiseau, 1979. (Authors' summary) 82g:82045 82A45 (76W05)
 Rivière, Nèstor Marcelo See Porta, Horacio, 82I:01131
- Rivkind, V. Ja. Steady-state motion of a viscous drop with account taken of its deformation. (Russian. English summary) Boundary value problems of mathematical physics and related questions in the theory of functions, 11. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 84 (1979), 220-242, 314, 320. (Author's summary) 82d:76037 76D99 (35O20)
 - (with Sigovcev, G. S.) On the method of successive approximations for a problem on the motion of a drop with account taken of the thermocapillary effect. (Russian) Metody Vyčisl. No. 12 (1981), 158-174, 234. (Authors' summary) 82k:76030 76A99)
 - (with Osmolovskii, V. G.) A method of separation of domains for elliptic equations with discontinuous coefficients. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 1, 35–39, 252. (Ja. A. Roĭtberg) 82d:35103 35R05 (35J25, 65N45)
- Rivlin, Ronald S. Some reflections on material stability. Mechanics today, Vol. 5, pp. 409-425, Pergamon, Oxford, 1980. (P. Laasonen) 82b:73030 73D15)
- (with Sawyers, Kenneth N.) Some stability conditions for a compressible elastic material. (German summary) Z. Angew. Math. Phys. 32 (1981), no. 3, 255-266. (From the introduction) 822:73048 73H99 (73G99)

- Rivlin, T. J. Best uniform approximation by polynomials in the complex plane Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 75-86, Academic Press, New York, 1980. (Z. Rubinstein) 82c:30059 30E10 olre, Paul See Obituary: Rivoire, Paul, 82d:01036
- ary: Rivoire, Paul, 82d:01036
- Rixecker, Helmut (with Rösler, Gunther) *Darstellende Geometrie. (German) [Descriptive geometry] Themenhefte Mathematik. [Mathematics Notebooks] Ernst Klett Verlag, Stuttgart, 1980. 140 pp. ISBN 3-12-738200-6 (E. Morgantini) 82k:51020 51N05
- Rizov, V. A. A Lie group framework for soliton equations. Mathematical aspects of quantum field theory, Part II (Karpacz, 1978), pp. 181–197, ACTA Univ. Wratislav., 519, Wydawn Uniw. Wrocław., Wrocław, 1979. (See 82:81004b) 58F07 (35Q20, 58A15, 58G99) (with Markovski, B. L.) On classical systems with infinite set of conservation laws. (Russian summary) Bulgar. J. Phys. 7 (1980), no. 2, 134-140. (Authors' summary) 82:81014 81C05 (58A15, 58F07)
- Rizvi, S. A. H. Solution of a general linear difference equation. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 3, 314-317. (André Hautot) 824:39001 39A10
- Rizvi, S. R. H. On the degree of approximation of analytic functions. Ganita 30 (1979), no. 1-2, 12-19. (V. M. Kokilašvili) 82m:30042 30E10
- (with Juneja, O. P.) Interpolation and approximation of entire functions. Proc. Roy. Irish Acad. Sect. A 79 (1979), no. 5, 37-47. (A. Meir) 82c:30058 30E05 (41A10)
- Rizza, Giovanni Battista On the complex differentials 33, 33, 33. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 1, 19-21. (A. Aeppli) 53B25 (32B99) 82i:53021
- otti Rizza, Lucilla See Bassotti Rizza, Lucilla
- Rizzi, Guido (with Bellomo, Nicola) A mathematical model for two-dimensional molecular gas flow with dispersed particles. Appl. Math. Modelling 5 (1981), no. 3, 205-208. (V. Protopopescu) 82k:76072 76T05 Protopopescu) 82k:76072
- (with Pignataro, M.; Di Carlo, A.) Symmetric bifurcation of plane frames through a modified potential energy approach. J. Structural Mech. 8 (1980), no. 3, 237-255. (Authors' summary) 82e:73046 73H05 (58E07, 73K20) 73H05 (58E07, 73K20)
- (Authors' summary) 82e:73046 73H05 (58E07, 73K20)

 Rizzitelli, Giuseppe A generalization of the theorem on finite increments. (Italian. English and French summaries) Atti Accad. Ligure Sci. Lett. 36 (1979), 234-238. (Theodore S. Bolis) 82i:26007 26A24 (26A06)
- Rizzo, F. J. (with Shippy, D. J.) The boundary integral equation method with application to certain stress concentration problems in elasticity. J. Austral. Math. Soc. Ser. B 22
- (1980/81), no. 4, 381-393. (Authors' summary) 82h:73016 73C45 (45L10, 73K30) castellani Rizzonelli, Pieranita See Castellani Rizzonelli, Pieranita Rjaben'kii, V. S. (with Beljankov, A. Ja.) Difference potentials and projectors. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1080-1084. (J. Král) 82f:39004
- (39A10) Rjabogin, A. K. Integral inequalities for periodic conjugate harmonic functions of several variables in half-space. (Russian) Metric questions of the theory of functions (Russi pp. 112-114, 162, "Naukova Dumka", Kiev, 1980. (L. Gogoladze) 82m:42014 Boundary values of conjugate harmonic functions of several variables. (Russian) Izv.
- Vysš. Učebn. Zaved. Matematika 1980, no. 12, 50-54. (I. Netuka) 82d:31007 Rjabov, B. A. (with Sačkov, G. P.) Requirements of structural stability and correctness in invariant control systems. (Russian) Theory of invariance and its application (Proc. Fifth All-Union Conf., Kiev, 1976), Part 2 (Russian), pp. 268-276, "Naukova Dumka", Kiev, 1979. (From the text) 82i:93063 93D99 (93B35)
- Rjabov, Ju. A. (with Magomedov, A. R.) Periodic solutions of linear systems of differential equations with "maxima". (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 2, 3-8. (A. I. Perov) 82b:34098 34K15
 - (with Mollova, K. G.) Periodic solutions of a quasilinear autonomous system with retarded argument in the resonance case. (Russian) Mat. Fiz. No. 29 (1981), 55-61, 125. (Pavol Marušiak) 82k:34082 34K15
 - Application of bounded operators and Lyapunov's majorizing equations to the analysis of differential equations with a small parameter. Equadiff IV (Proc. Czechoslovak Conf. Differential Equations and their Applications, Prague, 1977), pp. 356-365, Lecture Notes in Math., 703, Springer, Berlin, 1979. (F. Brauer (Zbl
- 441:47063)) 82m:34036 34C15 (47H15) Rjabov, V. M. On the rate of convergence of the Widder method for the inversion of the Laplace transform. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 1, 53-58, 120-121. (Author's summary) 82f:65133 65R10
- Rjabuhin, Ju. M. (with Andrunakievič, V. A.) ★Радикалы алгебр и структурная теория. (Russian) [Radicals of algebras and structural theory] Современная Алгебра. [Contemporary Algebra] "Nauka", Moscow, 1979. 496 pp. (B. J. Gardner) 82a:16001 16-02 (16A21, 17A65)
 - (with Wiegandt, R.) On special radicals, supernilpotent radicals and weakly nonorphically closed classes. J. Austral. Math. Soc. Ser. A 31 (1981), no. 2, 152-162. (L. C. A. van Leeuwen) 82k:16009 16A21 (17A65, 17D05)
 - (with Florja, R. S.) Simple relatively free rings and minimal varieties of rings. (Russian) Rings, algebras, modules. Mat. Issled. No. 62 (1981), 112–129, 150. (V. N. Latyšev) 82g:17001 17A30
- Rjabuškin, T. V. See Algorithms and software for applied statistical analysis, 82d:62004 and Statistical methods in control, 82k:90004
- Rjaško, L. B. Stabilization of linear stochastic systems with coefficients depending on an observable Markov chain. (Russian) Ural. Gos. Univ. Mat. Zap. 12 (1979), no. 1, 124-131, 158, (A. Nowak) 82f:60140 60H10 (93E15)
- Rjatin, A. G. A theorem of P. I. Romanovskii for functionals of summatory type. (Russia Application of functional analysis to approximation theory (Russian), pp. 120-127, 160, Kalinin. Gos. Univ., Kalinin, 1980. (W. W. Breckner) 82g:41019 41A35 Rjauba, B. See Riauba, B.
- ov, V. V. (with Zuravlev, Ju. I.; Zenkin, A. A.; Zenkin, A. I.; Isaev, I. V.; Kol'cov, P. P.; Kočetkov, D. V.) Problems of pattern recognition and classification with standard construction. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 5, 1294-1309, 1359. (Authors' summary) 82c:68059 68G10
- ach, F. A. (with Heller, Robert) A generalization of a classical necessary condition for convergence of continued fractions. Pacific J. Math. 95 (1981), no. 2, 307-310. (L. J. 30B70
- an, Raymond C. Weak-* generators for a class of subalgebras of I¹. J. Funct. Anal. 39 (1980), no. 1, 67-74. (D. N. Clark) 82a:46057 46J15

- an, Shi Shyr See Yuan, Hsi Shih
- schik, D. (with Tröger, G.; Wieczorek, E.) Light-cone expansion of matrix elements of current commutators. Lett. Math. Phys. 4 (1980), no. 1, 53-60. (Authors' summary) 81D15 (22E70, 32A15)
- bb, Peter J. (with Andrew, Alan L.; de Hoog, Frank R.) Leighton's bounds for Sturm-Liouville eigenvalues. J. Math. Anal. Appl. 83 (1981), no. 1, 11-19. (R. C. Gilbert) 34B25 (65L15)
- ba, Philippe Lemmes de Hensel pour les opérateurs différentiels. Application à la réduction formelle des équations différentielles. Enseign. Math. (2) 26 (1980), no. 3-4, 279-311 (1981). (Alan Adolphson) 82k:12022 12B40 (12H25, 14G20, 34A34)
 - Une propriété de spécialisation continue (d'après Artin, Bosch, Lang, van den Dries). Study Group on Ultrametric Analysis. 7th-8th years: 1979-1981 (Paris, 1979/1981) (French), Exp. No. 26, 11 pp., Secrétariat Math., Paris, 1981. (Gerhard Pfister) 13J05 (14B12)
 - See also Study Group: Ultrametric Analysis, 82g:12019
- Robbins, Herbert An empirical Bayes estimation problem. Proc. Nat. Acad. Sci. U.S.A. 77 (1980), no. 12, part 1, 6988-6989. (Françoise Garcia-Schaeffer) 821:62020 62C10 (with Levin, Bruce) Selecting the highest probability in binomial or multinomial trials. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 8, part 1, 4663-4666. (Khursheed Alam) 82m:62060 62F07
- ins, Howard Murray Junction phenomena for optimal control with state-variable inequality constraints of third order. J. Optim. Theory Appl. 31 (1980), no. 1, 85-99. (C. Marchal) 82a:49009 49A10
- Robert, Didler (with Helffer, Bernard) Comportement semi-classique du spectre des tiques hypoelliptiques. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 47-50. (Authors' summary) 82i:35143 35P25 (81C10) (with Helffer, Bernard) Comportement asymptotique précisé du spectre d'opérateurs balement elliptiques dans R. (English summary) C. R. Acad. Sci. Paris Sér. I Math.
- 292 (1981), no. 6, 363–366. (Authors' summary) 82h:35119 35P20 (81C15)

 Robert, Gilles Some congruences between Eisenstein series (supersingular case).

 Proceedings of the Queen's Number Theory Conference, 1979 (Kingston, Ont., 1979),
 pp. 441–452, Queen's Papers in Pure and Appl. Math., 54, Queen's Univ., Kingston, Ont., 1980. (See 82i:10003) 10D23
 - Congruences entre sèries d'Eisenstein, dans le cas supersingulier. Invent. Math. 61 (1980), no. 2, 103-158. (Hideo Imai) 82c:10037 10D30 (10D25)
- ert, Raoul (with Duchon, Jean; Witomski, Patrick) Problème de Dirichlet dans l'image bilipschitzienne d'un demi-espace. (English summary) Numer. Math. 36 (1980/81), no. 2,
 - 129-149. (Authors' summany) 82e-65096 65M99 (65N99) (65N99) ((with Duchon, Jean) Solution de forme stationnaire pour une équation d'évolution non linéaire de la chimie des surfaces. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 11, 547-549. (Authors' summary) 82e:35049 35K55 (92A09)
- bert, Serge (with Benabdallah, Khalid) Intersections finies de sous-groupes nets. Canad. J. Math. 32 (1980), no. 4, 885-892. (J. Hausen) 82a:20056 20K10 (20K27, 54H99)
- Roberts, A. J. The behaviour of harmonic resonant steady solutions to a model differential on. Quart. J. Mech. Appl. Math. 34 (1981), no. 3, 287-310. (Author's summary) 82j:76016 76B15
- Roberts, Charles E., Jr. (with de Korvin, André) Double adjoints of Hammerstein functionals defined on continuous functions. Ann. Mat. Pura Appl. (4) 126 (1980), 93–102 (1981). (N. Tiţa) 82f:47081 47H99 (34A34, 45P05)
- (with de Korvin, A.) Convergence theorems for some scalar valued integrals when the measure is Nemytskii. Pacific J. Math. 92 (1981), no. 2, 329-343. (Richard A. Alò) 47H15 (28A20, 28A33, 60G99)
- Roberts, F. D. K. (with Powell, M. J. D.) A discrete characterization theorem for the discrete L_1 linear approximation problem. J. Approx. Theory 30 (1980), no. 3, 173–179. (Martin Bartelt) 82h:41034 41A50 (41A45) berts, Fred S. On Luce's theory of meaningfulness. Philos. Sci. 47 (1980), no. 3, 424–433. (P. Suppes) 82e:03015 03A05 (90A10, 92A25)
- - Structural models and graph theory. Computer-assisted analysis and model simplification (Proc. First Sympos., Univ. Colorado, Boulder, Colo., 1980), pp. 59-67, Academic Press, New York, 1981. (See 82g:00016) 00A69 (05C20, 90B10, 93A10)
- Roberts, Gary B. Uniqueness in the Cauchy problem for characteristic operators of Fuchsian type. J. Differential Equations 38 (1980), no. 3, 374-392. (Ju. V. Egorov)
- 82i:35006 35A05 (35G10) (with Wenston, Paul R.) Uniqueness in the Cauchy problem for weakly hyperbolic operators not satisfying Levi conditions. J. Differential Equations 40 (1981), no. 1, 7-36.
- (D. Gourdin) 82k:35071 35L30 Roberts, George A. (with Chui, Charles K.) An interpolation formula for harmonic functions on the set of integers. J. Approx. Theory 29 (1980), no. 2, 144-150. (D. H.
- Armitage) 82h:31001 31A05 berts, James W. (with Kalton, N. J.) A rigid subspace of L₀. Trans. Amer. Math. Soc. 266 (1981), no. 2, 645-654. (G. Schechtman) 82j:46039 46E30 (46A22)
- erts, Joel (with Fujita, Takao) Varieties with small secant varieties: the extremal case Amer. J. Math. 103 (1981), no. 5, 953-976. (D. Gallarati) 82k:14042 14J40 (14M07)
- Roberts, John E. Net cohomology and its applications to field theory. Quantum
- Roberts, K. L. (with Fridy, John A.) Some Tauberian theorems for Euler and Borel summability. Internat. J. Math. Math. Sci. 3 (1980), no. 4, 731-738. (E. Reimers) 822:40007
- Roberts, Kevin W. S. The limit points of monopolistic competition. Noncooperative to the theory of perfect competition. J. Econom. Theory 22 (1980), no. 2, 256-278. (See approaches 82e:90023) 90A14 approaches 82e:90023)
 - (with Weitzman, Martin L.) Funding criteria for research, development, and exploration projects. Econometrica 49 (1981), no. 5, 1261-1288. (Authors' summary)
 - Possibility theorems with interpersonally comparable welfare levels. Rev. Econom. Stud. 47 (1980), no. 2, 409-420. (From the introduction) 824:90015a
 - Interpersonal comparability and social choice theory. Rev. Econom. Stud. 47 (1980), no. 2, 421-439. (From the introduction) 824:90015b 90A08

- herts, Leslie G. Some examples of smooth and regular rings. Canad. Math. Bull. 23 (1980), no. 3, 255-259. (Barry H. Dayton) 82e:14006 14B05 (13H05) (with Geller, Susan C.) Kahler differentials and excision for curves. J. Pure Appl. Algebra 17 (1980), no. 1, 85-112. (Barry H. Dayton) 82e:14012 14F15 (13D15, Algebra 14F10)
 - (with Dayton, Barry H.) Seminormality of unions of planes. Algebraic K-theory, Evanston 1980 (Proc. Conf., Northwestern Unio., Evanston, Ill., 1980), pp. 93-123, Lecture Notes in Math., 854, Springer, Berlin, 1981. (Nadia Chiarli) 82m:13014b
 - A conjecture on Cohen-Macaulay type. C. R. Math. Rep. Acad. Sci. Canada 3
- (1981), no. 1, 43-48. (W. Vogel) 82g:13020 13H10 (14M99) (with Gupta, S. K.) The Hilbert function and Cohen-Macaulay type of ordinary singularities. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 5, 273-278. (Authors'
- summary) 82k:14004 14B05 (13H15) berts, P. D. (with Williams, T. W. C.) On an algorithm for comsation and parameter estimation. Automatica-J. IFAC 17 (1981), no. 1, 199-209.
 - (Authors' summary) 82c:90046 90B30 (with Ellis, J. E.) Simple models for integrated optin zation and parameter estimation. Internat. J. Systems Sci. 12 (1981), no. 4, 455-472. (M. Junusov) 82f:49032
- serts, Paul ★Homological invariants of modules over commutative rings. Séminaire de Mathématiques Supérieures [Seminar on Higher Mathématics], 72. Presses de l'Université de Montréal, Montreal, Que., 1980. 110 pp. ISBN 2-7606-0499-3 (W. Vogel) 82j:13020
- 13D25 (13-02, 14B15) Cohen-Macaulay complexes and an analytic proof of the new intersection conjecture.
- J. Algebra 66 (1980), no. 1, 220-225. (R. A. Wiegand) 82e:14009 14B15 (13D25) perts, S. M. Variational perturbation method and power-series approximation method. J. Optim. Theory Appl. 32 (1980), no. 4, 441-450. (T. Čanturija) 82i:34063 34E0
 - Continuation and the variational perturbation method. J. Math. Anal. Appl. 80 (1981), no. 2, 506-522. (R. E. O'Malley, Jr.) 82e:34057 34E10 perts, William W., Jr. (with Lin, Chia Chiao) Some fluid-dynamical problems in galaxies.
- al review of fluid mechanics, Vol. 13, pp. 33-55, Annual Reviews, Palo Alto, Calif., 86A05 1981. (See 82f:76001)
- spread (Proc. Conf., Heidelberg, 1979), pp. 180–195, Lecture Notes in Biomath., 38,
- Springer, Berlin, 1980. (See 82c-92004) 92A05 pertson, A. Guyan Stable range in C*-algebras. Math. Proc. Cambridge Philos. Soc. 87 (1980), no. 3, 413-418. (From the introduction) 82h:46079 46L05
- vertson, Edmund F. A comment on finite nilpotent groups of deficiency zero. Canad. Math. Bull. 23 (1980), no. 3, 313-316. (N. D. Gupta) 82d:20032 20F05 (20F18) (with Campbell, C. M.) On 2-generator 2-relation soluble groups. Proc. Edinburgh Math. Soc. (2) 23 (1980), no. 3, 269-273. (D. J. S. Robinson) 82h:20041 (20F16)
- on, G. N. (with Anacker, S. E.) Neighborhood fixed pendant vertices. Trans. Amer. Math. Soc. 266 (1981), no. 1, 115-128. (Maria Ferro) 82e:05099 05C60 (05C25)
- bertson, James B. (with Rao, Jammalamadaka Sreenivasa) A characterization of Gaussian spaces. J. Multivariate Anal. 10 (1980), no. 4, 599-602. (Manfred Denker) 28C20
- ertson, M. S. Univalent functions starlike with respect to a boundary point. J. Math. Anal. Appl. 81 (1981), no. 2, 327-345. (Edward J. Moulis, Jr.) 82i:30017 (30C50)
- rtson, Neil (with Gupta, Ram Prakash; Kahn, Jeff) On the maximum number of als of a circuit in a graph. Discrete Math. 32 (1980), no. 1, 37-43. (J. A. Bondy) 824:05072 05C35 (05C38)
- ertson, Tim (with Wright, F. T.) Statistical inferences for ordered parameters: a personal view of isotonic regression since the work by Barlow, Bartholomew, Bremner and Brunk. Modern statistics: methods and applications (Amer. Math. Soc. Short Course, San Antonio, Tex., 1980), pp. 55-71, Proc. Sympos. Appl. Math., XXIII, Amer. Math. Soc., Providence, R.I., 1980. (See 82c:62003) 62G05
- bin, Maurice On some impulse control problems with long run average cost. SIAM J. Control Optim. 19 (1981), no. 3, 333-358. (Author's summary) 82f:93091
- binet, B. Les langages de Backus sont des systèmes de manipulation d'arbres. Trees in algebra and programming (Proc. 5th Lille Colloq., Lille, 1980), pp. 83–94, Univ. Lille I, Lille, 1980. (From the introduction) 82g:68018 68B10 (03B40)
- ins, A. J. (with Wellstead, P. E.) Recursive system identification using fast algorithms Internat. J. Control 33 (1981), no. 3, 455-480. (Authors' summary) 82c:93010 93B30 binson, D. A. The Bryant-Schneider group of a loop. Ann. Soc. Sci. Bruxelles Sér. I 94
- (1980), no. 2-3, 69-81 (1981). (H. Pflugfelder) 82e:20122 20N05 m, D. F. (with Foulds, L. R.) Comparison of phylogenetic trees.
- (1981), no. 1-2, 131-147. (William A. Beyer) 82m:05041 05C05 (92A10, 94C15)
 Constructing an annual round-robin tournament played on neutral grounds. Math. Chronicle 10 (1981), no. 1-2, 73-82. (Author's introduction) 82f:05049
- formulation of Bäcklund transformations. With applications to nonlinear evolution equations. Mathematical Physics Studies, 1. D. Reidel Publishing Co., Dordrecht-Boston, Mass.-London, 1979. viii + 132 pp. ISBN 90-277-1036-8 (A. M. Vinogradov) 82g:58097 58G35 (35A30, 81C99)
 - (with Crampin, Michael; Hodgkin, Luke; McCarthy, Patrick J.) 2-manifolds of constant curvature, 3-parameter isometry groups and Backlund transformations. Math. Phys. 17 (1980), no. 3, 373-383. (G. L. Lamb, Jr.) 82m:58001 58A15 (3 58A15 (35Q20, 53A05, 58F07)
- binson, Derek J. S. Recent results on finite complete groups. Algebra, Carbondale 1980 (Proc. Conf., Southern Illinois Univ., Carbondale, Ill., 1980), pp. 178–185, Lecture Notes in Math., 848, Springer, Berlin, 1981. (T. M. Gagen) 82j:20045 20D10 (20D45)
- Dinson, Derek W. Propagation properties in scattering theory. J. Austral. Math. Soc. Ser. B 21 (1979/80), no. 4, 474–485. (James S. Howland) 82c:81126 81F05 (47A40) (with Bratteli, Ola; Kishimoto, Akitaka) Positivity and monotonicity properties of

- C₀-semigroups. I. Comm. Math. Phys. **75** (1980), no. 1, 67–84. (Pavel Doktor) **82e:47052a** 47D05 (47R38)
- 547052a 47D05 (47B38) (with Kishimoto, Akitaka) Positivity and monotonicity properties of C₀-semigroups. Comm. Math. Phys. 75 (1980), no. 1, 85-101. (Pavel Doktor) 82e:47052b 47D05
- (with Bratteli, Ola) Equilibrium states of a Bose gas with repulsive interactions. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 2, 129-147. (Etang Chen) 82b:82022 82A15 (46L60)
- (with Bratteli, Ola) ★Operator algebras and quantum-statistical mechanics. II. Equilibrium states. Models in quantum-statistical mechanics. Texts and Monographs in Physics. Springer-Verlag, New York-Berlin, 1981. xiii+505 pp. ISBN 0-387-10381-3 (H. Araki) 82k:82013 82A15 (46L60, 81D05, 82-02)
- (with Kishimoto, Akitaka) Subordinate semigroups and order properties. J. Austral. Math. Soc. Ser. A 31 (1981), no. 1, 59-76. (Ola Bratteli) 82k:47059
- Oinson, Donald W. A proof of the Frobenius rank equality. Amer. Math. Monthly 87 (1980), no. 6, 481–482. (M. F. Smiley) 82c:15004 15A03
 Dinson, Enders A. Iterative least-squares procedure for ARMA spectral estimation.
- Nonlinear methods of spectral analysis, pp. 127-153, Topics Appl. Phys., 34, Springer, Berlin, 1979, (See 82;62069) 62M15
 - ★Physical applications of stationary time-series. With special reference to digital data processing of seismic signals. Macmillan, Inc., New York, 1980. xi+302 pp. 94-01 (62M10, 86A15, 94A12)
- ISBN 0-02-851050-X (Editors) 82d:94001 inson, G. de B. Ralph D. James: 1909–1979. Proc. Roy. Soc. Canada (4) 18 (1980), 93–97. (Editors) 82:01136 01A70
- binson, G. K. Conditional properties of statistical procedures. *A* no. 4, 742-755. (Author's summary) 82h:62014 62C15 (62C10)
- Conditional properties of statistical procedures for location and scale parameters. Ann. Statist. 7 (1979), no. 4, 756-771. (Author's summary) 82h:62008 62F10)
- Corrections: "Properties of Student's t and of the Behrens-Fisher solution to the two means problem" [Ann. Statist. 4 (1976), no. 5, 963-971; MR 54 #3946]. Ann. Statist. 10 no. 1, 321. (Editors) 82m:62055 62F03
- Sinson, G. R. (with Turull, A.) On finite groups with a certain Sylow normalizer. J. Algebra 68 (1981), no. 1, 144-154. (Thomas Laffey) 82g:20045 20D10
- on, I. (with de Doncker, Elise) Algorithm 45. Automatic computation of improper integrals over a bounded or unbounded planar region. (German summary) Computing 27 (1981), no. 3, 253–284. (Authors' summary) 82k:65011 65D30 (65–04)
- Ninson, Ivor (with Plebañski, Jerzy F.) Electromagnetic and gravitational Hertz potentials. J. Math. Phys. 19 (1978), no. 11, 2350-2358. (Authors' summary) 82i:83042 83C50 (53C10, 83C30)
- binson, John Optimal tests of significance. Austral. J. Statist. 21 (1979), no. 3, 301-310. (S. Blumenthal) 82a:62013 62A99 (62F03)
- An asymptotic expansion for permutation tests with several samples. Ann. Statist. 8 (1980), no. 4, 851-864. (Madanlal T. Wasan) 82e:60042 60F05 (62E15)
- n, John P. (with Cohn, Martin) Counting sequences. IEEE Trans. Comput. 30 (1), no. 1, 17-23. (Philippe Piret) 82e:94059 94B60 (94C10) (1981), no. 1, 17-23. (Philippe Piret) 82e:94059
- son, Karl H. (with Niederreiter, Harald) Bol loops of order pq. Math. Proc.
- Cambridge Philos. Soc. 89 (1981), no. 2, 241-256. (D. A. Robinson) 82c:20121 son, Kenneth Survey of finite element software—a consumers guide to availability, costs and scope. Modelling and simulation in practice, 2 (Proc. Second Annual Polymodel Conf., Teesside Polytech., Middlesbrough, 1979), pp. 33–49, Emjoc, Northallerton, 1980. 65N30 (65-04) (See 82c:65001)
- binson, P. M. Estimation and forecasting for time series containing censored or missing observations. Time series (Proc. Internat. Meeting, Univ. Nottingham, Nottingham, 1979), pp. 167–182, North-Holland, Amsterdam, 1980. (Hironao Kawashima) 82c:62122 62M10
- nel M. Can cubes avoid meeting face to face? The math pp. 226-233, Wadsworth, Belmont, Calif., 1981. (See 82b:00003) 52A45
- Robinson, Robert L., Jr. See Equations of state in engineering and research, 821:82003

 Robinson, Robert L., United Founds, L. R.) Determining the asymptotic number of
- phylogenetic trees. Combinatorial mathematics, VII (Proc. Seventh Australian Conf., Univ. Newcastle, Newcastle, 1979), pp. 110-126, Lecture Notes in Math., 829, Springer, Berlin, 1980. (Alan Tucker) 82j:05050 05C05 (05C30, 92A10)
 See also Combinatorial mathematics, 82c:05004
- n, Stephen M. (with Best, M. J.; Bräuninger, Jürgen; Ritter, Klaus) A globally and quadratically convergent algorithm for general nonlinear programming problems. (German summary) Computing 26 (1981), no. 2, 141-153. (Authors' summary) 82j:90063 90C30 (65K05)
- Some continuity properties of polyhedral multifunctions. Mathematical programming at Oberwolfach (Proc. Conf., Math. Forschungsinstitut, Oberwolfach, 1979). Math. Programming Stud. No. 14 (1981), 206-214. (Ulrich Eckhardt) 82d:90099 90C25 (52A40, 90C20)
- Robitasvili, N. G. Semantics of languages containing not everywhere defined expressions.

 (Russian) Begriffsschrift—Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979)

 (German), pp. 358-360, Friedrich-Schiller-Univ., Jena, 1979. (G. Asser) 82i:03034 03B50
- nguez, J. A. (with García-Colín, Leopoldo S.; Fuentes Martinez, G. J.) les-Don Beyond the Navier-Stokes regime in hydrodynamics. Phys. Lett. A 84 (1981), no. 4,
- 169-171. (Authors' summary) 82j-82032 82A35 (76A02, 76N99)
 onik, Marko (with Kundt, W.) Dipole confined by a disk. Astronom. and Astrophys. 91
 (1980), no. 3, 305-310. (Authors' summary) 82j:85003 85A05
- On adiabatic invariants and continuous large-scale deformations of QM energy spectra. Phys. Lett. A 80 (1980), no. 2-3, 117-120. (Author's summary) 82b:81027 81C12 (47A70, 81C10)
- on, D. (with Webber, D. M.) The gauge boson sector of U(1) lattice theories. Z. Phys.
- C 10 (1981), no. 2, 159-168. (Authors' summary) 82k:81067 81E25 son, J. C. (with Bit-David, J.) Normalizing extensions. I. Ring theory, Antwerp 1980 (Proc. Conf., Univ. Antwerp, Antwerp, 1980), pp. 1-5, Lecture Notes in Math., 825, Springer, Berlin, 1980. (L. C. A. van Leeuwen) 82b:16022a 16A56 (16A53, 16A55,

(with Chatters, A. W.) Decomposition of orders in semiprimary rings. Comm.

Algebra 8 (1980), no. 6, 517-532. (C. Nijā) 82c16006 16A18 (16A21) (with Small, Lance W.) Liberal extensions. Proc. London Math. Soc. (3) 42 (1981), no. 1, 87-103. (Donald S. Passman) 82c:16025 16A56

son, J. D. A simplified quasi-Gaussian random process model based on nonlinearity. J.

Sound Vibration 76 (1981), no. 2, 169–177. (Author's summary) 82e:93111 93E11 93en, J. M. Storage allocation is NP-hard. Inform. Process. Lett. 11 (1980), no. 3, 119–125. (From the introduction) 82b:68038 68C25 (68B15, 90B05, 90C10)

Robuk, V. N. (with Borovik, A. E.) Linear pseudopotentials and conservation laws for the Landau-Lifsic equation, describing the nonlinear dynamics of a ferromagnet with uniaxial anisotropy. (Russian. English summary) Teoret. Mat. Fiz. 46 (1981), no. 3, 371-381. (M. I. Monastyrskii) 82i:82016 82A15 (35C99, 58F07)
Rocca, A. (with Provost, J.; Berthomieu, G.) Low frequency oscillations of a slowly

rotating star: quasitoroidal modes. Astronom. and Astrophys. 94 (1981), no. 1, 126-133. (B. K. Datta) 82i:85005 85A15

Roček, Martin (with Grisaru, Marc; Siegel, Warren) Superhoops 3, beta 0: a calculation in N=4 Yang-Mills theory. Nuclear Phys. B 183 (1981), no. 1-2, 141-156. (Authors' summary) 82i:81145 81G20 (81E99)

(with Lindström, Ulf; Karlhede, Anders) The component gauges in supergravity Nuclear Phys. B 191 (1981), no. 2, 549-573. (Authors' summary) 82;:83064 83E5

(with Williams, Ruth M.) Quantum Regge calculus. Phys. Lett. B 104 (1981), no. 1,

31-37. (M. J. Perry) 82i:83034 83C45 (57Q15)
Ročev, V. E. The Legendre transform and equations for Green functions. (Russian. English summary) Teoret. Mat. Fiz. 47 (1981), no. 2, 184-197. (Author's summary) 82h:8100 81D10 (81C30)

(with Nekrasov, M. L.) Two-particle equations for fermions in models with three-linear interaction. (Russian. English summary) Teoret. Mat. Fiz. 48 (1981), no. 2,

187-196. (Authors' summary) 82i:81063 81D10 da Rocha, Armando Freitas Neural fuzzy point processes. Fuzzy Sets and Systems 5 (1981), no. 2, 127-140. (Author's summary) 82e:92020 92A09 (03E72)

Rocha, V. C., Jr. (with Wolfenson, M.) Soft decision decoding with unknown source distribution. Electron. Lett. 16 (1980), no. 25-26, 949-950. (Authors' summary) 94B35 (94A24)

Multilevel double error correcting codes. Electron. Lett. 17 (1981), no. 1, 45-46. (Author's summary) 82b:94025 94B15

Rocha-Caridi, Alvany Splitting criteria for g-modules induced from a parabolic and the Bernstein-Gel'fand-Gel'fand resolution of a finite-dimensional, irreducible g-module. Trans. Amer. Math. Soc. 262 (1980), no. 2, 335-366. (S. I. Gel'fand) 82f:17006 (22E47)

del, Hamid See Rahbar-Rochandel, Hami ar-Roch

Rochberg, R. H. (with Coifman, R. R.; Taibleson, Mitchell H.; Weiss, Guido)

Introduction. Representation theorems for Hardy spaces, pp. 1-9, Astérisque, 77, Soc. Math. France, Paris, 1980. (Sun Yung A. Chang) 82g:32010 32A35 (42B30, 43A85,

(with Coifman, R. R.) Representation theorems for holomorphic and harmonic functions in L^p . Representation theorems for Hardy spaces, pp. 11–66, Astérisque, 77, Soc. Math. France, Paris, 1980. (Charles Horowitz) 82j:32015 32A35 (32M15, 46E99, 47B38)

(with Anderson, James Milne) Toeplitz operators associated with subalgebras of the disk algebra. Indiana Univ. Math. J. 30 (1981), no. 6, 813-820. (Sheldon Axler) 47B35 (30H05, 46J15)

la Roche, Peter See La Roche, Peter

Rochus, Pierre (with Coz, Marcel) Extension of the Marchenko equation to non-Hermitian differential systems. Ann. Physics 126 (1980), no. 2, 460-499. (Chindhu S. Warke) 81F05 (45E05, 47A40) 82c:81123

Rockafellar, R. T. Convex processes and Hamiltonian dynamical systems. Convex analysis and mathematical economics (Proc. Sympos., Univ. Tilburg, Tilburg, 1978), pp. 122-136, Lecture Notes in Econom. and Math. Systems, 168, Springer, Berlin, 1979. (Karl Shell) 90A16 (49A10, 90C39)

Rockett, Andrew M. The metrical theory of continued fractions to the nearer integer. Acta Arith. 38 (1980/81), no. 2, 97-103. (V. Drobot) 82d:10074

Rockmore, R. Integrals over the Fermi function. J. Math. Phys. 22 (1981), no. 2, 282-283. (Author's summary) 82d:44903 44A15 (82A40)

Rockwood, A. See Poston, Tim; et al., 82i:58019

Roczen, Marko (with Fitzner, Heinz-Jörg; Kleinert, Werner; Kurke, Herbert; Pfister, Gerhard; Zink, Thomas) Modulprobleme in der algebraischen Geometrie. III. Beiträge zur Algebra und Geometrie, 7. Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg M 11 (1978), 91-144. (Contents) 82k:14011 14D20

Rod, David L. (with Churchill, Richard C.; Pecelli, G.) Stability transitions for periodic

orbits in Hamiltonian systems. Arch. Rational Mech. Anal. 73 (1980), no. 4, 313–347. (Robert L. Devaney) 824:58028 58F05 (34C25)

(with Churchill, Richard C.; Thomas, Edward) Normal modes and stability for some classes of mechanical systems. Classical mechanics and dynamical systems (Medford, Mass., 1979), pp. 13-23, Lecture Notes in Pure and Appl. Math., 70, Dekker, New York, 1981. (See 82k:58002) 58F05 (58F13, 70K20)

Jabaugh, D. J. (with Thompson, Skip) A note on the relative efficiency of Adams methods. Comput. Math. Appl. 7 (1981), no. 5, 401-403. (Authors' summary) 821:65081 65L05

fabaugh, S. E. The Hausdorff separation axiom for fuzzy topological spaces. Topology Appl. 11 (1980), no. 3, 319-334. (Author's summary) 82±54021 54A40 (03E72)

Locally starlike decompositions of separable metric spaces. Fund. Math. 112 (1981), no. 1, 61-68. (R. Bean) 82f:54013 54B15

A lattice of continuities for fuzzy topological spaces. J. Math. Anal. Appl. 79 (1981), no. 1, 244–255. (Ivan L. Reilly) 82c54005
Suitability in fuzzy topological spaces. J. Math. Anal. Appl. 79 (1981), no. 2, 273–285. (Ying Ming Liu) 82h:54004
54A40 (03E72)

lding, Dieter See Bartnick, Jürgen, 82k:03010

Roddy, D. A method of using Simpson's rule in the DFT. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 4, 936-937. (Author's summary) 821:94005 94A05 (65F05)

Rodé, Gerd Superkonvexe Analysis. Arch. Math. (Basel) 34 (1980), no. 5, 452-462. (L. Namioka) 82b:46012 46A55

Superkonvexität und schwache Kompaktheit. Arch. Math. (Basel) 36 (1981), no. 1, 62-72. (Benno Fuchssteiner) 82j:46012 46A55

le, L. O. Simple multidimensional singular integrals in classes H^k_{ω,β}. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk. 1980, no. 3, 28, 109. (A. Kufner) 82g:42016 42B20 (46E15)

(with Steinberg, David) A layout for the shuffle-exchange network with $\Theta(N^2/\log N)$ area. Inform. Process. Lett. 12 (1981), no. 2, 83–88. 824:69020 garcía-Rodeja Fernández, E. See García-Rodeja Fernández, E.

Rodemich, Eugene R. The groups of order 128. J. Algebra 67 (1980), no. 1, 129-142. (J.

McKay) 82k:20048 20D15 (20-04) (with Pierce, John R.; Posner, Edward C.) The capacity of the photon counting channel. IEEE Trans. Inform. Theory 27 (1981), no. 1, 61-77. (Carl W. Helstrom)

82c:94009 94A40 Rodger, Christopher A. (with Street, Deborah J.) Some results on Bhaskar Rao designs. Combinatorial mathematics, VII (Proc. Seventh Australian Conf., Univ. Newcastle, Newcastle, 1979), pp. 238-245, Lecture Notes in Math., 829, Springer, Berlin, 1980. (R. G. Stanton) 82f-05015 05B05

Rodgers, J. R. (with Santoro, A.; Mighell, A. D.) The determination of the relationship between derivative lattices. Acta Cryst. Sect. A 36 (1980), no. 5, 796-800. (H. Groemer) 52A43 (15A90, 52A15, 82A60)

Rodin, V. A. Membership of the sum of a cosine series with monotone coefficients in a symmetric space. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1979, no. 8, 60-64. (N. T. Anisimova) 82a:42007 42A16 (46E30)

Rodino, Luigi Potysingular integral operators. Ann. Mat. Pura Appl. (4) 124 (1980), 59-106. (R. V. Duduchava) 821:47060 47G05 (45P05, 47B38)

(with Parenti, C.) Parametrices for a class of pseudodifferential operators. I, II. Ann. Mat. Pura Appl. (4) 125 (1980), 221-254, 255-278. (Ju. V. Egorov) 82i:35175

(with Parenti, C.) On general pseudodifferential operators. Con

Differential Equations 5 (1980), no. 6, 561-594. (A. S. Dynin) 82b:35156 35S05
Rodionov, A. M. (with Afanas'ev, V. N.) Stabilization of a class of nonlinear equations with lag. (Russian) Differencial'nye Uravnenija 17 (1981), no. 5, 914-916, 958. (M. Ilolov)

82m:34978 348.35 reading Zenanifolds. (Russian) Sibirsk. Mat. Ž. 22 (1981), no. 2, 191-197, 238. (O. Kowalski) 82f:53087 53C20 (53C30) Rodionov, M. A. Description by graphs of the structure of relations. (Russian) Algorithms

and software for applied statistical analysis. Učen. Zap. Statist. 36 (1980), 271-278. (B. Zelinka) 82f:62087 62H05 (05C99)

ionov, V. I. A relation in finite topologies. (Russian) Modules and linear groups. Zap. Nauën. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 103 (1980), 114–116, 159. (S. A. Peregudov) 82k:54062 54G99 (05A15, 05A19, 54A10)
 Rodionov, V. N. (with Lobanov, A. E.; Ternov, I. M.; Halilov, V. R.) Elastic scattering

amplitudes of the electron and photon in a constant electromagnetic field. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 377-389. (Authors' summary) 81F20 (81G10)

Roditi, Itzhak (with Mignaco, Juan A.) Ground-state energy of three-body Coulomb systems through hyperspherical harmonics. J. Phys. B 14 (1981), no. 5, L161-L166. (Authors' summary) 82b:81144 81G50

Roditty, Y. On covering K_{n+1} by T₁, · · · , T_n special trees. Internat. J. Math. Ed. Sci. Tech. 12 (1981), no. 2, 139–142. (Alan Tucker) 82g:05075 05C70 (05C05)

Rodkina, A. E. The Cauchy problem for an equation of neutral type. (Russian) Qualitative and approximate methods for the investigation of operator equations (Russian), pp. 119-126, 168, Jaroslav. Gos. Univ., Yaroslavl', 1980. (V. G. Angelov) 82f:34089 34K 10 (34K 15)

Continuability and uniqueness of generalized solutions of equations of neutral type. (Russian) Differencial'nye Uravnenija 16 (1980), no. 11, 2003-2011, 2109. (V. Rosa) 82d-34099 34K05

Rödl, Vojtěch (with Poljak, Svatopluk) Orthogonal partitions and covering of graphs. With a loose Russian summary. Czechoslovak Math. J. 30(105) (1980), no. 3, 475-485. (A. Pultr) 82j:05088 05C70 (05B15)

(with Poljak, Svatopluk) On set systems determined by intersections. Discrete Math. 34 (1981), no. 2, 173-184. (Maria Ferro) 82e:05102 05C65 (05C75)

(with Poljak, Svatopluk) On the arc-chromatic number of a digraph. Theory Ser. B 31 (1981), no. 2, 190-198. (R. C. Entringer) 82j:05059 05C15 man, Leiba (with Gohberg, Israel) On spectral analysis of nonmonic matrix and 05C15 (05C20)

operator polynomials. II. Dependence on the finite spectral data. Israel J. Math. 30 (1978), no. 4, 321-334. (Winfried Kaballo) 82a:15009 15A18 (15A21, 47A68) (with Gohberg, Israel; Lancaster, P.) Perturbation theory for divisors of operator

polynomials. SIAM J. Math. Anal. 10 (1979), no. 6, 1161-1183. (Harro Heuser) 82b:47016 47A68 (47A55)

On extremal solutions of the algebraic Riccati equation. Algebraic and geometric methods in linear systems theory (AMS-MASA-NATO Summer Sem., Harvard Univ., Cambridge, Mass., 1979), pp. 311–327, Lectures in Appl. Math., 18, Amer. Math. Soc., Providence, R. I., 1980. (Peter Lancaster) 82g:15009 15A24 (93B25)
(with Gohberg, Israel; Lancaster, P.) Spectral analysis of selfadjoint matrix

olynomials. Ann. of Math. (2) 112 (1980), no. 1, 33-71. (Author's review (L.P.)) 15A18 (15A63, 47A65)

(with Lancaster, P.) Existence and uniqueness theorems for the algebraic Riccati equation. Internat. J. Control 32 (1980), no. 2, 285-309. (S. P. Bhattacharyya) 82c:15017

(with Gohberg, Israel; Kaashoek, M. A.; Lerer, L. E.) Common multiples and common divisors of matrix polynomials. I. Spectral method. Indiana Univ. Math. J. 30 (1981), no. 3, 321-356. (Peter Lancaster) 82j:15019 15A54 (47A68, 47E05)

(1981), no. 3, 321–336. (Feter Lancaster) 822:15019 15A35 (47A08, 47EU3) indifferent. N. E. (with Bodner, V. A.; Jurikov, E. P.) On the optimization of systems defined by stochastic differential equations. Prikl. Mat. Meh. 42 (1978), no. 5, 789–800 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 5, 848-862 (1979). (Authors' mary) 82g:93050 93F20

dart Rodón, David See Nualart Rodón, David

- Rosskil, K. A. Euclidean rings. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 4, 819–822. (P. M. Cohn) 82g:13014 13F07
- Irigo, Eurico A. Geometry dependence of Casimir energy and scalar Green's functions. Phys. Lett. A 84 (1981), no. 8, 411-414. (Author's summary) 82i:78009 78A25
- rigo, P. (with Gauvrit, M.; Fargeon, C.) Convergence and asymptotic behavior parallel algorithms. Internat. J. Control 33 (1981), no. 5, 811–837. (Authors' sum ptotic behaviour of
- rigue, Garry H. (with Madsen, Niel K.) Odd-even reduction for pentadiagonal matrices.

 Parallel computers—parallel mathematics (Munich, 1977), pp. 103–106, North-Holland,
 Amsterdam, 1977. (See 821:68003) 68C05 (65F05)

 rigues, Hiklebrando M. On growth and decay of solutions.
- Hildebrando M. On growth and decay of solutions of perturbed retarded linear ons. Tohoku Math. J. (2) 32 (1980), no. 4, 593-605. (I. P. Stavroulakis) 82h:34101 34K15 (34C11)
- rigues, K. (with Molčinskii, B. V.; Fedjanin, V. K.) The generating function and a functional analogue of the Bogoljubov variational method. (Russian. English summary)

 Teoret. Mat. Fiz. 45 (1980), no. 2, 251-260. (A. K. Vidybida) 82k:82020 82A25 (81C35, 82A15, 82A77)
- (81C35, 82A15, 82A77) hriguez, E. (with Quiros, M.; de Urries, F. J.; Hoyos, J.; Mazón, M. L.) Geometrical structure of Faddeev-Popov fields and invariance properties of gauge theories. J. Math. Phys. 22 (1981), no. 8, 1767-1774. (Authors' summary) 82m:81057 mindez Rodriguez, Francisco See Hernández Rodriguez, Francisco driguez, Gerardo Limiting differential equations in relation to certain types of instability. (Spanish) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 1, 99-109. (Placido Z. Thhons) 82m:34099 34C5 (34T05)
- (Plácido Z. Táboas) 82g:34059 34C35 (34D05)
- (Flacido Z. 1aboas) 82g:34059 34C35 (34D05) lriguer, J. A. (with Costal, F.; Costal, J. B.) Une condition nécessaire pour approcher des processus stochastiques par des "systèmes" avec entrées différentiées. Stochastics 4 (1980/81), no. 3, 215–222. (Halim Doss) 82f:60134 60H10 (93E20) singuez Rodríguez, J. Manuel See Dominguez Rodríguez, J. Manuel
- riguez, Lucio (with Dajczer, Marcos) On asymptotic directions of minimal immersions.

 Math. Z. 176 (1981), no. 2, 187-194. (Siegfried Steiner) 82f:53033 53B25 (53C40)
- Math. Z. 176 (1981), no. 2, 187-194. (Stegrired Steiner) 82i:3933 53B25 (33-40) driguer, M. A. (with Lorente, M.) Bargmann-Wigner equations: symmetries of multispinors and equations of motion. J. Math. Phys. 22 (1981), no. 6, 1283-1288. (Jules Beckers) 82i:81068 81D25 (81G20) driguez, R. (with Combe, Ph.; Sirugue-Collin, M.; Sirugue, M.) Weyl quantization of classical spin systems. Quantum spins and Fermi systems. Feynman path integrals (Proc. Internat. Colloq., Marseille, 1978), pp. 105-119, Lecture Notes in Phys., 106, Springer, Berlin, 1979. (Alberto Galindo) 82g:81022 81C35 (81D05)
 - (with Combe, Ph.; Hoegh-Krohn, Raphael; Sirugue, M.; Sirugue-Collin, M.)
 - Feynman formula and Poisson processes for gentle perturbations. Functional integration theory and applications (Proc. Collog., Louvain-la-Neuve, 1979), pp. 53–64, Plenum, New York, 1980. (Aubrey Truman) 82e81017 81C35 (60K35)

 (with Combe, Ph.; Sirugue, M.; Sirugue-Collin, M.) Parafermi fields as projective
 - representation of discrete groups. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 314-316, Ann. Israel Phys. Soc., 3, Hilger,
- Internat. Cottody. Anyout Anatom, 1979), pp. 514-316, Ann. Israet Phys. Soc., 3, Pluger, Bristol, 1980, (See **282-81004**) 8 1D05 (20C35)

 (with Combe, Ph.; Sirugue, M.; Sirugue-Collin, M.) A uniqueness theorem for central extensions of discrete products of cyclic groups. Quantum fields—algebras, processes (Proc. Sympos., Unio. Bielefeld, Bielefeld, 1978), pp. 207-221, Springer, Vienna, 1980. (Authors' summary) **82d-82072** 82A60 (20E22)
- (with Combe, Ph.; Høegh-Krohn, Raphael; Sirugue, M.; Sirugue-Collin, M.) Poisson processes on groups and Feynman path integrals. Comm. Math. Phys. 77 (1980), no. 3, 269–288. (G. Albimus) 82c-81040 81C35 (22A25, 58G32, 60160) driguez Artalejo, Mario Eine syntaktisch-algebraische Methode zur Konstruktion von Modellen. Z. Math. Logik Grandlag. Math. 27 (1981), no. 1, 59–71. (W. Hodges)
- 03C15 (03B10, 03C30, 03C57)
- driguez-Camino, E. (with González-Gascón, F.) Differential forms and invariant sets of amical systems. Lett. Nuovo Cimento (2) 29 (1980), no. 4, 113-119. (William Perrizo) 58F05 (70G99)
 - (with González-Gascón, F.) On the first integrals of certain dynamical systems.

 Phys. Lett. A 80 (1980), no. 2-3, 133–134. (Frans Cantrijn) 82g:58079 58F99 (70G99) lriguez Fernández, C. ★Invariantes de Baer y cohomología en variedades de Ω-grupos. 58F99 (70G99)
- Iriguez Fernández, C. ★Invariantes de Baer y cohomologia en variedades de Ω-grupos. (Spanish) [Baer invariants and cohomology in varieties of Ω-groups] With an English nmary, Alxebra [Algebra], 28. Universidad de Santiago de Compostela, Departamento de pebra y Fundamentos, Santiago de Compostela, 1980. ii+147 pp. ISBN 84-9191-207-4 (Mauricio Gutiérrez) 82f:18017 18G15
- quez Marin, L. (with Bombal Gordón, F.) An extension of sequential spaces (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 4, 535-543. (G. Marinescu) 82g:46005 46A09
- quez Montes, Jaime Some regularity properties of complex differential equations (Spanish, English summary) Rev. Colo iana Mat. 14 (1980), no. 3, 131-172. (Jorge Hounie) 82j:34007 34A20 (35B99, 35E99)
- Iriguez-Salinas, Baltasar µ-spaces of Suslin and Lusin. The strong "lifting" property.
 (Spanish) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 72 (1978), no. 4, 541-557. (Alan Shuchat) 82i:46060 46G10 (28C15, 46G15)
 - Radon measures of type (%) and measures with "lifting". (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 72 (1978), no. 4, 605-610. (R. D. McWilliams) 821:28005 28A51 (46G15)
 - Suslin and Luzin semi-µ-spaces. Strong lifting property. (Spanish) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 1, 33-40. (L. Janos) 82;54086 54H05 Integration of functions with values in a locally convex space. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 3, 361-387. (Alan Shuchat) 82i:46061
 - an Shuchat) 82:46061 46G10 (28B05, 46G15)

 The Radon-Nikodým theorem for measures with values in a locally convex space. (Spanish, English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 1, 41–64. (Alan Shuchat) 82i:46062 46G10 (28B05)
 - no. 1, 41—64. (Alan Shuchat) 8.24.46062 46C10 (28102)

 The Radon-Nikodým property, ø-dentability and martingales in locally convex spaces. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 1, 65—89. (Alan Shuchat) 822.46063 46G10 (46G15, 60G44)

 On the Dieudonné-forothendieck theorem. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 2, 169—171. (Author's summary)

On the closed graph theorem. Linear subcontinuous mappings. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 5, 811-825. (P. Pérez Carreras) 82k:46012 46A30

1982

- On the class of the barreled space $l_0^\infty(\Sigma)$. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 5, 827–829. (M. Valdivia) 823:246005 46A07 (46E30)
- On the Dieudonné-Grothendieck theorem. Necessary and sufficient conditions. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 5, 831-834. (M. Valdivia) 82k:46002 46A05 (46G10)
- Infigure: Sanjurjo, José M. Quasi-equivalence of compacta and spaces of components.

 Collect. Math. 31 (1980), no. 1, 3-9. (Y. Kodama) 82b:54029 54C56
- Rodriguez-Vargas, A. M. See Proceedings: Einstein Centennial Sympos Physics, 82h:81005
- Seth, Öystein J. On a linear Diophantine problem of Frobenius. II. J. Reine Angew. Math. 307/308 (1979), 431-440. (E. L. Cohen) 82k:10018 10B05 (10L20) On h-bases for n. Math. Scand. 48 (1981), no. 2, 165-183. (H. Gupta) 82m:10034
- Roe, P. L. Approximate Riemann solvers, parameter vectors, and difference schemes. Comput. Phys. 43 (1981), no. 2, 357-372. (Author's summary) 82k:65055 65M (76A60, 76N99)
- Roe, S. (with Light, William A.; Forrest, J.; Hammond, N.) A note on Goldbach's conjecture. BIT 20 (1980), no. 4, 525. (From the text) 82h:10003 10-04 (10115)
- buck, Laura See World directory of historians of mathematics, 82e:00018 eckerath, M. Th. (with Butzer, P. L.; Hahn, L.) Stable limit law and weak law of large numbers for Hilbert space with "large-€" rates. Contributions to probability, pp. 77-100, Academic Press, New York, 1981. (Evarist Ginè) 82h:60008 60B10 (60F05)
- Roehrig, Stephen F. (with Sine, Robert C.) The structure of w-limit sets of no Proc. Amer. Math. Soc. 81 (1981), no. 3, 398-400. (Dan Tiba) 82f:47068
- Roekaerts, D. (with Langouche, F.; Tirapegui, Enrique) On the most probable path for diffusion processes. J. Phys. A 11 (1978), no. 12, L263-L268. (Authors' summary) 82A70 (81C35)
 - (with Langouche, F.; Tirapegui, Enrique) On the path integral solution of the master action. Phys. Lett. A 68 (1978), no. 5-6, 418-420. (Authors' summary) 82i:82033 82A35 (81C35)
 - (with Langouche, F.; Tirapegui, Enrique) WKB expansions with higher order corrections: the general case. Phys. Lett. A 72 (1979), no. 6, 413-416. (Authors'
 - mary) 82-81031 81C12 (58G15) (with Langouche, F.; Tirapegui, Enrique) Semiclassical expansions on Riemannian
 - manifolds. Functional integration theory and applications (Proc. Colloq., Louvain-la-Neuve, 1979), pp. 191–205, Plenum, New York, 1980. (Takashi Miura) 81C99 (58G25, 81C35)
 - (with Langouche, F.; Tirapegui, Enrique) On quantization and point canonical transformations in phase-space functional integrals. Lett. Nuovo Cimento (2) 29 (1980), no. 7, 214–220. (M. Demuth) 82h:81036 81C35 (58D30, 58F06)
- (with Langouche, F.; Tirapegui, Enrique) Covariant WKB expansion in Riemannian space. Phys. Lett. A 77 (1980), no. 1, 3-6. (Authors' summary) 82:81043 81C35
- (with Langouche, F.; Tirapegui, Enrique) General Langevin equations and functional integration. Field theory, quantization and statistical physics, pp. 295-318, Math. Phys. Appl. Math., 6, Reidel, Dordrecht, 1981. (Authors' summary) 82h:82022 82A35 (60J25, 81C35)
- (with Langouche, F.; Tirapegui, Enrique) Master equation approach to the dynamical critical behaviour of the Schlögl model. Phys. Lett. A 82 (1981), no. 7, 309–312. (Authors' summary) 824:80033 80A30 (82A35)
- (with Langouche, F.; Tirapegui, Enrique) Covariant and gauge-invariant calculation of higher-order corrections in WKB expansions on Riemannian manifolds. Phys. Rev. D (3) 23 (1981), no. 6, 1290–1304. (Takashi Miura) 82g:81024 81C35 (58G15, 58G35)
- mer, John E. Innovation, rates of profit, and uniqueness of von Neumann prices.

 Econom. Theory 22 (1980), no. 3, 451–464. (Wolfgang Mayer) 82h:90026 90A12
- Roesler, Friedrich Zur Kongruenzklassen-Verteilung in Folgen von kleinen Zahlen, insbesondere von Primzahldifferenzen. Math. Ann. 254 (1980), no. 1, 1-26. (Aleksandar Ivić) 82b:10053 10H15 (10H20, 10J15)
- Roesner, K. G. An analytical approach to the determination of neutral stability curves. Recent developments in theoretical and experimental fluid mechanics, pp. 339–345, Springer, Berlin, 1979. (See 82c:76004) 76Exx
- See also Recent developments in theoretical and experimental fluid mech
- de Roever, Willem P. (with Lee, Stanley; Gerhart, Susan L.) The evolution of list-copying algorithms and the need for structured program verification. Conference Record of the Sixth Annual ACM Symposium on Principles of Programming Languages (San Antonio, Tex., 1979), pp. 53-67, ACM, New York, 1979. (From the introduction) 82a:68022 68R10
- Rofe-Beketov, F. S. Perturbations and Friedrichs extensions of semibounded operators on variable domains. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 5, 1054-1058. (P. A. Mišnaevskii) 82a:47013 47A55 (35P99)
- Rogava, Dž. L. Stability of the semidiscretization method for second-order hyperbolic differential-operator equations. (Russian. Georgian and English summaries) Sem. Inst. Prikl. Mat. Dokl. No. 12-13 (1978), 41-47. (N. S. Fal'ko) 82g:65035 65L05 (65J10)
- Rogava, M. G. A new decision procedure for SCI. (Russian) Begriffsschrift—Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 361–364, Friedrich-Schiller-Univ., Jena, 1979. (Roman Murawski) 82h:03012 03B25
 - On the sequential version of the propositional fragment of the first-order calculus of terms. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 101 (1981), no. 3, 545-548. (A. S. Kuzičev) 82m:03065 03F05
- Roger, A. Determination of the index profile of a dielectric plate from scattering data. Applied inverse problems, pp. 200-208, Lecture Notes in Phys., 85, Springer, Berlin, 1978. (Author's summary) 82c:78021 78A45
- r, Claudine (with Valton, Michel; Guillaume, Jean-Louis; Hoffmann, Patrick)
- Algèbres de Lie sous-jacentes à la hiérarchie B.B.G.K.Y. (Bogolioubov, Born, Green,

Kirkwood, Yvon). (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 4,

B105-B108. (Authors' summary) 82a:82008 82A05 (17B60)
 Roger, Jacques Buffon and mathematics. Geometrical probability and biological structure: Buffon's 200th anniversary (Proc. Buffon Bicentenary Sympos., Paris, 1977), pp. 29-35, Lecture Notes in Biomath., 23, Springer, Berlin, 1978. (Editors) 82e:01056 01A50 (53.03 60.03).

(53-03, 60-03)
gers, Alice A global theory of supermanifolds. J. Math. Phys. 21 (1980), no. 6,
1352-1365. (P. G. Walczak) 82d:58001 58A05 (15A75, 58C20)
Some examples of compact supermanifolds with nonabelian fundamental group. J.
Math. Phys. 22 (1981), no. 3, 443-444. (A. Verona) 82i:58008 58A99 (58F06, 83E50)
agers, C. Ambrose (with Jayne, John E.) K-analytic sets. Analytic sets (Conf., University
Coll., Univ. London, London, 1978), pp. 1-181, Academic Press, London, 1980. (See 03E15

A less strange version of Milnor's proof of Brouwer's fixed-point theorem. Amer. Math. Monthly 87 (1980), no. 7, 525-527. (David C. Wilson) 82b:55004 55M20 (54C15)

(with Jayne, John E.) Fonctions fermées en partie. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 13, A667-A670. (Authors' summary) 82a:54021 54C10

(with Kaniewski, J.) Double uniformization. J. London Math. Soc. (2) 22 (1980),
 no. 3, 521-533. (Roy Dyckhoff) 82d:04002 04A15 (54H05)
 (with Jayne, John E.) Corrigenda et addenda: "Borel isomorphisms at the first level.

I, II" [Mathematika 26 (1979), no. 1, 125-156; ibid. 26 (1979), no. 2, 157-159 (1980); MR 81h:54048ab]. Mathematika 27 (1980), no. 2, 236-260 (1981). (D. Preiss) 82e:54043 54H05 (04A15)

(with Jayne, John E.) Fonctions multivoques semi-continues supérieurement. (English summary) [Upper semicontinuous set-valued maps] C. R. Acad. Sci. Paris Sér.

I Math. 293 (1981), no. 8, 429-430. (Authors' summary) 82m:54010 54C60 (54C08,

An equichordal problem. Geom. Dedicata 10 (1981), no. 1-4, 73-78. (A. Florian) 82j:52009 52A10

gers, Colin (with Madan, V. P.) Correspondence principle for plane strain problems in magnetothermoviscoelasticity. Riv. Mat. Univ. Parma (4) 6 (1980), 7-13 (1981). (Authors' summary) 82h:73074 73R05 (73U05)

ers, D. G. A functional equation in statistical mechanics. Nanta Math. 12 (1979), no. 2, 182-186. (Author's summary) 82m:39013 39B40 (82A05)

(with Pelling, M. J.) Some (2, n) combinatorial Stein groupoids. Aequi 21 (1980), no. 2-3, 225-235. (Ferenc Fenyves) 82f:20101 20N05 (05B05)

The enumeration of a family of ladder graphs. II. Schröder and superconnective relations. Quart. J. Math. Oxford Ser. (2) 31 (1980), no. 124, 491–506. (M. Aigner)

05C99 (05A15, 05C30) Addition theorems for perfect systems of difference sets. J. London Math. Soc. (2) 23 (1981), no. 3, 385-395. (B. Garrison) 82h:10067 10L05 (05B10, 10J99)

Rogers, Donald D. (with Ward, Joseph D.) C_p-minimal positive approximants. Acta Sci.

Math. (Szeged) 43 (1981), no. 1-2, 109-115. (D. A. Herrero) 82i:47032 47B10

(47A30, 47A55, 47B15) (with Moore, Robert L.; Trent, Tavan T.) A note on intertwining M-hyponormal ators. Proc. Amer. Math. Soc. 83 (1981), no. 3, 514-516. (Mehdi Radjabalipour)

82i-47033 47B20 Rogers, J. W., Jr. Monotone maps and e-maps. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979). Topology Proc. 4 (1979), no. 2, 533-540 (1980). (Lee Mohler) 82c:54028 54F15 (54F50)

ogers, James T., Jr. (with Oversteegen, Lex G.) Tree-like continua as limits of cyclic graphs. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979). Topology Proc. 4 (1979), no. 2, 507-514 (1980). (Lee Mohler) 82c:54032

(54H25) (with Oversteegen, Lex G.) An inverse limit description of an atriodic tree-like continuum and an induced map without a fixed point. Houston J. Math. 6 (1980), no. 4, 549-564. (Lee Mohler) 82i:54075 54F20 (54H25)

Aposyndesis and homogeneity. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 97-99, Academic Press, New York, 1981. (Editors) 82f:54056

(with Dilks, A. M.) Whitney stability and contractible hyperspaces. Proc. Amer. Math. Soc. 83 (1981), no. 3, 633-640. (L. E. Ward, Jr.) 82i:54023 54B20 (54F20)

Rogers, Joel C. W. Steady state of a nonlinear evolutionary equation. Analysis and control of systems (IRIA Sem., Rocquencourt, 1978), pp. 119-139, IRIA, Rocquencourt, 1978. (Author's review (Zbl 432:35079)) 82h:35052 35K55 (80A20)

Stability, energy conservation and turbulence for water waves. Analysis and control of systems (IRIA Sem., Rocquencourt, 1978), pp. 163-180, IRIA, Rocquencourt, 1978. (L. Debnath (Zbl 431:76039)) 82h:35063 35L65 (76E20, 76F99)

Rogers, L. C. G. (with Barlow, Martin; Williams, David) Wiener-Hopf factorization for matrices. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 324-331, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Martin Jacobsen) 82h:60089a

(with Williams, David) Time-substitution based on fluctuating additive functionals (Wiener-Hopf factorization for infinitesimal generators). Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 332-342, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Martin Jacobsen) 82b:60089b 60J25 (60J55)

Characterizing all diffusions with the 2M-X property. Ann. Probab. 9 (1981), no. 4, 561-572. (D. Kannan) 82j:60150 60J60 (60J65)

(with Pitman, Jim W.) Markov functions. Ann. Probab. 9 (1981), no. 4, 573-582. (D. Kannan) 82j:60133 60J25 (60J65)

A simple proof of Müntz's theorem. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 1, 1-3. (D. Leviatan) 82641024 41A30

(Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 101–104, Academic Press, New York, 1981. (Editors) 821:54057 54F20 (54B10)

ogers, Pat Preservation of saturation and stability in a variety of nilpotent groups Symbolic Logic 46 (1981), no. 3, 499-512. (U. Felgner) 82k:20003 20A15 (03C40, 03C45, 03C60, 20F18)

Rogers, T. G. (with Pipkin, A. C.) Holes in inextensible networks. Quart. J. Mech. Appl. Math. 33 (1980), no. 4, 447–462. (Authors' summary) 82c:73015 73C40

Rogers, Thomas D. Diversity and diffusion in multidimensional niche space. Bull. Math. Biol. 41 (1979), no. 2, 129-138. (Author's summary) 82m:92076 92A17

(with Clarke, Bruce L.) A continuous planar map with many periodic points. Appl. th. Comput. 8 (1981), no. 1, 17-33. (K. E. Swick) 82g:58058 58F13 (39A10, 58F13 (39A10, 92A15)

Rogge, Lothar (with Landers, Dieter) The natural median. Ann. Probab. 9 (1981), no. 6, 1041-1042. (Patrick L. Brockett) 82m:62107 62G30 (60E15)

(with Landers, Dieter) Isotonic approximation in L₂. J. Approx. Theory 31 (1981), no. 3, 199-223. (D. Ramachandran) 82j:60055 60F25

(with Landers, Dieter) Characterization of conditional expectation operators for ich-valued functions. Proc. Amer. Math. Soc. 81 (1981), no. 1, 107-110. (L. Egghe) 60B11 (60A05)

grenkamp, K. W. Representation theory of blocks of defect 1. Representation theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 521-544, Lecture (Froc. Seconal Internal, Cong., Cong.), Votes in Math., 832, Springer, Berlin, 1980. (Karin Erdmann) 82e:20006 20C10 (with Benabdallah, Khalid) Pure unital local principal ideal domains in local fields.

Canad. J. Math. 32 (1980), no. 2, 350-353. (From the text) 82g:13016 13F30 (12B15) (with Gruenberg, K. W.) Extension categories of groups and modules. II. Stem extensions. J. Algebra 67 (1980), no. 2, 342-368. (L. Ribes) 821:16031 16A64 (16A90, 20J05)

(with Scott, Leonard L.) Nonsplitting examples for normalized units in integral up rings of metacyclic Frobenius groups. C. R. Math. Rep. Acad. Sci. Canada 3 81), no. 1, 29–32. (Editors) 82b:20009 20C05 (1981), no. 1, 29-32. (Editors) 82b:20009

Units in integral metabelian grouprings. I. Jackson's unit theorem revisited. Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 126, 209-224. (Donald S. Passman) 82:16009 16A26

Roginskii, L. I. On a problem of N. G. Čebotarëv. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 9, 30-31. (W. Narkiewicz) 82h:12004 12A20 (10M20, 15A33)

Rogovcov, N. N. Some boundary value problems and integral equations of convolution type encountered in radiation transfer theory. (Russian. English summary) Dokl. Akad. Nauk BSSR 24 (1980), no. 11, 974-977, 1052. (Author's summary) 82b:85008 (45E10)

Reconstruction of the internal radiation field distribution from its characteristics at the scattering medium boundaries. Izv. Akad. Nauk SSSR Ser. Fiz. Atmosfer. i Okeana 16 (1980), no. 3, no pp. (Russian); translated as Izv. Acad. Sci. USSR Atmospher. Ocean. Phys. 16 (1980), no. 3, 160-165 (1981). (Author's summary) 82g:78019

Transport theory and the general invariance principle. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 5, 420-423, 477. (Author's summary) 821:82071 82A70 (85A25)

Rogovin, D. (with Nagel, Jonathan Allen; Scully, Marian O.) Quantum theory of the dc Josephson effect: current-biased eigenstates and excitation spectrum. Phys. Rev. B (3) 23 (1981). no. 3, 1156-1170. (Authors' summary) 82c:81171 81J05 (1981), no. 3, 1156-1170. (Authors' summary) 82c:81171

Rogovtsov, N. N. See Rogovcov, N. N.
Rogoza, B. E. First integrals of a quasilinear elliptic equation. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 6, 57-61. (V. T. Fomenko) 824:35046 35J60

ozin, B. A. (with Mirošnikov, A. L.) Inequalities for concentration functions. (Russian English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 1, 178-183. (G. I. Ivčenko) 82b:60054 60G50 (60E99)

gožin, Ju. V. Universal one-place partial recursive functions. (Russian) Design of interpreters. Mat. Issled. No. 59 (1980), 36-43, 155. (D. Simovici) 82j:03046 (03D10, 68C40)

gožin, V. S. (with Vekua, N. P.; Litvinčuk, G. S.; Nikol'skii, S. M.; Samko, S. G.; Simonenko, I. B.; Hvedelidze, B. V.; Čerskil, Ju. I.) Fedor Dmitrievič Gahov. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 193-194. (Editors) 82c:01056 01A70

Rogula, Dominik (with Sztyren, Malgorzata) On one-dimensional models in nonlocal elasticity. Bull. Acad. Polon. Sci. Sèr. Sci. Tech. 26 (1978), no. 7, 631-635. (Authors' summary) 82b:73004 73B99 (35J20, 49A50)

nas, H. P. (with Bočarov, P. P.) On an exponential queueing system in series with blocking. (Russian. English summary) With a loose English translation. Problems Control Inform. Theory/Problemy Upravlen. Teor. Inform. 9 (1980), no. 6, 441–455. (Bruce D. Craven) 82h:60177 60K25 (90B22)

Rohas, V. P. (with Gesev, Atanas) Periodic and almost periodic characteristics of a nonstationary priority system with losses. (Russian. English summary) Plovdiv. Univ. Naučn. Trud. 16 (1978), no. 1, 131-138 (1980). (From the text) 821:60213 60K25

(with Gelev, Atanas; Hristova, S. G.) Periodic solutions of a nonstationary system with losses consisting of a single server. (Bulgarian. Russian and English sun Plovdiv. Univ. Naučn. Trud. 16 (1978), no. 1, 139-146 (1980). (B. Dimitrov) 82j:60172 60K25

Rohatgi, V. K. (with Ahluwalia, Rashpal) Testing equality of variances in sampling from two normal populations. J. Statist. Comput. Simulation 12 (1980/81), no. 2, 140-142. (From the summary) 82h:62039 62F03

(with Gupta, Arjun K.) On the estimation of restricted mean. J. Statist. Plann. Inference 4 (1980), no. 4, 369-379. (Thomas W. F. Stroud) 82k:62053 62F03

(with Laha, R. G.) Fourier transform methods in the study of limit theorems in a Hilbert space. Contributions to probability, pp. 123-137, Academic Press, New York, 1981. (A. Bozorgnia) 82h:60014 60B12 (60B15) See also Contributions to probability, 82f:60005

Rohler, David (with Krishnaprasad, P. S.) Radon inversion and Kalman reconstructions: a comparison. IEEE Trans. Automat. Control 26 (1981), no. 2, 483-487. (Authors' summary) 82e:92009 92A07 (65R10, 68G10)

Rohlfing, E. A. (with Loeser, J. G.; Rabitz, Herschel; DePristo, A. E.) A simple model for inelastic scattering. Amer. J. Phys. 49 (1981), no. 11, 1046-1050. (Authors' summary)

Rohlfs, J. Maximal arithmetically defined groups and related group schemes. Proceedings of the 5th School of Algebra (Rio de Janeiro, 1978), pp. 59-73, Soc. Brasil. Mat., Rio de Janeiro, 1978. (Author's introduction) 82a:22012 22E40 (10C30)

Rohlin, V. A. New inequalities in the topology of real plane algebraic curves. (Russian)

Funkcional, Anal. i Priložen, 14 (1980), no. 1, 37-43, 96. (V. M. Harlamov) 82e:14066 14N99 (14F45, 14G30, 14H99)

See also Titchmarsh, E. C., 82h:30001 ohman, M. See Abdel-Rohman, M.

Joachim Konstruktionen von Blockplänen durch Frobeniusgruppen. Gecata 7 (1978), no. 4, 455–463. (From the text) 82g:05021 05B05 (20B2) 05B05 (20B25)

m, Jiří An existence theorem for systems of nonlinear equations. Z. Angew. Math. Mech. 60 (1980), no. 8, 345. (K. Zimmermann) 82f:26016 26B25 (52A20, 90C30) terval linear systems with prescribed colu ms. Linear Algebra Appl. 39 (1981),

Interval linear systems with prescribed column sums. Linear Aigeora Appl. 39 (1701), 143-148. (Chung Lie Wang) 82i:15003 15A06 hr, Resé R. J. (with Nallet, C.; King, David A.) Éloge: Louis Janin. J. Hist. Arabic Sci. 3 (1979), no. 1, 85-87. (Editors) 82&01630 01A70 hrback, H. Richard Brauer zum Gedächtnis. Jahresber. Deutsch. Math.-Verein. 83

(1981), no. 3, 125-134. (I. E. Strazdinš) 82;:01071 01A70

herlich, David E. Galois conjugacy of unramified twists of Hecke characters. Duke Math.

J. 47 (1980), no. 3, 695-703. (Alan Candiotti) 82a:12009 12A70 (12A65)
herlich, Fritz (with King, Michael J.) Relativistic Hamiltonian dynamics. II.

Momentum-dependent interactions, confinement and quantization. Ann. Physics 130 (1980), no. 2, 350-394. (Authors' summary) 824:70029 70F99 (81G05, 83A05) (with King, Michael J.) Exactly solvable eigenvalue problem with hypergeometric eigenfunctions. J. Math. Phys. 21 (1980), no. 12, 2786-2788. (K. V. Bhagwat) 82:81025

(with Horwitz, L. P.) Constraint relativistic quantum dynamics. Phys. Rev. D (3) 24 (1981), no. 6, 1528-1542. (P. G. L. Leach) 82j:81016 81C05 (70F10, 81F10) rgaled Roig, J. See Margaled Roig, J. See Margaled Roig, J. Sin, J.-R. (with Lavendhomme, R.) Note on nonabelian cohomology. Applications of

sheaves (Proc. Res. Sympos. Appl. Sheaf Theory to Logic, Algebra and Anal., Unio. Durham, Durham, 1977), pp. 534-541, Lecture Notes in Math., 753, Springer, Berlin, 1979. (R. T. Hoobler) 82k:18005 18C10 (14F20, 18G50)

(with Lavendhomme, R.) Cohomologie non abelienne de structures algébriques. J. Algebra 67 (1980), no. 2, 385–414. (Marta C. Bunge) 82g:18004 18C10 (18F20) therg, Ja. A. (with Seftel', Z. G.) On general elliptic problems with strong degeneration. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1336–1342. (Johannes Elschner) 35J70 (47F05)

g, Joseph (with Dyer, Eldon) Note on sequences of Mayer-Vietoris type. Proc. er. Math. Soc. 80 (1980), no. 4, 660–662. (Peter J. Eccles) 82e:55025 55P99 berg, Jo

iter, A. V. BOCSs with involution. (Russian) Representations and quadratic forms (Russian), pp. 124–126, 155, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1979. (From the text) 82e:180 18A99 (15A60, 16A64, 46K99)

tman, Judy The number of automorphisms of an atomic Boolean algebra. *Pacific J.*Math. 94 (1981), no. 1, 231-242. (M. M. Richter) 82;03064 03E35 (06E99, 54H99) n, M. (with Sternfeld, Y.) When is a linear functional multiplicative? Trans. Amer.

Math. Soc. 267 (1981), no. 1, 111-124. (W. Żelazko) 82j:46061 46H20 (16A99) okne, J. Polynomial least square interval approximation. (German sun nmary) Comp

20 (1978), no. 2, 165-176. (Author's summary) 82m:41007 41A10 (65D10) usshima, Atuko (with Koyama, Hideyuki) Hamiltonian scheme for stochastic control and separation of variables to solve a quadratic-linear problem. Math. Japon. 25 (1980),

no. 6, 625-629. (Authors' summary) 82f;9089 93E20

Rokva, Ž. P. Numerical solution of some contact problems of the plane theory of elasticity. (Russian. Georgian and English summaries) Sem. Inst. Prikl. Mat. Dokl. No. 14 (1980), 37-43. (Author's summary) 82b:73055 73T05 (65L10)

A method for the numerical solution of certain problems of plane elasticity theory. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 99 (1980), no. 2, 329–332. (Author's summary) 82a:73015 73C99 (45E05)

Roleff, K. (with Glashoff, Klaus) A new method for Chebyshev approx plex-valued functions. Math. Comp. 36 (1981), no. 153, 233-239. (Wolfgang Wetterling) 82c:65011 65D15 (30E10, 90C30)

lewicz, Danuta See Przeworska-Rolewicz, Danuta

tolewicz, S. On optimal problems described by graph y-paraconvex multifunctions Functional differential systems and related topics (Proc. First Internat. Conf., Blażejewko, 1979), pp. 280–283, Higher College Engrg., Zielona Góra, 1980. (Igor Kluvánck) 34 49B27 (52A40)

Roley, V. Vance (with Melton, William C.) Imperfect asset elasticities and financial model building. Econometric modeling and policy design at the Federal Reserve, Part II. J. Econometrics 15 (1981), no. 1, 139–154. (See 82c:90003b) 90A09

Rolf, Bertil Black and Hempel on vagueness. Z. Allgemeine Wissenschaftstheorie 11 (1980), no. 2, 332-346. (From the introduction) 824:03014 03A05

Roll, Richard (with Cornell, Bradford) Strategies for pairwise competitions in markets and organizations. Bell J. Econom. 12 (1981), no. 1, 201–213. (Authors' summary) 82e:92050 92A20 (90D05)

Rollero, Aldo Some remarks on certain invariants of a binary quartic form. (Italian. English and French summaries) Atti Accad. Ligure Sci. Lett. 36 (1979), 183-190. (Daniel Coray) 82d:14002 14A25 (10C10, 14D25, 15A72)

Rollov, E. V. Subsemigroups of a class of semigroups. (Russian) Modern algebra (Russian), pp. 113-118, Leningrad. Gos. Ped. Inst., Leningrad, 1980. (G. Pollák) 82e:20068 20M05 (03D40)

Rolski, Tomasz On random discrete distributions. (Polish summary) Zastos. Mat. 16 (1980). no. 4, 609-619. (Yutaka Kato) 82f:60014 60B10 (60F05, 60G57)

★Stationary random processes associated with point processes. Lecture Notes in Statistics, 5. Springer-Verlag, New York-Berlin, 1981. vi+139 pp. ISBN 0-387-90575-8 (Masao Mori) 82i:60098 60G55 (60K25)

Queues with nonstationary input stream: Ross's conjecture. Adv. in Appl. Probab. 13 (1981), no. 3, 603-618. (N. U. Prabhu) 82h:60186 60K25 (90B22)

agnoli, Daniela (with Ambrogio, Elisabetta) An elementary example of a Moishezon manifold that is not algebraic. (Italian. English summary) Rend. Sem. Mat. Univ. Politec. Torino 37 (1979), no. 1, 57-61. (A. Acppli) 82e:14047 14J30 (32C10, 32J99) (with Ambrogio, Elisabetta) A relation between some projective invariants of an algebraic surface in characteristic p. (Italian. English summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 3, 495–499. (D. Gallarati) 82k:14036 14J25 nan, P. (with Haavisto, J.) Relativistic quantum dynamical group for hadrons. J. Math.

Phys. 22 (1981), no. 2, 403-411. (Fritz Schwarz) 82k:81040 81D25 (81D99)

man, Steven M. The formula of Faà di Bruno. Amer. Math. Monthly 87 (1980), no. 10, 805-809. (J. S. Lipiński) 82d:26003 26A06 (05A10) (with Brown, James Ward) Inverse relations for certain Sheffer sequences. SIAM J.

Math. Anal. 12 (1981), no. 2, 186-195. (R. N. Jain) 82b:33015 33A65 (33A50)
man, V. M. A numerical solution of nth-order differential equations using cubic splines.
(Russian) Ukrain. Mat. Ž. 32 (1980), no. 5, 686-693. (Gheorghe Micula) 82b:65061

manenko, O. Ju. (with Feščenko, T. S.) Estimation of the growth of solutions of a class of functional-differential equations with several deviations of the argument. (Russian) Theoretical and applied questions of differential equations and algebra (Russian), pp. 216-218, 270, "Naukova Dumka", Kiev, 1978. (Snežana Hristova) 82b:34101 34K25

(with Maistrenko, Ju. L.; Šarkovs'kii, O. M.) The qualitative behavior of solutions of quasilinear differential-difference equations. (Russian). An investigation of differential addifferential-difference equations (Russian), pp. 38–50, 187, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1980. (V. G. Angelov) 82g:34103 34K15 (34K20)

(with Feščenko, T. S.) The asymptotic behavior of solutions of functional-differential equations of neutral type in the neighborhood of a critical point. (Russian) An investigation of differential and differential-difference equations (Russian), pp. 107-121, 189, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (R. R. Ahmerov) 82m:34068 34K05 (34A08)

(with Sarkovs'kii, O. M.) Qualitative investigation of a class of differential-difference equations. (Russian) Qualitative investigations of functional-differential equations Russian), pp. 129-144, 186, "Naukova Dumka", Kiev, 1980. (P. Talpalaru) 82f:34108 34K25 (58A17)

menko, R. V. (with Nižnik, L. P.) The 12th Mathematical School. (Russian) Methods of functional analysis in problems of mathematical physics (Russian), pp. 5-7, 179, Akad. nuk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Editors) 82a:00008

nami, Francesco (with Bini, Dario; Lotti, Grazia) Approximate solutions for the bilinear form computational problem. SIAM J. Comput. 9 (1980), no. 4, 692–697. (Authors' summary) 82a:68065 68C25 (65F30)

Romankevič, A. M. (with Karačun, L. F.) On the calculation of the characteristics of a source of test sequences in a probabilistic system of technical diagnostics. (Russian. English summary) US i M-Upravljajuščie Sistemy i Mašiny 1981, no. 3(53), 33-35, i, ii. (Authors' summary) 82h:68132 68J05 (65U05)

Romanko, V. K. Conjugation problems for some partial differential equations. (Russian) Dokl. Akad. Nauk SSSR 244 (1979), no. 4, 831-835. (L. A. Ivanov) 82d:35035a

35G15 (35P05)

The conjugation problem for operator-differential equations. (Russian) Differencial ne Uravnenija 16 (1980), no. 1, 124-134, 189. (L. A. Ivanov) 82d:35035b

nano, Antonio A macroscopic theory of thermoelastic dielectrics. (Italian summary) Riv. Mat. Univ. Parma (4) 5 (1979), part 1, 27-41 (1980). (E. S. Suhubi) 82a:73057 73R05

(with Iannece, Donatella; Starita, Giulio) An approach to thermodynamics of materials with fading memory. Arch. Rational Mech. Anal. 75 (1980/81), no. 4, 373–385.

(J. Dunwoody) 824:73006 73B30 (80A99)

o, Giovanni (with Romano, Manfredi) On the solution of structural problems in the presence of unilateral constitutive relations, (Italian, English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 104-113 (1980). (Authors' summary) 82j:73061 73K99

nano, Manfredi (with Romano, Giovanni) On the solution of structural problems in the presence of unilateral constitutive relations. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 104-113 (1980). (Authors' summary) 82j:73061 73K99

nanov, A. S. (with Pavlov, K. B.) On the change in the region of localization of perturbations in nonlinear transport processes. Izv. Akad. Nauk SSSR Meh. Židk. Gaza 1980, no. 6, 57-62 (Russian); translated as Fluid Dynamics 15 (1980), no. 6, 839-843 (1981). (C. V. Pao) 82m:35078 35K55 (76A05, 82A70)

(with Pavlov, K. B.; Fedotov, I. A.) Propagation of perturbations in nonlinear transport processes described by an equation of turbulent filtration. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1981, no. 4, 83-88, 175. (Authors' summary) 82k:82059 82A70 (76S05)

nov, Ju. I. (with Dmitriev, O. M.) Analysis of parametrically random systems of structural mechanics on the basis of noncanonical expansions of structural-functional parameters. (Russian) Moskov. Inst. Inž. Železnodorož. Transporta Trudy No. 630 Čislen. Metody v Stroit. Meh. (1979), 22-33, 132. (Authors' summary) 82g:93057 (73L05)

nanov, V. A. Limits of differentiable measures in Hilbert space. (Russian) *Ukrain. Mat.* Ž. 33 (1981), no. 2, 215–219. (H. Triebel) 82e:46061 46G12 (28C15, 58C35)

w, V. G. *Обратные задачи для дифференциальных уравнений. (Russian) [Inverse problems for differential equations] Обратная кинематическая задача сейсмики. [Inverse kinematic problem of seismology]. Novosibirsk. Gos. Univ.,

Censumas. Interest attentiate problem of seasonogy; Processions. One. One., Noosibirsk. 1978. 89 pp. (Gottfried Anger) 82g-35123 35R30 (86A15) (with Lavrent'ev, M. M.; Šišatskii, S. P.) ★Некоррежтные задачи математической физики и анализа. (Russian) [Ill-posed problems of mathematical physics and analysis] "Nauka", Moscow, 1980. 287 pp. (I. K. Marck) 82g-65003 65-02 (00A69, 35R25, 53C65, 65J05, 86A20)

Inverse problems and energy inequalities. (Russian) Partial differential equations Inverse problems and energy inequalities. (Russian) Partial alignmental equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 148–153, 253, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (A. S. Alekseev) 82g-35122 35R30 (86A15) (with Belinskii, S. P.) On the problem of determining the coefficients of a r-hyperbolic system. (Russian) Mat. Zametki 28 (1980), no. 4, 525–532, 635. (Alexander Proc. 2018) (201

Doktor) 82e:35080

35R30 (35L50) Doktor) 82e:35080 35R30 (35L30) manor, V. N. (with Fateev, V. A.; Švarc, A. S.) Magnetic monopoles in unified theories of electromagnetic, weak, and strong interactions. Jademaja Fiz. 32 (1980), no. 4, 1138-1141 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 4, 587-589 (1981). (Authors' summary) 82h:81141 81G20 (53C05) (with Gaïduk, A. I.; Švarc, A. S.) Supergravity and field space democracy. Comm.

Math. Phys. 79 (1981), no. 4, 507-528. (W. Cox) 82j:81049 81E99 (81G20, 83E50)

w, V. S. Approximation of weakly Čebyšev systems by Čebyšev systems. (Russian English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 2, 117-119, 127. (A. B. Pevnyi) 82f:41033 41A50

novska, D. A. See Romanowska, D. A. novskii, A. V. Finite groups with a Frobenius section. (Russian) Sixth All-Union Symposium on Group Theory (Cerkassy, 1978) (Russian), pp. 200-208, 224, "Naukova Dumka", Kiev, 1980. (J. Wiegold) 82j:20050 20D20 Finite groups with large Sylow subgroups. (Russian) Dokl. Akad. Nauk SSSR 259 (1981), no. 3, 540-542. (Editors) 82i:20037 20D20

(1981), no. 3, 540-542. (Editors) 82i:20037 20D20

Simple groups with large Sylow subgroups. (Russian) Mat. Sb. (N.S.) 115(157) (1981), no. 3, 426-444, 496. (K. A. Hirsch) 82j:20037 20D05 (20E32)

nanovskii, N. S. The embedding problem for abelian-by-nilpotent groups. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 2, 170–174, 239. (J. Wiegold) 82c:20069 20F10

wskii, V. I. See Anniversary: Birth of Romanovskii, V. I., 82f:01158

antonov-Romanovskíi, V. V. See Antonov-Romanovskii, V. V. Romanovskii, Vsevolod Ivanovič See Romanovskii, V. I.

ricz, Zbigniew On the condition of controllability for linear nonstationary systems. (Polish. English summary) Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. 21 (1980), Algebra, Dydakt, Mat., Geom., Zastos, Mat., 147-154, (J. Kučera) 82g:49036

wska, Anna B. Free bisemilattices with one distributive law. Demonstratio Math. 13 (1980), no. 2, 565-572. (Joel Berman) 82d:06011 06D99 (06A99);

Subdirectly irreducible *-distributive bisemilattices. I. Demonstratio Math. 13 (1980), no. 3, 767-785. (Joel Berman) 82d:06012 06D99 (06A99)

(with Traczyk, Tadeusz) On commutative BCK-algebras. Math. Japon. 25 (1980), no. 5, 567-583. (Jerzy Kotas) 82g:06020 06D99 (03G25)

Subdirectly irreducible pseudocomplemented De Morgan algebras. Algebra

Universalis 12 (1981), no. 1, 70-75. (R. Beazer) 82d:06009 06D15 (06D30)

(with Smith, Jonathan D. H.) Bisemilattices of subsemilattices. J. Algebra 70 (1981), no. 1, 78-88. (D. R. Brown) 82h:06004

See also Wille, Rudolf, 82m:01085

nanowska, D. A. (with Petrova, S. S.) On the history of the discovery of Taylor series.
(Russian) Istor.-Mat. Issled. No. 25 (1980), 10-24, 378. (E. Stipanic) 82f:01033 01A45 (01A50, 26-03, 40-03)

wski, M. *Random errors in observations and the influence of modulation on their distribution. Verlag Konrad Wittwer, Stuttgart, 1979. x+151 pp. ISBN 3-87919-323-1 (R. J. Buehler) 82a:62004 62-02 (62E10)

crispim Romão, J. See Crispim Romão, J.

Romašev. Ju. A. Determination of stress factors in linear and couple-stress elasticity theory. (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 154-165, 313, Leningrad. Univ., Leningrad, 1980. (Z. Mróz) 82c:73073 73M05

naskevič, L. P. The first boundary value problem in classes of unbounded solutions for equations with nonnegative characteristic form. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1981, no. 4, 32-36, 85. (Author's summary) 82m:35059

Rome, Michel (with Beauzamy, Bernard) Représentation fonctionnelle des séries convergentes utilisant les itérés d'un point par une contraction de classe C1. (English summary) [Functional representation of convergent series using iterates of a point by a class C1. contraction] C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 22, 963-965. (Authors' summary) 82i:47010 47A45 (47A65)

nskii, V. P. The method of spline-collocation for the Poisson (high-accuracy scheme). (Russian) Vyčisl. Sistemy No. 81 Metody Splain-Funkcii (1979), 81-86, 104. (Gheorghe

65N35 (41A15, 65D07) Micula) 82e:65118

ner, E. J. (with Gollub, J. P.; Socolar, J. E.) Trajectory divergence for coupled relaxation oscillators: measurements and models. J. Statist. Phys. 23 (1980), no. 3, 321-333. (Jean-Pierre Eckmann) 82d:58043 58F13 (34C11)

Römer, H. Atiyah-Singer index theorem and quantum field theory. Differential geometric ntical physics (Proc. Internat. Conf., Tech. Univ. Clausthal, Clausthal-Zellerfeld, 1978), pp. 167–211, Lecture Notes in Phys., 139, Springer, Berlin, 1981. (S. M. Christensen) 82g:81063 81E10 (58E20, 58G10)
 A universality property of axial anomalies. Phys. Lett. B 101 (1981), no. 1-2, 55–60.

(S. M. Christensen) 82g:81086 81E99 (58A14, 83E50)

nero, Alfonso (with Barros, Manuel) Sur un invariant spectral pour les sous-variétés complexes de l'espace projectif complexe. (English summary) C. R. Acad. Sci. Paris Sér. Math. 292 (1981), no. 10, 523-525. (Domenico Perrone) 82j:53113
 Romero Ros, Emilio See Feyel, Denis; et al., 82m:30001 53C65 (53C40)

misch, W. An approximation method in stochastic optimal control. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 169-178, Lecture Notes in Control and Information Sci., 22, Springer, Berlin, 1980. (Jean-Michel Bismut) 82e:93135

no, John G. Spectral synthesis in Banach modules. I. Tamkang J. Math. 11 (1980),

no. 1, 91-109. (Y. Domar) 82g:46118 46M99 (43A45, 46J25)
mov, B. A. Maximal subalgebras of algebras of partial multivalued logic functions Kibernetika (Kiev) 1980, no. 1, ii, 28-36, 150 (Russian); translated as Cybernetics 16 (1980), no. 1, 31-41. (R. S. Grigolia) 82c:03078 03G20 (03B50)

ánchez-Ron, J. M. See Sánchez-Ron, J. M.

nan, Mark A. (with Smith, Stephen D.) 2-local geometries for some sporadic groups. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 283–289, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (Authors' introduction) 82c:20033 20D05 (20B05, 20C20)

Coverings and automorphisms of chamber systems. Eurono. 3, 259-269. (Francis Buckenhout) 82e:51009 51A40 (5 an J. Combin. 1 (1980), 51A40 (51H05, 57M99)

A note on the 3D4(q) generalized hexagons. J. Combin. Theory Ser. A 29 (1980),

no. 2, 249–250. (Francis Buekenhout) 82g-51015 51E20 (05B25)
Semiregular graph automorphisms and generalized quadrangles. J. Combin. Theory
Ser. A 29 (1980), no. 3, 319–328. (Joseph A. Thas) 82k:05047 05B30 (51B25)

A combinatorial characterization of the dual Moufang hexagons. Geom. Dedicata 11 (1981), no. 1, 61-67. (Francis Buekenhout) 82i:51016 51B99 (05B25)

On the second homotopy group of certain simplicial complexes and som combinatorial applications. Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 126, 225-233. 57M20 (05C10) (S. C. Althoen) 82f:57003

ey, Kathleen J. (with Shaw, Gordon L.) Analytic solution of a neural network theory based on an Ising spin system analogy. Phys. Lett. A 74 (1979), no. 1-2, 146-150. (E. Pessa) 82b;92022 92A09 (82A67) 92A09 (82A67)

(with Shaw, Gordon L.) Analytic study of assemblies of neurons in memory storage. Math. Biosci. 51 (1980), no. 1-2, 25-41. (Authors' summary) 82d:92009

On multiple points of smooth immersions. Comment. Math. Helv. 55 (1980), no. 4, 521-527. (R. E. Stong) 82d:57018 57R42 (58C27)

(with Piene, Ragni) A geometric approach to the arithmetic genus of a projective manifold of dimension three. Topology 20 (1981), no. 2, 179-190. (K. Lamotke)

82e:14027 14F12 (57R20, 58A10)
nkin, A. L. Distribution of zeros of quasipolynomials of several variables. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 3, 91-92. (Wieslaw Pleśniak) 82h:32003 32A15 (32C25)

Quasipolynomial zero sets. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 5, 165-169, 192.

(A. I. Helfe) 82k:32011 32A15

(As I. Helfe) 82k:32011 32A15

(As I. Helfe) 82k:32011 32A15 Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 10, 83-85. (A. I. Heific) 82c:32002 32A15

(with Agranovič, P. Z.) Functions of completely regular growth of several variables. (Russian) Ann. Polon. Math. 39 (1981), 239-254. (J. Siciak) 82k:32009 32A15 (30D15)

(30D15)
mse, Christian On permutation groups of prime power order. Math. Z. 173 (1980), no. 3, 211-215. (Peter Rowlinson) 82d:20007 20B05 (20D15)
mto, V. A. (with Samoilenko, A. M.) A numerical-analytic method for solving boundary value problems for ordinary differential equations. (Russian) Ukrain. Mat. Z. 33 (1981), no. 4, 467-475. (A. Coțiu) 82k:65043 65L10 (34A45)

nveaux, A. (with Decarreau, A.) Classification of the degenerate ellipsoidal coordinate systems where the separation of the Helmholtz equation is possible. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 345-347,

Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81604) 35C05
Rónyai, L. (with Kiss, Emil W.) On rings having a special type of subring lattice. Acta
Math. Acad. Sci. Hungar. 37 (1981), no. 1-3, 223-234. (I. Gy. Maurer) 82h:16027

(with Demetrovics, János; Hannák, L.) Prime-element algebras with transitive automorphism groups. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 1, 19–22. (Editors) 82b:08003 08A35 (20B25)

Rooij, Alfred Divisors of global weights. Bull. Inst. Math. Acad. Sinica 7 (1979), no. 4, 431-441. (C. B. Thomas) 82a:57035 57S15

mey, P. G. On the 9, and 9c, transformations. Canad. J. Math. 32 (1980), no. 5, 1021-1044. (Philip Heywood) 82b:44004 44A15 On the boundedness and range of the extended Hankel transformation. Canad.

Math. Bull. 23 (1980), no. 3, 321-325. (A. Schwartz) 82d:44004 ney, R. H. (with Shapiro, Eliezer Y.; Fredricks, D. A.; Barmish, B. Ross) Pole

placement with output feedback. J. Guidance Control 4 (1981), no. 4, 441-442. (From the introduction) 82i:93035 93B55

(with Dolan, L.) Nonlocal currents as Noether currents. Phys. Rev. D (3) 22 (1980), no. 8, 2018-2021. (Authors' summary) 82h:81086 81E99
ss, Cornelis (with Haemers, Willem) An inequality for generalized hexagons. Geom.

Dedicata 10 (1981), no. 1-4, 219-222. (Joseph A. Thas) 82g:51016 51E30 (05B30) Roos, Hans-Görg (with Tobiska, Lutz) Die asymptotische Lösung spezieller Wärmeleitungsprobleme in Strömungen. Wiss. Z. Tech. Hochsch. Magdeburg 23 (1979).

no. 6, 575-577. (Authors' summary) 82k:35018 35C20 (80A20) Roos, Jan-Erik (with Löfwall, Clas) Cohomologie des algèbres de Lie graduées et séries de

Poincaré-Betti non rationnelles. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 16, A733-A736. (Clarence Wilkerson) 824:17003 17B56 (13H99, 55P35) os, Maria (with Sikkema, P. C.; van der Meer, P. J. C.) Determination of the exact

degree of local approximation by some linear positive operators involving the modulus of continuity of the pth derivative. Nederl. Akad. Wetensch. Indag. Math. 43 (1981), no. 1,

117-128. (A. K. Varma) 82g:41024 41A36

At, R. R. (with Ragsdell, K. M.) On the relationship between a continuous update method of multipliers and the generalized reduced gradient method. Internat. J. Numer. Methods Engrg. 15 (1980), no. 12, 1735-1745. (Authors' summary) 824:90112

Root, W. L. Generic models for stochastic systems. Analysis and optimisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 165-180, Academic Press, London, 1980. (Martin Morf) 82e:93096 93E03

an Rootselaar, Bob See Bolzano, Bernard, 82e:01118

Roper, James E. (with Hendry, Herbert E.) Anything confirms anything? Synthese 45 (1980), no. 2, 217–232. (Philip L. Quinn) 82b:03056 03B60 (03A05)

Roquette, Peter Antrittsrede. Jbuch. Heidelberger Akad. Wiss. 1978, 47-50 (1979)

(Editors) 82b:01059 01A70 (with Jarden, Moshe) The Nullstellensatz over p-adically closed fields. J. Math. Soc. 14G20 (03C60, Japan 32 (1980), no. 3, 425-460. (G. A. Efroymson) 82g:14027

Rorty, Richard From epistemology to hermeneutics. The logic and epistemology of scientific change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn. 30 (1978), no. 2-4, 11-30 (1979). (See 82:e00024) 00A25 (03A05)
romero Ros, Emilio See Romero Ros, Emilio Rosa, Alexander (with Schellenberg, P. J.; Vanstone, S. A.) Generalized starter and adder

constructions for Howell designs. Proceedings of the Tenth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1979), pp. 833–842, Congress. Numer., XXIII–XXIV, Utilitas Math., Winnipeg, Man., 1979. (R. C. Mullin) 82e:05037 05B15 (05B30)

(with Huang, Charlotte; Kotzig, Anton) On a variation of the Oberwolfach problem.

Discrete Math. 27 (1979), no. 3, 261-277. (Nicholas Wormald) 82h:05104 05C73

Room squares generalized. Combinatorics 79 (Proc. Colloq., Univ. Montréal,

Montreal, Que., 1979), Part I. Ann. Discrete Math. 8 (1980), 43-57. (W. H. Mills) 12h:05036 05B15 (05B30)

(with Bermond, J.-C.; Huang, Charlotte; Sotteau, D.) Decomposition of complete graphs into isomorphic subgraphs with five vertices. Ars Combin. 10 (1980), 211–254. (D. K. Ray-Chaudhuri) 82:e05079 05C99 (05B05)

(with Phelps, Kevin T.) Steiner triple systems with rotational automorphisms.

Discrete Math. 33 (1981), no. 1, 57-66. (Luc Teirlinck) 82a:05018 05B05 (51E10)

(with Mathon, Rudolf A.; Phelps, Kevin T.) A class of Steiner triple systems of order 21 and associated Kirkman systems. Math. Comp. 37 (1981), no. 155, 209-222. (Charles J. Colbourn) 82a:05022 05B07 (51E10)

la Rosa, B. Concrete radicals in general modules. Publ. Math. Debrecen 27 (1980),

no. 1-2, 7-12. (R. Weigandt) 82g:16011 16A21
lart Rosa, S. See Goulart Rosa, S., Jr.
sales, M. A. (with Piña, E.) A hydrodynamic formalism for Brownian systems. (Spanish summary) Rev. Mexicana Fis. 27 (1980/81), no. 2, 169–178. (Authors' sun \$2282996 82A70

asky, Andrew Lim sup behavior of sums of geometrically weighted i.i.d. random variables. Stochastic Process. Appl. 11 (1981), no. 3, 297-300. (W. E. Pruitt) 82h:66055

ato, E. (with Vigilante, M.; De Cesare, N.; Perillo, E.; Spadaccini, G.) Weighted fit by orthonormal polynomials. Comput. Phys. Comm. 22 (1981), no. 2-3, 311-315. (Authors' introduction) 82kc65031 65F25

berg, Zvi A note on the ergodicity of Markov chains. J. Appl. Probab. 18 (1981), no. 1, 112–121. (R. L. Tweedie) 82c:60124 60J10

sea, Radu (with Arca, Giuseppe) Variétés parakähleriennes possédant la propriété de Poisson. (English summary) Riv. Mat. Univ. Parma (4) 6 (1980), 281-286 (1981). (Lieven Vanhecke) 82i:53038 53B30

(with Familiari-Calapso, Maria Teresa) On para-Kählerian manifolds with nformal self-orthogonal connection. Tensor (N.S.) 34 (1980), no. 3, 235-241. (A.

Crumeyrolle) 82e:53054 53C15

CR-hypersurfaces à champ normal covariant décomposable incluses dans une variété

pseudo-riemannienne neutre. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 4, 287–290. (Author's summary) 82b-53073 53C40 (53C15) (with Arca, Giuseppe) Repères de Sachs à covecteurs isotropes réels relativement conformes invariants. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981),

no. 21, 949–952. (Authors' summary) 82g:53069 53C50 (83C99)
On the codimension n minimal surfaces carrying a covariant decomposable tangential vector field in a Riemannian or pseudo-Rieman nian space form. Libertas Math. 1 (1981), 141-149. (Bang-yen Chen) 82h:53011 53A10

Sčin, N. V. Unsafe stability boundaries of the Lorenz model. Prikl. Mat. Meh. 42 (1978), no. 5, 950-952 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 5, 1038-1041 (1979). (Joseph Ford) 82g:58059 58F13 (76E20, 86A10)

ciszewski, K. Topological classification of symmetry defects and solitons in thin layers of liquid crystals. Acta Phys. Polon. A 57 (1980), no. 6, 927-939. (V. Z. Enol'skii) 82A60 (55P99)

rulet, Marcel (with Neagu, Ana Maria) Fonctions quasi monogènes sur des algèbres à radical. (Romanian summary) Bul. Inst. Politehn. Bucureşti Ser. Electrotehn. 42 (1980), no. 1, 3–14. (Wazir Hasan Abdi) 82k:30054 30G35 (30A05)

hin, L. D. A generalized form of Caplygin-Voronec-type equation nmary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 5, 23-26. (From the text) 93C20 (53B21, 70F25)

e, Alan Many-valued logics. Modern logic—a survey, pp. 113-129, Synthese Library, 149, Reidel, Dordrecht, 1981. (See 82f:03002) 03B50

Extensions de quelques théorèmes de McNaughton. (English summary) [Extensions of some theorems of McNaughton] C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 23, 979-981. (Editors) 82k:03026 03B50

se, Bruce I. (with Woodrow, Robert E.) Ultrahomogeneous structures. Z. Math. Logik Grundlag, Math. 27 (1981), no. 1, 23-30. (A. T. Nurtazin) 82c:03044 03C50 (03C10) se, C. W. Mathematical modelling of the transport and loss of leachable plant nutrients in field soils. Renewable resource manangement (Proc. Workshop, Univ. Canterbury, Christchurch, 1980), pp. 225-236, Lecture Notes in Biomath., 40, Springer, Berlin, 1981. (See 82k:90001) 90A30

(see data-sour)

No. 1. Saff, E. B.) A comment on the convexity condition

Indian J. Math. 18 (1976), no. 3, 159–164. (V. Lakshmikantham) 82d:52003

S2A1 52A10

e, Harvey A. (with Bender, Carl M.; Cooper, Fred; Guralnik, G. S.; Mjolsness, Eric; Sharp, David H.) A novel approach to the solution of boundary-layer problems. Adv. in Appl. Math. 1 (1980), no. 1, 22-36. (John P. Coleman) 824:65050 65L10

John S. Optimality of (s, S)-policies in statistical inventory control. J. Inform.
 Optim. Sci. 1 (1980), no. 2, 121–132. (Author's summary)
 82d:99083
 90B05

 Frattini normal subgroups of finite groups. J. Reine Angew. Math.
 316 (1980),

 83–98. (Author's review (Zbl 422:20019))
 82j:20048
 20D15

e, Julian On zeta functions of matrix algebras and distributions. Duke Math. J. 47 (1980), no. 4, 943-953. (Freydoon Shahidi) 82g:12018 12B37 (22E50)

se, Ollie J. (with Adler, Carl G.) Closed form bound-state perturbation theory. Internat. J. Math. Math. Sci. 3 (1980), no. 2, 351-368. (Authors' summary) 82a:81013 sebrugh, Robert On defining objects by recursion in a topos. J. Pure Appl. Algebra 20 (1981), no. 3, 325-335. (Ioan Tofan) 82e:18006 18B25 (18A15)

n, A. S. (with Brown, S. N.; Maslowe, S. A.) The evolution of a quasisteady critical layer in a stratified viscous shear layer. Proc. Roy. Soc. London Ser. A 375 (1981), no. 1761, 271-293. (Authors' summary) 821:76014 76E15 (86A05, 86A35)

en, Barry K. (with Ehrig, Hartmut) Parallelism and concurrency of graph manipulations. *Theoret. Comput. Sci.* 11 (1980), no. 3, 247-275. (Lee Rudolph and M. C. Golumbic) 82g:68058 68E10 (68F05)

(with Holley, L. Howard) Qualified data flow problems. IEEE Trans. Software Engrg. 7 (1981), no. 1, 60-78. (From the summary) 82bc68014 68B15

en, Edward See Science and history, 82e:01003 and Bibliography: Rosen, Edward, (See

ten, Gerald A remarkable operator version of the Navier-Stokes equation. Lett. Nuovo Cimento (2) 27 (1980), no. 9, 257-260. (Wolf von Wahl) 82g:35093 35Q10 (58D25,

Propagation theory for tactic bacteria: addendum. Math. Biosci. 52 (1980), no. 3-4, 303-304. (Editors) 82x-92015 92A09 (92A15)

Energy-particle-number inequality in nonlinear complex-scalar field theory. J. Math. Phys. 22 (1981), no. 3, 489-490. (Author's summary) 82f-81065 81E99

Incompressible fluid turbulence at large Reynolds numbers: theoretical basis for the t-1 decay law and the form of the longitudinal correlation function. J. Math. Phys. 22 (1981), no. 8, 1819-1823. (Author's summary) 82j:76051 76F05

Inequalities in isotropic homogeneous turbulence theory. J. Math. Phys. 22 (1981),

no. 12, 2983–2985. (Author's summary) 82m:76032 76F05
Asymptotic form of the longitudinal correlation function for isotropic homogeneous turbulence. Phys. Fluids 24 (1981), no. 3, 558–559. (Author's summary) 82a:76040 76F05 (35Q10, 58F13)

en, Harvey S. (with Small, Kenneth A.) Applied welfare economics with discrete choice models. Econometrica 49 (1981), no. 1, 105-130. (Authors' summary) 82æ90039

sen, Jay S. (with Ellis, Richard S.) Laplace's method for Gaussian integrals with an application to statistical mechanics. *Ann. Probab.* 10 (1982), no. 1, 47-66. (Hiroshi Sato) 60B12 (82A05)

n, Kenneth H. A congruence from Dedekind sums. Norske Vid. Selsk. Skr

(Trondheim) 1979, no. 3, 5 pp. (Bruce C. Berndt) 82:10004 10A10 (10A15)

Least positive residues and the quadratic character of two. Canad. Math. Bull. 23 (1980), no. 3, 355–358. (L. Bruce Richmond) 82h:10005 10A15

Leseries for genera at s=1. Mathematika 27 (1980), no. 1, 10-16. (M. A. Kenku): 10044 10H10 (12A25, 12A45, 12A70)

Rosen, Lon (with Cooper, Alan; Feldman, Joel) Legendre transforms and r-particle irreducibility in quantum field theory: the formalism for r=1,2. Ann. Physics 137 (1981), no. 1, 146–209. (John L. Challifour) 82m:81047 81E10 (58D20)

n, Michael (with Kraft, James) Eisenstein reciprocity and nth-power residues. Amer. 10A15 Math. Monthly 88 (1981), no. 4, 269-270. (C. Small) 82g:10008 Abel's theorem on the lemniscate. Amer. Math. Monthly 88 (1981), no. 6, 387-395.

(R. A. Askey) 82g:14041 14K07 (01A55, 33A25) (with Cornell, Gary) Group-theoretic constraints on the structure of the class group.

J. Number Theory 13 (1981), no. 1, 1-11. (Colin D. Walter) 82e:12005 12A50 An elementary proof of the local Kronecker-Weber theorem. Trans. Amer. Math.

Soc. 265 (1981), no. 2, 599-605. (Helmut Koch) 82f:12023 12B15 en, Nathan (with Falik, Dov) Particle field in bimetric general relativity. 239 (1980), no. 3, part 1, 1024—1031. (Authors' summary) 82;83048

The collapsed state of a star. Astrophys. J. 239 (1980), no. 3, part 1, 1032—1035.

(Author's summary) 82;83049

83D05 (85A15)

(with Falik, Dov) A charged particle in bimetric general relativity.

Gravitation 13 (1981), no. 6, 599–604. (Authors' summary) 82:83059

83D05 (53B40,

en, Robert Dynamical similarity and the theory of biological transformations. Bull.

Math. Biol. 40 (1978), no. 5, 549-579. (I. Stewart) 82f:92008 92A05 (58F10, 58F40) The role of time in mathematical models. Proceedings of the Second Interne Conference on Mathematical Modelling (St. Louis, Mo., 1979), Vol. I, II, pp. 13-27, Univ. Missouri-Rolla, Rolla, Mo., 1980. (Author's summary) 82j:92011 92A05 (58F14.

Bifurcations and biological observables. Czechoslovak Math. J. 31(106) (1981), no. 2,

289-300. (C. P. Bruter) 82j:92012 92A05 (58F14)

Rosenbaum, Kurt On the structure of p-adic closure of cyclic extensions of local fields. Indian J. Math. 20 (1978), no. 3, 255-264. (Ernst-Wilhelm Zink) 82k:12017 (12B25)

Rosenbaum, M. (with Luehr, C. P.) Poincaré group theory of gravitation in the fiber-bundle picture. Proceedings of the UNAM Workshop on Gauge Theories (Univ. Nac. Autónoma México, Mexico City, 1979). Hadronic J. 4 (1980/81), no. 1, 153-163. (Authors' summary) 82f:83092 83E99 (53C05, 53C80)

See also Proceedings: UNAM Workshop on Gauge Theories, 82d:81005 erg, Alex (with Kleinstein, Jerrold L.) Witt rings of higher level. Bull. Inst. Math.

Acad. Sinica 8 (1980), no. 2-3, part 2, 353-363. (Manfred Knebusch) 82i:10025 10C10 (10C05) (with Kleinstein, Jerrold L.) Succinct and representational Witt rings. Pacific J.

Math. 86 (1980), no. 1, 99-137. (E. Hornix) 82i:10024 10C05 (16A48)

senberg, Alexandre Homomorphismes "abstraits" de groupes algébriques et de groupes de Lie. (English summary) C. R. Acad. Sci. Paris Sér. 1 Math. 292 (1981), no. 4, 247-249. (Author's summary) 82b:20062 20G15 (22E10)

senberg, Arnold L. (with Miller, Raymond E.) On computing distances between leaves in a complete tree. Internat. J. Comput. Math. 8 (1980), no. 4, 289–301. (Authors' summary) 82a:68126 68E10 (68C25)

(with Hong, Jia Wei; Mehlhorn, Kurt) Cost tradeoffs in graph embeddings, with applications (preliminary version). Automata, languages and programming (Akko, 1981), pp. 41-55, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (See 82:68003) 68E10

Issues in the study of graph embeddings. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 150–176, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Author's summary) 82h:68094 68E10 (05C10)

(with Snyder, Lawrence) Time- and space-optimality in B trees. ACM Trans. stabase Systems 6 (1981), no. 1, 174-193. (Authors' summary) 82m:68048 68B15 (68E10)

On uniformly inserting one data structure into another. Comm. ACM 24 (1981),

no. 2, 88-90. (Author's summary) 82i:68016 68B15
enberg, Eric Globally convergent algorithms for convex programs Res. 6 (1981), no. 3, 437-444. (Author's summary) 82i:90089 90C25

On solving a primal geometric program by partial dual optimization. Math. Programming 21 (1981), no. 3, 319-330. (Author's summary) 82j:90067

senberg, Gary A. (with Kyner, Walter T.) Parameter estimation techniques used in the determination of the bulk flow of brain interstitial fluid. Mathematical aspects of physiology (Proc. Summer Sem., Univ. Utah, Salt Lake City, Utah, 1980), pp. 385–388, Lectures in Appl. Math., 19, Amer. Math. Soc., Providence, R.I., 1981. (From the text) 82j:92026 92A09 (76Z99) Rosenberg, Ivo Structural rigidity. I. Foundations and rigidity criteria. Combinatorics 79 (Proc. Colloq., Univ. Montreal, Montreal, Que., 1979), Part I. Ann. Discrete Math. 8 (1980), 143–161. (Ethan D. Bolker) 82e:05012 05A10 (05A15, 51M99, 70C99, 90C05)

Linear decompositions of positive real function of binary arguments. Utilitas Math. 17 (1980), 17–34. (Jean-Marie Laborde) 82e:06032 06F20 (94C10)

(with Frankl, Péter) A finite set intersection theorem. Europe an J. Combin. 2 (1981), no. 2, 127-129. (J. E. Graver) 82j:05002 05A05 (04A20, 05B30)

enberg, Jay F. Coupling, retheoretization, and the correspondence principle. Synthese 45 (1980), no. 3, 351-385. (B. van Rootselaar) 82e:00029 00A25 (00A69, 03A05)

enberg, Jonathan Appendix to: "Crossed products of UHF algebras by product type actions" [Duke Math. J. 46 (1979), no. 1, 1–23; MR 82a:46063 above] by O. Bratteli. Duke Math. J. 46 (1979), no. 1, 25–26. (\$. Strătilă) 82a:46064 46L05

(with Schochet, Claude) The classification of extensions of C*-algebras. Bull. Amer Math. Soc. (N.S.) 4 (1981), no. 1, 105-110. (Vern Paulsen) 82a:46066 46L05 (18G99,

erg, Leon rd Infrared radiation in electronom scattering. Phys. Rev. A (3) 21 (1980), no. 6, 1939-1949. (From the summary) 82d:81141 81F20

senberg, Shalom On the modal version of the ontological argument. Logique et Anal. (N.S.) 24 (1981), no. 93, 129-133. (Editors) 82m:03020 03B45 senberger, Gerhard Über Tschebyscheff-Polynome, Nicht-Kongruenzuntergruppen der

Modulgruppe und Fibonacci-Zahlen. Math. Ann. 246 (1979/80), no. 3, 193-203. (A. M. Macbeath) 82a:10026 10D07 (20H10)

Eine Bemerkung zu einer Arbeit von T. Jørgensen. Math. Z. 165 (1979), no. 3, 261–266. (Marvin I. Knopp) 82c:30071 30F35 (20H10, 22E40)

(with Levin, Frank) Generalized power laws. Burnside groups (Proc. Workshop, Univ. Bielefeld, Bielefeld, 1977), pp. 246-248, Lecture Notes in Math., 806, Springer, Berlin, 1980. (Charles C. Edmunds) 82c:20055 20E10

(with Abu Osman, M. T.) Embedding property of surface groups. Bull. Malaysi Math. Soc. (2) 3 (1980), no. 1, 21-27. (A. M. Macbeath) 82a:20054 20H10 (10D0 20H10 (10D07,

(with Kalia, R. N.) Application of two forms of generalized Taylor's theorem to Fox's H-function. Mat. Vesnik 4(17)(32) (1980), no. 3, 285-293. (J. L. Fields) 82j:33011

Berichtigung zu: "Gleichungen in freien Produkten mit Amalgam" [Math. Z. 173 (1980), no. ?, 1-11; MR 81k:20038]. Math. Z. 178 (1981), no. 4, 579. (Editors) 20E06

enblat, S. (with Cohen, Donald S.) Flickering and thermal flicker waves on catalytic wires and gauzes and in chemical reactors. SIAM J. Appl. Math. 39 (1980), no. 3, 463-474. (Frederick A. Howes) 82a:80001 80A20 (80A30)

(with Szeto, R. K.-H.) Multiple solutions of nonlinear bou d. Appl. Math. 63 (1980), no. 2, 99-117. (A. Haimovici) 82a:34016 34B15 (65L10) (with Homsy, G. M.; Davis, Stephen H.) Eigenvalues of the Rayleigh-Bénard and Stud. Appl. Math. 63 (1980), no. 2, 99-117. (A. Haimovici) 82a:34016 Marangoni problems. Phys. Fluids 24 (1981), no. 11, 2115-2117. (W. O. Criminale, Jr.)

(with Cohen, Donald S.) Periodically perturbed bifurcation. II. Hopf bifurcation. Stud. Appl. Math. 64 (1981), no. 2, 143-175. (K. R. Schneider) 82g:34081 34E10

 senblatt, J. M. Finitely additive invariant measures. II. Colloq. Math. 42 (1979), 361-363. (L. Thomas Ramsey) 82g:43003b 43A07 (28A60, 28A75)
 senblatt, M. Polynomials in Gaussian variables and infinite divisibility? Contril probability, pp. 139-142, Academic Press, New York, 1981. (F. W. Steutel) 82h:60033

60E07 (60F05) Limit theorems for Fourier transforms of functionals of Gaussian sequences. Z. Wahrsch. Verw. Gebiete 55 (1981), no. 2, 123-132. (M. Csörgő) 82i:60066 (60F05, 60G10)

um, Arnold The use of hyperfunctions for radiation reaction calculations in classical field theories. Phys. Lett. A 83 (1981), no. 7, 317-318. (Author's summary) 82g:78006 78A25 (46F15, 81E10, 83C99)

senblum, Marvin (with Rovnyak, James) An operator-theoretic approach to theorems of the Pick-Nevanlinna and Loewner types. I. Integral Equations Operator Theory 3 (1980),

no. 3, 408-436. (D. Sarason) 82a:47016 47A60 (30D35, 47A20) senbluth, M. N. (with Rechester, A. B.; White, Roscoe Beryl) Statistical description of entimum, M. N. (with Recuester, A. B.; white, Roscoe beryl) standard description of stochastic orbits in a tokamak. Intrinsic stochasticity in plasmas (Internal Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 239–259, École Polytech., Palaiseau, 1979. (J. S. Joel) 82d:76101 76X05 (58F13)

(with Rechester, A. B.; White, Roscoe Beryl) Fourier-space paths applied to the (With Recuestry, A. B.; White, Rose Leavy) (Recuestry)

enbrock, H. H. (with Bell, D. J.; Bryant, G. F.; Cook, P. A.; Crossley, T. R.; Denham, M. J.; Fallside, F.; Luntz, R.; MacFarlane, Alistair G. J.; Mayne, D. Q.; Munro, N.; Owens, D. H.; Storey, Colin) *Modern approaches to control system design. IEE

Control Engineering Series, 9. Peter Peregrinus, Ltd., Stevenage; on behalf of the Institution of Electrical Engineers (IEE), London, 1979, xviii + 413 pp. 1SBN 0-906048-06-0 (Publishers' description) 821:93060 93D15 (15A99, 34H05) Systems and polynomial matrices. Geometrical methods for the study of linear systems (Proc. NATO Adv. Study Inst., Harvard Univ., Cambridge, Mass., 1979), pp. 233–255, NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci., 62, Reidel, Dordrecht, 1980. (S. P.

Bhattacharyya) 82e:93012 93B05 (93B07, 93B55)
senfeld, Aron Marcus (with Timsit, R. S.) The potential distribution in a constricted cylinder: an exact solution. Quart. Appl. Math. 39 (1981/82), no. 3, 405-417. (Authors' nmary) 82m:78010 78A30 (35J05)

enfeld, Azriel (with Wu, Angela Y.) SIMD machines and cellular d-graph automata.

IEEE Trans. Comput. 30 (1981), no. 5, 370–372. (Authors' summary) 82d:68038

(with Dyer, Charles R.) Triangle cellular automata. Inform. and Control 48 (1981), no. 1, 54-69. (Authors' summary) 82bc68078 68D20

enfel'd, B. A. (with Utscha, L. G.) Some mathe Shadows. J. Hist. Arabic Sci. 4 (1980), no. 2, 332-336. (E. S. Kennedy) 82k:01014 01A30

leld, Moshe (with Bollobás, Béla) Sorting in one round. Israel J. Math. 38 (1981),

no. 1-2, 154-160. (Authors' summary) 82j:68042 68E05 (05C20)

(with Alspach, Brian; Heinrich, Katherine) Edge partitions of the complete nametric directed graph and related designs. Israel J. Math. 40 (1981), no. 2, 118-128. (D. Sotteau) 82k:05051 05C20 (05B30)

nkrantz, Roger D. Measuring truthlikeness. Synthese 45 (1980), no. 3, 463-487. (From the introduction) 82a:03011 03A05 (62A99)

(with Adams, Ernest W.) Applying the Jeffrey decision model to rational betting and information acquisition. Theory and Decision 12 (1980), no. 1, 1-20. (I. J. Good) 62A15 (62C10)

nlicht, Maxwell Initial results in the theory of linear algebraic groups. Studies in algebraic geometry, pp. 1-18, MAA Stud. Math., 20, Math. Assoc. America, Washington, algeorate geometry, pp. 1-16, MAA State, 1917, 1

senlund, Stig L. Passage times in the finite M/M/1 queue. Point processes and queuing problems (Colloq., Keszthely, 1978), pp. 337-341, Colloq. Math. Soc. János Bolyai, 24, North-Holland, Amsterdam, 1981. (William Henderson) 82:60166 60K25 Markov chains in small time intervals. J. Appl. Probab. 18 (1981), no. 3, 747-751. (P.

Laurie Davies) 82m:60066 60127
senmüller, Joachim Einstimmigkeitsspiele 2. Art, Standortspiele und
Fortsetzungsmöglichkeiten des Nash-Wertes. (English summary) Decision in small groups (Workshop, Jungholz, 1977) (German), pp. 40-56, Math. Systems in Econom., 45, Hain, Königstein/Ts., 1979. (See 82e:90130) 90D12

w, Wolfgang Analogon eines Satzes von Baer und Levi in der Klasse aller Halbgruppen. [Analogue of a theorem of Baer and Levi in the class of semigroups] Studia Sci. Math. Hungar. 13 (1978), no. 1-2, 167-171 (1981). (J. L. Chrislock) 82;:20116 20M10 (20E06, 20M05)

teel, G. (with Rowe, D. J.) On the algebraic formulation of collective models. II. Collective and intrinsic submanifolds. Ann. Physics 126 (1980), no. 1, 198-233. (N. Mukunda) 82e:81057a 81G30 (58F06, 81H10)

(with Rowe, D. J.) On the algebraic formulation of collective models. III. The symplectic shell model of collective motion. Ann. Physics 126 (1980), no. 2, 343-370. (N. 81G30 (58F06, 81H10) Mukunda) 82e:81057b

(with Rowe, D. J.; Ryman, A.) Many-body quantum mechanics as a symplectic mical system. *Phys. Rev. A* (3) **22** (1980), *no.* 6, 2362–2373. (Gerald Kaiser) 81169 81H99 (53B50, 58F06, 81D99)

enstock, Herbert B. (with Marquardt, Charles L.) Cluster formation in two-dimensional random walks: application to photolysis of silver halides. Phys. Rev. B (3) 22 (1980), no. 12, 5797-5809. (M. Dutta) 82c:82088 82A60 (60J15)

sental, I. L. See Rozental', I. L.

nthal, Arthur J. (with Lindzen, Richard S.) A WKB asymptotic analysis of baroclinic instability. J. Atmospheric Sci. 38 (1981), no. 3, 619-629. (Authors' summary) 82k:76035 76E20 (34E20, 76C15, 86A35)

thal, H. P. (with Bourgain, Jean) Martingales valued in certain subspaces of L1.

Israel J. Math. 37 (1980), no. 1-2, 54-75. (Gilles Pisier) 82g-86044 46822 (60G44) senthal, John W. On the dimension theory of ℵ₁-categorical theories with the nontrivial strong elementary intersection property. Z. Math. Logik Grandlag. Math. 25 (1979), no. 4, 359-362. (Annalisa Marcja) 82e:03035 03C50 (03C35) Card shuffling. Math. Mag. 54 (1981), no. 2, 64-67. (W. Herget) 82h:10005

10A10 (20B25) nthal, Peter (with Halperin, Israel) Burnside's theorem on algebras of matrices. Amer.

Math. Monthly 87 (1980), no. 10, 810. (Editors) 82b:15009 15A30 (15A04) senthal, Richard E. (with Brady, Stephen D.) Interactive computer graphical solutions of constrained minimax location problems. AIIE Trans. 12 (1980), no. 3, 241–248.

(Authors' summary) 82:90030 90805 (68G10)

A nonlinear network flow algorithm for maximization of benefits in a hydroelectric power system. Oper. Res. 29 (1981), no. 4, 763-786. (Author's summary) 82k:90048

senthal, Robert W. Sequences of games with varying opponents. Econo. 6, 1353-1366. (Author's summary) 82g:90084 90D15 (90C40)

Games of perfect information, predatory pricing and the chain-store paradox. Econom. Theory 25 (1981), no. 1, 92-100. (Author's introduction) 82m:90169

(with Landau, Henry J.) Repeated bargaining with opportunities for learning. J. Math. Sociol. 8 (1981, 82), no. 1, 61–74. (Authors' summary) 82;90083 90D1 enthal-Schneider, lise Reminiscences of Einstein. Some strangeness in the pro-

(Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 521-523, Addison-Wesley, Reading, Mass., 1980. (See 824:83002) 01A70

Addison-Wesley, Reading, Mass., 1980. (See 82d:83002) 01A70 sentrater, C. Ray Not every d-symmetric operator is GCR. Proc. Amer. Math. Soc. 81 (1981), no. 3, 443—446. (J. W. Bunce) 82b:47041 47B47 (46L05)

ser, S. (with Völk, H. J.; Jones, F. C.; Morfill, G. E.) Collisions between grains in a turbulent gas. Astronom. and Astrophys. 85 (1980), no. 3, 316-325. (F. C. Auluck) 85A30 (76F05) 82b:85009

nchin, N. V. See Roščin, N. V.

sický, Jiří Equational categories. Third Colloquium on Categories (Amiens, 1980), Part II. Cahiers Topologie Géom. Différentielle 22 (1981), no. 1, 85-95. (Tadashi Ohkuma) 18C05 (08B05, 18B15) Concrete categories and infinitary langu ages. J. Pure Appl. Algebra 22 (1981), no. 3,

309-339. (Walter Tholen) 82m:18004 18C99 (03C60, 03C75)
Rosier, Louis E. (with Ibarra, Oscar H.; Moran, Shlomo) A note on the parallel complexity of computing the rank of order n matrices. Inform. Process. Lett. 11 (1980), no. 4-5, 162. (From the text) 82d:68033 68C25

(with Ibarra, Oscar H.; Moran, Shlomo) Probabilistic algorithms and straight-line programs for some rank decision problems. Inform. Process. Lett. 12 (1981), no. 5, 227–232. (From the introduction) 82m:68068 68C05 (15A54, 90C20) (with Ibarra, Oscar H.) On restricted one-counter machines. Math. Systems Theory

14 (1981), no. 3, 241-245. (Authors' summary) 82f:60086 68F10 (03D10)

ssiński, Jan (with Suchanecki, Zdzisław) On the space of vector-valued functions integrable with respect to the white noise. Collog. Math. 43 (1980), no. 1, 183-201 (1981). (Gilles Pisier) 82,6000 60B11 (46B20, 46E40)

lague Puerta, Guittermo See Peys, Robert; et al., Samctioni da, Tamás The limits of modeling of nonlinear circuits. IEEE Trans. Circuits and Systems 28 (1981), no. 3, 212-216. (Author's summary) 82a:94101 94C05 (58C27) dam, Edw. E. Nonmetric analysis of linear models. Data analysis and informatics (Proc. Second Internat. Sympos., Versailles, 1979), pp. 83-99, North-Holland, Amsterdam, 1980. 92A25

akies, Ralph (with Schaposnik, Fidel) Comment on Fujikawa's analysis applied to the Schwinger model. Phys. Rev. D (3) 23 (1981), no. 2, 558-560. (Authors' summary) 82h:81068 81E10 (81C35)

(with Bender, Carl M.; Cooper, Fred; Guralnik, G. S.; Sharp, David H.)

Higher-order terms in the strong-coupling expansion for the renormalized effective potential. Phys. Rev. D (3) 24 (1981), no. 10, 2683-2692. (Authors' summary) 82::81070 81E99 (81C12)

er (with Rixecker, Helmut) *Darstellende Geometrie. (German) [Descriptive ometry] Themenhefte Mathematik. [Mathematics Notebooks] Ernst Klett Verlag

geometry I nemennette Mathematik. [Mathematics Notebooks] Erist Nett verlag, Stuttgart, 1980. 140 pp. ISBN 3-12-738200-6 [E. Morgantini) 82k:51020 5 INO5 sler, Roll Inverse Aufgaben in der Geophysik. Modern potential theory as a foundation for the inverse problem in geophysics (Summer School, Freiberg, 1978), pp. 4–14. Geodät. Geophys. Veröffentlichungen, Reihe III, 45, Akad. Wiss. DDR, Berlin, 1980. (See 82g:31001) 35R30

sler, Uwe (with Cranston, Michael; Orey, Steven) Exterior Dirichlet problems and the symptotic behavior of diffusions. Stochastic differential systems (Proc. IFIP-WG 7/1 asymptotic tentral of unitasions. Stochastic apprential systems (Proc. 1FIF-WG 7/1 Working Conf., Vibinia, 1978), pp. 207–220, Lecture Notes in Control and Information Sci., 25, Springer, Berlin, 1980. (S. J. Taylor) 82e:60123 60J60 (31C05, 35125)

Unimodality of passage times for one-dimensional strong Markov processes.

Probab. 8 (1980), no. 4, 853-859. (M. Iosifescu) 82g:60103 60J60 (60J15, 60J80)

Roslyi, A. A. Application of 5-dimensional field theory for determining solutions of the standard Einstein-Maxwell equations. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1981, no. 9, 91-94. (Kishore Marathe) 82m:83051 83E15 (83C50)

mond, Thomas E. Elliptic equations in meteorology. Information linkage between applied mathematics and industry, II (Proc. Second Annual Workshop, Monterey, Calif., 1979), pp. 85–104, Academic Press, New York, 1980. (Author's summary) 82e:35074 35Q20

ner, J. (with Timischl, W.) Über ein Differenzengleichungssystem der

Populationsgenetik. Österreich. Akad. Wiss. Math.-Natur. Kl. Sitzungsber. II 188 (1979), no. 4-7, 247-254. (L. E. Bobisud) 82g-92028 92A10 (39A10) ner, Jonathan L. (with Kwong, Waikwok; Schonfeld, Jonathan F.; Quigg, C.; Thacker, H. B.) Degeneracy in one-dimensional quantum mechanics. Amer. J. Phys. 48 (1980), no. 11, 926-930. (Authors' summary) 82c:81020 81C05 (34B25, 81F99)

(with Schonfeld, Jonathan F.; Kwong, Waikwok; Quigg, C.; Thacker, H. B.) On the convergence of reflectionless approximations to confining potentials. Ann. Physics 81F05 (34B25, 81G05) 128 (1980), no. 1, 1-28. (Marcel Coz) 82b:81104

off, Jeffrey A. Effective divisor classes and blowings-up of P2. Pacific J. Math. 89 (1980), no. 2, 419-429. (Peter Stiller) 82e:14042 14J17

Ross, Bertram Euler's letter to Goldbach announcing the discovery of an integral entation for x!. Ganita Bhāratī 1 (1979), no. 1-2, 9-12. (R. A. Askey) 82e:01068 01A55 (33-03)

ss, Brian H. (with Thomas, Ewart A. C.) On appropriate procedures for combining probability distributions within the same family. J. Math. Psych. 21 (1980), no. 2, 136-152. (Authors' summary) 82m:62035 62E10

136-132. (Author's summary) 22.83.065. St. Dennis K. A new representation for higher-spin fields. Nuovo Cimento A (11) 58 (1980), no. 1, 11-20. (W. Cox) 82½83066a 83E50 (53C80)

136-132. (Author's summary) 22.83.065 fields. Nuovo Cimento A (11) 58 (1980), no. 1, 11-20. (W. Cox) 82½83066a 83E50 (53C80)

Gauge groups in a fiber bundle approach to superspace and the gravitational field. J. Math. Phys. 22 (1981), no. 3, 557-561. (W. Cox) 82j:83066b 83E50 (53C80)

Plane waves and topology. J. Math. Phys. 22 (1981), no. 10, 2300-2302. (Author's summary) 82m:81083 81G20 (53C05, 57R22)

Ross, Dieter K. The motion of a simple pendulum with uniformly shortening string length.

General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978), pp. 453–454, Birkhäuser, Basel, 1980. (From the text) 82e:70005 70D99

with Sofo, Anthony) Special solutions of $dy/dx = (a_1x + b_1y + c_1)/(a_2x + b_2y + c_2)$. Internat. J. Math. Ed. Sci. Tech. 11 (1980), no. 4, 597–598. [John R. Graef) 82j:34002

ss, Edward W., Jr. On Volterra integral equations of pulse-convolution type.

Transactions of the Twenty-Sixth Conference of Army Mathematicians (Hanover, N.H., 1980), pp. 153-166, ARO Rep. 81, 1, U. S. Army Res. Office, Research Triangle Park,

N.C., 1981. (Author's summary) 82a:45004 45D05 (65R20) sss, G. (with Jarvis, D. A.) The characterization of orientation in anisotropic media by means of elastic light scattering. I. The inhomogeneity of anisotropic media and its description. Optica Acta 27 (1980), no. 3, 359-370. (Authors' summary) 82b:78019a

(with Jarvis, D. A.) The characterization of orientation in anisotropic media by means of elastic light scattering. II. The elastic scattering of light by an inh medium. Optica Acta 27 (1980), no. 3, 371-384. (Authors' summary) 82b:78019b

s, G. J. S. Uses of nonlinear transformation in nonlinear optimisation problem Compstat 1980 (Proc. Fourth Sympos. Comput. Statist., Edinburgh, 1980), pp. 382-388, Physica, Vienna, 1980. (E. Spedicato) 82a:90147 90C30 (65K05)

James A Morrey-Nikol'skii inequality. Proc. Amer. Math. Soc. 78 (1980), no. 1, 97-102. (Reinhard Mennicken) 82a:46034 46E35

Ross, Jeffrey A. (with Brualdi, Richard A.) Invariant sets for classes of matrices of zeros and ones. Proc. Amer. Math. Soc. 80 (1980), no. 4, 706-710. (H. Lenz) 82f:05018 05B20

(with Brualdi, Richard A.) Matrices with isomorphic diagonal hypergraphs. Discrete Math. 33 (1981), no. 2, 123-138. (Cyriel Van Nuffelen) 82b:05094 05C50 (05C65, 15A36)

Ross, John (with Hunt, Katharine L. C.) Path integral solutions of stochastic equations for near irreversible processes: the uniqueness of the thermodynamic Lagrangian. J. Chem. Phys. 75 (1981), no. 2, 976-984. (Authors' summary) 82f:82028

(with Termonia, Yves) Oscillations and control features in glycolysis: numerical analysis of a comprehensive model. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 5, part 2, 2952–2956. (From the summary) 82j:92035 92A09

Ross, Kenneth A. Another approach to Riemann-Stieltjes integrals. Amer. Math. Monthly no. 8, 660-662. (E. R. Love) 82h:26011 26A42 (28A25)

ss, Michael D. (with Gregorius, Hans-Rolf) Selection in plant populations of effectively infinite size. I. Realized genotypic fitnesses. Math. Biosci. 54 (1981), no. 3-4, 291-307. (Authors' summary) 82k:92042 92A10

ss, Sheldon M. (with Shahshahani, Mehrdad; Weiss, Gideon) On the duration of the problem of the points. J. Amer. Statist. Assoc. 75 (1980), no. 371, 663-666. (Z. W. Birnbaum) 82a:62146 62N05

(with Kan, Y. C.) Optimal list order under partial memory constraints. J. Appl. Probab. 17 (1980), no. 4, 1004–1015. (Linda Pagli) 82a:68032 68B15
Generalized Poisson shock models. Ann. Probab. 9 (1981), no. 5, 896–898.

(Benjamin Epstein) 82m:60111 60K10 (62N05)

Ross, William R. Basis states for equivalent electrons. I. States for the Lie group

U(21+1)×SU(2). (French summary) Canad. J. Phys. 58 (1980), no. 12, 1718-1723. (Author's summary) 82d:81168a 81G40 (22E70)

Basis states for equivalent electrons. II. States for the Lie group Sp(4l+2). (French nmary) Canad. J. Phys. 58 (1980), no. 12, 1724-1728. (Author's summary)

81G40 (22E70) Basis states for equivalent electrons. III. States for the Lie group $SO(2l+1) \times SU(2)$ using Sp(4l+2) states. Canad. J. Phys. **59** (1981), no. 2, 207-212. (Author's summary) 81G40 (22E70)

Basis states for equivalent electrons. IV. States for the Lie group $SO(2l+1) \times SU(2)$ using U(2/t-1)×SU(2) states. (French summary) Canad. J. Phys. 59 (1981), no. 3, 315-324. (Author's summary) 824:81168d 81G40 (22E70) sberg, H.-J. (with Chu Duc) Uniqueness theorems for the components of a convolution

given on a half line. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Statist. 11 (1980), no. 3, 361-371. (M. Csörgö) 82d:60027 60E10 (60E99)

(with Jesiak, Bernd; Siegel, G.) Continuation of distribution functions Contributions to probability, pp. 29-48, Academic Press, New York, 1981. (T. Kawata) 60E05 (60E07)

osser, J. Barkley Fourier transform evaluation. Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 137-146, ARO Rep. 80, 3, U. S. Army Res. Office, Research Triangle Park, N.C., 1980. (Author's summary) 82e:65138 65T05

Majorization formulas for a biharmonic function of two variables. SIAM J. Nur

Anal. 17 (1980), no. 2, 207–220. (Paul Nickel) 82e:31005 31A30 asset, Shmuel The Goldie rank of virtually polycyclic groups. The Brauer group (Sem., Les Plans-sur-Bex, 1980), pp. 35-45, Lecture Notes in Math., 844, Springer, Berlin, 1981.

(Gerald H. Cliff, 82:16010 16A27 (20C07)

Rossi, A. (with Roux, J.-C.; Bachelart, S.; Vidal, Christian) Representation of a strange attractor from an experimental study of chemical turbulence. Phys. Lett. A 77 (1980), no. 6, 391-393. (O. E. Rössler) 82h:58028 58F13 (80A30, 92A40)
(with Roux, J.-C.; Bachelart, S.; Vidal, Christian) Experimental observations of

complex dynamical behavior during a chemical reaction. Phys. D 2 (1981), no. 2,

395-403. (Authors' summary) 82i:92010 92A09 (58F15, 80A30)

Rossi, Enzo On the iterated operator of the vibrating string. (Italian. English summary)

Rend. Sem. Fac. Sci. Univ. Cagliari 49 (1979), no. 1-2, 45-61. (Tommaso Ruggeri) 82a:35058 35L05

A lemma on relative stability with an application to an economic case study. J. Math. Econom. 8 (1981), no. 1, 75-85. (B. L. Ovsievič) 82m:90056 90A16

ossi, Fabio Quasi-ends and a relative Yoneda lemma in the theory of relative bicategories. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 18 (1981), no. 1, 315-334. (Author's summary) 82f:18008 18D05 (18A30)

(with Kasangian, Stefano) Some remarks on symmetry for a monoidal category Bull. Austral. Math. Soc. 23 (1981), no. 2, 209-214. (G. M. Kelly) 82g:18007 (18D20)

Rossi, G. C. (with Testa, M.) The structure of Yang-Mills theories in the temporal gauge. II. Perturbation theory. Nuclear Phys. B 176 (1980), no. 2, 477–499. (Authors' summary) 82c:81115 81E99 (53C05, 81C35)

Rossi, Maria Evelina On symmetric algebras which are Cohen Macaulay. Manuscripta Math. 34 (1981), no. 2-3, 199-210. (W. Vogel) 82m:13016 13H10 (14B05)

Rossi, Paolo (with Brower, Richard C.; Tan, Chung I) The external field problem for QCD.

Nuclear Phys. B 190 (1981), no. 4, FS3, 699–718. (Authors' summary) 82m:81079

(with Prasad, M. K.) Mirror symmetry and exact multimonopole solutions. Rev. D (3) 23 (1981), no. 8, 1795–1799. (A. Comtet) 82g;81085 81E99 (83C20) (with Prasad, M. K.) Construction of exact multimonopole solutions. Phys. Rev. D

(3) 24 (1981), no. 8, 2182-2199. (R. S. Ward) 82m:81056 81E10 (with Brown, S. A.; Prasad, M. K.) Multimonopole solutions. Phys. Rev. D (3) 24 81), no. 8, 2217-2224. (Authors' summary) 82k:81048 81E10 (1981), no. 8, 2217-2224. (Authors' summary) 82k:81048

(with Prasad, M. K.) Construction of exact Yang-Mills-Higgs multimonopoles of arbitrary charge. Phys. Rev. Lett. 46 (1981), no. 13, 806-809. (A. Comtet) 82g:81062 81E10 (53C05, 58E30)

hin, Ju. A. Influence of weak anisotropy on the nature of cylindrical and spherical shock propagation. Prikl. Meh. 17 (1981), no. 1, 34-37 (Russian); translated as Soviet Appl. Mech. 17 (1981), no. 1, 25-28. (From the text) 82k:73020 73D05

in, V. V. (with Voronkov, E. O.) On the solution of a nonhomogeneous Schrödinger equation with a model pseudopotential. (Russian. English summary) Teoret. Mat. Fiz. 48 (1981), no. 1, 121-128. (Authors' summary) 82i:81029 81C05 (81H99)

Rossikhin, Yu. A. See Rossihin, Ju. A.

Rossky, Peter J. (with Dale, William D. T.) Generalized recursive solutions to Ornstein-Zernike integral equations. J. Chem. Phys. 73 (1980), no. 5, 2457-2464. (From 82A50 (45G10) the summary) 82d:82068

Rössler, Otto E. Chaos and bijections across dimensions. New approaches to no problems in dynamics (Proc. Conf., Pacific Grove, Calif., 1979), pp. 477-486, SIAM, Philadelphia, Pa., 1980. (D. K. Arrowsmith) 82d:58047 58F13 The gluing-together principle and chaos. Nonlinear problems of analysis in geometry

- and mechanics (Proc. Sympos., Univ. Paul Sabatier, Toulouse, 1979), pp. 50-56, Res. Notes in Math., 46, Pitman, Boston, Mass., 1981. (L. A. Bunimovich) 82g:58047 58F12 (58C28)
- Rosso, Fabio Bundle and proper incompleteness with unbounded world acceleration in general relativity. (Italian summary) Boll. Un. Mat. Ital. A (5) 16 (1979), no. 3, 593-597. (From the introduction) 82h:83051 83C99 (53C80)

 Rossotti, Maria Lia (with Borello, Laura; Ferraro, Mario; Penengo, Piero) A model of
- Biol. Cybernet. 39 (1980/81), no. 2, 79-85. (Authors' summary) visual perception. 92A25 (68G10)
- wan Rossum, H. Generalized Pade approximants. Approximation theory, 111 (Proc. Conf., Unio. Texas, Austin, Tex., 1980), pp. 747–756, Academic Press, New York, 1980. (Michael F. Barnsley) 82d:41018 41A21 (30E10)
- F. Barnstey) 826-41018 41A21 (30E10) 44, Hermann Nonequilibrium solutions of an infinite system of stochastic differential equations. Stochastic differential systems (Proc. IFIP-WG 7/1 Working Conf., Vilnius, 1978), pp. 297-303, Lecture Notes in Control and Information Sci., 25, Springer, Berlin,
- 1980. (J. Fritz) 82k:60214 60K35 (82A05)

 See also Biological growth and spread, 82c:92004

 t, Karla (with Silbermann, Bernd) Das Reduktionsverfahren für eine Klasse ausgearteter Integrodifferenzengleichungen. Wiss. Z. Tech. Hochsch. Karl-Marx-Stadt 20 (1978), no. 6, 689-691. (Authors' summary) 82i:45013 45L05
- Rosta, Vera (with Burr, Stefan A.) On the Ramsey multiplicities of graphs-problems and recent results. J. Graph Theory 4 (1980), no. 4, 347-361. (R. H. Schelp) 82c:05071 05C55
- Rostamian, Rouben (with Alikakos, Nicholas D.) Large time behavior of solutions of Neumann boundary value problem for the porous medium equation. Indiana Univ. Math. J. 30 (1981), no. 5, 749-785. (Antonio Fasano) 82j:35017 35B40 (35K55) Internal constraints in linear elasticity. J. Elasticity 11 (1981), no. 1, 11-31.
 - (Author's summary) 82j:73016 73C99 (35B30) Continuity properties of stationary points of quadratic functionals in Hilbert space Numer. Funct. Anal. Optim. 3 (1981), no. 2, 147–167. (M. Z. Nashed) 82m:49032
- Rota, Gian-Carlo (with Doubilet, Peter; Fox, John) The elementary theory of the symmetric group. Combinatorics, representation theory and statistical methods in groups, pp. 31-65, Lecture Notes in Pure and Appl. Math., 57, Dekker, New York, 1980. (Michael H. Peel) 82a:20021 20C30 (05A10)
- (with Barnabei, Marilena; Brini, Andrea) Section coefficients and section sequences.
 (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 68 (1980), no. 1, 5–12. (Giuseppe Pellegrino) 82k:05008 05A10
- no. 1, 5-12. (Cruseppe Petegrino) 82205008 USA10 (with Sagan, Bruce; Stein, Paul R.) A cyclic derivative in noncommutative algebra.

 J. Algebra 64 (1980), no. 1, 54-75. (David M. Jackson) 820:05017 05A15 (12H05,
- (with Kung, Joseph P. S.; Murty, M. Ram) On the Rédei zeta function. J. Nu Theory 12 (1980), no. 3, 421-436. (Louis Solomon) 82c:06018 06B99 (10H10)
- (with Kung, Joseph P. S.) On the differential invariants of a linear ordinary differential equation. Proc. Roy. Soc. Edinburgh Sect. A 89 (1981), no. 1-2, 111-123. (K. Okugawa) 82i:12026 12H05 (34A35)
- See also Davis, Philip J.; et al., 82:00020 tar', V. I. (with Gafurov, M. U.) On the exit of a random walk through a curvilinear indary. I. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1981, no. 1, 10-15, 60J15 91. (R. S. Lipcer) 82k:60145a
- (with Gafurov, M. U.) On the exit of a random walk through a curvilinear boundary II. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1981, no. 3, 10-16, 97. (R. S.
- Lipcer) 82k:60145b 60J15
 Rotaru, P. (with Blezu, D.; Pascu, N.) Alpha-starlike functions of order β. (Roman Processing Pr English summary) Bul. Univ. Braşov Ser. C 21 (1979), 41-44. (P. T. Mocanu) 82j:30017
- Rothart, F. C. (with Horwitz, I. P.) Nonrelativistic limit of relativistic quantum mechanics Phys. Rev. D (3) 24 (1981), no. 8, 2127-2131. (Authors' summary) 82i:81014 (81M05)
- Rotem, D. Stack sortable permutations. Discrete Math. 33 (1981), no. 2, 185-196. (Author's 68E05 (05A05, 05C99) summary) 82j:68051
- Roter, W. (with Derdziński, Andrzej) Some properties of conformally symmetric manifolds which are not Ricci-recurrent. Tensor (N.S.) 34 (1980), no. 1, 11-20. (V. Cruceanu) 82b:53060 53C25 (53B20)
 - Some remarks on infinitesimal conformal motions in conformally symmetric manifolds. Tensor (N.S.) 35 (1981), no. 1, 8-10. (T. J. Willmore) 82i:53035
- Roth, Alvin E. (with Blair, C. E.) Erratum: "An extension and simple proof of a constrained lattice fixed point theorem" [Algebra Universalis 9 (1979), no. 1, 131-132; MR Algebra Universalis 12 (1981), no. 1, 134. (Editors) 82c:06016
- (with DeBrock, Lawrence M.) Strike two: labor-management negotiations in major league baseball. Bell J. Econom. 12 (1981), no. 2, 413-425. (From the summary) 90D10
- Roth, Arthur J. (with Sobel, Milton) A probabilistically attained set of polynomials that generate Stirling numbers of the second kind. Discrete Math. 32 (1980), no. 1, 77-84. (L. Carlitz) 82m:05005 05A10 (10A40, 60C05)
- Roth, B. (with Bolker, Ethan D.) When is a bipartite graph a rigid framework? Pacific J. Math. 90 (1980), no. 1, 27-44. (G. Laman) 82c:57003 57M15 (05C10, 51F99, 51N10, 53A17, 57Q35, 70C99, 73K05)
 - (with Whiteley, Walter) Tensegrity frameworks. Trans. Amer. Math. Soc. 265 (1981), no. 2, 419-446. (Robert Connelly) 82m:51018 51F99 (53A17, 73K20)
- Roth, H. (with Litz, L.) State decomposition for singular perturbation order reduction-a model approach. Internat. J. Control 34 (1981), no. 5, 937-954. (Authors' summary) 82m:93002 93A15
- Roth, Jean-Pierre (with Arques, Didier) Courant superficiel et champ magnétostatique associé. Potential theory, Copenhagen 1979 (Proc. Colloq., Copenhagen, 1979), pp. 29–34.

 Lecture Notes in Math., 787, Springer, Berlin, 1980. (Mircea Puta) 82k:58011 58A25 (78A25)
- Recollement de semi-groupes de Feller locaux. Ann. Inst. Fourier (Grenoble) 30 (1980), no. 3, 75-89. (Eugen Popa) 82a:47041 47D07 (60J35)

 Roth, K. F. On irregularities of distribution. IV. Acta Arith. 37 (1980), 67-75. (L. Kuipers)

- Roth, Robert S. Techniques in the identification of deterministic systems. IEEE Trans. Automat. Control 26 (1981), no. 5, 1169-1176. (Author's summary) 82i:93022
- Roth, Walter (with Flösser, Hans O.; Irmisch, R.) Infimum-stable convex cones and approximation. Proc. London Math. Soc. (3) 42 (1981), no. 1, 104-120. (H. H. McFaden) :46009 46A40 (41A65)
 - Abstrakte Choquet-Ordnung auf einer kompakten Menge. [Abstract Choquet ordering on a compact set] Rev. Roumaine Math. Pures Appl. 26 (1981), no. 8, 1161–1173. (A. Clausing) 82k:46021 46A55 (46E10)
- Rothblum, Uriel G. Sensitive growth analysis of multiplicative systems. I. The dynamic approach. SIAM J. Algebraic Discrete Methods 2 (1981), no. 1, 25-34. (B. W. Stuck) 826:60156 60J10
- Rothe, Franz Asymptotic behavior of the solutions of the Fisher equation. Biological grow and spread (Proc. Conf., Heidelberg, 1979), pp. 279–289, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (Author's summary) 82j:92046 92A10 (35K55)
 Global existence of branches of stationary solutions for a system of reaction diffusion
 - equations from biology. Nonlinear Anal. 5 (1981), no. 5, 487-498. (E. D. Conway) 35B32 (35K55, 92A09)
- Rothe, Gunter Some properties of the asymptotic relative Pitman efficiency. Ann. Statist. 9 (1981), no. 3, 663-669. (Lionel Weiss) 82h:62057 62F12
- Rothe, H. J. (with Girotti, H. O.) Comments about 8-vacua and topology of the SU, Yang-Mills theory. (Italian and Russian summaries) Nuovo Cimento A (11) 60 (1980),
 - no. 3, 171-184. (Authors' summary) 824:81679 81E10 (53C05, 58E20)

 Comments on the theory of the Aharonov-Bohm effect. (Italian and Russian nmaries) Nuovo Cimento A (11) 62 (1981), no. 1, 54-67. (Author's summary) 81B05 (81D05) 82g:81006
- Rothe, K. D. (with Hortacsu, M.; Schroer, Bert) Zero-energy eigenstates for the Dirac boundary problem. Nuclear Phys. B 171 (1980), no. 3, 530-542. (Authors' summary) 81E10 (58G11, 81G05)
 - (with Schroer, Bert) Do quark correlation functions exist in confining gauge theories? Nuclear Phys. B 172 (1980), no. 2-3, 383-412. (Authors' summary) 82a:81050 81G10 (81E99)
 - (with Hortaçsu, M.; Schroer, Bert) Still more about the fermion determinant in two-dimensional QED. Phys. Rev. D (3) 22 (1980), no. 12, 3145-3146. (Authors' summary) 82b:81065b 81E10 (58E20)
 - (with Girotti, H. O.) Some remarks on the implementation of gauge conditions.

 Lett. Nuovo Cimento (2) 31 (1981), no. 16, 545-548. (From the text) 82i:81113 81E99
- Rothen, F. (with Lièvre, C.) New approach to the morphological stability of the Stefan Helv. Phys. Acta 53 (1980), no. 1, 119-133. (I. Tadjbakhsh) 82c:80008 80A20 (35R35, 58E07, 92A09)
- Rothmaler, Philipp A note on I-types. Z. Math. Logik Grundlag. Math. 27 (1981), no. 1, 95-96. (Daniel Lascar) 824c19058 03C68
 Rothman, Edward D. (with Butler, R.) Predictive intervals based on reuse of the sample. J. Amer. Statist. Assoc. 75 (1980), no. 372, 881-889. (I. Guttman) 82cc2050 62F25
- (with Templeton, Alan R.) A class of models of selectively neutral alleles. Theoret Population Biol. 18 (1980), no. 2, 135-150. (Authors' summary) 82b:92026 92A10
- nan, Sheldon The von Neumann kernel and minimally almost periodic groups. Trans Amer. Math. Soc. 259 (1980), no. 2, 401-421. (Author's summary) 82g:22008 (22D05, 43A60)
- (with Strassberg, Helen) The algebraic von Neumann kernel and linear algebraic groups. Math. Z. 177 (1981), no. 1, 9-14. (William Moran) 82d:20040 (20G20, 22D25)
- hschild, Bruce L. (with Graham, Ronald L.; Spencer, Joel H.) *Ramsey theory. Wiley-Interscience Series in Discrete Mathematics. A Wiley-Interscience Publication. John Wiley & Sons, Inc., New York, 1980. ix + 174 pp. ISBN 0-471-05997-8 (J. E. Graver) 05-02 (04A20, 05C55, 54H20)
 - (with Linial, Nathan) Incidence matrices of subsets-a rank formula. SIAM J. Algebraic Discrete Methods 2 (1981), no. 3, 333-340. (R. A. Brualdi) 82h:05011
- Rothschild, Linda Preiss (with Greenleaf, Frederick P.; Moskowitz, M.) A unipotent gro associated with certain linear groups. Colloq. Math. 43 (1980), no. 1, 41-45 (1981). (J. L. Brenner) 82k:20076 20G99
- Nonexistence of optimal L^2 estimates for the boundary Laplacian operator on certain weakly pseudoconvex domains. Comm. Partial Differential Equations 5 (1980), no. 8, 897–912. (Makhlouf Derridj) 82:35060 35H05 (22E27, 32F20, 58G05)

 Rothstein, Arthur Veršik processes: first steps. Israel J. Math. 36 (1980), no. 3-4, 205–224. (Manfred Denker) 82e:28035 28D05
- Rotillon, Denis Deux contre-examples à une conjecture de R. Stanley sur les anneaux d'invariants intersections complètes. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 6, 345-348. (Melvin Hochster) 82f:13007
- Rotkiewicz, A. (with Wasen, R.) Lehmer's numbers. Acta Arith. 36 (1980), no. 3, 203-217. 10A25 (D. H. Lehmer) 82a:10009
- Rotkovič, G. Ja. Lattice-ordered groups with cyclic linearly ordered subgroups. (Russian) Modern algebra (Russian), pp. 119-123, Leningrad. Gos. Ped. Inst., Leningrad, 1980. (J. Jakubik) 82f:06027 06F20 (06F15)
- (with Koldunov, A. V.) Archimedean lattice-ordered groups with the splitting property. Ordered groups (Proc. Conf., Boise State Univ., Boise, Idaho, 1978), pp. 43–45, Lecture Notes in Pure and Appl. Math., 62, Dekker, New York, 1980. (Editors) 82a:06031
- Rott, Nikolaus Nonlinear acoustics. Theoretical and applied mechanics (Proc. 15th Internat. Congr., Univ. Toronto, Toronto, Ont., 1980), pp. 163–173, North-Holland, Amsterdam, 76Q05 1980. (See 824:00008)
- as, Christel Zur Komplettierung ausgezeichneter Ringe. Math. Ann. 253 (1980), no. 3, 213-226. (Manfred Steurich) 82c:13023 13E05 (13I10, 14B20) (with Brodmann, Markus) Über den regulären Ort in ausgezeichneten Ringen. Math. Z. 175 (1980), no. 1, 81-85. (Gerhard Pfister) 824:13009 13B20
- Math. Z. 175 (1980), no. 1, 81-85. (Gerhard Pfister) 82d:13009 tman, Craig Symmetry classification of continuous phase transitions in two dim Phys. Rev. B (3) 24 (1981), no. 3, 1482-1492. (Author's summary) 82i:82029

- (with Wortis, Michael) Exact equilibrium crystal shapes at nonzero temperature in dimensions. Phys. Rev. B (3) 24 (1981), no. 11, 6274-6277. (Authors' summary) 52054 82A68
- mult, Alain Lois empiriques dans les processus de branchement spatiaux homogènes supercritiques. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 20, 933-936. (Author's summary) 821:60188 60180
- hine, E. *Théorie des distributions. (French) [Theory of distributions] ESE, 2571.

 École Supérieure d'Électricité, Gif-sur-Yoette, 1978. iii+137 pp. (Editors) 82h:46001 46-01
- rol, Gérard P. On parallelization of "single-assignment" programs. Parallel uputers—parallel mathematics (Munich, 1977), pp. 203–206, North-Holland, usterdam, 1977. (See 821:68003) 68D15 (68B20)
 - (with Berthelot, G.; Valk, Rüdiger) Reductions of nets and parallel programs. Net ory and applications (Proc. Adv. Course General Net Theory Processes Syst Hamburg, 1979), pp. 277-290, Lecture Notes in Comput. Sci., 84, Springer, Berlin, 1980. (Siegmar Gerber) 82x68109 68D40 (68B20, 68D90) exheta. V. Commutative alsebra in system theory. Geometrical methods for the study of
- u, Y. Commutative algebra in system theory. Geo linear systems (Proc. NATO Adv. Study Inst., Harvard Univ., Cambridge, Mass., 1979), pp. 213-231, NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci., 62, Reidel, Dordrecht, 1980. (Allen Tannenbaum) 821:93020 93B25 (14D20, 93B15)
- chee, N. (with Mawhin, Jean) **Cordinary differential equations. Stability and periodic solutions. Translated from the French and with a preface by R. E. Gaines. Surveys and Reference Works in Mathematics, 5. Pitman (Advanced Publishing Program), Boston, Mass.-London, 1980. ix+260 pp. ISBN 0-273-08419-4 (From the preface) 82i:34001 34-01 (34Cxx, 34Dxx)
- (with Peiffer, K.) La représentation mathématique des forces et les principes de la e. Ann. Soc. Sci. Bruxelles Sér. I 95 (1981), no. 1, 45-68. (T. Erber) 82k:70003 70A05 (58E30)
- Nuet, A. (with Gauthier, Serge) Pure Yang-Mills perturbation theory in the instanton sector compared to the zeroth sector. (Italian and Russian summaries) Nuovo Cimento A (11) 58 (1980), no. 2, 141–158. (José M. Cerveró) 82h:81078 81E15 (58D30)
 - (with Becchi, C.; Stora, R.) Renormalizable theories with symmetry breaking. Field theory, quantization and statistical physics, pp. 3-32, Math. Phys. Appl. Math., 6, Reidel, Dordrecht, 1981. (K. S. Viswanathan) 82i:81099 81E15 (58D30, 81D20)
- (with Richard, J. L.) Complex saddle points versus dilute-gas approximation in the ble-well anharmonic oscillator. Nuclear Phys. B 185 (1981), no. 1, 47-60. (J. S. Joel) 81C15 (58G15, 58G25, 81E15)
- (with Richard, J. L.) The saddle point method for the double well anharm oscillator. Phys. Lett. B 98 (1981), no. 4, 305-309. (Authors' summary) 82h:81067
- fs, Jacques A. J. (with van Ouwerkerk, Hendrik J.; Tulp, Jan H.; Piceni, Hans A. L.; nert, Frans J. J.) Instabilities in a continuous medium model for the retina. Biol. Cybernet. 39 (1980/81), no. 1, 11-14. (Authors' summary) 82j:92064 92A27 (92A09)
- thani, Ramine (with Tse, Edison) Bounding the behavior of positive dynamic systems.

 J. Econom. Dynamics Control 2 (1980), no. 3, 283-299. (M. Ali Khan) 82e:93005

 93A15 (58F13, 58F30)
- (with Tse, Edison) Structural design for classes of positive linear systems. IEEE Trans. Systems Man Cybernet. 11 (1981), no. 2, 126-134. (Authors' summary) 824:90039 90A16
- et, B. (with Caroli, B.; Caroli, C.; Saint-James, D.) On fluctuations and relaxation in systems described by a one-dimensional Fokker-Planck equation with a time-dependent otential. Phys. A 108 (1981), no. 1, 233-256. (Authors' summary) 82j:82031
- dier, John A. (with Paur, S. O.) Uniform Lipschitz and strong unicity constants on subintervals. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 715-720, Academic Press, New York, 1980. (Z. Ditzian) 82d:41030 41A44
 - (with McAllister, David F.) Approximation by convex quadratic splines. proximation theory, III (Proc. Conf., Unio. Texas, Austin, Tex., 1980), pp. 757-761, Academic Press, New York, 1980. (David R. Hill) 82a:41013 41A15
 - Constrained interpolation. SIAM J. Sci. Statist. Comput. 1 (1980), no. 3, 333–344. (Philip W. Smith) 82e-41018 41A15 (65D05)
- (with McAllister, David F.) An algorithm for computing a shape-preserving osculatory quadratic spline. ACM Trans. Math. Software 7 (1981), no. 3, 331–347. (Authors' summary) 82k:65009
- et, James (with Uy, Marilou) Piece rates, time rates, and teams: explain patterns in the employment relation. J. Econom. Behavior Organization 1 (1980), no. 4, 343–360. (Authors' summary) 82h:90027 90A12
- uncliotis, John A. (with Fikioris, John G.) Scattering of plane waves from an eccentrically coated metallic sphere. J. Franklin Inst. 312 (1981), no. 1, 41–59. (Authors' nary) 82h:78017 78A45
- iam B. *Systems engineering models of human-machine interaction. North-Holland Series in System Science and Engineering, 6. North-Holland Publishing Co., New York-Amsterdam, 1980. x+152 pp. ISBN 0-444-00366-5 (From the preface and text) 82b:90042 90Bxx (00A69, 03E72, 68-01, 92A25, 93A13)
 - Human-computer interaction in the control of dynamic systems. Comput. Surveys 13
- (1981), no. 1, 71–99. (Author's summary) 82e-92055 92A25
 ssh, Fred William (with Kim, Ki Hang) ★Introduction to mathematical consensus theory. Lecture Notes in Pure and Applied Mathematics, 59. Marcel Dekker, Inc., New York, 1980. vi + 179 pp. ISBN 0-8247-1001-0 (Mark A. Aizerman) 82e:90012 90A08
 - (with Kim, Ki Hang; Makar-Limanov, L. G.; Neggers, Joseph) Graph algebras. J. 05C99 (18G50)
 - Algebra 64 (1980), no. 1, 46-51. (Dominique Foata) 82e:05114a 05C99 (18G50) (with Kim, Ki Hang) Binary social welfare functions. J. Econom. Theory 23 (1980), no. 3, 416-419. (From the summary) 82g:90013 90A08
- no. 3, 416–419. (From the summary) 82g-90013 90A08

 (with Kim, Ki Hang) Homology of certain algebras defined by graphs Algebra 17 (1980), no. 2, 179-186. (Dominique Foata) 82e:05114b 05C99 (18G50) (with Kim, Ki Hang) Economic planning based on social preference function . Social Sci. 1 (1980/81), no. 2, 193-200. (J. J. Buckley) 82b:90007

(90A06)

(with Kim, Ki Hang) The algebraic structure of the semigroup of binary relations on nite set. Glasgow Math. J. 22 (1981), no. 1, 57-68. (P. R. Jones) 82c:20113 20M20

- (with Kim. Ki Hang) Effective nondictatorial domains. J. Econom. Theory 24 (1981), no. 1, 40-47. (From the introduction) 82m:90015 90A08
- (with Kim, Ki Hang) Generating all linear transformations. Linear Algebra Appl. 37
 (1981), 97-101. (A. Jaeger) 82m:15003 15A04 (05C50)
 (with Kim, Ki Hang) Posets and finite topologies. Pure Appl. Math. Sci. 14 (1981),
- no. 1-2, 9-22. (J. Karásek) 82f:54004 54A05
- is, G. G. (with Akritas, Michael G.) Asymptotic inference in continuous time Markov processes. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. I, pp. 210-217, Reidel, Dordrecht, 1980. (David J. Scott)
- 82h:62161 62M05 (62M02)
 ssseem, C. C. (with Burr, Stefan A.; Erdős, Paul; Faudree, R. J.; Schelp, R. H.) An extremal problem in generalized Ramsey theory. Ars Combin. 10 (1980), 193–203. (J. Spencer) 82h:63696 05C35 (05C35)
- (with Faudree, R. J.; Schelp, R. H.; Schuster, Seymour) Embedding graphs in their aplements. With a loose Russian summary. Czechoslovak Math. J. 31(106) (1981), no. 1, 53-62. (Paul A. Catlin) 82e:05105 05C70
- reseau, Christiane Formes normales des matrices rectangulaires dans un topos et applications. Ann. Sci. Math. Québec 5 (1981), no. 1, 81-85. (Gavin Wraith) 82k:18004 18B25 (58C27)
- m, Jean-Marc (with Lessard, Réjean; Dupuis, Daniel) HASTUS I: a mathematical programming appproach to the bus driver scheduling problem. Computer scheduling of public transport (Internat. Workshop, Univ. Leeds, Leeds, 1980), pp. 255-267, North-Holland, Amsterdam, 1981. (See 821:90053) 90B35
- eau, P. (with Bochi, S.; Brossier, G.; Celeux, Gilles; Charles, Christian; Chifflet, R.; Darcos, J.; Diday, E.; Diebolt, J.; Fevre, P.; Govaert, G.; Hanani, O.; Jacquet, D.; Lecnevallier, Yves; Lemaire, Jacques; Lemoine, Y.; Molliere, J. L.; Morisset, G.; Ok-Sakun, Y.; Sankoff, D.; Schroeder, A.; Sidi, J.; Taleng, F.) ★Optimisation en classification automatique. Tome 1, 2. (French) [Optimization in automatic classification. Vol. 1, 2] Institut National de Recherche en Informatique et en Automatique (INRIA), mcourt, 1980. vii + 896 pp. ISBN 2-7261-0219-0 (A. Aiello) 82k:62116 Rocquen (92A05)
- au, Ronny The covariance algebra of an extended covariant system. II. Simon Stevin 53 (1979), no. 4, 281-295. (Ole A. Nielsen) 82g:46105 46L10
 - sed products of von Neumann algebras and semidirect products of groups. Nederl. Akad. Wetensch. Indag. Math. 43 (1981), no. 1, 105-116. (Marie Choda) 82i:46103 46L55 (22D25, 22D30)
- sselet, Bernard (with Haug, Edward J.) Design sensitivity analysis in structural mechanics. I. Static response variations. J. Structural Mech. 8 (1980), no. 1, 17-41. (N. 73K10 (49H05, 73K40) Gass) 82j:73046a
- (with Haug, Edward J.) Design sensitivity analysis in structural mechanics. II. Eigenvalue variations. J. Structural Mech. 8 (1980), no. 2, 161-186. (N. Gass) 82j:73046b 73K12 (49H05, 73K40)
- Roussignol, M. (with Cocozza, C.; Galves, A.) Étude de deux évolutions markoviennes de processus ponctuels sur R par des méthodes d'association. (English summary) Ann. Inst. H. Poincaré Sect. B (N.S.) 15 (1979), no. 3, 235-259. (Walter Warmuth) 82d:60190 60K35 (60G55)
- Un processus de saut sur R à une infinité de particules. (English summary) Ann. Inst. H. Poincaré Sect. B (N.S.) 16 (1980), no. 2, 101-108. (Antonio Galves) 82i:60181 60K35 (60G55, 60J15)
- ley, Richard Semantics for connexive logics. I. Studia Logica 37 (1978), no. 4, 393-412 (1979). (Editors) 82i:03031 03B45
- (1979). (Editors) **82303031**(with Routley, V.) Some bad arguments for and against conventionalism. *Internat. Logic Rev. No.* 19-20 (1979), 84–90. (Alasdair Urqubart) **823:63067**03A05 (03B45) (with Loparic, Andréa) Semantics for quantified relevant logics without replacement. Proceedings of the Third Brazilian Conference on Mathematical Logic (Inst. Math., Fed. Univ. Pernambuco, Recife, 1979), pp. 263–280, Soc. Brasil. Lógica, São Paulo, 1980. (Stephen Read) 82g:03044 03B60
- On the impossibility of an orthodox social theory and of an orthodox solution to environmental problems. Logique et Anal. (N.S.) 23 (1980), no. 89, 145-166. (Dennis J. Packard) 82e:90018 90A10 (90A08)
- utley, V. (with Routley, Richard) Some bad arguments for and against conventionalism Internat. Logic Rev. No. 19-20 (1979), 84-90. (Alasdair Urquhart) 82h:03007 03A05 (03B45)
- avière, Franc is Démonstration de la conjecture de Kashiwara-Vergne pour l'algèbre sl(2). (English summary) C. R. Acad. Sci. Paris Sér. 1 Math. 292 (1981), no. 14, 657-660. (Jouko Mickelsson) 82m:17001 17B05 (22E45)
- Roux, A. Y. Stability of numerical schemes solving quasilinear wave equations. Comp. 36 (1981), no. 153, 93-105. (Author's summary) 82b:65088 65M10 (35L67) Numerical stability for some equations of gas dynamics. Math. Comp. 37 (1981), no. 156, 307-320. (Murli M. Gupta) 82m:76044 76N15 (65M10, 76A60)
- Roux, Delfina (with Massa, Silvio) On the minimal displacement under generalized nonexpansive multivalued mappings. (Italian summary) Rend. Mat. (6) 12 (1979), no. 3-4, 577-585 (1980). (Bhamidi V. Rao) 82a:54025 54C60 (54H25)
- (with Massa, Silvio) On the lower type of entire functions. (Italian summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 1, 76-83. (R. S. L. Srivastava) 82e:30005
- le Roux, H. J. (with Heyman, G. A. P.) A note on the lower radical. Publ. Math. Debrecen 28 (1981), no. 1-2, 11-13. (L. C. A. van Leeuwen) 82j:16018
- Roux, J.-C. (with Rossi, A.; Bachelart, S.; Vidal, Christian) Representation of a strange attractor from an experimental study of chemical turbulence. Phys. Lett. A 77 (1980), no. 6, 391-393. (O. E. Rössler) 82h:58028 58F13 (80A30, 92A40)
- (with Rossi, A.; Bachelart, S.; Vidal, Christian) Experimental observations of complex dynamical behavior during a chemical reaction. Phys. D 2 (1981), no. 2, 395-403. (Authors' summary) 82i-92010 92A09 (58F15, 80A30) uxel, Bernard L'œuvre mathématique d'Albert Ribaucour. Arch. Hist. Exact Sci. 23 (1980/81), no. 2, 159-177. (D. J. Struik) 82i-01054 01A55 (01A70, 53-03) Ruled (Saurfaces in Fuelidana repose E[®]. Sendon J. March. 110 (1980) 137 (198 Ruled &-surfaces in Euclidean space E". Soochow J. Math. 6 (1980), 117-121.
 - (Wolfgang Kühnel) 82j:53011 53A10 (53A05) A-submanifolds in Euclidean space. Kodai Math. J. 4 (1981), no. 1, 181-188. copold Verstraelen) 82g:53028 53B25 (53A07)
- (Leopold Verstraelen) 82g:53028 er, Jozef Asymptotic behaviour of solutions of the differential equation of the fourth

- nary) Math. Slovaca 30 (1980), no. 4, 379-392. (Ch. G. Philos) 82a:34042 34C11 (34A30)
- wenta, E. (with Bocsan, Ch.) On some fixed point theorems in probabilistic metric spaces. Bul. Stiint. Tehn. Inst. Politehn. "Traian Vula" Timiqoara 25(39) (1980), no. 1, in Vuia" Timişoara 25(39) (1980), no. 1, apacton June 18-20 (1981). (B. Schweizer) 82m:54046 54H25 (08A02)
 winsky, Robert B. (with Shoemaker, Christine) Operations research: applications in
- agriculture. Operations research (Duluth, Minn., 1979), pp. 151-174, Proc. Sympos. Appl. Math., 25, Amer. Math. Soc., Providence, R.I., 1981. (Authors' summary) 82k:90071 90B99 (92A15)
- Rovnyak, James (with Rosenblum, Marvin) An operator-theoretic approach to theorems of
 - no. 3, 406-436. (D. Sarason) 8264-7016 4/AGO (30153, 4/AZO) A converse to von Neumann's inequality. Proc. Amer. Math. Soc. 84 (1982), no. 3, 370-372. (Hari Bercovici) 826:47021 47AGO (30A10)
- w, W. H. (with Daverman, Robert J.) Cell-like 0-dimen sional decompositions of S3 are 4-manifold factors. Trans. Amer. Math. Soc. 254 (1979), 217-236. (Authors' summary) 54B15 (57N99)
- owe, C. J. See Ridler-Rowe, C. J.
- Rowe, D. J. (with Rosensteel, G.) On the algebraic formulation of collective models. II.
 Collective and intrinsic submanifolds. Ann. Physics 126 (1980), no. 1, 198–233. (N. 81G30 (58F06, 81H10)
 - (with Rosensteel, G.) On the algebraic formulation of collective models. III. The plectic shell model of collective motion. Ann. Physics 126 (1980), no. 2, 343-370. (N. 81G30 (58F06, 81H10)
 - (with Ryman, A.; Rosensteel, G.) Many-body quantum mechanics as a symplectic mical system. *Phys. Rev. A* (3) **22** (1980), *no.* 6, 2362-2373. (Gerald Kaiser) **1169** 81H99 (53B50, 58F06, 81D99)
- we, David E. (with Unguru, Sabetai) Does the quadratic equation have Greek roots? A study of "geometric algebra", "application of areas", and related problems. Libertas Math. 1 (1981), 1-49. (C. M. Taisbak) 82m:01012 01A20
- wen, Louis Halle *Polynomial identities in ring theory. Pure and Applied Mathematics, 84. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London-Toronto, Ont., 1980. xx+365 pp. ISBN 0-12-599850-3 (S. A. Amitsur) 82a:16021 16A38
 - Central polynomials for special Jordan rings without nilpotent elements, and an log of Kaplansky's theorem. J. Algebra 63 (1980), no. 1, 152-161. (Oda Kühn)
 - Division algebra counterexamples of degree 8. Israel J. Math. 38 (1981), no. 1-2, 16A39 51-57. (B. Fein) 82d:16013
- wland, John H. (with Davis, Philip J.) On the selection of test data for recursive mathematical subroutines. SIAM J. Comput. 10 (1981), no. 1, 59–72. (Authors' summary) 82m:65116 65Q05 (39A10, 68B10)
- nds, G. (with Infeld, E.; Hen, M.) Three-dimensional stability of Korteweg-de Vries waves and solitons. Acta Phys. Polon. A 54 (1978), no. 2, 131-139. (Authors' summary) 35Q20 (76B25)
- (with Infeld, E.) Three-dimensional stability of Korteweg-de Vries waves and is. II. Acta Phys. Polon. A 56 (1979), no. 3, 329-332. (Authors' summary) 82i:35129b
- 35O20 (76B25) (with Broomhead, D.; McCreadie, G.) On the analytic derivation of Poincaré maps -the forced Brusselator problem. Phys. Lett. A 84 (1981), no. 5, 229-231. (From the text) 82h:92012
- 92A09 (58F10, 80A30) wlett, Russell J. (with Beem, R. Paul) The fixed point homomorphism for maps of period 2k. Indiana Univ. Math. J. 30 (1981), no. 4, 489-500. (R. E. Stong) 82f:57025
- wley, Peter On the orders of finite groups and centralizers of real elements. Arch. Math. asel) 36 (1981), no. 5, 394-397. (N. D. Podufalov) 82j:20053 20D60
 - Characteristic 2-type groups with a strongly closed 2-subgroup of class at most two.

 J. Algebra 71 (1981), no. 2, 550-568. (Stephen D. Smith) 82k:20029 20D05 (20D15) 3-locally central elements in finite groups. Proc. London Math. Soc. (3) 43 (1981), no. 2, 357-384. (Stephen D. Smith) 82m:20013 20D05 (20D20)
- wlinson, J. S. Translation of J. D. van der Waals' "The thermodynamic theory of capillarity under the hypothesis of a continuous variation of density". J. Statist. Phys. 20 (1979), no. 2, 197-244. (Editors) 82e:01128 01A75 (80-03)
- willinson, P. (with Buekenhout, Francis) The uniqueness of certain automorphic graphs. Geom. Dedicata 11 (1981), no. 4, 443-446. (Norman Biggs) 82k:05087
- Roy, A. K. A short proof of a theorem on complex Lindenstrauss spaces. Israel J. Math. 38 (1981), no. 1-2, 41-45. (A. J. Lazar) 82b:46018 46B20 (with Ellis, A. J.; Rao, T. S. S. R. K.; Uttersrud, U.) Facial characterizations of
- complex Lindenstrauss spaces. Trans. Amer. Math. Soc. 268 (1981), no. 1, 173-186. (A. J. Lazar) 82j:46015 46B10 (46A55) Roy, A. R. (with Chatterjee, B.) Cylindrically symmetric empty space-time solution of Sen-Dunn theory. Acta Phys. Acad. Sci. Hungar. 48 (1980), no. 4, 383-389. (Authors'
- summary) 82f:83073 83D05 Roy, Archie E. (with Walker, Ian W.; Emslie, A. Gordon) Stability criteria in many-body
- Mech. 22 (1980), no. 4, 371–402. (Authors' summary) 82a:70006 70F10 (with Markellos, V. V.) Hill stability of satellite orbits. Celestial Mech. 23 (1981),
 - no. 3, 269-275. (Authors' summary) 824:70043 70M10 (with Walker, Ian W.) Stability criteria in many-body systems. II. On a sufficient
- condition for the stability of coplanar hierarchical three-body systems. Celestial Mech. 24 (1981), no. 2, 195-225. (Authors' summary) 82h:70015 70F15 (58F05) 24 (1981), no. 2, 195-225. (Authors' summary) 82h:70015
- Roy, Dipa On some information-improvement. J. Math. Sci. 12(13) (1977/78), 8-16 (1981). (Author's summary) 82i:94009 94A15 (90A99)
- Roy, L. K. More about entropies of power distributions. Z. Angew. Math. Mech. 60 (1980), no. 1, 55-56. (N. S. Kambo) 82a:94041 94A17
- coste-Roy, Marie-Françoise See Coste-Roy, Marie-Françoise
 Roy, Nian M. An M-ideal characterization of G-spaces. Pacific J. Math. 92 (1981), no. 1,
 151-160. (A. J. Lazar) 82h:46031 46B20
- Roy, Philippe Résolution des équations de Navier-Stokes par un schéma de haute précision en espace et en temps. (English summary) Translated as Rech. Aérospat. (English) 1980, no. 6, 3-15. Rech. Aérospat. 1980, no. 6, 373-385. (Author's summary) 82c:76036

- Roy, Ranjan (with Fricke, Gerd H.; Shah, Shantilal M.) Bounded index, entire solutions of ordinary differential equations and summability methods. Internat. J. Math. Math. Sci. 4 (1981), no. 3, 417-434. (J. Rausen) 82i:30040 30D15 (34A20, 40D05)
- Roy, Roch (with Lefrançois, Pierre) Sur les moments des autocovariances échantillonnales d'un processus ARIMA. Ann. Sci. Math. Québec 5 (1981), no. 1, 87–95. (Robert Fernholz) 82i:62131
- Roy, Sisir (with Roychoudhury, R. K.) Stochastic space-time and the concept of potential in classical mechanics. Phys. Rev. D (3) 22 (1980), no. 10, 2384-2386. (Authors' summary) 82a:81006 81B05
- Roy, Subir (with Datta, Nanigopal) Interval arithmetic for two-point boundary value problems with mixed boundary conditions. Indian J. Mech. Math. 17 (1979), no. 1, 46-56. (Authors' summary) 82k:65022 65Gl0 (65L10)
- Roy, Susanta (with Sinha, D. K.) Mathematical modeling of harvesting on competitive system. Proceedings of the Second International Conference on Mathematical Modelling (St. Louis, Mo., 1979), Vol. I, II, pp. 1097-1106, Univ. Missouri-Rolla, Rolla, Mo., 1980. (William J. Reed) 82c:92027 92A15 (90A30, 90C39)
- (with Paul, S. K.) On an aspect of optimum exploitation of renewable resources: a etitive economy. J. Indian Acad. Math. 3 (1981), no. 2, 26-31. (Authors' summary) 92A15 (90A30)
- Roy, T. (with Banerjee, R. S.; Roy Chowdhury, A.) Some special multisoliton solutions of near equations. Acta Phys. Polon. A 58 (1980), no. 3, 259-262. (Authors' summary) 82e:35066 35020
- (with Banerjee, R. S.; Roy Chowdhury, A.) Solitonlike solution of the massive Thirring model in a singular perturbation approach. Acta Phys. Polon. A 58 (1980), no. 6, 683-689. (Authors' summary) 82f:81057 81E99
 - 683-689. (Authors' summary) \$22.81057 81E99
 (with Roy Chowdhury, A.; Banerjee, R. S.) A soliton perturbation scheme for 3×3 inverse scattering formalism with application to the problem of self-focussing of polarised wave in a nonlinear medium. Phys. Scripta 23 (1981), no. 3, 268-271. (Authors
- summary) 82f:78001 78A25 (35B99) Royall, Richard M. (with Cumberland, William G.) Prediction models and unequal probability sampling. J. Roy. Statist. Soc. Ser. B 43 (1981), no. 3, 353–367. (Authors' summary) 82k:62019 62D05
- Roychoudhury, R. K. (with Roy, Sisir) Stochastic space-time and the concept of potential in classical mechanics. Phys. Rev. D (3) 22 (1980), no. 10, 2384-2386. (Authors' summary) 82a:81006 81B05
- Roy Chowdhury, A. (with Banerjee, R. S.; Roy, T.) Some special multisoliton solutions of nonlinear equations. Acta Phys. Polon. A 58 (1980), no. 3, 259–262. (Authors' summary) 878-38065. 35020
 - (with Banerjee, R. S.; Roy, T.) Solitonlike solution of the massive Thirring model in (Authors' summary) 821:81057 81E99
 - (with Banerjee, R. S.; Roy, T.) A soliton perturbation scheme for 3×3 inverse scattering formalism with application to the problem of self-focussing of polarised wave in a nonlinear medium. Phys. Scripta 23 (1981), no. 3, 268-271. (Authors' summary) 78A25 (35B99)
- 82f:78001 78A25 (35B99)
 Royden, H. L. The Ahlfors-Schwarz lemma in several complex variables. Comment. Math. Helv. 55 (1980), no. 4, 547-558. (Marcus Wright) 82i:32049 32H20
- Royer, Gilles Croissance exponentielle de produits markoviens de matrices aléatoires (English summary) Ann. Inst. H. Poincaré Sect. B (N.S.) 16 (1980), no. 1, 49-62. (G. G. 60J05 (60F99) Vranceanu) 82d:60117
- Roynette, B. (with Clerc, Jean-Louis) Un théorème central-limite. Analyse harmo les groupes de Lie (Sém., Nancy-Strasbourg, 1976-1978), II, pp. 122-131, Lecture Notes in Math., 739, Springer, Berlin, 1979. (Albert Raugi) 82i:58072 58G25 (58G32, 60J15) (with Hennion, H.) Un théorème de dichotomie pour une marche aléatoire sur un espace homogène. (English summary) Conference on Random Walks (Kleebach, 1979)
- (French), pp. 99-122, 4, Astérisque, 74, Soc. Math. France, Paris, 1980. (Philippe Bougerol) 82f:60028 60B15 (60J15) Rozanov, Ju. A. Investigation of the Markov property of random fields. (Russian) Current problems in mathematics, Vol. 14 (Russian), pp. 3-70, 256, Akad. Nauk SSSR, Vsesoj Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (H.-J. Engelbert) 82i:60100 600
 - Some problems of the linear theory of random functions. (Russian. English sum jatnost. i Primenen. 25 (1980), no. 4, 704-717. (François Bronner) 82h:60121 60H15 (60G60, 60J65)
- anskaja, M. M. Khāzinī's astronomical clock. (Russian) Istor.-Astronom. Issled. No. 14
 - (1978), 189-198. (Е. S. Kennedy) 82;01019 01A30 (with Grigor'jan, А. Т.) ★Механика и астроновия на средневсковом Востоке. (Russian) [Mechanics and astronomy in the East in the Middle Ages] Серва "История науки и техники". [Series "History of Science and Technology"] 1980. 200 pp. (E. S. Kennedy) 82d:01006 01A30
- Panskii, I. D. **Aнгичная ваука. (Russian) [Ancient science] Сервя "История Науки и Техники". [Series in the History of Science and Technology] "Nauka", Moscow, 1980. 200 pp. (E. M. Bruins) 82k:01001 01-01 (01A20)

 Idestvenskli, B. L. The problem of numerical modeling of unstable motions of an
- incompressible viscous fluid. (Russian) Problems in mathematical physics and nu atics (Russian), pp. 271-279, 327, "Nauka", Moscow, 1977. (N. D. Kopačevskii) 76D99 (65P05)
- (with Ruev, G. A.; Fomin, V. M.; Janenko, N. N.) Conservation laws for systems of se medium equations. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 2, 288-293. (Alexander Doktor) 82h:35105 351.65 (76T05)
- 288-293. (Alexander Dottor) azersines (with Levitan, Ju. L.; Moissenko, B. D.; Prilmak, V. G.; Sidorova, V. K.) Methods of numerical modeling of turbulent flow of a fluid in a channel. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 3, 737-747, 812. (Authors' summary) 82h:76026 76F99 (65P05, 76A60)
- erg, Grzegorz (with Salomaa, Arto) *The mathematical theory of L systems. Pure and Applied Mathematics, 90. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London-Toronto, Ont., 1980. xvi+352 pp. ISBN 0-12-597140-0 (Gheorghe 68D22 (68F05, 68F10, 92A05)
 - (with Ehrenfeucht, A.) DOS systems and languages. Automata, languages and gramming (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 134–141,

- Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (K. P. Lee) 82a:68141

- (with Verraedt, R.) Synchronized and desynchronized EOL forms. Discrete Appl. Math. 2 (1980), no. 3, 233–247. (Jürgen Dassow) 82b:68068 68F05 (with Vermeir, Dirk) On metalinear ETOL systems. Fund. Inform. (4) 3 (1980), no. 1, 15–36. (Jürgen Dassow) 82b:68069 68F05 (with Albert, Jürgen; Maurer, Hermann A.) Simple EOL forms under uniform interpretation generating CF languages. Fund. Inform. (4) 3 (1980), no. 2, 141–156. (K. P. Lee) 82e:68071 68F05
- (with Vermeir, Dirk) A note on M-growth functions of FTOL systems with rank. Fand. Inform. (4) 3 (1980), no. 3, 295–302. (Jürgen Dassow) 82e:68053 68D22
- (with Ehrenfeucht, A.; Maurer, Hermann A.) Continuous grammars. Info Control 46 (1980), no. 1, 71-91. (Jürgen Dassow) 824:68045 68F05 (03D05)
- (with Ehrenfeucht, A.) On basic properties of DOS systems and languages. and Control 47 (1980), no. 2, 137–153. (Authors' summary) 824:68046 68F05 68F05 (03D05) with Ehrenfeucht, A.) On ambiguity in EOL systems. Theoret. Comput. Sci. 12 (1980), no. 2, 127–134. (Derick Wood) 82e:68048 68F05 (68F25)
- ith Janssens, Dirk Marcel) A characterization of context-free string languages by directed node-label controlled graph grammars. Acta Inform. 16 (1981), no. 1, 63–85. (Authors' summary) 82;68075 68F05 (05C99) (Authors' summary) 82j:68075
- (with Verraedt, R.) On fixed, terminal fixed and nonterminal fixed interpretations of EOL forms. Inform. and Control 48 (1981), no. 2, 119-146. (Authors' summary) 68F05 82i:68082
- (with Verraedt, R.) EOL forms and finite substitutions of OL forms. Intern. mput. Math. 10 (1981/82), no. 1, 17-33. (Authors' summary) 82m:68124 (with Verraedt, R.) On pure, terminal invariant and nonterminal invariant
- interpretations of EOL forms. Theoret. Comput. Sci. 14 (1981), no. 3, 267-288. (Authors' ary) 82g:68076 68F05
- (with Ehrenfeucht, A.) On the subword complexity of square-free DOL languages coret. Comput. Sci. 16 (1981), no. 1, 25-32. (Authors' summary) 82::68048 68F0 (03D05)
- (with Kleijn, H. C. M.) Context-free-like restrictions on selective rewriting. Theoret.
- Соприл. Кс. ів. (1981), по. 3, 237—269. (Authors' summary) 82m:68120 68F(
 renbljum, А. А. ★Интегрирование дифференциальных уравнений оператория
 метолом. (Russian) [Integration of differential equations by the operator m
- Gor'kov. Gos. Univ., Gorki, 1980. 60 pp. (J. D. Keckić) 82h:34005 34A25
 renbljum, A. V. (with Rozenbljum, L. V.) Representations of the group of motions of n-dimensional Euclidean space and Bessel functions of matrix index. (Russian. English mary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 4, 44-52, 140. (Tom H. Koornwinder) 82b:22029 22E70 (33A40, 33A70, 81C40)
- ljum, L. V. (with Rozenbljum, A. V.) Representations of the group of motions of n-dimensional Euclidean space and Bessel functions of matrix index. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1990, no. 4, 44-52, 140. (Tom
- endorn, È. G. (with Aleksandrov, A. D.; Aminov, Ju. A.; Oleinik, O. A.; Pogorelov, A. V.; Poznjak, È. G.; Sabitov, I. H.) Nikolai Vladimirovič Efimov (on the occasion of his seventieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 3(219), 233-238. (Editors) 82g:01037b 01A70
- endorn, E. R. On the imbedding of two-dimensional Riemannian metrics into a four-dimensional Euclidean space. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. No. 2 (1979), 47-50, 103. (J. Szenthe) 82e:53008
 - Approximate solution of the wind and pressure balance equation for anticyclones in tropical and subtropical latitudes. (Russian) Dokl. Akad. Nauk 584-587. (From the text) **82g:86017** 86A35 (35Q20, 86A10) uk SSSR 253 (1980), no. 3,
 - Reduction of a problem of meteorology to a geometric problem. (Russian) Uspehi Mat. Nauk 35 (1980), no. 6(216), 167-168. (A. V. Pogorelov) 82h:86005 86A10 (53C45)
 - A wind-pressure balance equation in a model of a thin atmosphere. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1981, no. 4, 11-14, 84. (V. M. Isakov) 82m:86003 86A10 (35Q20)
- zenfel'd, B. A. (with Ahmedov, A.) "Cartography"—one of Birūni's first essays to have reached us. (Russian) Mathematics in the East in the Middle Ages (Russian), pp. 127–153, 196, "Fan", Tashkent, 1978. (E. S. Kennedy) 82a:01006 01A30
- (with Marupov, N. N.) On the work in physics of the Iranian scholars of the IX-X centuries al-Īrānshahrī and al-Rāzī. (Russian) Voprosy Istor. Estestvoznan. i Tehn. 1980, no. 2, 106–111. (E. S. Kennedy) 82b:01008 01A30 01A30 vental, I. L. (with Berkov, A. V.; Nikitin, Ju. P.) Two-dimensional field theories.
- Fortschr. Phys. 29 (1981), no. 7, 303-344. (R. Delbourgo) 82i:81074 81E10 (81G05.
- nvasser, E. N. Sensitivity study of oscillatory processes with respect to the excitation frequency. Automat. i Telemeh. 1980, no. 6, 23-27 (Russian. English sum translated as Automat. Remote Control 41 (1980), no. 6, part 1, 755-759. (Author's summary) 82i:70027 70K99 (34C15)
- et, I. G. (with Filinyh, V. V.) Homoclinic trajectories in some classes of auto three-dimensional dynamic systems. (Russian) Dokl. Akad. Nauk UzSSR No. 8 (1979), 16-18. (L. Reiziņš) 82b:34069 34D30 (58F14)
- rinas, M. G. The semilattice of e-degrees (Russian) Recursive functions (Russian), pp. 71-84, Ivanov. Gos. Univ., Ivanovo, 1978. (Max I. Kanovič) 82i:03057 03D30
- w, V. I. (with Mašnikov, S. A.) Asymptotic behavior of solutions of systems of difference and differential-difference equations with small lag. (Russian) Differential equations with deviating argument (Russian), pp. 65-79, Univ. Družby Narodov im. Patrisa Lumumby, Moscow, 1979. (G. S. Ladde) 82e:34088 34K25
- 2015kii, B. L. (with Krylov, N. V.) Itô equations in Banach spaces and strongly parabolic stochastic partial differential equations. (Russian) Dokl. Akad. Nauk SSSR 249 (1979). no. 2, 285-289. (Ja. I. Belopol'skaya) 82i:60108 60H10 (35R60)
 - A note on strong solutions of stochastic differential equations with random coefficients. Stochastic differential systems (Proc. 1FIP-WG 7/1 Working Conf., Vilnius, 1978), pp. 287-296, Lecture Notes in Control and Information Sci., 25, Springer, Berlin, 1980. (Shinichi Kotani) 82i:60109 60H10

- Conditional distributions of degenerate diffusion processes. (Russian. English ary) Teor. Verojatnost. i Primenen. 25 (1980), no. 1, 149-154. (N. M. Zinčenko) 60J60 (35R60, 60G35)
- vskii, L. V. On the rate of convergence to the normal law in an integral metric. (Russian) Mat. Zametki 27 (1980), no. 2, 307-316, 320. (Werner Wolf) 82d:60044
- rsky, B. L. See Rozovskii, B. L.
- Rózsa, P. (with Sinha, N. K.) Algorithm for transformation of a polynomial matrix to canonical form. (Russian summary) Problems Control Inform. Theory/Problems Upravlen. Teor. Inform. 10 (1981), no. 3, 175-180. (C. E. Langenhop) 82g:15005 15A21 (15A54)
 - (with Sinha, N. K.) Some system theory applications of Egerváry's algorithm for transformation of a matrix to the Hermite normal form. (Russian summary) Problems Control Inform. Theory/Problemy Upravien. Teor. Inform. 10 (1981), no. 4, 267-277. (Authors' summary) 82h:93012 93B05 (93B07, 93B20)
- as, Afrânio F. (with Tölke, Jürgen) Eine Kennzeichnung der symmetrischen Projektivbewegungen. Abh. Braunschweig. Wiss. Ges. 31 (1980), 143-147. (J. Hoschek) 824:53010 53A17
- as, Vitoriano A class of asymmetric simplicial finite element methods for solving finite incompressible elasticity problems. Comput. Methods Appl. Mech. Engrg. 27 (1981), no. 3, 319–343. (Author's summary) 82m:73041 73G05 (73K25)
 Rubahin, V. F. See Mathematical modeling in psychology, 82t:92052
 Rubakov, V. A. (with Krasnikov, N. V.; Matveev, V. A.; Tavhelidze, A. N.; Tokarev, V. F.)
- The structure of the ground state in two-dimensional massless quantum electrodynan (Russian, English summary) Teoret, Mat. Fiz. 45 (1980), no. 3, 313-328. (Authors' summary) 82b:81060 81E10 (81L05)
- (with Verjaskin, A. V.; Lapčinskii, V. G.) The spontaneous breakdown of symmetry in the closed cosmological Friedman model. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 407-420. (S. G. Mamaev) 82c:83073 83F05 (81D20)
- an, A. I. (with Kuhtenkov, L. P.) The sensitivity of discontinuous systems described by differential-difference equations with lagging argument. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 6, 167-172, 222 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 6, 136-141 (1980). (A. Halanay) 82b:34087 34K05
- ın, V. L. (with Velikin, V. L.; Žensykbaev, A. A.; Motornyi, V. P.; Nikol'skii, S. M.) Nikolaï Pavlovič Korneičuk (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 209-213. (Editors) 82e:01105 01A70
- Nanovič, S. G. Hölder spaces with weight and pseudodifferential operators. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 71 (1980), no. 5, 267–274. (From the text) 82:47061 47G05 (35S05, 46E35)
- Rubanovskii, V. N. See Wittenburg, Jens, 82c:70003
 Rubčinskii, A. A. (with Vinogradskaja, T. M.) Logical forms of choice functions. (Russian)
 Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1362–1366. (Stanisław J. Surma) 82f:04005 04A25 (90A06)
- Rubcov, V. N. Cohomology of the Der-complex. (Russian) Uspehi Mat. Nauk 35 (1980), no. 4(214), 209-210. (Luchezar L. Avramov) 82a:13007 13N05 (32L10, 58A12) Rubel, Lee A. (with Briggs, John) Interpolation by nonnegative polynomials. J. Approx.
- Theory 30 (1980), no. 3, 160-168. (E. Neuman) 82e:41005 41A05
 - (with Taylor, B. A.) An example of a rigid partial differential equation. J. Differential Equations 38 (1980), no. 1, 126-133. (L. Cattabriga) 82a:35025 35E20
 - (with Lappan, Peter) Some orderings induced by spaces of analytic functions Michigan Math. J. 27 (1980), no. 3, 371-377. (A. N. Kanatnikov) 82h:30054 (with Cowen, Carl C.) A joint spectrum for shift invariant subspaces of H² of the polydisc. Proc. Roy. Irish Acad. Sect. A 80 (1980), no. 2, 233–243. (D. N. Clark) 82i:47043 47B38 (32A35, 47A15)
 - A universal differential equation. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 3, 345-349. (B. G. Pachpatte) 82e:34015 34A45 (41A30)
 - (with Gervais, Robert) Yet another characterization of the sine function. Interna Math. Math. Sci. 4 (1981), no. 2, 371-381. (Chung-Chun Yang) 82h:30022 30D15 (with Diamond, Harold G.; Pomerance, Carl) Sets on which an entire function is
- determined by its range. Math. Z. 176 (1981), no. 3, 383-398. (I. V. Ostrovskii) 82c:30031 30D20

 Ruben, Peter *Philosophie und Mathematik. (German) [Philosophy and mathematics] Eine populärwissenschaftliche Darstellung der philosophischen Basis für das
- weltanschauliche Begreifen der Mathematik. [A popularized presentation of the philosophical foundation for the ideological understanding of mathematics] BSB B. G. Teubner Verlagsgesellschaft, Leipzig, 1979. 122 pp. (D. J. Struik) 82f:00014 00A25 (03A05, 03F55)
- venčik, A. M. (with Kanašov, A. A.) On turbulence spectra of nonisothermal plasma. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 5, 1112–1116. (J. D. Atkinson)
- Rubenstein, R. (with Murakawa, Hide; Reed, K. W.; Atluri, Satya N.) Stability analysis of structures via a new complementary energy method. Comput. & Structures 13 (1981), no. 1-3, 11-18. (Authors' summary) 82j:73055 73K25 (73H99)
- Rubenthaler, Hubert Espaces vectoriels préhomogènes, sous-groupes p §1₂-triplets. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 3, A127-A129. (A. L. Oniščik) 82b:17007 17B20 (32M10) 17B20 (32M10)
- Ruberg, Stephen J. The tree planting problem on a sphere. Math. Mag. 53 (1980), no. 4, 235-237. (Stefan A. Burr) 82f:05023 05B30 (51A20)
- la Rubia, J. (with Velarde, M. G.) Further evidence of a phase transition induced by external noise. Phys. Lett. A 69 (1978/79), no. 4, 304-306. (Authors' summary) 82a:92016 92A09 (35K55, 82A25)
 Rubin, Arthur L. (with Erdős, Paul; Taylor, Herbert) Choosability in graphs. Proceedings
- of the West Coast Conference on Combinatorics, Graph Theory and Computing (Humbe State Univ., Arcata, Calif., 1979), pp. 125-157, Congress. Numer., XXVI, Utilitas Math., Winnipeg, Man., 1980. (R. C. Entringer) 82f:05038 05C15 (with Posner, Edward C.; Taylor, Herbert) Partitioning files into subfiles with keys.
- Utilitas Math. 17 (1980), 85-101. (James W. Snively, Jr.) 82c:68015 68B15

 Rubin, B. S. Noether's theory for generalized Abel equations with a real index. (Russian)

 Differencial' nye Uravnenija 16 (1980), no. 5, 917-927, 958. (Ju. I. Karlovič) 82e:45017 45P05 (47B38, 47G05)

On the Noethericity of integral equations of the first kind with a finite number of kernels of potential type. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estesto, Nauk. 1980. no. 3, 29-31, 109. (R. V. Duduchava) 82d:45011 45E10 (47R35) k. 1980, no. 3, 29-31, 109. (R. V. Duduchava) 82d:45011

Rubin, Donald B. The Bayesian bootstrap. Ann. Statist. 9 (1981), no. 1, 130-134. (J. M. 62F15 (62G05) Bernardo) 82h:62036

(with Dempster, A. P.; Tsutakawa, R. K.) Estimation in covariance components J. Amer. Statist. Assoc. 76 (1981), no. 374, 341-353. (Authors' summary) 82h:62116 62110

Rubin, L. R. (with Dickman, R. F., Jr.; Porter, J. R.) Completely regular absolutes and projective objects. Pacific J. Math. 94 (1981), no. 2, 277–295. (A. I. Baškirov) 82k:54061 54G05 (54C05)

Rubin, M. B. (with Naghdi, P. M.) On inviscid flow in a waterfall. J. Fluid Mech. 103 76B15

(1981), 375-387. (Authors' summary) 82d:76015

Rubin, Matatyahu (with Malitz, J.) Compact fragments of higher order logic. Mathema logic in Latin America (Proc. IV Latin Amer. Sympos. Math. Logic, Santiago, 1978), pp. 219-238, Stud. Logic Foundations Math., 99, North-Holland, Amsterdam, 1980. (M.

Makkai) 826:403055 03C80 (03C55)
(with van Douwen, Eric K.; Monk, J. Donald) Some questions about Boolean algebras. Algebra Universalis 11 (1980), no. 2, 220-243. (P. Štěpánck) 82a:06024

06E05 (03E35, 03G05)

On the reconstruction of Boolean algebras from their automorphism groups. Arch. Math. Logik Grundlag. 20 (1980), no. 3-4, 125-146. (Peter Schmitt) 82c:06026 06E05

Rubin, Michael Architecture and geometry. (French summary) Structural Topology 1979, no. 1, 13-25, 73. (Author's summary) 82e:01005 01A05 (51-03, 52-03, 73-03) Rubin, R. J. Energy flow and thermal conductivity in one-dimensional, harmonic,

isotopically disordered crystals. Perspectives in statistical physics, pp. 111-122, Stud.

Statist. Mech., IX, North-Holland, Amsterdam, 1981. (See 82h:82001) 82A70
Rubin, S. G. (with Khosla, P. K.) Navier-Stokes calculations with a coupled strongly implicit method. II. Spline deferred-corrector solutions. Approximation methods for Navier-Stokes problems (Proc. Sympos., Univ. Paderborn, Paderborn, 1979), pp. 469-488, Lecture Notes in Math., 771, Springer, Berlin, 1980. (Authors' summary) 82h:76019b 76D05 (65P05, 76–04, 76A60)

(with Khosla, P. K.) Navier-Stokes calculations with a coupled strongly implicit method. I. Finite-difference solutions. Comput. & Fluids 9 (1981), no. 2, 163-180. (Authors' summary) 82h:76019a 76D05 (65N10, 76A60)

(with Khosla, P. K.) Applications of a variational method for mixed differential equations. J. Engrg. Math. 15 (1981), no. 3, 185-200. (Authors' summary) 82h:76030 76H05 (49D15, 76A60)

ov, A. M. A macroeconomic model. (Russian) Optimizacija No. 21(38) (1978),

139-152, 180. (Author's summary) 82m:90042 90A14
(with Dem'janov, V. F.) Quasidifferentiable functionals. (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 1, 21-25. (Jiří V. Outrata) 82e:90112 90C48 (46G05)
Turnpike sets in discrete dispersed dynamical systems. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 4, 136-145, 238. (Helmut Ludescher) 82a:\$4074 54H15 (54C60) pinovič, E. Ja. Trajectory control of observations in discrete stochastic optimization

problems. Avtomat. i Telemeh. 1980, no. 3, 93-102 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 3, part 2, 365-372. (Author's summary) 82f:93092 93E25

(with Abramjanc, T. G.; Maslov, E. P.) Elementary differential game of alternate pursuit. Avtomat. i Telemeh. 1980, no. 8, 5-15 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 8, part 1, 1043-1052 (1981). (E. G. Al'breht) 90D26

ovskii, A. V. Application of the method of p-analytic functions for solution of axisymmetric problems of blast ejection theory. (Russian) Vyčisl. Prikl. Mat. (Kiev) No. 44 (1981), 76-84, 148. (Author's summary) 82k:76049 76L05

ow, Sol I. (with Bard, Jonathan L. B.; Ghozlan, Aline; Goldbeter, Albert; Hardt, Shoshana; Levitzki, Alexander; Liron, Nadav; Odell, Garrett M.; Parnas, Hanna; Perelson, Alan S.; Rapp, P. E.; Segel, Lee A.; Tolkovsky, Aviva M.; Wehrhahn, Christian; Yagil, Gad; Zeigler, Bernard P.) *Mathematical models in molecular and cellular biology. Cambridge University Press, Cambridge-New York, 1980. x+757 pp. ISBN 0-521-22925-1 (John J. Tyson) 82c:92001 92-01 (92A09)

(with Keller, Joseph B.) Recurrent precipitation and Liesegang rings. J. Chem. Phys.

74 (1981), no. 9, 5000-5007. (Authors' summary) 82d:80032

(with Nedelman, J.) Facilitated diffusion of oxygen and carbon monoxide in the large affinity regime. J. Math. Biol. 12 (1981), no. 1, 73-90. (Authors' summary) 82k:92032 92A09 binstein, Ariel On an anomaly of the deterrent effect of punishment. Econom. Lett. 6

(1980), no. 1, 89-94. (Author's summary) 82d:90023 90A10

Stability of decision systems under majority rule. J. Econom. Theory 23 (1980), no. 2,

150-159. (From the introduction) 82m:90019 90A08 Rubinstein, G. S. (with Rutkovskii, N. V.) Axial structures and foundations of geometry.

(Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1342–1345. (H. Sachs) 82f:51014 51L05 (53C75)

On Čebyšev rank for problems of uniform approximation in the space of \(\text{\$\tex{\$\text{\$\tex{\$\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\texi\text{\$\texititt{\$\text{\$\text{\$\texitititt{\$\text{\$\texititt{\$\t 41A65

vinstein, Lawrence V. (with Gail, Mitchell H.; Lubin, Jay H.) Likelihood calculations for matched case-control studies and survival studies with tied death times. Biometrika 68 (1981), no. 3, 703-707. (Authors' summary) 82k:62194 62P10 (62N05)

tein, Lev (with Fasano, Antonio; Primicerio, Mario) Remarks on the analyticity of the free boundary for the one-dimensional Stefan problem. Ann. Mat. Pura Appl. (4) 125 (1980), 295-311. (D. L. Colton) 82f:35087 35K05 (35R35)

(with Fasano, Antonio; Primicerio, Mario) A model problem for heat conduction with a free boundary in a concentrated capacity. J. Inst. Math. Appl. 26 (1980), no. 4, 35R35 (35K20, 80A20) 327-347. (Alfonso Castro) 82j:35139

binstein, Y. Selecting the best stable stochastic system. Stochastic Process. Appl. 10 (1980), no. 1, 75-85. (E. V. Bulinskaja) 82g:60113 60K05 (65C20, 65U05) binstein, Zalman Solution of the middle coefficient problem for certain classes of

C-polynomials. Pacific J. Math. 89 (1980), no. 2, 431-437. (A. W. Goodman) 82a:30004 30C10

rtein, Ryszard Andrzej Jankowski (1938-1975). (Polish) Wiadom. Mat. (2) 23, no. 1, 87-92 (1980). (Editors) 82f:01137 01A70

io, A. J. (with Duran Garcia, J. J.) FIR digital filters for signals in delta-modulated form. Proc. IEE-E 129 (1982), no. 1, 33-36. (Authors' summary) 82m:94016 Rubio, J. E. Controllability and extensions. J. Franklin Inst. 309 (1980), no. 5, 301-308.
(From the introduction) 82b:49058 49E15

Rubio de Francia, José L. (with Marcellan Español, Francisco) Functionals continuous with respect to convergence in measure. (Spanish) Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 140–162, Consejo Sup. Inv. Cient., Madrid, 1977. (From the text) 824:28008 28A20

Notes on spectral sets and factorization of ideals. (Spanish) Proceedings of the First pp. 211-222, Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 211-2 Consejo Sup. Inc. Cient., Madrid, 1977. (W. Żelazko) 82m:43006 43A20 (43A45)

Lacunary isomorphism of finitely Bernoulli sequences of measurab partitions. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 10, 5-7. (B. Kamiński)

eness result for Enneper's minimal surface. Indiana Univ. Math.

J. 30 (1981), no. 3, 427-431. (V. M. Mikljukov) 82h:53012 53A10

Rück, Hans-Georg Diskriminanten zu singulären Werten von j. Arch. Math. (Basel) 34 (1980), no. 1, 27–31. (Reinhard Bolling) 82:10027 10D05 (10D25, 12A65, Ruckebusch, Guy Théorie géométrique de la représentation markovienne. (English 10D05 (10D25, 12A65, 14K07)

mmary) Ann. Inst. H. Poincaré Sect. B (N.S.) 16 (1980), no. 3, 225-297. (J. Bulatović) 60G15 (60G35, 93E11)

ckelshausen, W. (with Rival, Ivan; Sands, Bill) On the ubiquity of herringbones in finitely generated lattices. Proc. Amer. Math. Soc. 82 (1981), no. 3, 335-340. (L. Beran) 06B05

Ruckle, William H. (with Kaneko, Hideaki) Schauder decompositions, approximations and control problems. SIAM J. Control Optim. 18 (1980), no. 4, 381-390. (Authors' summary) 82:49031 49D27 (46N05)

Pursuit on a cyclic graph—the symmetric stochastic case. Internat. J. Game Theory

10 (1981), no. 2, 91-99. (Author's summary) 82m:90186 90D26 (90D05)
Rudakov, A. N. (with Safarevič, I. R.) Degeneration of surfaces of type K3 over fields of finite characteristic. (Russian) Izo. Akad. Nauk SSSR Ser. Mat. 45 (1981), no. 3, 646-661. (Gerhard Pfister) 82k:14040 14J25

Rudakov, S. A. (with Melencov, A. A.) Pseudoconvergence and summability of iterations of nonlinear operators. (Russian) Ural. Gos. Unio. Mat. Zap. 11 (1978/79), no. 4, 38-71, 131. (P. P. Zabreiko) 82f:47067 47H09 (47H10)

Rudakov, V. P. Well-posedness of a boundary value problem for explicit and implicit differential equations in a Banach space. (Russian) Differencial'nye Uravnenija 17 (1981), no. 9, 1635-1640, 1724. (Sergiu Aizicovici) 82m:34066 34G20

mu, Sergiu (with Brown, Frank Markham) Consequences, consistency, and

independence in Boolean algebras. Notre Dame J. Formal Logic 22 (1981), no. 1, 45-62. (Sabine Koppelberg) 82g:03106 03G05 (06E05)

lenko, A. V. Methods of differential topology in the problem of local controllability. (Russian) Complex control systems (Russian), pp. 16–26, 97, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (Author's summary) 82g:93009 93B05 (57R27) Representation of simultaneously reachable sets in nonlinear systems. Automatika

1980, no. 5, 42-48, 93 (Russian. English summary); translated as Soviet Automat. Control 13 (1980), no. 5, 36-41 (1981). (J. Kučera) 82m:49052 49E15 (57R27, 93B05)

adenok, I. P. (with Kolesnikov, P. M.; Martynenko, O. G.) Contribution to the theory of waves in open gradient fiber lightguides. Radiotehn. i Elektron. 24 (1979), no. 11, 2173–2178 (Russian); translated as Radio Engrg. Electron. Phys. 24 (1979), no. 11, 1–5 (1980). (G. P. Bava) 82h:78025 78A50

rfer, V. I. Zeros of solutions of a certain class of analytic system 35J15 (35B99) 106(148) (1978), no. 4, 544-553. (G. Wildenhain) 82f:35064

Rüdiger, G. On negative eddy viscosity in MHD turbulence. Magnit. Gidrodinamika No. 1 (1980), 3-14 (Russian); translated as Magnetohydrodynamics 16 (1980), no. 1, 1-10. (From the summary) 82b:76067 76W05

Rüdiger, Roland Time dependence of the cosmological redshift in Friedmann universes.

Astrophys. J. 240 (1980), no. 2, part 1, 384-386. (Author's summary) 82j:83072

The Dirac equation and spinning particles in general relativity. Proc. Roy. Soc. London Ser. A 377 (1981), no. 1771, 417-424. (Author's summary) 82i:83010 83C10

din, G. I. (with Leïcina, V. G.; Pavljukevič, N. V.) On the calculation of the barodiffusion constants of binary gas mixtures (McCormack model). Inž.-Fiz. Ž. 38 (1980), no. 6, 1077-1083 (Russian); translated as J. Engrg. Phys. 38 (1980), no. 6, 671-676 (1981). (S. L. Kalla) 824:80015 80A20 (80A15, 82A70)

din, Mary Ellen Directed sets which converge. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 305-307, Academic Press, New York, 1981. (From the text) 82f:54006 54A20 (06A10)

Rudin, Walter Tauberian theorems for positive harmonic functions. Nederl. Akad. Wetensch. Indag. Math. 40 (1978), no. 3, 376-384. (W. H. J. Fuchs) 82a:31007 Unitarily invariant algebras of continuous functions of spheres. Houston J. Math. 5

(1979), no. 2, 253-265. (Charles Horowitz) 82i:46000 46J10 (32A99)

★Function theory in the unit ball of Cⁿ. Grundlehren der Mathematischen
Wissenschaften [Fundamental Principles of Mathematical Sciences], 241. Springer-Verlag. New York-Berlin, 1980. xiii+436 pp. ISBN 0-387-90514-6 (L. I. Ronkin) 82i:32002 32-01 (32A07, 32A10)

Lebesgue's first theorem. Mathematical analysis and applications, Part B, pp. 741-747, Advances in Math., Suppl. Studies, 7b, Academic Press, New York, 1981. (N. Passell) 82k:28006 28A20 (26A21, 26B99)

The finiteness of compact varieties in C". Ann. Polon. Math. 39 (1981), 143-147. orges Dloussky) 82e:32014 32C25 (32-01) (Georges Dloussky) 82e:32014

Holomorphic maps that extend to automorphisms of a ball. Proc. Amer. Math. Soc. 81 (1981), no. 3, 429–432. (Peter Pflug) 82c:32012 32D15 (32H99)

Totally read Klaip souther in C². Proc. Amer. Math. Soc. 82 (1981), no. 4, 653–654.

Totally real Klein bottles in C². Proc. Amer. (Eric Amar) 82i:32012 32A15 (32H99, 57N05) Proc. Amer. Math. Soc. 82 (1981), no. 4, 653-654.

Rudjak, B. V. See Chadan, K.; et al., 82c:81121 Rudjak, Ju. B. On the Thom-Dold isomorphism for nonorientable vector bundles. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 6, 1323-1325. (Jože Vrabec) 82h:55018 55R25 (55N20, 57N65)

See also Bredon, Glen E., 82e:57021

th, V. Ja. (with Smagulov, S.) On the hyperbolic modification of the Burgers equation.

Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 4, 801-804. (P. Szeptycki) 82a:35092 35Q20 (35B25)

Tio, V. P. (with Kiriljuk, O. A.) On finite irreducible solvable subgroups of group GL(p, Z). (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 8, 17-20, 87. (D. B. Persic) 82a:20052 20G20 (10C30, 15A36, 20D10) diman, S. (with Marconi, F.; Calia, V.) Numerical study of one-dimensional unsteady

Imams, S. (with Marcoan, F.; Caha, V.) Numerical study of one-dimensional unsteady particle-laden flows with shocks. AIAA J. 19 (1981), no. 10, 1294–1301. (Authors' summary) 82m:76065 76T05 (76A60, 76L05, 76N15) inex, V. V. An interconnected graph system as a model of complex finite automata. Automat. 1 Telemeh. 1990, no. 3, 156–161 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 3, part 2, 416–419. (Author's summary) it. Remote Control

(with Mihailov, G. I.) Automaton interconnected graph system with simple nets. Avtomat. i Telemeh. 1980, no. 5, 132-141 (Russian. English summary); translated a nary); translated as st. Remote Control 41 (1980), no. 5, part 2, 697-705. (Authors' summary) 82b:68091 68E10

nick, J. (with Crutchfield, J.; Nauenberg, Michael) Scaling for external noise at the onset of chaos. *Phys. Rev. Lett.* **46** (1981), *no.* 14, 933–935. (Authors' summary) 82f-58059 58F13 (82A05)

hick, Karl (with Bennett, Colin; Vaaler, Jeffrey D.) Best uniform approximation by linear fractional transformations. J. Approx. Theory 25 (1979), no. 3, 204–224. (J. S. Byrnes) 82b:41017 41A20 (41A30, 41A50)

hiicki, J. W. Comment on: "Fundamental solutions for a fluid-saturated porous solid" [Internat. J. Solids and Structures 13 (1977), no. 9, 785-806; MR 58 #25253] by M. P. Cleary. Internat. J. Solids and Structures 17 (1981), no. 9, 855-857. (Author's sums 73K20

John, Daniel (with Steele, J. Michael) Sizes of order statistical events of stationary processes. Ann. Probab. 8 (1980), no. 6, 1079-1084. (Eric V. Slud) 82e:60061 60G10 (28D05, 60C05)

logab, Pakart (with Breuer, Reinhard A.) Radiation reaction and energy loss in the post-Newtonian approximation of general relativity. Gen. Relativity Gravitation 13 (1981), no. 8, 777-793. (Authors' summary) 82m:83016 83C25

tolph, Klaus-Peter Michal-Bastiani differentiability on topological groups. Convergence structures and applications to analysis (Proc. Internat. Summer School, Frankfurt a.d. Oder, 1978), pp. 161-166, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1979, 4,

Akademie-Verlag, Berlin, 1980. (Peter Michor) 82i:58016 58C20 (22A10, 46G05)
(with Boseck, Helmut) An axiomatic approach to differentiability on topological groups. Math. Nachr. 98 (1980), 27-36. (Eric Nummela) 82h:22001 22A10 (43A95) 60lph, Lee (with Ash, Avner) The modular symbol and continued fractions in higher dimensions. Invent. Math. 55 (1979), no. 3, 241-250. (From the introduction) 82g:12011

12A67 (10D15, 22E41) dolphi, T. J. (with Ashbaugh, N. E.) An integral-equation solution for a bounded elastic body containing a crack: mode I deformation. (French summary) Internat. J. Fracture 14 (1978), no. 5, 527-541. (Authors' summary) 82c:73074 73M05

raiah, N. (with Srimani, P. K.) Finite-amplitude cellular convection in a flu porous layer. *Proc. Roy. Soc. London Ser. A* 373 (1980), no. 1753, 199-222. (E. Ungureanu-David) 82i:76037 76S05 (76R10, 80A20)

Rudwick, M. J. S. See Studies on Christiaan Huygens, 82m:01036
Rudziński, Jan Transfer and its reduction to coverings. Bull. Acad. Polon. Sci. Sér. Sci.
Math. 27 (1979), no. 11-12, 913-921 (1981). (Henning Hauschild) 82i:55015
S5R10
Rudzkis, R. (with Bentkus, R.) Exponential estimates for the distribution of random

variables. (Russian. Lithuanian and English summaries) Litovsk. no. 1, 15–30, 216. (Dominik Szynal) 824:60029 60E15 (60F05) naries) Litovsk. Mat. Sb. 20 (1980),

da, A. See Proceedings: Einstein Centennial Sympo 92h-81005

lle, David Sensitive dependence on initial condition and turbulent behavior of dynamical systems. Bifurcation theory and applications in scientific disciplines (Papers, Conf., New York, 1977), pp. 408-416, Ann. New York Acad. Sci., 316, New York Acad.

 Sci., New York, 1979. (L. A. Bunimovich) 82h:58048
 58F11 (58F13, 76F99)
 Study of a simplexial complex related to the Wightman functions. Bull. Soc. Math.
 Belg. Sér. A 31 (1979), no. 2, 157–169. (H. Araki) 82j:81039
 81E05 (55N99, 58F40) Strange attractors. Math. Intelligencer 2 (1979/80), no. 3, 126-137. (D. K.

Arrowsmith) 82h:58056 58F13
Microscopic fluctuations and turbulence. Phys. Lett. A 72 (1979), no. 2, 81-82.
(Hirokazu Fujisaka) 82e:76033 76F05 (58F13)

Strange attractors and characteristic exponents of turbulent flows. Approximation methods for Navier-Stokes problems (Proc. Sympos., Univ. Paderborn, Paderborn, 1979), pp. 489-493, Lecture Notes in Math., 771, Springer, Berlin, 1980. (L. A. Bunimovich) 58F13 (34D05, 58F40)

(with Shub, Michael) Stable manifolds for maps. Global theory of dyn (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 389-392, Lecture Notes in Math., 819, Springer, Berlin, 1980. (M. C. Irwin) 82e:58055 58F10 (58F11)

(with Collins, Heron S.) Weak compactness and convergence in operator spaces.

Measure theory and its applications (Proc. Conf., Northern Illinois Univ., DeKalb, Ill., 1980), pp. 187–192, Northern Illinois Univ., DeKalb, Ill., 1981. (See 82g:28002)

Ruev, G. A. (with Roždestvenskii, B. L.; Fomin, V. M.; Janenko, N. N.) Conservation laws for systems of two-phase medium equations. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 2, 288-293. (Alexander Doktor) 82b:35105 35L65 (76T05)

olo See Ayoub, Raymond G., 82j:01028 Ruffini, Remo On gravitationally collapsed objects. Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein, Vol. I, II, pp. 599–658, Johnson, New York, 1979. (See 82h:83002) 83F05 (85A15) (with Ferrari, Valeria) On the structure of gravitational wave bursts: implosion with finite kinetic energy. Phys. Lett. B 98 (1981), no. 5, 381-384. (Authors' summary)

(with Jantzen, Robert T.) Particles in Friedmann and Einstein-Straus univer-Phys. Lett. B 104 (1981), no. 5, 373-376. (Authors' summary) 82h:83012

, P. Eingre e, P. Eingrenzung kritischer Lasten über das zweiparametrige Eigenwertprob Angew. Math. Mech. 60 (1980), no. 6, T74-T76. (H. Baumgärtel) 82j:35113 35P15

Rüger, B. Alternativtests für zwei einfache Hypothesen mit endlich vielen Ergebnisse (English summary) Metrika 27 (1980), no. 2, 73-90. (L. B. Klebanov) 82e:62037

gert, Tommaso On the conservative form of quasilinear hyperbolic systems. The case of ionized gases and relativistic thermohydrodynamics. (Italian. English summary) Rend. Mat. (6) 13 (1980), no. 2, 223-234. (Piero Bassanini) 82f:35124 35L65 (76X05) (with Strumia, Alberto) Main field and convex covariant density for quasilinear Ruggeri, Tor

hyperbolic systems. Relativistic fluid dynamics. Ann. Inst. H. Poincaré Sect. A (N.S.) 34 (1981), no. 1, 65-84. (Gérard A. Maugin) 82b:76077 76Y05 (35L65, 83C55)

(with Strumia, Alberto) Convex covariant entropy density, symmetric conservative form, and shock waves in relativistic magnetohydrodynamics. J. Math. Phys. 22 (1981), no. 8, 1824–1827. (Alan Jeffrey) 82m:76070 76Y05 (83C55)

Ruggiero, P. (with Zannetti, M.) Critical phenomena at T=0 and stochastic quantization. Phys. Rev. Lett. 47 (1981), no. 18, 1231-1234. (Authors' summary) 82i:82022 82A15

Madze, A. K. (with Berekašvili, R. A.) On a generalized Almansi problem. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 100 (1980), no. 3, 561-564. (Authors' summary) 82g:73029 73K05 (31A30)
 Madze, Ž. A. Static equilibrium of an infinite anisotropic strip with stresses given on the

boundary. (Russian. Georgian and English summaries) Some problems of the theory of elasticity (Russian), pp. 105-113, Tbilis. Gos. Univ., Inst. Prikl. Mat., Tbilisi, 1980. (Author's summary) 82b:73010 73C30
Ruhaja, H. M. A variant of theory Textended by abbreviating symbols. (Russian)

Begriffsschrift—Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 365-381, Friedrich-Schiller-Univ., Jena, 1979. (Jerzy Kotas) 82m:03012 03B10

e, Axel Fitting empirical data by positive sums of exponentials. Compstat 1980 (Proc. Fourth Sympos. Comput. Statist., Edinburgh, 1980), pp. 622-628, Physica, Vienna, 1980. (Hans-Peter Höschel) 82e:65017 65D10 (62J02)

The relation between the Jacobi algorithm and inverse iteration and a Jacobi algorithm based on elementary reflections. BIT 20 (1980), no. 1, 88-96. (V. L. Makarov) 65F15

with Wedin, Per Åke) Algorithms for separable nonlinear least squares prob

SIAM Rev. 22 (1980), no. 3, 318-337. (Nobuo Sannomiya) 82x:90148 90C30 hlin, B. I. Fox integro-differential equations and their systems in the space of generalized n) Differencial'nye Uravnenija 16 (1980), no. 10, 1896-1898, 1920. (C. 45J05 Corduneanu) 82f:45009

hovee, L. A. (with Oganesjan, L. A.) *Варнационно-разностные методы решения единитических уравнений. (Russian) [Variation-difference methods for solving elliptic equations] Akad. Nauk Armjan. SSR, Erevan, 1979. 236 pp. (loose errata). (A. G. 65N30 (35Jxx, 49Dxx) Ramm) 82m:65105

Ruijgrok, Th. W. (with Jurkiewicz, J.) On a new formulation of the continuum Heisenberg spin system in a space of arbitrary dimensionality. Phys. A 103 (1980), no. 3, 573-585. (Authors' summary) 82a:82015 82A15

(with Wu, Tai Tsun) A solvable nonlinear Boltzmann equation. Phys. Lett. A 85 (1981), no. 8-9, 420-422. (Authors' summary) 82i:82042 82A40

Ruijsenaars, Simon N. M. A positive energy dynamics and scattering theory for directly interacting relativistic particles. Ann. Physics 126 (1980), no. 2, 399-449. (Author's nary) 82g:81100 81F20 (81M05)

The continuum limit of the infinite isotropic Heisenberg chain in its ground state representation. J. Funct. Anal. 39 (1980), no. 1, 75-84. (A. Corciovei) 82h:82012 82A15 (47A40, 81E05)

(with Hegerfeldt, Gerhard C.) Remarks on causality, localization, and spreading of wave packets. Phys. Rev. D (3) 22 (1980), no. 2, 377-384. (From the introduction) 82g:81095 81F10 (81D99)

Integrable quantum field theories and Bogoliubov transformations. Ann. Physics 132 (1981), no. 2, 328-382. (Gerhard C. Hegerfeldt) 82j:81042 81E10 (32A45, 58F07)

erez, H. (with Dormido, S.) On certain algorithmic aspects of dynamic programming (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 2, 238-242. (Authors' summary) 82m:90154 90C39

Ruiter, H. M. Integral-equation approach to the computation of modes in an optical waveguide. J. Opt. Soc. Amer. 70 (1980), no. 12, 1519-1524. (Author's summary) 78A50

Ruiz, Ceferino (with Giaro, André; Kumpera, Antonio) Sur la lecture correcte d'un résultat d'Élie Cartan. (English summary) C. R. Acad. Sci. Paris Sér. A-B 287 (1978), no. 4, A241-A244. (A. M. Vinogradov) 82b:58006 58A17 (34C20)

trillas Ruiz, Enrique See Trillas Ruiz, Enrique

Ruiz, Sergio On a family of self-complementary graphs. Combinatorics 79 (Proc. Colloq., Univ. Montreal, Montreal, Que., 1979), Part II. Ann. Discrete Math. 9 (1980), 267–268. (H. Sachs) 82c:05054 05C25 (05C99)

On strongly regular self-complementary graphs. J. Graph Theory 5 (1981), no. 2, 213–215. (D. R. Lick) 82i:05044 05C25

r-Claeyssen, Julio (with Cockburn, Bernardo) Applications of the integral averaging bifurcation method to retarded functional-differential equations. Functional differential equations and bifurcation (Proc. Conf., Inst. Ciènc. Mat. São Carlos, Univ. São Paulo, São Carlos, 1979), pp. 348-367, Lecture Notes in Math., 799, Springer, Berlin, 1980. (Erwin Kozakiewicz) 82a:34087 34K15 (58F30)

The integral-averaging bifurcation method and the general one-delay equation. J. Math. Anal. Appl. 78 (1980), no. 2, 429-439. (N. D. Kazarinoff) 82h:34092 34K15

Ruiz-Rivas Hern t-Rivas Hernando, C. A new bivariate system and its properties. (Spanish. English summary) Estadist. Española No. 87 (1980), 47-54. (Author's summary) 82h:62081

Ruiz S., Roberto See Ruiz Salguero, Roberto
 Ruiz Salguero, Carlos (with Ruiz Salguero, Roberto) Characterization of the set-theoretical geometric realization in the non-Euclidean case. Proc. Amer. Math. Soc. 81 (1981), no. 2, 321–324. (Authors' summany) 82:55021
 Solution Salguero, Roberto Relative subdivisions. (Spanish) Rev. Colombiana Mat. 13 (1979),

no. 2, 75-92. (From the introduction) 82c:18012 18G30 (55U10)

(with Ruiz Salguero, Carlos) Characterization of the set-theoretical geometric realization in the non-Euclidean case. Proc. Amer. Math. Soc. 81 (1981), no. 2, 321-324. (Authors' summary) 82b:55021 55U10

Ruiz Shulcloper, José Test construction for polyvalent matrices. (Spanish) Cienc. Mat. (Havana) 1 (1980), no. 1, 85-101. (C. Moraga) 82m:94073 94C99 (68G99)
Ruján, P. (with Williams, G. O.; Frisch, H. L.; Forgács, G.) Phase diagrams of

ensional Z(q) models. Phys. Rev. B (3) 23 (1981), no. 3, 1362-1370. (C. A. Hurst) 82f:82019

rst) 82f:82019 82A25 (82A67, 82A68)
(with Pandit, R.; Forgács, G.) Finite-size calculations for the kinetic Ising model. Phys. Rev. B (3) 24 (1981), no. 3, 1576-1578. (Authors' summary) 82g:82035 (82A25, 82A68)

Odaline, A. V. Semigroup algebras of finite inverse semigroups over arbitrary fields. (Russian) Modules and linear groups. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 103 (1980), 117–123, 159. (Hubert Grassmann) 82g:20106 20M30

miantsev, A. N. See Rumjancev, A. N. miantsev, V. V. See Rumjancev, V. V. miantsev, V. V. See Rumjancev, V. V. Miantsev, V. V. Quasi-identities of finite groups. (Russian) Algebra i Logika 19 (1980), no. 4, 458–479, 503. (S. S. Leviščenko) \$2g:08013 08C15 (20D10, 20E10)

mo. v., 420-478, 2025 (S. S. Leviscenko) **32g318013**08C15 (201210, 20E10) mijancev, A. N. (with Babeško, V. A.) Vibration of a stamp partially adhering to an elastic medium. *Prikl. Mat. Meh.* 42 (1978), no. 6, 1085-1092 (*Russian*); translated as J. Appl. Math. Mech. 42 (1978), no. 6, 1189-1197 (1980). (From the text) **82j:73022** 73D99 (73T05)

njancev, I. A. *Покальные методы интерполяции. (Russian) [Local methods of interpolation] Akad. Nauk SSSR, Vyčisl. Centr, Moscow, 1979. 48 pp. (S. D. Riemenschneider) 82f:41002 41-01 (41A05, 65D05, 68K05)

njancev, V. V. On Hamilton's principle for nonholonomic systems. Prikl. Mat. Meh. 42 (1978), no. 3, 387–399 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 3, 407–419 (1979). (From the summary) 82k:70015 70H25 (49H05, 70F20)

On the Lagrange and Jacobi principles for nonholonomic systems. Prikl. Mat. Meh.

43 (1979), no. 4, 583-590 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 4, 625-632 (1980). (S. Drobot) 82m:49061 49H05 (53B20, 58F05, 70H30)

Stability of rotation of a heavy gyrostat on a horizontal plane. Izv. Akad. Na SSSR Meh. Toerd. Tela 15 (1980), no. 4, 11-21 (Russian); translated as Mech. Solids 15 (1980), no. 4, 1-10. (Author's summary) 82d:70008 70E05 (70K20)

mp, S. M. (with Kaucher, E.) Generalized iteration methods for bounds of the solution

of fixed point operator-equations. (German summary) Computing 24 (1980), no. 2-3, 131-137. (G. Alefeld) 82k:47075 47H10 (65J15)

mpf, Helmut Selfadjointness-based quantum field theory in de Sitter and anti-de Sitter space-time. Phys. Rev. D (3) 24 (1981), no. 2, 275-289. (Derek Raine) 82k:83036 83C47 (81E20)

nvantsey, V. V. See Rumiancey, V. V.

k, P. O. (with Sinwel, Herbert F.) On constants of approximation in the theorems of Jackson and Jackson-Timan. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 763-768, Academic Press, New York, 1980. (J. Prasad) 82i:41029

Al, Hanno Subspaces of manifolds with direction-dependent connections. Tensor (N.S.) 35 (1981), no. 2, 139–154. (Makoto Matsumoto) 82k:53044 53B40

nge, Walter Analytische Modellierung und Optimierung deterministischer Wartesysteme. Wiss. Z. Tech. Hochsch. Magdeburg 23 (1979), no. 6, 527-533. 82m:90082 90B22

nggaldier, W. J. A generalized certainty-equivalence result in stochastic control. Automatica—J. IFAC 17 (1981), no. 2, 393-395. (Author's summary) 82h:93089

nnenburg, J. Th. (with Hoekstra, A. H.) Inequalities compared. Statist. Neerlandica 34 (1980), no. 2, 67-82. (Jon A. Wellner) 82d:60031 60E15 (60F10, 60G42) nst, Thomas (with Sickel, Winfried) On strong summability of

Jacobi-Fourier-expansions and smoothness properties of functions. Math. Nachr. 99

(1980), 77-85. (L. Leindler) 82k:42016 42C10 (46E99) ohonen, Matti On the weak convergence of alternating processes. Scand. Actuar. J. 1981, no. 2, 93–103. (Dominik Szynal) 82m:60071 60H10 (60K99, 62P05) upertsberger, H. W. Relicts of topology: the axial-vector anomaly in four-dimensional

QED. Phys. Rev. D (3) 23 (1981), no. 10, 2388-2393. (Author's summary) 82h:81167

miewska, Elzbieta Measurable multivalued transformations. (Polish. Russian and French summaries) Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 35 (1979), 79-82. (Author's summary) 82e:28008 28A20

Ruppel, Wilhelm (with Gilles, E. Dieter) Model reduction of chemically reacting systems Dynamics and modelling of reactive systems (Proc. Adv. Sem., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1979), pp. 37–58, Publ. Math. Res. Center Univ. Wisconsin, Madison, Wis., 1979), pp. 37–58, Publ. Math. Res. Center Univ. Wisconsin, 44, Academic Press, New York, 1980. (See 81:80001) 80A30

Ruppert, David (with Carroll, Raymond J.) Trimmed least squares estimation in the linear model. J. Amer. Statist. Assoc. 75 (1980), no. 372, 828–838. (Jana Jurečková) 82d:62073

(with Carroll, Raymond J.) On robust tests for heteroscedasticity. Ann. Statist. 9

(1981), no. 1, 206–210. (D. G. Kildea) 82mc2058 62F05

Ruppert, Richard W. Some structural aspects of economic models. Computer-assisted analysis and model simplification (Proc. First Sympos., Univ. Colorado, Boulder, Colo., 1980), pp. 165-173, Academic Press, New York, 1981. (See 82g:00016)

Ruppert, Wolfgang On compact locally connected semigroups with identity. Forum 18 (1979), no. 1, 51-78. (A. B. Paalman-de Miranda) 82e:22006 Semitopological monoids defined on compact connected 3-manifolds. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 1045–1049, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (Jimmie D. Lawson) 824:22004

On semitopological compactifications of nonabelian groups. Semigroup Forum 21

(1980), no. 4, 383–389. (From the text) 824:22007 22C05

No semitopological monoid can be defined on the closure of $\{(x, \sin 1/x)|x \in \mathbb{R}/\{0\}\}$. Semigroup Forum 22 (1981), no. 3, 283–284. (John F. Berglund) 82m:22004

A remark on compact semilattices of groups. Semigroup Forum 22 (1981), no. 4, 381-385. (Rangachari Venkataraman) 82m:22005 22A25 rma, A. A. A two-stage adaptive algorithm of parameter estimation. (Russian. Georgian

and English summaries) Soobië. Akad. Nauk Gruzin. SSR 99 (1980), no. 3, 669-672. (Author's summary) 82e:93146 93E25

Rus, Ioan A. Results and problems in the metrical common fixed point theory

Mathematica (Chij) 21(44) (1979), no. 2, 189-194. (S. P. Singh) 82b:540 Some metrical fixed point theorems. (Romanian summary) Studia Univ. Babeş-Bolyai Math. 24 (1979), no. 1, 73-77. (From the text) 82i:54081

Maps with φ-contractive iterates. (Romanian. English summary) Studia Uni Babez-Bolyai Math. 25 (1980), no. 4, 47-51. (From the text) 82k:54078 (47H10)

Rus, Teodor (with Miller, Jill) Abstract data types in communication system languages. ica (Chg) 21(44) (1979), no. 1, 43-56. (Authors' summary) 82a:68024

HAS-Hierarchy; a natural tool for language specification. Fund. Inform. (4) 3 (1980), no. 3, 269-293. (U. Wybraniec-Skardowska) 82k:68046 68F05 (03D05, 08A50, 68F20)

Rusak, Ju. B. Some questions of the Jordan structure of an analytic operator-valued function. (Russian) Boundary value problems for equations of mathematical physics (Russian), pp. 115-120, 169-170, "Fan", Tashkent, 1980. (Stefan Balint) 82j:47021

Problem of the points of bifurcation in the case of several parameters. (Russian) Differencial'nye Uravnenija 17 (1981), no. 2, 383-386, 392. (Š. Schwabik) 824:58023 58F07 (47H15)

ak, V. N. Approximation of periodic functions, differentiable in the sense of Weyl, by rational operators. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 6, 496-498, 572. (J. Szabados) 82i:41020 41A20 (41A35) sanov, V. V. (with Šarakšanė, A. A.) Investigation of a linearized nonstationary model of

flow around an infinite wedge. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 103, 29 pp. (Authors' summary) 82g:76023

(with Nažëstkina, È. I.) Difference approximation near the boundary for hyperbolic stems of quasilinear equations. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 32, 30 pp. (Authors' summary) 82e:65099 65N05 (with Bezmenov, I. V.) On the limit profile of a nonlinear discontinuity in difference

schemes for a one-dimensional quasilinear equation. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 69, 31 pp. (G. W. Hedstrom) 82j:65064 65M10 (35L67)

(with Nažestkina, É. I.) Approximation of boundary conditions in difference nemes. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 6, 1483–1499, 1630. (E. Schechter) 82g:65047 65M05

On the computation of discontinuous multidimensional gas flows. Seventh International Conference on Numerical Methods in Fluid Dynamics (Stanford Univ., Stanford, Calif.; NASA/Ames Res. Center, Moffett Field, Calif., 1980), pp. 31-43, Lecture Notes in Phys., 141, Springer, Berlin, 1981. (From the introduction) 82j:76067

nendorf, Ludger Weak convergence of the weighted multiparameter empirical process. Nonparametric asymptotic statistics (Proc. Conf., Rouen, 1979) (French), pp. 86-94, Lecture Notes in Math., 821, Springer, Berlin, 1980. (B. L. S. Prakasa Rao) 82d:60045

A generalization of the marriage theorem and balancing of block designs. Calcutta Statist. Assoc. Bull. 29 (1980), no. 113-114, 95-97. (K. Vijayan) 82e:62118 62K10

Inequalities for the expectation of Δ-monotone functions. Z. Wahrsch. Verw. Gebiete 54 (1980), no. 3, 341-349. (D. N. Shanbhag) 82e:60023 60E05 (62E10)

Ordering of distributions and rearrangement of functions. Ann. Probab. 9 (1981), no. 2, 276-283. (Rastislav Potocký) 82e:60017 60B99 (60E15)

Weak association of random variables. J. Multivariate Anal. 11 (1981), no. 3, 448-451. (Richard L. Dykstra) 82:62088 62H20 (with Gaffke, N.) On a class of extremal problems in statistics. (German and French

summaries) Math. Operationsforsch. Statist. Ser. Optim. 12 (1981), no. 1, 123-135. (Giorgio Dall'Aglio) 82f:62034 62E10

(Giorgio Dall'Agino) 82f:80895 02E10

ozbeweyh, Stephan (with Bauer, Karl Wilhelm) *Differential operators for partial differential equations and function theoretic applications. Lecture Notes in Mathematics, 791. Springer-Verlag, Berlin-New York, 1980. v + 258 pp ISBN 3-540-09975-1 (Manfred W. Kracht) 824:35012 35A20 (300 35A20 (30Cxx, 30Dxx, 30G20,

On the partial sums of prestarlike and related functions. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1587-1589. (P. T. Mocanu) 82k:30018 30C45
Neighborhoods of univalent functions. Proc. Amer. Math. Soc. 81 (1981), no. 4,

521-527. (T. J. Suffridge) 82c:30016 30C45 (30C75)

Rukickii, Ja. Ja. General representations of the solutions to the equations in the linear theory of mixtures of elastic materials. *Prikl. Meh.* 16 (1980), *no.* 8, 3-10 (*Russian*); lated as Soviet Appl. Mech. 16 (1980), no. 8, 655-660. (From the text) 82e:73020

citti, Aldo Problems of classification and connection in a class of planar graphs with hexagonal faces (Italian English summary) Rio. Mat. Sci. Econom. Social. 2 (1979), no. 1, 27–38. (F. Speranza) 82b:05092 05C40 (52A25)

Rusek, Kamil (with Winiarski, Tadeusz) Criteria for regularity of holomorphic mappings. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 9-10, 471–475 (1981). (R. R. Simha) 82i:32055 32J20 (14C30, 32J25)

Sh, David E. Big Cohen-Macaulay modules. Illinois J. Math. 24 (1980), no. 4, 606-611.
 (Jürgen Herzog) 82e:14010 14B15 (13H10)
 Seminormality. J. Algebra 67 (1980), no. 2, 377-384. (Nadia Chiarli) 82h:13016

13H10 (14C22)

hchitskii, Ya. Ya. See Ruščic'kii, Ja. Ja.

- T. B. (with Goodearl, K. R.) Direct limit groups and the Keesling-Mardešić shape fibration. Pacific J. Math. 86 (1980), no. 2, 471-476. (Paul F. Duvall) 82g:55021
- David J. Groups admitting nilpotent fixed-point-free automorphism g gebra 64 (1980), no. 1, 89-92. (From the text) 82;20066 20E36 (20F16) k, Isak (with Zaera, F.) Monte Carlo simulation for inhomogeneous chemic n, David J. Groups a
- kinetics: application to the Belousov-Zhabotinskii reaction. J. Comput. Chem. 2 (1981), no. 4, 402-409. (Authors' summary) 82‡92038 92A09 (80A30) skey, Frank (with Eichhorst, Peter) On unary stochastic Lindenmayer system
- and Control 48 (1981), no. 1, 1-10. (Authors' summary) 82h:68110 68F15 (68D22)
- Listing and counting subtrees of a tree. SIAM J. Comput. 10 (1981), no. 1, 141–150. (Author's summary) 82;69066 68E10 (05C05)

 108. S. B. A translation of Bolzano's paper on the intermediate value theorem. (French summary) Historia Math. 7 (1980), no. 2, 156–185. (Bertram Ross) 82c01072 01A75 (01A55, 26-03)
- (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20.
 (clrs.), 20-20. Wahrsch. Verw. Gebiete 53 (1980), no. 2, 117-122. (M. Métivier) 82i:60068
- set, W. B. Brownian motion of small particles suspended in liquids. Annual review of fluid mechanics, Vol. 13, pp. 425-455, Annual Reviews, Palo Alto, Calif., 1981. (See fluid mecho 82f:76001) 82A70
- nd A. W. (with Whitehead, Alfred North) *Principia mathematica (hasta el **56). (Spanish) [Principia mathematica (to **56)] Translated from the English by J. Manuel Dominguez Rodriguez. Colección Lógica y Teoria de la Ciencia. [Logic and Theory of Science Collection] Paraninfo, Madrid, 1981. 471 pp. ISBN 84-283-1144-7 (Editors) \$23mc01682 01A75 (03-03, 03B15)
 - See also Frege, Gottlob, 82b:01072; Bertrand Russell's early philosophy, 82e:03 Lepage, François, 82b:00012; Cappio, James, 82j:01053; Pears, David, 82j:01058; Hintikka, Jaakko, 82j:03002; Lycan,
 - William, 823:0004; Cark, Romane, 82k:01027 and Hylton, Peter, 82k:03006 sell, Bruce (with Moore, Daniel J.) Axiomatic data type specifications: a first order
- theory of linear lists. Acta Inform. 15 (1981), no. 3, 193-207. (J. Paredaens) 82j:68007 68B10 (03B99)
- ssell, D. C. (with Jakimovski, Amnon) Interpolation by functions with mth derivative in pre-assigned spaces. Approximation theory, III (Proc. Conf., Unio. Texas, Austin, Tex 1980), pp. 531-536, Academic Press, New York, 1980. (W. J. Kotzė) 82j:41004 41A0 (41A30, 41A63)
 - (with Jakimovski, Amnon) On an interpolation problem and spline functions General inequalities, 2 (Proc. Second Internal. Conf., Oberwolfach, 1978), pp. 205-231, Birkhäuser, Basel, 1980. (M. Marsden) 82641011 41A15
 - (with Jakimovski, Amnon) An inequality for the LP-norm related to uniform convexity. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 1, 23-27. (Wolfgang Lusky) 46B20 (46E30)
- ell, David A. (with Hanson, James D.; Ott, Edward) Dimension of strange attractors. ys. Rev. Lett. 45 (1980), no. 14, 1175-1178. (D. L. Rod) 82a:58034 82A05)
- sell. David L. Sums of products of terms from linear recurrence sequences. Discrete Math. 28 (1979), no. 1, 65-79. (Author's summary) 82j:10021 10A35
 - (with Eslami, Mansour) On stability with large parameter variations: stemming from the direct method of Lyapunov. IEEE Trans. Automat. Control 25 (1980), no. 6, 1231-1234. (Authors' summary) 82a:93042 93D05 (65L07)
- ssell, K. G. (with Eccleston, John A.; Knudsen, G. J.) Algorithms for the construction of (M, S)-optimal block designs and row-column designs. J. Statist. Comput. Simulation 12 (1980/81), no. 2, 93-105. (Authors' summary) 82i:62111 62K05
- ell, Peter On affine-ruled rational surfaces. Math. Ann. 255 (1981), no. 3, 287-302. (M. H. Gizatullin) 82h:14024 14J25 (14M20)
 ssell, Robert D. (with Ascher, U.; Christiansen, J.) COLSYS—a collocation code for
- boundary-value problems. Codes for boundary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 164-185, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 82b:65074) 65-04 (65L10)

 Mesh selection methods. Codes for boundary-value problems in ordinary differential
 - equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 228-242, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 82h:65074) 65L10 th Christiansen, J.) Deferred corrections using uncentered end formulas. Nu
- Math. 35 (1980), no. 1, 21–33. (L. Fox) 82e:65006 65B05 (65L10) (with Ascher, U.) Reformulation of boundary value problems into "standard" form. SIAM Rev. 23 (1981), no. 2, 238–254. (E. R. Hansen) 82f:65084 65L10 (34B15)
- sell, Thomas Portfolio separation: the analytic case. Econom. Lett. 6 (1980), no. 1,
- 59-66. (Author's summary) 82d:90019 90A09 sell, William R. (with Seo, Tae Kun) Ordering uncertain prospects: the multivariate
- utility functions case. Rev. Econom. Stud. 45 (1978), no. 3, 605-610. (Authors' introduction) 82m:90026 90A10 (with Seo, Tae Kun) Diversification theorems for subsets of risk averters. Rev.
- m. Stud. 46 (1979), no. 3, 555-559. (Authors' introduction) 82f:90016 90A09 skih, L. V. Prime ends of Riemann surfaces, connected with boundary elements of the second kind. (Russian) Taškent. Gos. Univ. Sb. Naučn. Trudov No. 623 Mat. Analiz i
- Geometrija (1980), 61-64, 94. (G. Piranian) 82k:30045 30F25 (30D40) ssnann, Helmut Konvergente Reihenentwicklungen in der Störungstheorie der Himmelsmechanik. Selecta Mathematica, V (German), pp. 93-260, Heidelberge Taschenbücher, 201, Springer, Berlin, 1979. (D. Schmidt) 82j:70011 70F1
- Russo, Assunta (with Di Maio, Giuseppe) On complementation in the lattice of T₁-topologies. (Italian. English summary) Rend. Accad. Sci. Fis. Mat. Napoli (4) 47 (1980), 199-204 (1981). (Authors' summary) 82e:06008 06C15 (54A99)
- so, Bernard The norm of the L^p-Fourier transform. III. Compact extensions. J. Funct. Anal. 30 (1978), no. 2, 162-178. (Author's summary) 82a:43002 43A15 (47G05)
- sso, Lucio (with Franceschini, Valter) Stable and unstable manifolds of the Hénor J. Statist. Phys. 25 (1981), no. 4, 757-769. (D. L. Rod) 82m:58038

- On the critical percolation probabilities. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 2, 229-237. (J. Theodore Cox) 82i:60182 60K35 (82A43)
- so, Ralph P. (with Hanson, David Lee) On the law of large numbers. Ann. Probab. 9 (1981), no. 3, 513-519. (R. Vasudeva) 82g:60044 60F15 (with Hanson, David Lee) A new stochastic approximation procedure using quantile with Hanson, David Lee; A new stochastic approximation procedure using quantile (with Hanson, David Lee) A new stochastic approximation procedure using quantile stochastic approximation procedure approximation procedure approxima
 - curves. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 2, 145-162. (G. Pflug) 82j:62062 621.20
- sso, Remigio Continuous dependence for the viscous compressible fluids in unbounded domains. (Italian summary) Riv. Mat. Univ. Parma (4) 6 (1980), 333-345 (1981). (From the introduction) 82k:76050 76N10 (35B30) sssu. G. I. Two-sided closed ideals of the algebra of linear operators in some spaces of sequences. (Russian) Linear operators and integral equations. Mat. Issled. No. 61 (1981),

- sequences. (Russian) Linear operators and integral equations. Mat. Issued. No. 61 (1961), 141–147, 158. (T. Figiel) 82i:47061 47D15 (46B99)

 See also Linear operators and integral equations, 82e:47001

 Rust, A., III (with Tsokos, Chris P.) Recent developments in nonparametric estimation of probability density. Applied stochastic processes (Proc. Conf., Univ. Georgia, Athens, Ga., 1070), 170–170. (2007). 1978), pp. 269-281, Academic Press, New York, 1980. (T. Robertson) 82e:62061 62G05 (62-02)
- Rust, B. W. (with Burrus, W. R.; Cope, J. E.) Constrained interval estimation for linear models with ill-conditioned equations. Information linkage between applied mathematics and industry, II (Proc. Second Annual Workshop, Monterey, Calif., 1979), pp. 1-38, Academic Press, New York, 1980. (R. E. Funderlic) 82a:65029 65F30 (15A12)
- mov, N. A. Asymptotic behavior of Green's function of an anharmonic oscillator. (Russian, Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 1, 15-22. (M. Lawrence Glasser) 82b:81022
 - The asymptotic behavior of the eigenvalues of an anharmonic oscillator. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 3, 11-16. (A. Devinatz) 82m:34024 34B25 (81C15)
- Rustem, B. (with Zarrop, M. B.) A Newton-type method for the optimization and control of nonlinear econometric models. J. Econom. Dynamics Control 1 (1979), no. 3, 283-300. (Authors' summary) 82±65055 65K10 (90A19)

 (with Zarrop, M. B.) A quasi-Newton algorithm for the control of large nonlinear
 - econometric models. Large Scale Systems 2 (1981), no. 2, 105-111. (Authors' summary) 90C20 (90A14)
- Rusu, I. (with Marica, Carmen; Vasilache, Mariana; Eftimescu, Cornelia) Representation of the shadows in the plane axial reference system. (Romanian. French summary) Bul. Inst. Politehn. Iaşi Sect. I 26(30) (1980), no. 1-2, 75-79. (O. Bottema) 82g:51030
- hotto, Johannes Kennzeichnung verallgemeinerter euklidischer Ebenen durch Ähnlichkeitsrelationen. (English summary) J. Geom. 15, no. 1, 28–34 (1981). (Giovanni Ferrero) 82e:51024 51F99 (51M05)
- Rutkauskas, S. The Dirichlet problem for elliptic equations that are weakly degenerate at an interior point of the domain. (Russian. Lithuanian and German summaries) Litovsk. Mat. Sb. 20 (1980), no. 2, 137-148, 210. (O. John) 82d:35050 35J70 (35J25)
- Rutkevič, S. B. Establishment of a statistical equilibrium in an isolated quantum chain of harmonic oscillators. (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 2, 263-270. (R. A. Minlos) 82c:82101 82A67
 Relaxation dynamics of a quantum chain of harmonic oscillators. (Russian. English
 - ary) Ukrain. Fiz. Z. 25 (1980), no. 7, 1135-1141, 1226. (Author's summary) 82A15
- Rutkovskii, N. V. (with Rubinštein, G. Š.) Axial structures and foundations of geometry. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1342-1345. (H. Sachs) 82f:51014 51L05 (53C75)
- Rutkovskii, V. Ju. (with Petrov, B. N.; Zemljakov, S. D.) ★Адантивное
- координатно-параметрическое управление пестационарными объектами. (Russian) [Adaptive coordinate-parametric control of nonstationary objects] "Nauka", Moscow, 1980. 244 pp. (Publisher's description) 82i:93046 93C40
- ma Minmax estimation of the empirical distribution function. (Polish) Mat. Stos. (3) 16 (1980), 115-123 (1981). (Ryszard Zieliński) 82g:62062 (62C20)
- Rutkowski, Leszek Sequential estimates of probability densities by orthogonal series and their application in pattern classification. IEEE Trans. Systems Man Cybernet. 10 (1980),
 - no. 12, 918-920. (Luc P. Devroye) **824:62074** 62G05 Sequential estimates of a regression function by orthogonal series with applications in discrimination. The First Pannonian Symposium on Mathematical Statistics (Be Tatzmannsdorf, 1979), pp. 236–244, Lecture Notes in Statist., 8, Springer, New York, 1981. (P. K. Sen) 82j:62030 62G99 (62H30)
- wski, Marek Some properties of stochastic integral equation of a mixed Volterra-Stieltjes and Itô type. Demonstratio Math. 12 (1979), no. 4, 995-1022. (Seppo
- Heikkilä) 82b:60072 60H20 Stochastic integral equations with a reflecting barrier. Demonstratio Math. 13 (1980),
- no. 2, 483–507. (Halim Doss) 82b:60073 60H20 (60H99)

 Ruymgaart, F. H. (with van Zuijlen, M. C. A.) On convergence of the remainder term in linear combinations of functions of order statistics in the non-i.i.d. case. Sankhyā Ser. A
 - 40 (1978), no. 4, 369-387. (Jon A. Wellner) 82a:60040 60F15 (62G30) A unified approach to the asymptotic distribution theory of certain midrank statistics. Nonparametric asymptotic statistics (Proc. Conf., Rouen, 1979) (French), pp. 1-18, Lecture Notes in Math., 821, Springer, Berlin, 1980. (Dana Vorličková)

82j:62028 62G20 (62E20)

- Ruys, P. H. M. (with Weddepohl, H. N.) Economic theory and duality. Convex analysis and mathematical economics (Proc. Sympos., Univ. Tilburg, Tilburg, 1978), pp. 1-72, Lecture Notes in Econom. and Math. Systems, 168, Springer, Berlin, 1979. (Mohamed
- El-Hodiri) 82b:90030 90A14 (90C30)
 Ruzakov, V. Ja. (with Čencov, A. G.) A class of differential games in mixed strategies. (Russian) Differencial'nye Uravnenija 16 (1980), no. 10, 1794-1800, 1915. (Authors' summary) 82e:90124 90D25
- Ruzmaikin, A. A. (with Sokolov, D. D.; Šukurov, A. M.) A disk dynamo with concentrated spirality. Magnit. Gidrodinamika No. 1 (1980), 20-26 (Russian); translated as Magnetohydrodynamics 16 (1980), no. 1, 15-20. (From the introduction) 82a:85003

- Ruzsa, I. Z. A pseudonorm for unbounded transformations. Acta Math. Acad. Sci. Hungar. 34 (1979), no. 3-4, 297-305 (1980). (H. Baumgärtel) 82d:47011 47A30 On the concentration of additive functions. Acta Math. Acad. Sci. Hungar. 36
 - (1980), no. 3-4, 215-232 (1981). (S. L. Segal) 82j:10088 10K20 (10H25) (with Szekely, G. J.) An extension of expectation. Z. Wahrsch. Verw. Gebiete 53 (1980), no. 1, 17-19. (A. De Hoyos) 82æ60017 60B99

Ruzzo, Walter L. On uniform circuit complexity. Special issue dedicated to Michael Machtey. J. Comput. System Sci. 22 (1981), no. 3, 365-383. (Author's summary) 82j:68024 68C25 (03D15, 68C40)

Rvačov, V. L. (with Slesarenko, A. P.; Arhipova, E. S.) Calculation of the temperature field in a doubly connected cylinder of complex cross section. (Russian) Mat. Fiz. No. 28 (1980), 87–92, 124. (Authors' summary) 82m:80003 80A.20 (49D15, 65P05) See also Mathematical methods in cybernetics, 82a:93006 Ryabov, Yu. A. See Rjabov, Ju. A.

- Ryaciotaki-Boussalis, Helen A. (with Boussalis, Dhemetrios) Stability of class of discrete-time interconnected systems. Fourteenth Asilomar Conference on Circuits. Systems and Computers (Pacific Grove, Calif., 1980), pp. 509-511, IEEE, New York, 1981. (See 82d:93001) 93D05
- Ryan, D. M. (with Foster, B. A.) An integer programming approach to scheduling.

 Computer scheduling of public transport (Internat. Workshop, Univ. Leeds, Leeds, 1980),

 pp. 269–280, North-Holland, Amsterdam, 1981. (See 82f:90053) 90C10 (90B35)
- Ryan, Doris R. (with Chen, Stephen) A comparison of three algorithms for finding fundamental cycles in a directed graph. Networks 11 (1981), no. 1, 1-12. (A. T. Amin) 68C25 (05C05, 05C20, 68E10)
- Ryan, J. Philip Information-entropy interfaces and different levels of biological organization. J. Theoret. Biol. 84 (1980), no. 1, 31–48. (Guy Jumarie) 82a:94042 94A17 (92A90, 93A10)
- Ryan, Merilyn Locally linearly compact semisimple rings. J. Reine Angew. Math. 320 (1980), 86–96. (S. Warner) 82g:16036 16A80
- Ryan, Michael John (with Charnes, A.; Duffuaa, S.) Degeneracy and the more-for-less paradox. J. Inform. Optim. Sci. 1 (1980), no. 1, 52-56. (Authors' summary) 82a:90067 90B30
- Ryan, Michael P., Jr. (with Obregón, Octavio) Bianchi type IX cosmological models with homogeneous spinor fields. J. Math. Phys. 22 (1981), no. 3, 623-630. (Authors
- summary) 82f:83027 83C20

 See also Proceedings: UNAM Workshop on Gauge Theories, 82d:81005

 Ryan, Patrick J. (with Cecil, Thomas E.) Conformal geometry and the cyclides of Dupin. Canad. J. Math. 32 (1980), no. 4, 767-782. (Katsuei Kenmotsu) 82f:53004 (53C42)
- Ryan, W. J. Proof of the quadratic reciprocity law in primitive recursive arithmetic. Math. Scand. 45 (1979), no. 2, 177-197. (Herman R. Jervell) 82b:03104 03F30 (10A10, 10A15)
- Ryang, Yong Joon (with Mine, Hisashi; Fukushima, Masao) On solving a certain multiparametric nonlinear programming problem. Mem. Fac. Engrg. Kyoto Univ. 42 (1980), no. 4, 404-412 (1981). (Authors' summary) 82m:90140 90C30
 - (with Mine, Hisashi; Fukushima, Masao) Methods of parametric nonlinear programming. Internat. J. Systems Sci. 12 (1981), no. 1, 95-110. (Authors' summary) 90C30
- Ryavec, C. The Poisson summation formula. Aequationes Math. 21 (1980), no. 2-3, 246-250. (Miloslav Duchoň) 82j:42004 42A16
- Rybak, V. I. See Problems on the theory of robots and artificial intelligence, 82g:68091a Rybakov, Ju. P. (with Nisičenko, V. P.) Regular solution in Skyrme's model with a gauge field. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 9, 13-17. (Authors' summary)
- (with Kumar, Ajit; Nisičenko, V. P.) Ljapunov stability of scalar charged solitons. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1981, no. 1, 56-60. (Authors' summary)
- 82i:81116 81E99 (35B35, 35Q20) Rybakowski, Krzysztof P. A topological principle for retarded functional-differential
- equations of Carathéodory type. J. Differential Equations 39 (1981), no. 2, 131–150. (V. Staikos) 82h:34102 34K15
- Rybalko, Ju. A. Parametric properties of data structures and their application in complexity analysis of algorithms. (Russian) Questions of the computational complexity of algorithms (Russian), pp. 41-43, 48, Preprint 79, 14, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev. 1979. (Author's summary) 82f:68051 68C25 (68B10)
- 1979. (Author's summary) 821:68051 68C25 (68B10)

 Rybalov, Ju. V. A boundary value problem in a half-space with a boundary condition at infinity. (Russian) Differencial new Urannenija 15 (1979), no. 12, 2193-2204, 2300-2301. (Author's summary) 82b:35036 35G30 (Author's summary) 82b:35036
- Rybčenko, L. V. (with Krugljakov, L. Z.) 2-families of lines in P4. (Russian) Differential geometry of homogeneous spaces (Russian), pp. 25-38, Irkutsk. Gos. Unio., Irkutsk, 1979. (J. D. Zund) 82a:53008 53A20 (53A25)
- Rybicki, George B. (with Press, William H.) Enhancement of passive diffusion and suppression of heat flux in a fluid with time-varying shear. Astrophys. J. 248 (1981), no. 2, part 1, 751-766. (Authors' summary) 82h:85006 85A30 (76E20)
- Rybina, I. A. Choice of a complete system of residues with respect to a one-sided ideal in a matrix ring. (Russian) Theory of coding and complexity of calculations (Russian), pp. 189-194, 224, "Nauka" Kazah. SSR, Alma-Ata, 1980. (Ju. A. Drozd) 82g:15012
- ka, Eugeniusz Copernican ideas in Kepler's Epitome astronomiae Copernicanae. Science and history, pp. 461-472, Studia Copernicana, XVI, Ossolineum, Wrocław, 1978. (See Rybka, Euger 01A45
- Rybkin, A. S. Finite local rings of principal ideals. (Russian) Mat. Zametki 28 (1980), no. 1, 3-16, 167. (Ju. N. Mal'cev) 82a:16024 16A44 (16A10)

 Rybko, A. I. Complexity of self-correcting contact schemes that admit of testing. (Russian)
- Problemy Kibernet. No. 37 (1980), 139-153, 239. (A. D. Koršunov) 82a:94120
- mikov, A. K. Torsion manifolds. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1980, no. 3, 43–47, 108. (H. Kil'p) 82e:53060 53C15 (53B25) Second-order affine connections. (Russian) Mat. Zametki 29 (1981), no. 2, 279-290, 53B15 318. (L. Tamássy) 82h:53031
- nikov, K. A. See History and method ogy of the natural sciences, 82c:01004 and atorial analysis, 82d:05005

- Rychlik, E. (with Rychlik, Z.) The generalized Anscombe condition and its applications in random limit theorems. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Blażejewko, 1979), pp. 244-250, Lecture Notes in Math., 828, Springer, Berlin, 1980. (Adhir K. Basu) 82i:60046 60F05 (60B12)
- Rychlik, Z. (with Rychlik, E.) The generalized Anscombe condition and its applications in random limit theorems. Probability theory on vector spaces, II (Proc. Second Intern random limit theorems. Probability theory on vector spaces, II (Proc. Second Insternat. Conf., Blażejewko, 1979), pp. 244–250. Lecture Notes in Math., 828, Springer, Berlin, 1980. (Adhir K. Basu) 82i:60046 60F05 (60B12)

 Rytkov, S. V. On direct products of abelian groups. (Russian) Dokl. Akad. Nawk SSSR 252 (1980), no. 2, 301–302. (J. Wiegold) 82i:20075 20K25 (03E55, 20K27)

 Rydalevskaja, M. A. (with Nagnibeda, E. A.) Equations of a nonequilibrium mixture of
- viscous dissociable gases. (Russian) Aerodynamics of rarefied gases, No. 10 (Russian), pp. 80-93, 232, Leningrad. Univ., Leningrad, 1980. (Authors' summary) 824:76074 76P05 (80A32, 82A40)
- Rydbeck, Nils (with Aulin, Tor; Sundberg, Carl-Erik W.) Continuous phase modulation. II. Partial response signaling. IEEE Trans. Comm. 29 (1981), no. 3, 210-225. (Authors' summary) 824:94019b 94A14
- Rydel, Mieczysław Characteristics of transmission codes for optical fibre communication systems. (Polish. English, French, German and Russian summaries) Rozprawy Elektrotech. 26 (1980), no. 3, 747-766. (Author's summary) 82b:94011 94A24
- Ryder, J. M. Consequences of a simple extension of the Dutch Book argument. British J. Philos. Sci. 32 (1981), no. 2, 164-167. (From the conclusion) 82m:03029 (60A05)
- Rydz, B. Stochastic storage problems: the water management background. The mathe of hydrology and water resources (Proc. Conf., Univ. Lancaster, Lancaster, 1976), pp. 57-71, Academic Press, London, 1979. (See 82a:86001) 86A05 (60K30) Ryhlov, V. S. Equiconvergence for differential operators with nonzero coefficient
- multiplying the (n-1)th derivative. (Russian) Functional analysis, No. 14 (Russian), pp. 113-115, Ul' janovsk. Gos. Ped. Inst., Ul' yanovsk, 1980. (Boris Pavlov) 82e:47065 47E05 (34B25)
- Rykov, V. V. (with König, Dieter; Schmidt, Volker) Stationary queueing systems with dependencies. (Russian). Probability theory. Mathematical statistics. Theoretical cybernetics, Vol. 18 (Russian), pp. 95–186, 188, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. (Bruce D. Craven) 82k:60191 60K25 (60–02, 60K25 (60-02, 60G55)
- Ryll-Nardzewski, Czesław (with Brzuchowski, Jan; Cichoń, Jacek; Grzegorek, Edward) On the existence of nonmeasurable unions. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 6, 447-448. (Authors' summary) 82b:28002 28A05 (04A15) (with Hartman, Stanislaw; Narkiewicz, W.) Scientific work of Edward Marczewski.
 Collog. Math. 42 (1979), 5-17. (Henryk Fast) 82b:01047 01A70
 - (with Hulanicki, Andrzej) Invariant extensions of the Haar measure. Collog. Math.
 - 42 (1979), 223-227. (J. C. Oxtoby) 82c:28023 28C10 (43A05) (with Grzegorek, Edward) A remark on absolutely measurable sets. (Russian mary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 5-6, 229-232 (1981). (J.
 - Bourgain) 82:54065 54H05 (04A15, 28A05) (with Grzegorek, Edward) On universal null sets. Proc. Amer. Math. Soc. 81 (1981), no. 4, 613-617. (D. W. Bressler) 82c:04001 04A15 (28A05)
- Rylova, T. N. (with Borisenko, A. D.) Determination of the distribution of particle diffusion in a two-layer medium on the plane. (Russian. English summary) Vyčisl. Prikl. Mat. (Kiev) No. 42 (1980), 97-102, 165. (V. G. Kolomiec) 82k:60151 60J65 (60H10)
- Ryman, A. (with Rowe, D. J.; Rosensteel, G.) Many-body quantum mech symplectic dynamical system. *Phys. Rev. A* (3) **22** (1980), *no.* 6, 2362-2373. (Gerald Kaiser) **82c:81169** 81H99 (53B50, 58F06, 81D99)
- Rymarenko, V. V. See Rimarenko, V. V.
- Rynne, T. M. (with Erber, T.; Sklar, A.) Quantum mechanics and mixing transformations. Acta Phys. Austriaca 53 (1981), no. 3, 145–155. (Authors' summary) 82k:81018 81C20 (58F11, 60G99)
- Rypnevskii, V. S. (with Abdullaev, G. B.; Mehtiev, T. R.) Some models of the conduction of an impulse along a nerve fiber. I. Geometrically inhomogeneous fiber in a closed medium. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR
- Dokl. 35 (1979), no. 11, 43–48. (A. L. Rebenko) 82a-92008 92A09
 Rysbaev, B. R. (with Džoldasbekov, U. A.; Baĭgunčekov, Ž. Ž.) Analytic determination of circular quadratic points. (Russian) Vestnik Akad. Nauk Kazah. SSR 1980, no. 6, 69–71. (V. Medek) 82b:53016 53A17 (70B99)
- Rysen, Adam See Riese, Adam
 Ryser, H. J. Matrices and set intersections. Linear Algebra Appl. 37 (1981), 267–275. (R. A. Mena) 82k:05029 05B20 (05B05)
- Rysjuk, N. A. On the question of solution of a nonlinear boundary value problem. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 6, 41-44, 141. (P. Ju. Alekna) 82e:30059 30E25
- Ryškov, S. S. (with Kon, M. Dž.) On the theory of construction of the Minkowski reduction domain. (Russian) Geometry of positive quadratic forms. Trudy Mat. Inst. Steklov. 152 (1980), 175-194, 238. (S. A. Stepanov) 82i:10039 10E25
- (with Kon, M. Dž.; Lomakina, Z. D.) Vertexes of a symmetrized Minkowski domain for n < 5. (Russian) Geometry of positive quadratic forms. Trudy Mat. Inst. Steklov. 152 (1980), 195-203, 238. (S. A. Stepanov) 82i:10040 10E25
- (with Lomakina, Z. D.) A proof of the theorem on maximal finite groups of integral 5×5 matrices. (Russian) Geometry of positive quadratic forms. Trudy Mat. Inst. Steklov. 152 (1980), 204–215, 238. (M. M. Murač) 82e:20058 20H15 (15A36)
- See also Geometry of positive quadratic forms, 82x:10001

 Ryter, D. Brownian motion in inhomogeneous media and with interacting particles. Z. Phys. B 41 (1981), no. 1, 39-42. (Author's summary) 82a:82007 82A05 (82A70)
- Rytor, S. M. See Collection: Mandel Stam, L. I., 82201085

 Ryter, Wojciech Functional automata. Fund. Inform. (4) 3 (1980), no. 1, 37-44. (Author's summary) 82e:68049 68D05 (68C05)
- Ryu, Hae Dong On a formula for the chromatic number of a graph. (Korean. English summary) Cho-son In-min Kong-hwa-kuk Kwa-hak-won T'ong-bo 27 (1979), no. 6, 2-5.
 - (Author's summary) 82h:05021 05C15 (05C10)
 Invariants of a graph. I. (Korean. English summary) Cho-sön In-min Kong-hwa-kuk
 Kwa-hak-wön T'ong-bo 1980, no. 5, 23-25. (Author's summary) 82h:05022 05C10

caromatic number under homomorphism of a curved graph of genus n. ljish summary) Su-hak kwa Mul-li 1980, no. 1, 17–22. (Author's summary) 05C15 (05C10) On the chromatic nur (Korean. English sur 821:05023 05C15

Rytak, E. I. (with Nikitin, L. V.) Accuracy of the Boussinesq approximation for an incompressible fluid. Izv. Akad. Nauk SSSR Meh. Židk. Gaza 1981, no. 2, 19-26 n); translated as read 76R10 (76E15) d as Fluid Dynamics 16 (1981), no. 2, 174-180. (Authors' summ

zhik, I. M. See Ryžik, I. M.

zhikov, Yu. I. See Ryžikov, Ju. I. žik, I. M. See Fettis, Henry E., 82a:65009 and Gallas, Jason A. Carlson, 82c:65003

Ryzia, I. M. See Fettis, Item? E., 82200009 and Gainas, Jason A. Carison, 8200013

Ryžikov, Ju. L. Algorithm of design of multiserver Erlang queuing systems. Actomat. i

Telemeh. 1980, no. 5, 30-37 (Russian. English summary); translated as Automat. Remote
Control 41 (1980), no. 5, part 1, 612-618. (L. R. Goel) 82h:60187 60K25 (90822)

van Ryzin, John See Van Ryzin, John
Ryžiov, Ju. M. See Diestel, Joseph. 82h:6023

Ryžiov, O. S. (with Žuk, V. I.) Free interaction and stability of the boundary layer in an incompressible fluid. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 6, 1326-1329.

(A. S. Silbergleit) 82e:76651 76E05

proteir methods in fluid dynamics. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 b. 5, 1221–1248, 1358. (N. N. Janenko) 82e:76002 76–02 (35C20, 76Bxx, 76K05, 76N99)

onic flows of a multicomp (with Ni, A. L.) Trans ment relaxing mixture through a nozzle. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 6, 1536-1553, 1631.

(Authors' summary) 822:76060 76H05 (65P05, 80A32)

Ryžov, V. N. (with Tareeva, E. E.) An equation for the radial distribution function.

(Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 5, 1102-1104. (A. K. Vidybida)

Rzażewski, Kazimierz (with Wódkiewicz, K.) Gauge-independent canonical formalism for nonrelativistic electrodynamics. Ann. Physics 130 (1980), no. 1, 1–13. (Authors' summary) 82c:81184 81L05

(with Gawędzki, Krzysztof) No-go theorem for the superradiant phase transition hout dipole approximation. *Phys. Rev. A* (3) 23 (1981), *no.* 5, 2134–2136. (Authors' without dipole approximation mmary) 824:81181 81K05

Rzehak, H. Parallel computers for continuous systems simulation. Parallel computers—parallel mathematics (Munich, 1977), pp. 59–70, North-Holland, Amsterdam, 1977. (See 82k:68003) 68B20 (68J05)

pecki, Bogdan Some remarks on an operator equation in a Banach space. Ann. Math. 37 (1980), no. 2, 167-174. (Simeon Reich) 82d:47061 47H10 (34G20) Some fixed point theorems and applications to integral-differential equations.

tio Math. 13 (1980), no. 3, 633-640. (J. Kolomý) 82b:47075 54H25)

A note on fixed point theorem of Maia. (Romanian summary) Studia Univ. beg-Bolyai Math. 25 (1980), no. 2, 65-71. (I. A. Rus) 82b:47056 47H10 (45D05, Babeq-Bolyai Math. 25 (1980), no. 2, 65-71. (I. A. Rus) 82h:47056 47H15, 54H25)

Fixed point theorem of Luxemburg type with application to differential equations. (Italian summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 2, 251-257. (M. Edelstein) 82h:54080 54H25 (34A10)

Some fixed point theorems in locally convex spaces and applications to differential and integral equations. Comment. Math. Univ. Carolin. 22 (1981), no. 1, 113-127. (Michele Mininni) 821:47057 47H10 (47G05)

Rzepka, Danuta (with Grande, Zbigniew) Sur le produit de deux dérivées vectorielles. Real Anal. Exchange 6 (1980/81), no. 1, 95-110. (A. M. Bruckner) 82c:28009 28A15 (26E20)

vskii, S. V. (with Nenahov, E. I.) Application of e-subgradient descent for the solution of convex programming problems. (Russian) Methods of solution of problems of th optimization and stochastic program ming (Russian), pp. 13-17, 34-35, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Authors' summary) 82f:90079

Fundamental algorithm for minimizing convex functions. Kibernetika (Kiev) 1979, no. 6, 13-14 (Russian); translated as Cybernetics 15 (1979), no. 6, 787-789 (1980). (Signid 90C25 Moga) 82a:90122

Use of the e-subdifferential of a convex function in a method for minimizing it. Kibernetika (Kiev) 1980, no. 1, iv, 109-111, 152 (Russian); translated as Cybernetics 16 (1980), no. 1, 123-127. (From the text) 82a:90123 90C25

A unified approach to the solution of unconditional minimization problems (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 4, 857-863, 1083. (Jiří V. Outrata) 90C25 (65K05)

Rzeżuchowska, Grażyna Differential inclusion with dissipative operator. Demonstratio Math. 12 (1979), no. 4, 1059-1070. (J. Jarnik) 82i:34074 34G20 (34A60) hevskii, S. V. See Rževskii, S. V.

- S -

marques de Sá, E. See Marques de Sá, E. Saab, Elias (with Saab, Paulette) On the Choquet theory and vector measures. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 475-484, Academic Press, New York, 1981. (H. H. McFaden) 82g:46026 46A55 (46G10)

(with Saab, Paulette) Sur quelques sous-espaces complémentés isomorphes à /, et sur "Respace de Banach X" /X. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 7, 405–407. (Authors' summary) 82c:46023 46B22 (46B10)

(with Saab, Paulette) Sur les espaces de Banach ne contenant pas I1. (English mary) [On Banach spaces not containing l₁] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 4, 261-263. (Authors' summary) 82k:46027 46B20

Extreme points, separability, and weak K-analyticity in dual Banach spaces London Math. Soc. (2) 23 (1981), no. 1, 165-170. (Wolfgang Lusky) 82c:46020

b, Paulette (with Saab, Elias) On the Choquet theory and vector measures. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 475-484, Academic Press, New York, 1981. (H. H. McFaden) 82g:46026 46A55

A general Rudin-Carleson theorem for vector-valued functions. General topolo modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 485-490, Academic Press, New York, 1981. (H. H. McFaden) 82g:46074 46E40 (46G99)

(with Sash, Elias) Sur quelques sous-espaces complémentés isomorphes à l₁ et sur l'espace de Banach X"/X. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 7, 405-407. (Authors' summary) 82c:46023 46B22 (46B10)

(with Saab, Elias) Sur les espaces de Banach ne contenant pas l₁. (English summary) [On Banach spaces not containing l₁] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 4, 261-263. (Authors' summary) 82k:46027 46B20

Sand, Y. On the rates of convergence of the Lanczos and the block-Lanczos methods.

SIAM J. Numer. Anal. 17 (1980), no. 5, 687-706. (W. C. Rheinboldt) 82g:65022 65F15

dabaev, A. Approximate solution of a Fredholm integral equation of the first kind in the space of continuous functions. (Russian) Izv. Akad. Nauk Kirgiz. SSR 1979, no. 2, 3–10, 93. (Author's summary) 82h:45013 45L05 (45B05)

Regularization of solutions of an integral equation of the first kind with an approximately given kernel and right-hand side. (Russian) Izo. Akad. Nauk Kirgiz. SSR

1981, no. 4, 7-11, 101. (L. B. Rall) 82k:45001 45B05 (45L10)

al-Saadi, S. D. See Al-Saadi, S. D. Saak, E. M. A duality theorem for nonlocal boundary value problems. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk. 1981, no. 1, 19-22, 101. (Enrico Obrecht) 82i:35060 35J55

(Ennos Obrechi) <u>accessoro</u> 33333 kijan, A. O. Absolute stability of integral manifolds (Russian) *Differencial' nye Urawnenija* 17 (1981), no. 6, 1000–1006, 1147. (Mark Levi) **82k:34054** 34C30 (34D20,

Saakjan, B. A. (with Džrbašjan, Mk. M.) Expansions in series of generalized absolutely monotone functions. (Russian. English summary) Anal. Math. 7 (1981), no. 2, 85-106. (É. Riekstins) 82k:41024 41A58 (26A33, 26A48, 33A70)

(Russins) 826:41024 41A38 (20A33, 20A48, 33A/0)

Saakjan, S. S. Hermispheres of a complex plane and their real realization. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 12 (1980), 67-84. (M. C. Chaki) 82j:53035 53820

Saam, W. F. Quantum theory of superfluidity and its onset in Bose films. Phys. Rev. B (3) 23 (1981), no. 3, 1485-1488. (Author's summary) 82c:81172 81105

Saari, Donald G. N-body collisions and singularities. Classical mechanics and dynamical systems (Medford, Mass., 1979), pp. 187-201, Lecture Notes in Pure and Appl. Math., 70, Dekker, New York, 1981. (See 82k:58002) 58F05

Saarinen, Esa (with Hintikka, Jaakko) Information-secting dialogues: some of their logical recognities. Studia. Conica 38 (1970), no. 4, 355-363 (Lerry Persanouski) 82d:13042

properties. Studia Logica 38 (1979), no. 4, 355-363. (Jerzy Perzanowski) 82d:03042 03B65

van Saarloos, W. (with Bedeaux, D.; Mazur, P.) Hydrodynamics for an ideal fluid: Hamiltonian formalism and Liouville equation. *Phys. A* **107** (1981), *no.* 1, 109–125. (Authors' summary) **82e:76005** 76A02 (49H05, 58F05)

Saatov, Ja. U. (with Kadyrov, A. K.) The splitting of M. A. Biot's equations in the presence of mass forces (Russian, Tajiki summary) Dokl. Akad. Nauk Tadžik. SSR 23 (1980), no. 2, 74-75. (E. Ungureanu-David) 82æ76082 76S05 (with Hamrakulova, R.) Splitting of M. A. Biot's equation. (Russian) Dokl. Akad.

(with Hallirakutova, R.) Spitting of M. A. Biot's equation. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 12, 13-14. (B. A. Bondarenko) 82g:73036 73K20

Saba, Farrokh (with Burns, David; Chartrand, Gary; Kapoor, S. F.) Randomly k-axial graphs. Bull. Austral. Math. Soc. 23 (1981), no. 1, 143-156. (Carsten Thomassen) 82i:05062 05C38

Sabac, Mihai Scalar generalized operators and irreducible representations of a Lie algebra

on a complex Banach space. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 5, 823–825. (Pierre de la Harpe) 82b:17004 17B05 (46L05, 47B40) ud, O. P. (with Lomsadze, Ju. M.) Abstract concentratable and reducible linear functionals and generalized functions. Rep. Math. Phys. 17 (1980), no. 1, 101-126. (J. B.

Cooper) 82h:81077 81E05 (46F05)

Idini, Nicoletta (with Mauri, Giancarlo) A #P-complete problem over arithmetical Cooper) 82h:81077

trees. CAAP '81 (Proc. Sixth Colloq., Genoa, 1981), pp. 308-315, Lecture Notes in Comput. Sci., 112, Springer, Berlin, 1981. (From the introduction) 82j:68022 68C25

Sabaer, E. F. (with Postnikov, N. S.) Matrix comparison systems and their applications to automatic control problems. Automat. i Telemeh. 1980, no. 4, 24–34 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 4, part 1, 455-464. (B. G. Pachpatte) 82i:93053 93D10 (34H05)

in, P. L. Univalence classes and V. I. Smirnov's domains. (Russian) Trudy Ser Kraev. Zadačam No. 16 (1979), 218-226, 246. (P. T. Mocanu) 82c:30022

w-Kušnarenko, Ju. P. Formulas of the algebra of finite predicates. (Russian) Automat. Sistemy Upravlenija i Pribory Automat. No. 53 (1980), 4-10, i. (Author's summary) 82e:04002 04A05 See also Problems of bionics, 82:68004

arov, A. Ju. (with Popov, A. M.) Study of magnetohydrodynamic stability of a compact

torus. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1981, no. 1, 82–85, 88. (B. Vujanović) 821:76016 76E25 (SREO7, 76W05) not. A. B. (with Ziber, A. V.; Ibragimov, N. H.). Liouville-type equations. (Russian) Dokl. Akad. Nauk SSSR 249 (1979), no. 1, 26–29. (H. Kil'p) 821s:58058 58H15 (35A30, 35O20)

(with Zaharov, V. E.) Integration of the nonlinear equations of mathematical physics by the method of the inverse scattering problem. II. (Russian) Funkcional. Anal. i Priložen. 13 (1979), no. 3, 13-22. (L. A. Takhtajan (Tahtadžjan)) 82m:35137 35Q20

(with Ibragimov, N. H.) Evolution equations with a nontrivial Lie-Bäcklund group. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 1, 25–36, 96. (A. M. Vinogradov) 821:58087 58G35 (35A30, 35K22, 58F07)

(with Ibragimov, N. H.) Infinite Lie-Bäcklund algebras. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 4, 79-80. (J. Chrastina) 82b:58007 58A17 (35A30, 35O99, 58F07, 58G35)

Šabat, B. V. (with Belinskii, P. P.; Bilii, V. I.; Gutljans'kii, V. Ja.; Lavrent'ev, M. A.) Georgii Dmitrievič Suvorov (on the occasion of his 60th birthday). (Russian) Uspehi Mat. Nauk 35 (1980), no. 2(212), 247-250. (Editors) 82g:01040 01A70

(with Aleksandrov, P. S.; Bogoljubov, N. N.; Kolmogorov, A. N.; Ljusternik, L. A.; Marčuk, G. I.; Sobolev, S. L.) In memory of Mihail Alekseevič Lavrent'ev. (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 3-10 (1 plate). (Editors) 82e:01081

Sabata, Hideki (with Masumoto, Naoya) Sur le crochet neuf dans mécanis (Japanese summary) Mem. Osaka Kyoiku Univ. III Natur. Sci. Appl. Sci. 29 (1980), no. 1, 13-17. (J. S. Joel) 82k:70018 70H99 (58F05, 70G25)

(with Butera, P.; Galgani, Luigi; Giorgilli, A.; Tagliani, A.) Stochasticity threshol in a lattice field theory. (Italian and Russian summaries) Nuovo Cimento B (11) 59 (1980), no. 1, 81-86. (Authors' summary) 82a:81030 81E99 (58F13, 70K99, 82A05)

(Russian) [Inverse problems in quantum scattering theory] Translated from the English by Ju. Muzyčka, B. V. Rudjak and A. A. Suz'ko. With a foreword by B. N. Zahar'ev and Suz'ko. "Mir", Moscow, 1980. 408 pp. (Editors) 82c:81121 81Fxx (47A40) Sabbata, V. See De Sabbata, V.

Sabbi, Sandra On a reciprocity theorem in electromagnetism. (Italian) Atti Accad. Sci. Istit. ogna Cl. Sci. Fis. Rend. (13) 6 (1978/79), no. 1, 133-143. (G. P. Bava) 82b:78008 78A25 (35J99)

Sabel'fel'd, K. K. (with Elepov, B. S.; Kronberg, A. A.; Mihailov, G. A.) *Pemerme красвых задач методом Monre-Kapao. (Russian) [Solution of boundary value problems by the Monte Carlo method] "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. 175 pp. (В. L. Granovskil) 82e:65120 65N99 (65C05)

Sabel nikov, V. A. Equations for probability distributions of velocity and concentration in turbulent and nonturbulent regions of free flows. (Russian) *Učen. Zap. CAGI* 11 (1980), no. 6, 25-30. (Author's summary) 82e:76036 76F99

Sabharwal, Y. P. (with Gupta, B. R.) Joint probability distributions concerning a sequence of symmetric Bernoulli trials. Scand. Actuar. J. 1980, no. 3, 135-138. (S. G. Mohanty) 60C05

(with Gupta, B. R.) Peak points in a symmetrically correlated random walk. Austral. J. Statist. 23 (1981), no. 1, 101–108. (Authors' summary) 82m:60083 60J15 idussi, Gert (with Chaput, Daniel) Une généralization du théorème de Ginsburg-Rose.

- Canad. J. Math. 32 (1980), no. 3, 567-575. (B. M. Schein) 82a:20078 20M35 (68D30) (with Földes, Stephane) Recursive undecidability of the binding property for finitely presented equational classes. Algebra Universalis 12 (1981), no. 1, 1-4. (Authors'
- summary 82:e0007 08B05 (03C05, 03D35)

 Sabin, G. C. W. (with Graham, G. A. C.) The opening and closing of a growing crack in a linear viscoelastic body that is subject to alternating tensile and compressive loads. (French summary) Internat. J. Fracture 14 (1978), no. 6, 639-649. (R. Temam) 73M05 924-73071
- Sabirov, R. H. On the stationary theory of perturbations in quantum mechanics. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 11, 33-36. (Author's summary) 82d:81035
- Sabitov, I. H. (with Aleksandrov, A. D.; Aminov, Ju. A.; Oleinik, O. A.; Pogorelov, A. V.; Poznjak, È. G.; Rozendorn, È. G.) Nikolaĭ Vladimirovič Efimov (on the occasion of his seventieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 3(219), 233-238.

(Editors) 82g01037b 01A70

See also Investigations in the metric theory of surfaces, 82b:53083

sitor, K. B. The problem M for the equation $x^{\mu}u_{xx} + \text{sign } yu_{yy} = 0$ in an infinite mixed domain. (Russian) Application of the methods of functional analysis to problems of mathematical physics and numerical analysis (Russian), pp. 115-120, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1979. (Megumi Saigo) 824:35069 35M05

Uniqueness of the solution of the Tricomi problem for an equation of mixed type of the second kind. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 48–50, 248, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Author's summary) 82±35077 35M05

Formulation of boundary value problems for an equation of mixed type with degeneration of the second kind on the boundary of an infinite domain. (Russian) Sibirsk. Mat. Z. 21 (1980), no. 4, 146-150, 238. (Alexander Doktor) 82b:35110 35M05

Sablina, S. A. See Construction and application of specialized tools of com 82e:68003

- blinskaja, I. R. (with Timošina, I. R.) A method for solving a nonsmooth problem based on a necessary integral condition of the extremum. (Russian. English summary) Vesinik Leningrad. Unio. Mat. Meh. Astronom. 1980, vyp. 2, 47-51, 124. (M. M. Cvetanov)
- Šablov, V. L. (with Komarov, V. V.; Popova, A. M.) Two-particle system in a force field. Nonsingular integral equations for components of T-operator. Progr. Theoret. Phys. 66 (1981), no. 3, 940-947. (Authors' summary) 82k:81077 81F05
- ovskii, O. N. A study of temperature waves based on the generalized heat-transfer equation. Int.-Fiz. Z. 40 (1981), no. 2, 345-351 (Russian); translated as J. Engrg. Phys. 40 (1981), no. 2, 218-223. (Author's summary) 82i:80006 80A20 Analytic solutions of parabolic and hyperbolic heat-transfer equations for nonlinear

media. Inž.-Fiz. Ž. 40 (1981), no. 3, 510-517 (Russian); translated as J. Engrg. Phys. 40

- (1981), no. 3, 319–324. (Author's summary) 82m:90004 80A20 (35K05) sodas, P. F. (with Naval, I. K.) Nonstationary thermoelastic waves in a closed spherical shell under local heating. (Russian) Mathematical methods in mechanics. Mat. Issled.
- No. 57 (1980), 111-119, 137. (Authors' summary) 82c:73096 73U05
 bodas, P. R. (with Naval, I. K.) Thermoelastic waves in a cylindrical shell under local
 heating. (Russian) Computational methods of mechanics. Mat. Issled. No. 64 (1981), 69-77, 192. (See 82k:73001) 73D99
- obmadière, J. C. Numerical analysis of eddy-current problems. Finite elements in electrical and magnetic field problems, pp. 109–124, Wiley, Chichester, 1980. (Magdi M. Shoucri) 82b:78029 78A55 (65M99, 65N99)
- oxov, M. Estimates of approximation of differentiable periodic functions of two variables by interpolating mixed splines. (Russian) Questions of the theory of the approximation of functions (Russian), pp. 166-172, 202, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1980. (A. A. Pekarskii) 82;41014 41A15

On best cubature formulas with a weight. (Russian. Tajiki summary) Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk 1980, no. 4(78), 66-69. (Yury

Natur Taazir. S.N. Otael. 112.-Mail. 1 Geolog.-Trim. Natur 1990, no. 4(18), 60-65. (Yury Girshovich) 82h:41040 4 44.55 (65D32)

Lozov, O. S. Approximation of upper semicontinuous functions by rational-fractional operators of L. V. Kantorovič type. (Russian. Tajiki summary) Dokl. Akad. Nauk Tadžir. SSR 23 (1980), no. 6, 294-297 (L. G. Labsker) 824-41024 4 | Al35 (41A20)

Lagra, Abdelhamid I. A note on Codex Biblioteca Medicea-Laurenziana Or. 152. J. Hist.

Arabic Sci. 1 (1977), no. 2, 276–283 (1 plate). 82e:01016 01A30
An eleventh-century refutation of Ptolemy's planetary theory. Science and history, pp. 117–131, Studia Copernicana, XVI, Ossolineum, Wrocław, 1978. (See 82e:01003)

Ibn al-Haytham's "Treatise on methods of astronomical observations". (Arabic. English summary) J. Hist. Arabic Sci. 2 (1978), no. 1, 228-194, 155. (E. S. Kennedy) 82e:01017 01A30

The treatise of Ibn al-Haytham: "Resolution of difficulties concerning the of iltifaf". (Arabic. English summary) J. Hist. Arabic Sci. 3 (1979), no. 2, 422-388. (B. Rozenfel'd) 82f:01018 01A30

Karadeniz Tech. Univ. 2 (1979), 41-46. (M. A. Akivis) 82k:53006 53A05 oğlu, Arif On the Joachimsthal's theorems. (Turkish su

- 13/403 (1977), 11-10. (81. A. AKIVS) 62823000 33/403 (1977), 11-10. (81. A. AKIVS) 62823000 33/403 (1977), 11-10. (81. A. AKIVS) 62823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 638230000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 63823000 33/403 (1977), 11-10. (81. A. AKIVS) 6382300 33/403 (1977), 11-10. (81. A. AKIVS) 6382300 33/403 (1977), 11-10. (81. A. AKIVS) 6382300 33/403 (1977), 11-10. (81. A. AKIVS) 6382300 33/403 (1977), 11-10. (81. A. AKIVS) 6382300 33/403 (1977), 11-10. (81. A. AKIVS) 6382300 33/403 (1977), 11-10. (81. A. AKIVS) 6382300 33/403 (1977), 11-10. (81. A. AKIVS) 6382300 33/403 (1977), 11-10. (81. A. AKIVS) 6382300 33/403 (1977), 11-10. (81. AKIVS) 6382300 33/403 (1977), 11-10. (81. AKIVS) 6382300 33/403 (1977), 11-10. (81.
- Sabzaliev, M. M. (with Džavadov, M. G.) A boundary value problem for a monocharacteristic equation degenerating into a monocharacteristic one. (Russian) Dokl. Akad. Nauk SSSR 247 (1979), no. 5, 1041-1046. (From the text) 82e:35027 35G15 (35B25)
- Sacca, D. (with Ausiello, G.; D'Atri, Alessandro) Graph algorithms for the synthesis and manipulation of data base schemes. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 212-233, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Authors' summary) 82h:68016 68B15 (05C20, 68E10) ochetti, Anna Martellotti (with Candeloro, Domenico) On the range of a vector measur

(Italian) Atti Sem. Mat. Fis. Univ. Modena 28 (1979), no. 1, 102-111. (Igor Kluvánck) 826:28009 28B05

Sacchi, M. T. (with Bosco, B.) On the inversion problem in classical electrodynamics and the "Casimir theorem". Ann. Physics 133 (1981), no. 1, 1-12. (T. Erber) 82m:78014 78A45 (78A25)

Sacchiero, Gianni Normal bundles of rational curves in projective space. (Italian. English summary) Ann. Univ. Ferrara Sez. VII (N.S.) 26 (1980), 33-40 (1981). (Knud Lønsted) 14H45 (14F05)

(with Ghione, Franco) Normal bundles of rational curves in P3. Manuscripta Math.

33 (1980/81), no. 2, 111-128. (D. Gallarati) 82b:14016 14H10
Sačenkov, A. V. (with Daragan, V. I.) On the solution of a three-dimencional problem of elasticity theory for a layer of constant thickness in trigonometric series. (Russian) Issled. Teor. Plastin i Oboloček No. 13 (1978), 47-61. (I. Aganović) 82e:73030 73C99 (with Konopley, I. G.; Kazancey, V. A.) Construction of formulas for estimation of stability and strength of shells in solution of problems by the theoretical-experimental method. (Russian) Issled. Teor. Plastin i Oboloček No. 14 (1979), 100-122. (From the text) 82j:73039 73H99 (73L99) text) 82j:73039

Sacerdote, F. Bounds for the solutions of elliptic problems of mixed type. (Italian. English mary) Riv. Mat. Univ. Parma (4) 6 (1980), 287-297 (1981). (Earico Obrecht)

82k-35040 35J55

Sacerdote, L. (with Ricciardi, Luigi M.) The first passage time problem with applications to neuronal modeling. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. III, pp. 226–236, Reidel, Dordrecht, 1980. (Authors' summary) 82f:92016 92A09 m hữu Sách See Phạm Hữu Sách

Sachdev, P. L. A generalised Cole-Hopf transformation for nonlinear parabolic and hyperbolic equations. (French summary) Z. Angew. Math. Phys. 29 (1978), no. 6, 963–970. (Author's introduction) 82a:35006 35A30 (35K55)

(with Lobo, M.) Some direct numerical approaches to the solution of the singular nonlinear transonic integral equation. Proc. Roy. Soc. London Ser. A 374 (1981), no. 1756, 35-64. (From the summary) 82c:76072 76H05 (45G05, 65R20)

Sachs, Ekkehard (with Gruver, W. A.) *Algorithmic methods in optimal control. Research Notes in Mathematics, 47. Pitman (Advanced Publishing Program), Boston, Mass.-London, 1981. x + 233 pp. ISBN 0-273-08473-9 (Kimio Kanai) 82;49029 49D37 (65K10, 90C30, 93C15)

Sachs, Elmar (with Hall, Ernst) Reliability aspects in the organization and operation of a large data base. J. Combin. Inform. System Sci. 6 (1981), no. 1, Special Issue on bility, 54-73. (Authors' summary) 82f:68023 68B15

Reliability, 54-73. (Authors' summary) 821:68023 68B15

Sachs, Hans Algebraische und analytische Methoden in der Theorie der Geradenkomplexe des Flaggenraumes. First Geometry Colloquium (Graz, 1980) (German), Ber. No. 166, 24 pp., Bericht, 163-167, Forschungszentrum Graz, Graz, 1981. (K. Strubecker) 82j:53025 53A40 (51N20)

Sachs, Horst Über einige graphentheoretisch-kombinatorische Problemkreise. Contributions to graph theory and its applications (Internat. Colloq., Oberhof, 1977) (German), pp. 201-217, Tech. Hochschule Ilmenau, Ilmenau, 1977. (O. V. Borodin) 82&05060 05C15 (05C25, 05C50, 20F32)

(with Hexel, Erhard) Counting residues modulo a prime in Pascal's triangle. Indian J. Math. 20 (1978), no. 2, 91-105. (Heiko Harborth) 82i:05003 05A10 (10A05)

Sachs, J. (with Toomer, G. J.) Otto Neugebauer, bibliography, 1925-1979. Centaurus 22 (1978/79), no. 4, 258-280. (Editors) 82f:01138 01A70

Sachs, R. K. (with Liang, E. P. T.) Cosmology. General relativity and gravitation, Vol. 2, pp. 329-357, Plenum, New York, 1980. (Sotirios Persides) 82i:83076 83F05 (51F99,

Sacker, Robert J. (with Sell, George R.) The spectrum of an invariant submanifold. J. Differential Equations 38 (1980), no. 2, 135-160. (Richard C. Swanson) 82h:58040 58F15 (34C30)

- ckii, V. P. On a boundary value problem for some singular operators of odd order. (Russian) Some questions of the qualitative theory of differential equations and theory of the control of motion, pp. 66–69, 163–164, Mordov. Gos. Univ., Saravak, 1980. (See 82m:34004) 35G30
- Sackov, G. P. (with Rjabov, B. A.) Requirements of structural stability and correctness in invariant control systems. (Russian) Theory of invariance and its application (Proc. Fifth All-Union Conf., Kieo, 1976), Part 2 (Russian), pp. 268–276, "Naukoca Dumka", Kieo, All: Union Cong., Kirc., 1976), Part 2 (Russian), pp. 200–276, Naucoca Dunna, Nico., 1979. (From the text) 82i:99063 93D99 (93835)
 cks, Gerald E. Post's problem, absoluteness and recursion in finite types. The Kleene
- Symposium (Proc. Sympos., Unio. Wisconsin, Madison, Wis., 1978), pp. 201–222, Stud. Logic Foundations Math., 101, North-Holland, Amsterdam, 1980. (John P. Helm)

cks, Jerome (with Ylvisaker, Donald) Asymptotically optimum kernels for density estimation at a point. Ann. Statist. 9 (1981), no. 2, 334-346. (C. Stone) 82:62066

(with Ylvisaker, Donald) Variance estimation for approximately linear models. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Statist. 12 (1981), no. 2, 147-162. (From the summary) 82f-52024 62C20 (62/05)

hs. Jonathan (with Uhlenbeck, K.) The existence of minimal immersions of 2-spheres.

Ann. of Math. (2) 113 (1981), no. 1, 1-24. (John C. Wood) 82f-59035 58E12 (53C42,

Hogha, Cihan A string-like self-dual solution of Yang-Mills theory. Nuclear Phys. B 178 (1981), no. 2, 361-372. (Author's summary) 82k:81059 81E10

niu, Ion (with Cenuşă, Gheorghe) Sequences of random variables almost periodical in probability. (French and Russian summaries) Econom. Comput. Econom. Cybernet. Stud. Res. 13 (1979), no. 2, 77-82. (A. Precupanu) 82h:60057 60G99 (42A75, 43A60,

(French summary) Rend. Mat. (6) 12 (1979), no. 1, 143-156. (A. Precupanu) 82h:60058 60G99 (41A10, 43A60)

(with Cenuşă, Gheorghe) Some properties of random functions alm ne Math. Pures Appl. 25 (1980), no. 9, 1317-1325. (K. Jacobs) obability. Rev. Rou 60G99 (42A16) 82k:60120a

Sad, Paulo (with Camacho, César) Sur l'existence de courbes analytiques complexes intes d'un champ de vecteurs holomorphe. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 4, A311-A312. (Freddy Dumortier) 824:32006 58F18

opan, S. (with Sweet, Arnold L.) On a model for random phenomena described by screte and continuous variables. *IEEE Trans. Systems Man Cybernet.* 10 (1980), no. 12, 936-938. (Authors' summary) 82a:94043 94A17

manatsu, Takashi (with Kitagawa, Keiichiro) Sur le problème de Cauchy pour un système d'équations aux dérivées partielles. J. Math. Kyoto Univ. 21 (1981), no. 1, 85–103. (C. schal) 82k:35023 35G05

m, K. See Chadan, K. manda, R. (with Kailay, Balbir Chand; Das, Junu R.) An algorithm for segmenting osed objects. Pattern Recognition 13 (1981), no. 5, 347-351. (Authors' summary) 27b-68118 68G10 (92A07)

w, N. M. On a method of Z. I. Halilov. (Russian. Azerbaijani and English sun nd. Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 1, 13-15. (From the text) 82:47045 47B38 (46H99)

ova, R. H. Inequalities for sourcelike representable functions. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1979, no. 11, 61-64. (From the text) 82c:26020

limetov, H. M. (with Žamalov, Z. Ž.) Coefficients of optimal quadrature formulas. (Russian) Boundary value problems for equations of mathematical physics (Russian), pp. 159–165, 170, "Fan", Tashkent, 1980. (Yury Girshovich) 82f:41037 41A55 i Sadjadi, M. R. See Azimi Sadjadi, M. R.

Sadler, Charles (with Klares, Bernard) Étude d'une connexion linéaire à plusieurs variables au voisinage d'une singularité irrégulière. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 39-42. (Authors' summary) 82b:34037 34C05

Rok, Zbigniew (with Tyc, Zygmunt) Remarks on rapidly increasing distributions.
(Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 11-12, 833-837

(1981). (Ioana Ciorânescu) **82i:46058** 46F10 (33A65) On Hermite expansion of x_*^2 . Ann. Polon. Math. **38** (1980), no. 2, 159–162. (Jean Lavoine) **82a:33013** 33A65 (44A40, 46F10)

a, A. (with Deguchi, Kisaboru; Nishikawa, K.; Aono, S.) Generator coordinate method based on coherent states: calculation of nuclear bound and resonance states in molecules. J. Phys. B 14 (1981), no. 18, 3305-3311. (Authors' summary) 82i:81165

ny, Robert (with Basdevant, Claude) Une classe d'opérateurs adaptés à la modélisation de la diffusion turbulente en dimension deux. (English summary) C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci. Univers Sci. Terre 292 (1981), no. 15, 1061-1064. (Authors' summary) 82i:76049 76F99 (35Q10)

1061-1064. (Authors' summary) 848:70009

Jory D. D. (with Ihsanov, S. M.) A control problem in radio communications. (Russian)

Adaptive control systems (Russian), pp. 17-27, 79, Akad. Nauk Ukrain. SSR, Inst.

Kibernet., Kiev., 1980. (Authors' summary) 82b:94004

94A05 (93E20)

loveam, Viorel Inhomogeneous linear recurrent sequences. (Romanian) Gaz. Mat. Publ.

Lunară Pentru Tineret 83 (1978), no. 5, 187-190. (Vincențiu Dumitru) 82g:39002

ovničii, V. A. (with Ljubiškin, V. A.) Regularized sums of the roots of a class of entire functions of exponential type. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 4, 794–798. (C. Tanaka) 82e:30006 30C15 (30D15)

vnikov, B. I. (with Inozemceva, N. G.) On nonlinear equations of nonlocal hydrodynamics in a model of solid spheres. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 4, 852-855. (V. Protopopescu) 82æ82034 82A40

(with Inozemceva, N. G.) Divergence of Barnett coefficients in three-dimensional hydrodynamics of hard spheres. I. Linear approximation. (Russian. English summary) Teoret. Mat. Fiz. 48 (1981), no. 1, 136-144. (Authors' summary) 82i:82040 82A40

wol, A. A. (with Golubev, A. I.) Sturm representation of the Green function of noninteracting particles and the multidimensional angular Coulomb function method. (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 2, 229-237. (Authors' ry) 82c:81168 81H99 (81G50)

ovskii, A. P. (with Pyžkova, N. V.) A method for solving the problem of isochronism of the center. (Russian) Differencial'nye Uraonenija 16 (1980), no. 10, 1893-1895, 1919. 34C20 (34C25, 58F22)

An elementary proof and applications of a theorem of F. Takens. (Russian) Differencial nye Uravnenija 16 (1980), no. 12, 2284–2287, 2304. (A. A. Reinfelds)

34C20 (58C27, 58F14) lovskii, B. N. (with Gerštein, V. M.; Potapov, A. S.) On the calculation of steady state regimes in a three-phase bridge circuit. (Russian) Qualitative and approximate methods for the investigation of operator equations (Russian), pp. 43-57, 166, Jaroslav. Gos. Univ., Yaroslav!, 1980. (Authors' summary) 82j-94025 94C05

Yarostaol*, 1980. (Authors' summary) 82;94025 94C05 (with Bogoljubov, N. N.; Išlinskii, A. Ju.; Kantorovič, L. V.; Sobolev, S. L.; Trapeznikov, V. A.; Bobylèv, N. A.) Mark Aleksandrovič Krasnosel'skii (on the

occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218),

215-220. (Editors) 82f:01079 01A70 lovskii, L. E. (with Ioffe, L. Š.; Klefner, G. B.) Linear organizational systems. (Russian) Moskov. Inst. Inž. Železnodorož. Transporta Trudy No. 640 Prikl. Mat. i Zadači odorož. Transporta (1979), 17-23, 150. (Authors' summary) 82d:90073

korskii, V. N. Logic and the theory of scientific change. Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science (Second Internat. Conf., Pisa, 1978), Vol. 1, pp. 49-61, Synthese Library, 145, Reidel, Dordrecht, 1981. (See 821:01001a) 03A05

treev, A. F. Statistical mechanics of a one-dimensional chain with two-level impurities. Phys. Lett. A 84 (1981), no. 3, 103-106. (Author's summary) 82h:82008 82A05

(with Maier, David; Mendelzon, Alberto O.; Ullman, Jeffrey D.) Adequacy of decompositions of relational databases. Advances in data base theory, Vol. 1 (Proc. Workshop, Tot ulouse, 1979), pp. 101-114, Plenum, New York, 1981. (See

drina, N. H. (with Regirer, S. A.) On models of thixotropic fluids. Prikl. Mat. Meh. 42 (1978), no. 5, 856-865 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 5, 925-936 (1979). (Authors' summary) 82f:76002 76A05 (82A35)

Jullaev, A. The operator $(dd^cU)^n$ and inner functions in Cⁿ. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 6, 3-5. (Harold P. Boas) 82b:32028 32F05 (31C10, 32A40)

Sadyhov, V. E. Asymptotic series for a class of double integrals. (Russian) Azerbaidžan. Gas. Univ. Učen. Zap. 1979, no. 2, 10-22. (M. Fedorjuk (RŽMat 1980:4 B14)) 82d:41042

dykov, A. S. See Umarov, S. U., 82h:01076

Sadykov, F. R. Observability and parametric invariance of linear control systems with indeterminate parameters. (Russian) Theory of invariance and its application (Proc. Fifth All-Union Conf., Kiev, 1976), Part 1 (Russian), pp. 110-120, "Naukova Dumka", Kiev, 1979. (Valeriu Prepeliță) 82b:93012 93B07 (93D20)

Sadykov, H. M. Investigation of the stability of the solution of a system of linear equations connected with the analysis of differential transformers. (Russian. Tajiki summary) Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk 1979, no. 4(74), 128-132.

(J. W. Macki) 82h:34066 34D20 (651.20, 86A15)
Some properties of a recurrent relation that connects the successive values of a recordable motion and recorded seismogram. (Russian. Tajiki summary) Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk 1980, no. 4(78), 90-93. (A. S. Alekseev) 82m:86006 86A15

lyrbaev, F. Ž. A two-point boundary value problem for a system of first-order ordinary differential equations. (Russian) Lato. Mat. Ežegodnik No. 23 (1979), 131–136, 274. (E. S. Čičkin) 82h:34026 34B15

Liapunov functions and the solvability of the first boundary value problem for an ordinary second-order differential equation. (Russian) Differencial'nye Uravnenija 16 (1980), no. 4, 629-634, 764. (Ju. A. Melencova) 82a:34017 34B15

Sadyrhanov, R. S. Covering mappings in domains of normed spaces. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk

1979, no. 6, 9-16. (Marián Fabian) 82:58014 58C15 (57M10)

Some properties of covering mappings of finite multiplicity and their applications. (Russian) Dokl. Akad. Nauk SSSR 259 (1981), no. 1, 44-49. (J. Daneš) 82j:54016 54C10 (57M10)

Saeki, Masami (with Araki, Mitsuhiko; Kondo, Bunji) Local stability of composite systems -frequency-domain condition and estimate of the domain of attraction. IEEE Trans. at. Control 25 (1980), no. 5, 936-940. (Authors' summary) 82f:93057 (93D20)

Saeki, Sadahiro (with Pigno, Louis) Constructions of singular measures with remarkable convolution properties. Studia Math. 69 (1980/81), no. 2, 133–141. (Colin C. Graham) 82h:43001 43A05 (43A25)

Singular measures and tensor algebras. Illinois J. Math. 25 (1981), no. 1, 12-15. din C. Graham) 82h:43006 43A46 (Colin C. Graham) 82h:43006

Saeks, Richard (with De Santis, Romano M.) A decentralized stochastic optimal control in Hilbert space. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. II, pp. 139–144, Reidel, Dordrecht, 1980. (Authors' 93E20 (93E11)

(with Desoer, Charles A.; Liu, Ruey Wen; Murray, John) Feedback system design: the fractional representation approach to analysis and synthesis. *IEEE Trans. Automat. Control* 25 (1980), no. 3, 399-412. (Sahjendra N. Singh) 82b:93023 93C35 (with Sangiovanni-Vincentelli, Alberto; Visvanathan, V.) Diagnosability of

nonlinear circuits and systems. II. Dynamical systems. IEEE Trans. Circuits and Systems 28 (1981), no. 11, 1103-1108. (Authors' summary) 82m:93054b 93C10 (93C25)

(with Feintuch, Avraham) Extended spaces and the resolution topology. Internat. J. Control 33 (1981), no. 2, 347-354. (Authors' summary) 82b:47049 47B99 (93B50)

Sáenz, Albert W. Wave operators for multichannel long-range scattering. Mathematical methods and applications of scattering theory (Proc. Conf., Catholic Univ., Washington, D.C., 1979), pp. 175-181, Lecture Notes in Phys., 130, Springer, Berlin, 1980. (See 35P25 (81F15)

See also Mathematical methods and applications of scattering theory, 82h:81117 Sáenz Lorenzo, José F. Cohomology of fiber bundles over symmetric spaces. (Spanish) Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 272–275, Consejo Sup. Inc. Cient., Madrid, 1977. (From the text) 55R20

Sae-Ung, S. (with Juang, J. N.; Yang, J. N.) Active control of large building structures. Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 663-676, North-Holland, Amsterdam, 1980. (See 82g:93003) 93C99

Safarevič, I. R. (with Rudakov, A. N.) Degeneration of surfaces of type K3 over fields of finite characteristic. (Russian) 1zv. Akad. Nauk SSSR Ser. Mat. 45 (1981), no. 3, 646–661. (Gerhard Pfister) 82k:14040 14J25

Safarjan, R. G. (with Sarafjan, V. V.) Diffusion processes with averaging, and propagation of concentrated waves. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 5, 274-279. (Pierre-Louis Lions) 82&35023 35B25 (35K55, 60J60)

Some boundary value problems with a small parameter for degenerate diffusi processes and corresponding differential equations. (Russian. Armenian and English

naries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 15 (1980), no. 4, 258-267, 333. (Z.

Schuss) 82d:60146 60J60 (35B25, 60H15)
Safarov, T. M. Generalization of a Fatou-Korevaar theorem. (Russian) Mathematics and the methodology of its teaching, Part II (Russian), pp. 55–61, Tadik, Gos. Univ., Dushanbe, 1974. (A. V. Bratiščev) 82g:30007 30B50 (40G05)

Safavi-Naini, Reza (with MacPhie, Robert H.) On solving waveguide junction scattering problems by the conservation of complex power technique. IEEE Trans. Microwave Theory Tech. 29 (1981), no. 4, 337–343. (Authors' summary) 82d:78026 78A50

Šafeev, M. N. Solution of a nonlinear problem by the method of degenerate hypergeometric transformations. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 12, 75-78. (R. D. Bačelis) 82g:35124 35R35 (35A25)

Saff, E. B. (with Horowitz, D. A.; Rose, D. A.) A comment on the convexity condition Indian J. Math. 18 (1976), no. 3, 159-164. (V. Lakshmikantham) 82d:52003 52A1

(with de Bruin, M. G.; Varga, R. S.) On two conjectures on the zeros of generalized Bessel polynomials. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 261–266, Academic Press, New York, 1980. (J. P. Singhal) 82c:33018

(with Ullman, Joseph L.; Varga, R. S.) Incomplete polynomials: an electrostatics approach. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 769–782, Academic Press, New York, 1980. (Manfred v. Golitschek) 82h:41009 41A10

(with Varga, R. S.) Remarks on some conjectures of G. G. Lorentz. J. Approx. Theory 30 (1980), no. 1, 29-36. (A. Sharma) 82e:41040 41A50 (41A10) (with de Bruin, M. G.; Varga, R. S.) On the zeros of generalized Bessel polynomials.

I, II. Nederl. Akad. Wetensch. Indag. Math. 43 (1981), no. 1, 1-13, 14-25. (M. E. 33A40 (41A21) Muldoon) 82d:33015

(with Anderson, Ned; Varga, R. S.) An extension of the Eneström-Kakeya theorem and its sharpness. SIAM J. Math. Anal. 12 (1981), no. 1, 10-22. (M. Marden) 82b:30007 30C15 (90C05)

Saffman, Philip G. (with Chen, Benito C.) Steady gravity-capillary waves on deep water. I. Weakly nonlinear waves. Stud. Appl. Math. 60 (1979), no. 3, 183-210. (J. Jimenez) 82e:76013a 76B15 (35C99)

(with Crawford, Donald R.; Lake, Bruce M.; Yuen, Henry C.) Effects of nonlinearity and spectral bandwidth on the dispersion relation and component phase speeds of surface gravity waves. Theoretical and applied mechanics (Proc. 15th Internat. Congr., Univ. Toronto, Toronto, Ont., 1980), pp. 319-344, North-Holland, Amsterdam, 1980. (See 82d:00008) 76B15

Long wavelength bifurcation of gravity waves on deep water. J. Fluid Mech. 101

(1980), no. 3, 567–581. (Author's summary) 82a:76015 76B15 (76E20) (with Yuen, Henry C.) A new type of three-dimensional deep-water wave of permanent form. J. Fluid Mech. 101 (1980), no. 4, 797–808. (Authors' summary) 824:76018 76B15

(with Szeto, R. K.-H.) Equilibrium shapes of a pair of equal uniform vortices. Phys. Fluids 23 (1980), no. 12, 2339-2342. (L. Debnath) 82a:76020 76B99 (76C05, 76E99) (with Chen, Benito C.) Steady gravity-capillary waves on deep water. II. Numerical results for finite amplitude. Stud. Appl. Math. 62 (1980), no. 2, 95-111. (J. Jimenez) 76B15 (35C99)

(with Martin, David U.; Yuen, Henry C.) Stability of plane wave solutions of the two-space-dimensional nonlinear Schrödinger equation. Wave Motion 2 (1980), no. 3, 215-229. (Authors' summary) 824:76020

Coherent structures in turbulent flow. The role of coherent structures in modelling

turbulence and mixing (Proc. Internat. Conf., Madrid, 1980), pp. 1-9, Lecture Notes in Phys., 136, Springer, Berlin, 1981. (See 82c:76062) 76F10

Vortex interactions and coherent structures in turbulence. Transition and turbulence (Madison, Wis., 1980), pp. 149-166, Publ. Math. Res. Center Univ. Wisconsin, 46,

Academic Press, New York, 1981. (See 82k:76002) 76F99 (58F13)
(with Crawford, Donald R.; Lake, Bruce M.; Yuen, Henry C.) Stability of weakly nonlinear deep-water waves in two and three dimensions. J. Fluid Mech. 105 (1981), 177-191. (J. J. Mahony) 82i:76007 76B15

Dynamics of vorticity. 25th anniversary issue: editorial reflections on the development of fluid mechanics. J. Fluid Mech. 106 (1981), 49–58. (See 82g:76002) 76C05

(with McLean, J. W.; Ma, Y. C.; Martin, David U.; Yuen, Henry C.) (1981), no. 13, 817–820. (Authors' summary) 82c:76017 76B15 (35Q20)

(with Schatzman, J. C.) Properties of a vortex street of finite vortices. SIAM J. Sci. Statist. Comput. 2 (1981), no. 3, 285–295. (Authors' introduction) 82k:76018 76C05 Safiev, N. K. Asymptotic behavior with respect to the small parameter of the solution of the

mixed problem for a hyperbolic equation. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 5, 1074-1078. (A. V. Peržan) 82i:35109 35L20 (35B40) Safiev, R. A. (with Babaeva, A. E.) Convergence of a class of iterative methods of regula

falsi type. (Russian) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1979, no. 6, 52-58. (I. P. Mysovskih) 82h:65043 65315

On the stability of pseudoinversion. (Russian. Azerbaijani and English su Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 3, 3-10. (F. Smithies) 82h:47010 47A50 (47A55, 65J10) L-pseudoinversion. (Russian. Azerbaijani and English summaries) Akad. Nauk

idžan. SSR Dokl. 37 (1981), no. 5, 8-12. (Author's summary) 82i:47004 (47A50)

Safko, J. L. (with Dolan, P.; Choudhury, P.) A "constant of the motion" for the geodesic deviation equation. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 1, 28-33. (Authors' summary) 82j:83007 83C10 (53B50)

Safonov, A. V. On the spectral type of ergodic G-induced flows. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 4, 81-82. (B. Kamiński) 82g:28025 28D15 (22D40,

Safonov, M. V. On the Dirichlet problem for Bellman's equation in a plane region. (Russian) Mat. Sb. (N.S.) 105(147) (1978), no. 4, 594-600, 640. (P.-L. Lions (Zbl 407:35042)) 82a:35045 35165 (93E20)

Dirichlet problem for the Bellman equation in a multidimensional domain. (Russian)

Dokl. Akad. Nauk SSSR 253 (1980), no. 3, 535-540. (Pierre-Louis Lions) 824:93074

Harnack's inequality for elliptic equations and Hölder property of their solution (Russian) Boundary value problems of mathematical physics and related questions in the theory of functions, 12. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 96 (1980), 272-287, 312. (A. A. Novruzov) 82b:35045 35J15

Salonov, Michael G. Frequency-domain design of multivariable control systems for insensitivity to large plant modeling errors. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 247-249, IEEE, New York, 1979. (Author's summary) 82a:93034 93C35 (93B50)

The sensitivity problem in multivariable feedback systems revisited. Fourteenth Asilomar Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 512-515, IEEE, New York, 1981. (See 82d:93001)

(with Laub, Alan J.; Hartmann, Gary L.) Feedback properties of multivariable systems: the role and use of the return difference matrix. IEEE Trans. Automat. Control 26 (1981), no. 1, 47-65. (Authors' summary) 82b:49055 49D99

(with Athans, Michael) A multiloop generalization of the circle criterion for stability margin analysis. IEEE Trans. Automat. Control 26 (1981), no. 2, 415-422. (Authors' summary) 82d:93054 93D25

Safonov, V. F. (with Lomov, S. A.) Regularization method for systems with a weak nonlinearity, in the resonance case. (Russian) Mat. Zametki 25 (1979), no. 6, 871-889, 957. (Authors' summary) 82e:34059 34E15 (58F19)

onova, T. E. Minimization of the number of tasks not occurring in their directive intervals. (Russian) Numerical methods and questions in the organization of calculations, 3. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 90 (1979), 186–193, 301. (R. Şerban) 82a:90071 90B35

Realization of an algorithm for constructing an optimal schedule with a starting

point in a given interval. (Russian) Numerical methods and questions in the organization of calculations, 3. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOM1) 90 (1979), 194-209, 301. (R. Şerban) 82a:90072 90B35 (1979), 194-209, 301. (R. Şerban) 82a:90072

ranovskii, I. I. ★История кристаллографии. (Russian) [The history of crystallography] XIX век. [19th century] "Nauka" Leningrad. Otdel., Leningrad, 1980. 324 pp. (J. C. Fisher) 82i:01033 01A55 (82-03)

ronenko, V. G. (with Vorovic, I. I.) Use of variational principles in coupled problems of thermoviscoelastic shells. Izv. Akad. Nauk SSSR Meh. Toerd. Tela 15 (1980), no. 4, 166-173 (Russian); translated as Mech. Solids 15 (1980), no. 4, 132-138. (Authors' summary) 82c:73088 73U05 (49H05, 73L99)

Sagadeer, A. V. Ion Sinā as a systematizer of medieval scientific knowledge. (Russian) Vesnik Akad. Nauk SSSR 1980, no. 11, 91-103. (Editors) 82f:01019 01A30

Sagan, Bruce (with Rota, Gian-Carlo; Stein, Paul R.) A cyclic derivative in noncommutative algebra. J. Algebra 64 (1980), no. 1, 54-75. (David M. Jackson) 82b:05017 05A15 (12H05, 13F25)

On selecting a random shifted Young tableau. J. Algorithms 1 (1980), no. 3, 213-234. (J. Désarménien) 82f:05008 05A15 (05B30, 20C30, 60C05)

Sagdar, L. (with Cerenbat, O.; Togmid, S.) An optimal quality control plan based on a multivariate quantitative attribute. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1979, no. 5, 30-35, 79. (K. Sarkadi) 82e:62163 62N05

Sage, Andrew P. (with Dewispelare, Aaron R.) On combined multiple objective optimization theory and multiple attribute utility theory for evaluation and choicemaking. Large Scale Systems 2 (1981), no. 1, 1-19. (Authors' summary) 82f:90007 90A05 (90C31)

Sagerer, Gerhard (with Beth, Thomas; Hain, Manfred; Schäfer, Norbert) Materialien zur Codierungstheorie. II. Arbeitsber. Inst. Math. Masch. Datenverarb. (Inform.) 12 (1979/80), no. 10, vi+190 pp. (Z. Takeda) 82e:94056b 94B35 (94B15)

ther, Y. Real interpolation with weights. Indiana Univ. Math. J. 30 (1981), no. 1, 113-121. (Colin Bennett) 82e:46045 46E30 (46M35)

113-121. (Coun Bennett) Berthers (County (William)) glinashvili, M. G. See Saginashvili, M. G. (With Dudučava, R. V.) Integral convolution operators on the half axis with semi-almost-periodic presymbols. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 98 (1980), no. 1, 21-24. (V. S. Rabinovič) 82k:47041 47B35 (45E10, 47G05)

Singular integral equations with coefficients that have discontinuities of semi-almost-periodic type. (Russian) Theory of analytic functions and harmo analysis. Trudy Thiliss. Mat. Inst. Razmadze Akad. Nauk Gruzin. SSR 66 (1980), 84-95. (V. S. Rabinovič) 82i:45006 45E05

(with Dudučava, R. V.) Integral equations of convolution on the half axis with almost-periodic presymbols. (Russian) Differencial'nye Uravnenija 17 (1981), no. 2, 301-312, 389-390. (William L. Perry) 82g:45010 45E10 (47G05)

Saginašvili, M. G. (with Agekjan, T. A.) Motion in a rotationally symmetric potential field: properties of near-circular motion. Astronom. Z. 58 (1981), no. 2, 273-279 (Russia translated as Soviet Astronom. 25 (1981), no. 2, 154-157. (Authors' summary) 82k:70009 70F15 (58F22, 85A05)

Saginjan, L. A. On a theorem of Marcinkiewicz-Zygmund. (Russian. Armenian and English mmaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 16 (1981), no. 1, 54-64, 83. (V. Totik) 82l::42016 42A24
Sagiv, Yehoshua (with Yannakakis, Mihalis) Equivalences among relational expressions

with the union and difference operators. J. Assoc. Comput. Mach. 27 (1980), no. 4, 633-655. (Authors' summary) 82a:68038 68B15 (68C25)

(with Delobel, Claude; Parker, D. Stott, Jr.; Fagin, Ronald) An equivalence between relational database dependencies and a fragment of propositional logic.

Assoc. Comput. Mach. 28 (1981), no. 3, 435-453. (Authors' summary) 82h:68025 (68B15 (03B05)

(with Beeri, Catriel; Mendelzon, Alberto O.; Ullman, Jeffrey D.) Equivalence of relational database schemes. SIAM J. Comput. 10 (1981), no. 2, 352-370. (Authors' summary) 82m:68033 68B15

(with Aho, A. V.; Szymanski, Thomas G.; Ullman, Jeffrey D.) Inferring a tree from lowest common ancestors with an application to the optimization of relational expressions. SIAM J. Comput. 10 (1981), no. 3, 405-421. (Authors' summary) 82h:68015

Sagle, A. A. (with Holmes, J. P.) Analytic H-spaces, Campbell-Hausdorff formula, and

- tive algebras. Pacific J. Math. 91 (1980), no. 1, 105-134. (J. Stasheff) 82d:17005 17D05 (55P99)
- pusto (with Zwiebach, Barton) Electromagnetic waves in a Bianchi type-I Phys. Rev. D (3) 24 (1981), no. 2, 305-319. (Authors' summary) 82f:83053 83C50 (53B50)
- al solvability of linear partial differential operators in $C^{\infty}(\Omega)$. Geometrical approaches to differential equations (Proc. Fourth Scheveningen Conf., Scheveningen, 1979), pp. 290-305, Lecture Notes in Math., 810, Springer, Berlin, 1980. (M. H. Protter) 82ac47045 47F05 (35E20)
- (M. H. Protter) \$2.264-705 (3.25.20)
 guet, P. (with Pic, E.) Le maillage rectangulaire et le changement de maille dans la
 méthode TLM en deux dimensions. (English summary) Electron. Lett. 17 (1981), no. 7,
 277-279. (Authors' summary) 82494060 94C05
 ha, Bibbiti Bhusan On a generating function of ultraspherical polynomials. Rev. Mat.
 Hisp.-Amer. (4) 39 (1979), no. 1, 21-26. (Peter A. McCoy) 824:33013 33A45 (33A50)
- ha, D. C. (with Prasada Rao, G.) Identification of distributed parameter systems via
- multidimensional distributions. Proc. IEE-D 127 (1980), no. 2, 45-50. (Author's summary) 82x-93021 93B30 (94A12)

 Saha, G. M. (with Das, A. D.) A note on duals of some T_m-type PBIB designs. Calcutta Statist. Assoc. Bull. 29 (1980), no. 115-116, 179-183 (1981). (K. L. Sharma) 82g-62107
- ha, R. K. (with Boriotti, J. R.) Truncation and round-off errors in computation of matrix exponentials. Internat. J. Control 33 (1981), no. 1, 137-147. (L. B. Rall) 82c:65029
- nai, Ajit (with Ray, S. K.) An efficient estimator using auxiliary information. Metrika 27 (1980), no. 4, 271–275. (C. H. Kapadia) 82:62024 62D05

 nai, Ashok Improved variance bounds for unbiased estimation in inverse sampling. J.
- Statist. Plann. Inference 4 (1980), no. 3, 213-216. (S. K. Katti) 82h:62020
- anenko, A. I. (with Borovkov, A. A.) Estimates for the convergence rate in the invariance principle for Banach spaces. (Russian. English summary) Teor. Ver. Primenen. 25 (1980), no. 4, 734–744. (A. Badrikian) 82c:60060 60F17 (60B) nary) Teor. Vero
- userabudhe, S. C. (with Kekre, H. B.; Rama Rao, V.) Synthesis procedure for p-symmetric Boolean functions. Proc. IEE-E 127 (1980), no. 3, 93–96. (Authors'
- azjan, K. V. (with Lebedinskaja, N. B.) Efficient optimization methods for establishing schedules for a single-machine (survey). (Russian) Numerical methods and questions in the organization of calculations. 5. Zap. Naučn. Sem. Leningrad.. Otdel. Mat. Inst. Steklov. (LOMI) 111 (1981), 195-217, 239. (Authors' summary) 82m:90092 90B35
- zov, A. A. (with Abramov, A. H.; Pravotorova, N. A.) On determining the optimal service discipline with a limited number of waiting places. (Russian) Questions of mathematical cybernetics and applied mathematics, No. 3 (Russian), pp. 74-81, "Elm", Baku, 1978. (E. A. Danieljan) 821:60201 60K25 (90B22)
- backi, 1976. [L. Danienjan] outroof of backy, A. L. On some compact operators in uniform spaces of continuous functions. [Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 12, 6–8. (From the text) 324-47043 47838 (47805) ebban, F. (with Friedman, A. D.) Diagnostic and computational reconfiguration in multiprocessor systems. ACM 78. (Proc. Annual Conf., Assoc. Comput. Mach.,
- Washington, D.C., 1978), pp. 68-78, ACM, New York, 1978. (O. O. Romanovs'kii) 68B20
- ney, B. N. (with Singh, Sankatha P.) On best simultaneous approximation. tion theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 783-789, Academic Press, New York, 1980. (Jean Tzimbalario) 82h:41021 41A28 (41A50)
 - (with Waterman, Daniel) On the summability of Fourier series. Rev. Rou
- Math. Pures Appl. 26 (1981), no. 2, 327-330. (V. Totik) 82f-42004 42A24
 mi, Paramdeep S. (with San Miguel, M.; Gunton, James D.; Dee, Gregory) Theory of spinodal decomposition in relaxational tricritical models. Phys. Rev. B (3) 23 (1981), no. 5, 2334–2345. (Authors' summary) 82c:82037 82A25 no. 5, 2334-2345. (Authors' summary) 82c:82037
- no. 3, 234–2342. (Author's summary) 822-8067 82A25 min, Sartaj Preemptive scheduling with due dates. Oper. Res. 27 (1979), no. 5, 925–934. (Author's summary) 822-9063 90835 (with Nassimi, David) Finding connected components and connected ones on a mesh-connected parallel computer. SIAM J. Comput. 9 (1980), no. 4, 744–757. (Danny
 - Doley) 82e:68069 68E10 (68A05, 68B20, 68C05)
 (with Nassimi, David) A self-routing Benes network and parallel permutation algorithms. IEEE Trans. Comput. 30 (1981), no. 5, 332–340. (Authors' summary) 68A05 (68C25)
- (with Cho, Yookun) Preemptive scheduling of independent jobs with release and due times on open, flow and job shops. Oper. Res. 29 (1981), no. 3, 511-522. (Authors' summary) 82h:90063 90B35
- wič, A. L. Continuation of block Toeplitz matrices. (Russian) Functional analysis, No. 14 (Russian), pp. 116-127, Ul' janovsk. Gos. Ped. Inst., Ul' yanovsk, 1980. (S. Kurepa) 82h:15029 15A57 (47B35)
 - On the extension of Toeplitz matrices. (Russian. English sun
- Nauk Ukrain. SSR Ser. A 1981, no. 7, 19-24. (M. Cotlar) 82m:47017 47B35
 movič, L. A. Effective construction of noncontinuable Hermite-positive functions of several variables. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 4, 55-60, 96. (D. P. Gupta) 82j:49036 49G15
 - The asymptotic behavior of the spectrum of an anharmonic oscillator. (Russian. lish summary) Teoret. Mat. Fiz. 47 (1981), no. 2, 266-276. (Author's summary) 82i:81035 81C12
- bov, O. A two-sided estimate of the reliability of a complex repairable system. Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1979, no. 1, 30-35, 93-94. (B. Dimitrov) 82f:60200
 - mitrov) 821:60200 60K20

 Some two-sided inequalities for a reliability characteristic (Russian) Izv. Akad. uk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 6, 31-33, 91. (Author's summary) 821:60192 60K 10 (90B25)
- werdjan, A. Ju. On A. L. Šaginjan's theorems on limit decrease of meromorphic functions. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980),
- no. 5, 266-273. (W. H. J. Fuchs) 82e:30039 30D40 (30D50)

 Saičev, A. I. Eigenvalue statistics of a one-dimensional randomly inhomogeneous boundar value problem. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 2, 183-188 (Russian English summary); translated as Radiophys. and Quantum Electronics 23 (1980), no. 2,

- 132-136. (Author's summary) \$2c:82018 82A05 (35P15, 82A42)
- Statistical analysis of linear stochastic boundary value problems by the method of reduction to a Cauchy problem. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 10, 1163–1176 (Russian. English summary); translated as Radiophys. and Quantum Electronics 23 (1980), no. 10, 770–780 (1981). (Author's summary) 82;82049 82A42 (35R60,
- denko, A. V. Mappings that preserve the value of set functions. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 5, 173-176, 192. (H. W. Guggenheimer) 82d:52004 52A20 dukov, K. M. (with Laptev, B. L.; Šerstněv, A. N.; Husnutdinov, R. Š.) Boris
- Mihailovič Gagaev (1897-1975). (Russian) Mathematical analysis (Russian), pp. 5-14,
- Kazan. Gos. Univ., Kazan, 1978. (Editors) 82g:01061 01A70
- Salfuddin Random phase approximation for three particle nuclear potential. J. Natur. Sci. Math. 17 (1977), no. 2, 69-78. (Author's summary) 82x81055 81G35
 Salgal, R. The fixed point approach to nonlinear programming. Point-to-set maps and mathematical programming. Math. Programming Stud. No. 10 (1979), 142-157. (Author's summary) 82x00074. 90074 90C30
- Saïgardanov, Ju. Z. Asymptotic behavior of the solution of the first boundary value problem for a fourth-order elliptic equation with a small parameter multiplying the highest derivatives. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 28 Primen. Metoda Soglasocan. Asimptot. Razloženii k Kraev. Zadačam dl' ja Differencial. Urav. (1979), 58-72, 109. (M. M. Skriganov) 82d:35022 35B25 (35J40)
- Saigo, Megumi On a property of the Appell hypergeometric function F_1 . Math. Rep. Kyushu Unito. 12 (1979/80), no. 2, 63-67. (L. J. Slater) 82c:33006 33A30 Saihet, L. E. (with Kolmanovskii, V. B.) On the approximate synthesis of the optimal control of stochastic quasilinear systems with aftereffect. Prikl. Mat. Meb. 42 (1978), no. 6, 978-988 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 6, 1070-1080 93E25 (1980). (Authors' summary) 82j:93062
- Sain, Ildikó (with Andréka, Hajnal; Németi, István) Program verification within and thin Address, rajnar, recincu, stanii rozgan verincadon widin and without logic. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic. 8 (1979), no. 3, 124–129. (Author's review (H.A.)) 82b:68005 68B10 (03B60, 03C80)
- Sain, Michael K. (with Wyman, Bostwick F.) Essential right inverses and system zeros. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 23-28, IEEE, New York, 1979. (Authors' summ
 - (with Wyman, Bostwick F.) The zero module and essential inverse systems. IEEE Trans. Circuits and Systems 28 (1981), no. 2, 112-126. (A. A. Pervozvanskii) 82e:93026 93B25 (13N05, 93C05)
- iguès-Sainte-Beuve, M.-F. See Nouguès-Sainte-Beuve, M.-F.
 nt-James, D. (with Nozières, P.) Transient growth of fluctuations when sweeping a system through bifurcation. Progr. Theoret. Phys. Suppl. No. 69 (1980), 122-136 (1981). (Authors' summers) 828-70077 708 50 (58E1A 22A05) mary) 82h:70027 70K50 (58F14, 82A05)
- (with Caroli, B.; Caroli, C.; Roulet, B.) On fluctuations and relaxation in systems described by a one-dimensional Fokker-Planck equation with a time-dependent potential. Phys. A 108 (1981), no. 1, 233–256. (Authors' summary) 82;82031 82A35 moreau de Saint-Martin, J. See Moreau de Saint-Martin, J. See Moreau de Saint-Martin, J. Sainz D., Ma. Victoria See Gómez Calderón, Javier, 82i:03001 Saipe, Alan L. (with Cook, Wade D.; Seiford, Lawrence M.) Production runs for multiple

- products: the full-capacity heuristic. J. Oper. Res. Soc. 31 (1980), no. 5, 405–412. (Józef Grabowski) 82m:90088 90B35 (90B30)
- sa A note on conformal martingales. Keio Math. Sem. Rep. No. 6 (1981),
- 47-49. (Editors) 82k:60107 60G46
 Saishu, Kazuo (with Sato, Kimio; Onodera, Rikio) Comments on: "Computer generation of trees and co-trees in a cascade of multiterminal networks" [IEEE Trans. Circuit Theory 16 (1969), 518-526; MR 40 #7023] by W. K. Chen. IEEE Trans. Circuits and
- Systems 28 (1981), no. 7, 747-748. (Authors' summary) 82f:68072 68E10 (05C05)
 Saito, Hiroshi On a decomposition of spaces of cusp forms and trace formula of Hecke operators. Nagoya Math. J. 80 (1980), 129-165. (Larry J. Goldstein) 82c:10028 10D12 (10D30)
 - See also Gérardin, Paul. 82b:10036
- Kazuyuki A structure theory in the regular σ-completion of C*-algebras. J. Lor Math. Soc. (2) 22 (1980), no. 3, 549-558. (J. D. Maitland Wright) 82d:46081 Saito, Kichi-Suke Shift-invariant Hardy spaces and their applications. (Japanese) Sūgaku
 - 32 (1980), no. 3, 247-262. (Yasuo Watatani) 82m:46072 46L55 (46J15) mutative L^p-spaces with 0<p<1. Math. Proc. Cambridge Philos. Soc. 89
 - (1981), no. 3, 405-411. (Jean-Marie Schwartz) 82a:46078 46L50 (46E30) Invariant subspaces for finite maximal subdiagonal algebras. Pacific J. Math. 93 (1981), no. 2, 431-434. (Jean-Marie Schwartz) 82m:46068 46L50 (46L10, 47A15)
- to, Nobuji (with Watanabe, Takahiro; Asano, Takao) Upper bounds on lengths of Chinese postman walks in undirected graphs. Systems-Comput.-Controls 10 (1979), no. 2, 66–75 (1981). (Carsten Thomassen) 821:05071 05C45 (90C08) (with Takamizawa, K.; Nishizeki, Takao) An O(p3) algorithm for finding
- Hamiltonian cycles in certain digraphs. J. Inform. Process. 3 (1980/81), no. 2, 68-72. 68E10 (05C20, 05C45, 68C25) (Authors' summary) 82c:68046
- (with Akiyama, Takanori; Nishizeki, Takao) NP-completeness of the Hamilton cycle problem for bipartite graphs. J. Inform. Process. 3 (1980/81), no. 2, 73-76. (Authors' summary) 82a:68119 68E10 (68C25)
- (with Takamizawa, K.; Nishizeki, Takao) Combinatorial problems on series-paralleh. Discrete Appl. Math. 3 (1981), no. 1, 75-76. (Authors' summary) 82e:05085 natorial problems on series-parallel 05C35 (05C99, 68C25)
- o Some expressions for 15 and 1978. Res. Rep. Miyagi Tech. College No. 15 (1979), 195-199. (Author's summary) 82e:10025 10A99 (10-04)
- Salto, Satoru (with Hori, Takayuki) On the structure of finite supertransformations. Progr. Theoret. Phys. 65 (1981), no. 4, 1470-1471. (Authors' summary) 82g:81107 81G20
- Saito, Tatsuhiko A semigroup of ideals in multiplicative systems. Proceedings of the 4th Symposium on Semigroups (Yamaguchi Univ., Yamaguchi, 1980), pp. 62-68, Yamaguchi Univ., Yamaguchi, 1980 (Author's introduction) 82g:20099 20M12
- Saitò, Teishirò (with Goya, Eitoku) On intertwining by an operator having a dense ra Tôhoku Math. J. (2) 33 (1981), no. 1, 127-131. (C. R. Putnam) 82g:47017 4
- 8. Toru Nonnegatively ordered semigroups in the strict sense and problems of

- Satyanarayana. II. Proceedings of the 4th Symposium on Semigroups (Yamaguchi Un Yamaguchi, 1980), pp. 69-79, Yamaguchi Univ., Yamaguchi, 1980. (See 821:20008)
- Saitō, Yoshimi On the S-matrix for Schrödinger operators with long-range poter Reine Angew. Math. 314 (1980), 99-116. (Author's introduction) 82h:35063
- Saitoh, Noriko A transformation connecting the Toda lattice and the KdV equation. J. Phys. Soc. Japan 49 (1980), no. 1, 409-416. (J. S. Joel) 82g:35111 35Q20 (82A68)
 soh, Saburou The Rudin kernels on an arbitrary domain. Pacific J. Math. 83 (1979), no. 1, 273-284. (N. Suita) 82a:30010 30C35 (30F99)
- toh, Toshikazu (with Mori, Kazuhide; Itoh, Reikichi) Approximate methods for the coupled two oscillators in the stationary state. Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 91 (1980), 122-134. (K. Kumar) 82b:81146 81G55
- Sak, J. (with Bruno, J.) Renormalization group for first-order phase transitions: equation of state of the compressible Ising magnet. *Phys. Rev. B* (3) **22** (1980), *no.* 7, 3302-3318. (From the summary) **82i:82023a** 82A25 (82A77)
 - (with Bruno, J.) Two-point correlations near the phase transition in a compressible et. Phys. Rev. B (3) 22 (1980), no. 7, 3319-3324. (Authors' summary) 82i:82023b 82A25 (82A77)
 - (with Vause, C.) Erratum: "Non-Ising-like effects in the liquid-vapor transition: equations of state" [Phys. Rev. A (3) 21 (1980), no. 6, 2099-2114; MR 81c:82012]. Phys. Rev. A (3) 23 (1981), no. 3, 1562. (Editors) 82c:82042 82A25
 - (with Rezayi, E. H.; Sólyom, J.) Symmetry properties of one-dimensional Fermi systems: some nonperturbative results. Phys. Rev. B (3) 23 (1981), no. 3, 1342-1348.
- (Koichiro Matsuno) 82d:82021 82A15
 Saka, Köichi Besov spaces and Sobolev spaces on a nilpotent Lie group. Tõhoku Math. J.
 (2) 31 (1979), no. 4, 383–437. (David S. Tartakoff) 82a:46035 46E35 (22E30, 43A80)
- ekov, A. Justification of the variational principle for a system of the method of spherical harmonics in x-y geometry. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1980, no. 5, 78-81, 89. (Ll. G. Chambers) 824:49014 49A34 (82A75)
 - Variational principles for a system of equations of the method of spherical harmonic in P_{2N+1}-approximation (RZ-geometry), (Russian, Kazakh summary) Izv. Akad. Nauk Kazah, SSR Ser. Fiz.-Mat. 1981, no. 5, 51-56, 82, (Ll. G. Chambers) 82k:49059 49H05 (85A25)
- Sakaguchi, Köichi (with Fukui, Seiichi) On alpha-starlike functions and related functions. Bull. Nara Univ. Ed. Natur. Sci. 28 (1979), no. 2, 5-12. (Sanford S. Miller) 82a:30015
- aguchi, Michinori Generalized Cohen-Macaulay modules. Hiroshim (1980), no. 3, 615-634. (Jean-Luc Chabert) 82b:13008 13C15 (13H10)
- Sakaguchi, Minoru Non-zero-sum games related to the secretary problem. (Japanese summary) J. Oper. Res. Soc. Japan 23 (1980), no. 3, 287-293. (Bert Fristedt) 82b:90129 90D05 (90D10)
 - (with Tamaki, Mitsushi) Optimal stopping problems associated with a nonhomogeneous Markov process. Math. Japon. 25 (1980), no. 6, 681-696. (P. Neumann) 82f:60094 60G40 (60J25, 62L15)
- Sakaguchi, Toshifumi (with Takada, Satoshi; Misawa, Susumu) The Kosterlitz-Thouless transition in the quantum sine-Gordon model and the corresponding classical film system. Progr. Theoret. Phys. 66 (1981), no. 3, 820-830. (Authors' summary) 82k:82021 82A25 (81E99)
- Sakaguchi, Toshio On Finsler spaces with $F_{hjk}^i = 0$. Tensor (N.S.) 34 (1980), no. 3, 327-336. (Yoshihiro Ichijyō) 82c:53024 53B40
- Sakai, Akira Uniform approximation on totally real sets. Math. Ann. 253 (1980), no. 2, 139-144 (S. I. Pinčuk) 82e:32026 32F30
- io Symmetric powers of the cotangent bundle and classification of algebraic varieties. Algebraic geometry (Proc. Summer Meeting, Univ. Copenhagen, Cope 1978), pp. 545-563, Lecture Notes in Math., 732, Springer, Berlin, 1979. (Miles Reid) 32J99 (14J99)
 - Semistable curves on algebraic surfaces and logarithmic pl Ann. 254 (1980), no. 2, 89-120. (Ulf Persson) 82f:14031 14J10
- Sakai, Hideaki (with Tokumaru, Hidekatsu) Autocorrelation of certain chaos. IEEE Trans. Acoust. Speech Signal Process. 28 (1980), no. 5, 588-590. (Editors) 82g:58060 (62M10, 92A17, 93E11)
- Sakai, Jun-ichi (with Kawata, Tutomu) Linear problems associated with the derivative nonlinear Schrödinger equation. J. Phys. Soc. Japan 49 (1980), no. 6, 2407-2414. (Authors' summary) 82e:81008 81C05 (35Q20, 81F99)
- Sakai, Katsuro The space of retractions of a compact Q-manifold is an l²-manifold. Proc. Amer. Math. Soc. 83 (1981), no. 2, 421-424. (V. A. Kalinin) 82j:57011 57N20
 - Images of l_2 -manifolds under approximate fibrations. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 5, 260–261. (John J. Walsh) 82h:57017 57N20 (58B05)
- kai, Makoto On analytic functions with finite Dirichlet integrals. (Japanese) Sügaku 31 (1979), no. 3, 207-216. 82i:30059 30E20
- Sakai, Ryozi Approximation of certain classes of periodic functions with many variables. J. Math. Soc. Japan 33 (1981), no. 1, 51-65. (L. Leindler) 82b:42001 42A10 (42B99)
- Sakai, Takashi (with Klingenberg, Wilhelm) Injectivity radius estimate for \(\frac{1}{4}\)-pinched manifolds. Arch. Math. (Basel) 34 (1980), no. 4, 371-376. (Midori Goto) 82e:53030
 - Cut loci of Berger's spheres. Hokkaido Math. J. 10 (1981), no. 1, 143-155. (John Bolton) 82g:53054 53C30 (53C20, 53C22)
- (with Buchner, M.; Fritzsche, K.) Geometry and cohomology of certain domains in the complex projective space. J. Reine Angew. Math. 323 (1981), 1-52. (Alan T. Huckleberry) 82k:2030 32C35 (32D05, 32E10, 32F10)

 Sakakura, Arthur Y. (with Brittin, Wesley E.) Number operators for composite particles in nonrelativistic many-body theory. J. Math. Phys. 21 (1980), no. 8, 2164–2169. (R. L.
- Ingraham) 82a:81058 81H99 (47D45)
- Sakaljuk, K. D. (with Njaga, V. I.) Inversion of a supersingular integral with a Cauchy-Abel kernel. (Russian) Investigations in functional analysis and differential equations, pp. 85–93, 142, "Štiinca", Kishinev, 1981. (C. Tanaka) 82j:30061 30E20
- Sakaloš, Štefan Projective functors on free categories. (Russian) Mat. Sb. (N.S.) 114(156) (1981), no. 3, 425-437, 479-480. (C. Niță) 82h:18005 18E99
- o, Akio (with Ushida, Akio) Newton method for obtaining periodic solution of

- vise-linear oscillators.~1979 Interna (Tokyo, 1979), pp. 46-47, IEEE, New York, 1979. (See 82e:94002)
- to, Reiko *Hyperbolic boundary value problems. (Japanese) Iwanami Shoten, Tokyo, 1978. vii + 207 pp. (Hideo Soga) 82i:35101 35Lxx
- to, Takanori (with Togo, Shigeaki; Honda, Masanobu) Ideally finite Lie algebras. Hiroshima Math. J. 11 (1981), no. 2, 299-315. (Ernest Stitzinger) 82m:17008 17B65
- cane, Yusuke (with Ishikawa, Kunio) On complex projective bundles over a Kähler ice. Osaka J. Math. 16 (1979), no. 1, 121-132. (Koichi Ogiue) 82k:53086 (32L05)
 - (with Takeuchi, Masaru) Einstein hypersurfaces of Kählerian C-spaces. Nagoya Math. J. 78 (1980), 153-175. (Jarolim Bureš) 821:53677 53C55
 - (with Takeuchi, Masaru) On defining equations of symmetric submanifolds in complex projective spaces. J. Math. Soc. Japan 33 (1981), no. 2, 267–279. (Takao Fujita) 82g:32034 32M10 (14M17, 53C30)
- 82g-32034 32M10 (14M17, 53C30)

 skano, Kazunori Injective dimension of generalized triangular matrix rings. Tsukuba J.

 Math. 4 (1980), no. 2, 281–290. (B. L. Osofsky) 82j:16043 16A60
- Injective dimension of generalized triangular matrix rings. Proceedings of the 13th Symposium on Ring Theory (Okayama Unio., Okayama, 1980), pp. 108-115, Okayama Unio., Okayama, 1981. (K. R. Goodearl) 82c:16027 16A60 (16A52)
- es Monoldes pointés. (English summary) Semigroup Forum 18 (1979),
- Description des monoïdes de type fini. Semigroups (Proc. Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 92–115, Lecture Notes in Math., 855, Springer, Berlin, 1981. (Dominique Perrin) 82j:20117 20M10
- Sur une propriété d'itération des langages algébriques déterministes. (English mary) Math. Systems Theory 14 (1981), no. 3, 247-288. (Author's summary) 68032 68C01 (03D05, 20M35, 68F05)
- ata, Hajime (with Nakayama, J.; Ogura, H.) Scattering of a scalar wave from a slightly random surface. J. Math. Phys. 22 (1981), no. 3, 471-477. (Andrzej Zardecki) 82g:78017
- Sakata, Makoto (with Shinba, Yutaka; Fukuchi, Mitsuru) Physical theory of measuring process. A critical review. Keio Engrg. Rep. 33 (1980/81), no. 1, 1-12. (Franklin E. Schroeck, Jr.) 82i:81015 81B99 (81D99)
- Sakata, Sadahisa (with Yamamoto, Minoru) On the boundedness and the attractivity properties of nonlinear second order differential equations. Proc. Japan Acad. Ser. A. Math. Sci. 57 (1981), no. 2, 111-116. (John R. Graef) 82c:34040 34C10
- (with Yamamoto, Minoru) Further results on the boundedness and the attractivity properties of nonlinear second order differential equations. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 5, 254-259. (Ch. G. Philos) 82i:34037 34C11
- Sakawa, Masatoshi (with Seo, Fumiko) Interactive multiobjective decisionmaking for large-scale systems and its application to environmental systems. IEEE Trans. Syste Man Cybernet. 10 (1980), no. 12, 796-806. (From the text) 82d:90121 90C31 (92A20) Interactive multiobjective reliability design of a standby system by the sequential proxy optimization technique (SPOT). Internat. J. Systems Sci. 12 (1981), no. 6,
- 687-701. (Author's summary) 82g:90004 90A05 (90C31)
 Sakawa, Yoshiyuki (with Shindo, Yuji) On global convergence of an algorithm for optimal control. IEEE Trans. Automat. Control 25 (1980), no. 6, 1149-1153. (F. M. Kirillova) 49C20
 - (with Matsumura, Toshio) Nonlinear analysis of nitrogen cycle in aquatic ecosystems. Internat. J. Systems Sci. 11 (1980), no. 7, 803-816. (T. G. Hallam)
- 92A17 (34C05) (with Matsumura, Toshio) An optimization problem related to the regulation of
- influent nutrients in aquatic ecosystems. Internat. J. Systems Sci. 12 (1981), no. 5, 565-585. (Authors' summary) 82k:92065 92A17
- Sakina, K. (with Chiba, Jiro) Precession of a gyroscope in the Kerr geometry. Lett. Nuovo Cimento (2) 27 (1980), no. 6, 184-188. (From the introduction) 82d:83009 (83B05)
- Sakirov, V. N. (with Egorov, A. I.) Optimal control of vibrations of a conductor with a current in a magnetic field. (Russian) Mathematical methods in mechanics. Mat. Issled. No. 57 (1980), 34-38, 134. (Authors' summary) 82c:78025 78A55 (35L05, 49E99)
- rova, Ju. S. Homeomorphic transformations of cycles of the second kind. (Russ Differencial'nye Uravnenija (Ryazan) No. 13 (1979), 142-150. (M. Švec) 82h:34071 34D99 (58F35)
 - Topographical systems, defined by equations that are algebraic with respect to Z. (Russian) Differencial'nye Uravnenija (Ryazan) No. 13 (1979), 151-158. (C. Avramescu) 82g:34030 34C05
 - Equivalence of equations with periodic coefficients in the neighborhood of a degenerate singular point. (Russian) Partial differential equations, pp. 94-104, Rjazan. Gos. Ped. Inst., Ryazan, 1980. (A. A. Reinfelds) 82m:34041 34C20
- skirzjanov, M. M. (with Berim, G. O.; Kessel', A. R.) Kinetics of the Ising magnet. III.
- The influence of the alternating field and nonequilibrium states of the reservoir of the dipole-dipole interactions upon the one-dimensional Ising model kinetics. Phys. A 105 (1981), no. 1-2, 187-202. (Authors' summary) 82k:82028 82A42 (82A68)
- nar, I. A. Bound on the diffraction peak for the spin 0-spin \frac{1}{2} case. J. Math. Phys. 22 (1981), no. 5, 1047-1050. (Author's summary) 82g:81101 81F20 Integrated rotational parameter as a constraint for the variational lower bound of the
- diffraction peak. J. Math. Phys. 22 (1981), no. 7, 1438-1442. (Author's summary)
- Sakong, Jungsook (with Woo, Moo Ha) On o-semidevelopable spaces. J. Korean Math.
- toto, Moussa (with Pigeaud, Pierre) Espaces cosmologiques et transformations infinitésimales conformes fermées. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 7, B181-B184. (J. R. Vanstone) 824:83022 83C20 (53B30, 83C55)
- Saks, Michael E. A short proof of the existence of k-saturated partitions of partially ordered sets. Adv. in Math. 33 (1979), no. 3, 207-211. (Curtis Greene) 82c:06008 (05A17, 05C35)
- (with Griggs, Jerrold R.; Sturtevant, Dean) On chains and Sperner k-families in ranked posets. II. J. Combin. Theory Ser. A 29 (1980), no. 3, 391-394. (D. J. Kleitman) 05A05 (06A10)
 - (with Kleitman, Daniel J.) Set orderings requiring costliest alphabetic binary trees.

- SIAM J. Algebraic Discrete 68E05 (05C05) ic Discrete Methods 2 (1981), no. 2, 142-146. (Authors' summary)
- (with Chaiken, Seth; Kleitman, Daniel J.; Shearer, James B.) Covering regions by langles. SIAM J. Algebraic Discrete Methods 2 (1981), no. 4, 394–410. (Steven R. Lay) no. 52A45 (05B40, 52A10, 94C99)
- aks, R. S. Boundary value problems for weakly elliptic systems of differential equation (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 51-57, 248, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Editors) 82h:58001 58A10 (35H05, 58G99)
- Saks, Victor Products of countably compact spaces. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979). Topology Proc. 4 (1979), no. 2, 553-575 (1980). (J. E. Vaughan) 82a:54013 54B10 (03E35, 54D30)
 Saksena, Vikram Raj (with Cruz, J. B., Jr.) Stabilization of singularly perturbed linear
- KSENA, VIRTAIN RAJ (with Cruz, J. B., Jr.) Stabilization of singularly perturbed linear time-invariant systems using low-order observers. IEEE Trans. Automat. Control 26 (1981), no. 2, 510-513. (Authors' summary) 82e:93071 93C45 sonew, M. T. (with Arkin, B. I.) To the maximum principle theory for problems of control of stochastic differential equations. Stochastic differential systems (Proc. IFIP. WG 7/1 Working Conf., Vilnius, 1978), pp. 255-263, Lecture Notes in Control and Information Sci., 25, Springer, Berlin, 1980. (V. F. Dem'janov) 82g:49013 49A60 (65H10, 65U05, 94F25)
- (65H10, 65U05, 93E25) na, Hiroshi (with Shinoda, Shoji; Yasuda, Tomoshige) Semimatroids. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 1004-1007, IEEE, New York, 1979. (See 82e:94002) 94C30
- m, Y. See Ok-Sakun, Y. akurai, Takashi (with Levine, Randolph H.) Generation of coronal electric currents due to convective motions on the photosphere. *Astrophys. J.* **248** (1981), *no.* 2, *part* 1, 817–829. (Authors' summary) **82**;**85004** 85A20 (76X05)
- Fukuoka Unio. Ed. III 30 (1980), Takayuki) On some properties of prolongations. Bull.

 Fukuoka Unio. Ed. III 30 (1980), 17–27 (1981). (Jean Pradines) 82k:58010 58A20

 aev, V. V. (with Aširov, R. A.) A double singular integral with continuous density.
- an) Azerbaidžan. Gos. Univ. Učen. Zap. 1979, no. 6, 29-43. (S. G. Samko)
- (Kussian) Agreement of the Control o
 - acre, v. v. Some relations between approximate characteristics of periodic functions of the class H** (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 32-35, 104. (James E. Daly) 82ce42003 42A10 (with Babenko, V. F.) Inequalities of the Jackson type for linear methods of approximation of functions. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 10, 31-34, 93. (M. Tomic) 82bc41015 41A17
- Sask Ser. A 1980, no. 10, 31-34, 93. (M. Tomic) 82bc41015 41A17
 Salaginov, S. D. The Cauchy problem for the Laplace equation in a complex space.
 (Russian) Differencial'nye Uravnenija 16 (1980), no. 5, 947-949, 960. (Wolfgang Tutschke) 82b:35041 35C15 (32A25, 35105)
 Salah, M. M. Constructing Liapunov functions for transient stability problems.

 Res. J. Natur. Sci. 2 (1975), no. 1, 35-49. (Author's summary) 82i:93058 93D05
- ah, Munthir S. (with Awad, Adnan M.) Partial sum approximation for the distribution function of random sums. Iraqi J. Sci. 21 (1980), no. 4, 817-838. (Authors' summary) 62E15 (60-04, 60F99)
- ahi, J. (with Graupe, D.; Jain, V. K.) A comparative analysis of various least-squares identification algorithms. Automatica—J. IFAC 16 (1980), no. 6, 663–681. (Authors' summary) 821:93021 93B30
- shitdinov, M. S. (with Nagornyi, A. M.) On a boundary value problem for a third-order equation of parabolic-hyperbolic type. (Russian) Boundary value problems for equations of mathematical physics (Russian), pp. 3-13, 167, "Fan", Tashkent, 1980. (V. V. Kovrižkin) 82i:35131 35M05
 - (with Džuraev, T. D.; Kabulov, V. K.; Polubarinova-Kočina, P. Ja.; Sarymsakov, T. A.; Siraždinov, S. H.) Ivan Seměnovič Aržanyh. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 195-202. (Editors) 82h:01042 01A70
- See also Boundary value problems for equations of mathematical physics, 82d:35006 Salam, Abdus (with Strathdee, J.) On Witten's charge formula. Lett. Math. Phys. 4 (1980),
 - no. 6, 505-508. (Authors' summary) 82e81049 81G05 (81E99)

 Gauge unification of fundamental forces. Rev. Modern Phys. 52 (1980), no. 3, 525-538. (Editors) 824:81001b 81-03 (01A65, 81G20)
- Einstein's last dream: the space-time unification of fundamental forces. The impact of modern scientific ideas on society (Munich/Ulm, 1978), pp. 24-31, Reidel, Dordrecht, 1981. (See 82k:01046) 01A60 (01A70 See also Ynduráin, F. J., 82d:81001d 01A60 (01A70, 81-03)
- ttin, A. N. Analysis of the simplest mathematical models of dome-shaped glaciers. (Russian) Issled. Prikl. Mat. No. 7 (1979), 131-139. (C. Fetecău) 82h:76003 (86A99)
- mmon, Peter (with Nitzan, Abraham) Finite time optimizations of a Newton's law
 Carnot cycle. J. Chem. Phys. 74 (1981), no. 6, 3546-3560. (Authors' summary)
 824:80004
 80A10
- n, R. See Medical informatics, 82m:92004a
- lane, D. (with Tewarson, R. P.) On symmetric minimum norm updates. IMA J. Numer. Anal. 1 (1981), no. 2, 235-240. (Authors' summary) 82e:65077 65K10
- what. 1 (1961), no. 2, 233-240. (Authors summary) 82e:0077 OSE 10 OSE 1 14D20 (14B05)
- nt, Stephen W. (with Wenocur, Roberta S.) Recurrence of a modified random walk and its application to an economic model. SIAM J. Appl. Math. 40 (1981), no. 1, 163-166. (B. W. Stuck) 82f:60162 60J15 (90A12)
- s, A. (with Sanchez-Ron, J. M.) Fokker-type dynamics with three-body correlations. (Italian and Russian summaries) Nuovo Cimento A (11) 63 (1981), no. 1, 85-107. (Authors' summary) 82i:70015 70F99 (81E99)
- as, Hector N. A note on strictly cyclic weighted shifts. Proc. Amer. Math. Soc. 83
- (1981), no. 3, 555-556. (Richard Fleming) 82k47026 47837
 lastlin, V. I. (with Grigoljuk, È. I.) Some forms of the method of extension by parameter in nonlinear problems of elasticity theory. (Russian) Ž. Prikl. Meh. i Tehn. Fiz. 1980, no. 5, 158-162, 207. (J. L. Nowinski) 82k73015 73C50

- Šalát, Tibor (with Dravecký, Jozef) On a certain type of convergence. (Slovak and Russian summaries) Acta Fac. Rerum Natur. Univ. Comenian. Math. 36 (1980), 35–40. (B. Kuttner) 821:40004 40A30

 - A remark on I^p spaces (Slovak and Russian summaries) Acta Fac. Rerum Natur. Univ. Comenian. Math. 36 (1980), 69-73. (R. D. McWilliams) 823-66026 46B25 (with Antoni, Jozef) On the A-continuity of real functions. (Slovak and Russian summaries) Acta Math. Univ. Comenian. 39 (1980), 159-164. (H. Burkill) 82b:26004 26A03 (40C05)
 - (with Kostyrko, Pavel; Neubrunn, Tibor; Smital, J.) On locally symmetric and symmetrically continuous functions. Real Anal. Exchange 6 (1980/81), no. 1, 67-76. (James Foran) 82c-26005 26A15 (26A21) athé, Eric P. (with Wang, Tseng Chan; Gross, Joseph F.) Mathematical analysis of oxygen transport to tissue. Math. Biosci. 51 (1980), no. 1-2, 89-115. (Authors' summary)
- oxygen transport to tissu 82b-92021 92A09 (92A07)
- dazar, Diego (with Broemeling, Lyle; Chi, Albert) Parameter changes in a regression model with autocorrelated errors. Comm. Statist. A—Theory Methods 10 (1981), no. 17, 1751–1758. (Bert M. Steece) 82i:62096 62105
- bany, S. An embedding characterization of compact spaces. Categorical topology (Proc. Internat. Conf., Free Univ. Berlin, Berlin, 1978), pp. 316-325, Lecture Notes in Math., 719, Springer, Berlin, 1979. (Author's introduction) 82m:54018
- soler Salcedo, Juan Miguel See Soler Salcedo, Juan Miguel Sal'da, L. M. (with Kil'čevs'kiĭ, M. O.) Self-similar motions of a system consisting of "an elastic shell and a liquid". (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR
- Ser. A 1980, no. 10, 34-37, 94. (S. Drobot) 824:73435 73106 (35C99, 76N99)

 Šaldyrvan, V. A. Three-dimensional thermoelasticity problems for transversally isotropic plates. Prikl. Meh. 16 (1980), no. 5, 12-19 (Russian); translated as Soviet Appl. Mech. 16
- piates. Frikl. Men. 16 (1980), no. 3, 12-19 (Russian); transitied as Societ Appl. Mech. 16 (1980), no. 5, 370-375. (From the introduction) 32a:73064 73U05 (73C25)

 (with Kosmodamians'kii, O. S.; Galič, V. A.) Bending of transtropic three-layer plates. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 1, 35-39, 92. (Authors' summary) 82e:73059 73K10

 Salehi, Habib (with Dawson, Donald A.) Spatially homogeneous random evolutions. J. Multivariate Anal. 10 (1980), no. 2, 141-180. (François Bronner) 82e:60102 60H10
- Salehi, Masoud (with Cover, Thomas M.; El Gamal, Abbas A.) Multiple access channels with arbitrarily correlated sources. IEEE Trans. Inform. Theory 26 (1980), no. 6,
- with arbitrarily correlated sources. IEEE trans. Inform. Incory 20 (1960), no. 0, 648-657. (V. A. Zinov'ev) 82b;94012 94A29 (94B70). Salei, S. V. On the rate of convergence of a free boundary to the limit value in a Stefan problem. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 6, 19-23, 108. (Author's summary) 82m:35067 35K05 (35R35)
- lerno, S. (with Perelli, A.) On the average order of multiplicative functions. (Italian summary) Boll. Un. Mat. Ital. A (5) 17 (1980), no. 3, 490-497. (Aleksandar Ivić) 82a:10051 10H25
- etan, E. J. (with Marmo, G.; Simoni, A.; Zaccaria, F.) Liouville dynamics and Poisson brackets. J. Math. Phys. 22 (1981), no. 4, 835-842. (E. C. G. Sudarshan) 82g:58031 58F05 (70G99)
- ruiz Salguero, Carlos See Ruiz Salguero, Carlos ruiz Salguero, Roberto See Ruiz Salguero, Roberto
- Saliba, George The first non-Ptolemaic astronomy at the Maraghah School. Isis 70 (1979), no. 254, 571-576. (From the introduction) 82m:01018 01A30
- Saliev, S. T. (with Gafurov, M. U.) Asymptotic expansion of the distribution of sums of a random number of independent random variables with regularly varying tails. (Russian) Probability theory (Papers, VIIth Semester, Stefan Banach Internat. Math. Center Warsaw, 1976), pp. 113-124, Banach Center Publ., 5, PWN, Warsaw, 1979. (J. Galambos) 82e:60035
- Saliga, B. O. See Salyga, B. O. abu-Salih, M. S. See Abu-Salih, M. S.
- Salikov, S. P. (with Buldyrev, V. S.; Grikurov, V. E.) Line-of-sight horizons and boundaries of applicability of the method of normal waves in the presence of superrefraction. Radiotehn. i Elektron. 24 (1979), no. 7, 1323-1331 (Russian); translated as Radio Engrg. Electron. Phys. 24 (1979), no. 7, 58-65 (1980). (Authors' summary)
 - 78A10 (with Buslaev, V. S.; Merkur'ev, S. P.) Description of pair potentials for which the scattering in the quantum system of three one-dimensional particles is free of
 - diffractional effects. (Russian. English summary) Boundary value problems of mathematical physics and related questions in the theory of functions, 11. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 84 (1979), 16-22, 310, 316. (S. T. 81F10 (34B25)
- Salima, V. N. Numerical integration of second-order differential equations. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 1, 38-41, 138. (Author's summary) 82b:65062
- Salimov, F. G. Geometric mean values of entire functions represented by multiple Dirichlet series. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 3, 86-88. (P. Agranovič) 32A15 (32A05)
- Salimov, F. I. An approach to a synthesis of probability converters. (Russian) Algorithms and automata (Russian), pp. 78-94, Kazan. Gos. Univ., Kazan, 1978. (Costică Cazacu) 68D25
- imov, Ja. S. A loaded problem with an integral boundary condition in a normed ring. (Russian. Azerbaijani summary) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 7, 19-23. (V. Mičić) 821:30045 30E25
- mov, R. B. (with Aksent'ev, L. A.; Il'inskii, N. B.) On V. N. Monahov's book: Boun value problems with free boundaries for elliptic systems of equations ["Nauka" Sibirsk. Otdel., Novosibirsk, 1977; MR 57 #16979]. (Russian) Trudy Sem. Kraev. Zadačam No. 15 (1978), 202–212, 219. (È. M. Saak) 82m:35045 35J55 (35R35, 76–02)
- (with Aksent'ev, L. A.; Il'inskii, N. B.; Nužin, M. T.; Tumašev, G. G.) The theory of inverse boundary value problems for analytic functions and its applications. (Russian) Mathematical analysis, Vol. 18 (Russian), pp. 67-124, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (V. Mičić) 82d:30038 30E25 (76B99)
- problems arising from FEM formulations. Comput. Math. Appl. 6 (1980), no. 1, Special
- rodriguez-Salinas, Baltasar See Rodriguez-Salinas, Baltasar Salinas, David (with Franke, Richard) An efficient method for solving stiff transient field

Issue, 15-21. (J. P. Hennart) 82e:65107 65N30 (65L05, 65M99)

nas, Norberto (with Paschke, William L.) C*-algebras associated with free products of groups. Pacific J. Math. 82 (1979), no. 1, 211-221. (Jonathan M. Rosenberg) 82c:22010

(with McGovern, Richard; Paulsen, Vern I.) A classification theorem for essentially binormal operators. J. Funct. Anal. 41 (1981), no. 2, 213-235. (Claude Schochet) 47B20 (46M20)

netti, Gabriella Admissibility, quasi-admissibility and optimality in decision theory. Symposia Mathematica, Vol. XXV (Conf., INDAM, Rome, 1979), pp. 95-112, Academic Press, London, 1980. (A. L. Rukhin) 82g:62014 62C05

(with Wets, Roger J.-B.) On the convergence of closed-valued measurable multifunctions. Trans. Amer. 82k:28007 28A20 (54C60) Trans. Amer. Math. Soc. 266 (1981), no. 1, 275-289. (G. Mägerl) 82k:28007

ngaros, Nikos Clifford, Dirac, and Majorana algebras, and their representations

Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part B. Hadronic J. 4 (1980/81), no. 3, 949-980. (A. O. Barut) 82i:15027 15A66 (81C40)

Realization, extension, and classification of certain physically important groups and algebras. J. Math. Phys. 22 (1981), no. 2, 226-232. (J.-P. Antoine) 82j:15023 (17B60, 81C40)

aliu, L. (with T\u00e4taru, O. L.) General group conditions for gauge theories without anomalies. An. Univ. Craiova Mat. Fiz.-Chim. 6 (1978), 55-64. (Authors' summary) 82b:81069

ikov, Viktor N. (with Andelić, Tatomir P.) The life and work of Academician Professor Konstantin P. Voronjec. (Serbo-Croatian. French summary) Zb. Rad. Math. Inst. Beograd. (N.S.) 3(11) (1979), 9-14. (Editors) 82b:01033 01A70 (01A74)

Salkin, Gerald R. (with Christofides, Nicos; Hewins, Robin D.) Graph theoretic approaches to foreign exchange operations. Combinatorial optimization (Lectures. ner School, Urbino, 1977), pp. 409-419, Wiley, Chichester, 1979. (See 82a:90099) 90B10 (90A99)

am, S. On the stability of quasidouble step spline function approximations for solutions of initial value problems. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 3-4, 207-210 (1981), (A. V. Džiškariani) 82p:65043 (5L20 (4IA15, 65D07) (1981). (A. V. Džiškariani) 82g:65043

lantin, Jean Langage, logique et observations. Representation of knowledge and reason in the human sciences (Colloq., Saint Maximin, 1979) (French), pp. 368-408, INRIA, Rocquencourt, 1980. (E. Pessa) 82m:03039 03B52 (03B55, 94D05)

Salle, Patrick Une généralisation de la théorie des types en A-calcul. I. (English summary)

RAIRO Inform. Théor. 14 (1980), no. 2, 143–167. (J. P. Seldin) 82f:03012a 03B40

Une généralisation de la théorie des types en λ-calcul. II. (English summary) RAIRO Inform. Théor. 14 (1980), no. 3, 301-314. (J. P. Seldin) 82f:03012b 03B40 (68B10) Salles, Danielle Dualisation de la platitude. Systèmes projectifs de modules plats. Systèmes

projectifs de modules injectifs. Séminaire d'Algèbre Paul Dubreil et Marie-Paule Malliavin, 32 ème année (Paris, 1979), pp. 369-401, Lecture Notes in Math., 795, Springer,

Berlin, 1980. (Chr. U. Jensen) 82b:16025 16A62 (18A30)
Sallet, G. (with Bonnard, Bernard; Jurdjevic, V.; Kupka, Ivan A. K.) Systèmes de champs de vecteurs transitifs sur les groupes de Lie semi-simples et leurs espaces homogène

Systems analysis (Conf., Bordeaux, 1978), pp. 17-43, assessing, France, Paris, 1980. (Antoinette See) 82as93010 93805 (57R27, 58F25)
Sally, Judith D. The Poincaré series of stretched Cohen-Macaulay rings. Canad. J. Math. 13410 (13D99) Good embedding dimensions for Gorenstein singularities. Math. Ann. 249 (1980), no. 2. 95-106. (K. Wolffhardt) 82c:13031 13H10 (13H15, 14B05)

ov, V. S. (with Babaev, M. A.) Conformal transformation of a plane stress state taking account of physical nonlinearity. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 2 (1981), no. 1, 59-63. (Authors' summary) 82m:73011 73C40

(with Shah, Shantilal M.) Functions with univalent derivatives and of irregular growth. Indian J. Pure Appl. Math. 12 (1981), no. 6, 749-752. (Selden Trimble) 30C45 (30D15)

en, Paavo The 3-dimensional Bessel process and Brownian motion. Acta Acad. Abo. Ser. B 40 (1980), no. 7, 8 pp. (Shigeo Takenaka) 82e:60133 60J65

Martin boundaries for some space-time Markov processes. Z. Wahrsch. Verw. Gebiete 55 (1981), no. 1, 41-53. (Yves Derriennic) 82g:60101 60J45 (60J25)

raro, Franco (with Catenacci, Roberto) On Kähler metrics in Lorentzian m Ann. Inst. H. Poincaré Sect. A (N.S.) 31 (1979), no. 4, 355-362 (1980). (Authors' summary) 82;83008 83C15 (53C50)

(with Catenacci, Roberto; Marzuoli, Annalisa) Generalized Killing-Yano tens Gen. Relativity Gravitation 13 (1981), no. 5, 425-432. (J. D. Zund) 82i:83032 (53B30, 83C20)

n, Denise (with Gueguen, Alice) Modèles quantitatifs de génétique épidémiologique (English summary) Medical informatics, Europe 81 (Proc. Third Congr., Toulouse, 1981), pp. 708-714, Lecture Notes in Med. Inform., 11, Springer, Berlin, 1981. (Authors' summary) 82m:92004b 92A10 (92A07, 92A15)

non, Jean (with Grmela, Miroslav) Examples of two-point kinetic equations obeying the entropy principle. (French summary) Canad. J. Phys. **59** (1981), no. 9, 1241–1250. (Authors' summary) **82k82027** 82A40 (Authors' summary) 82h:82027

n, Paolo (with Gover, Eugene) On a class of Golod hom

46 (1980), no. 1, 5-14. (Elsa Zatini) 82c:13033 13H99
Salmon, Rick (with Carnevale, George F.; Frisch, Uriel) H theorems in statistical fluid dynamics. J. Phys. A 14 (1981), no. 7, 1701-1718. (Authors' summary) 82g:76022 76F05 (82A40)

mon, Ronald D. Perfect mappings and singular sets. Kyungpook Math. J. 21 (1981), no. 1, 75-85. (G. L. Cain, Jr.) 82;54017 54C10 no. 1, 75-85. (G. L. Cain, Jr.) 82j:54017

no. 1, 12-63. (Cf. L. Calla, 17.) 46,259017 ★The mathematical theory of L systems. Pure and Applied Mathematics, 90. Academic Press [Harcourt Brace Jocanovich, Publishers], New York-London-Toronto, Ont., 1980. xvi + 352 pp. ISBN 0-12-597140-0 (Gheorghe

Păun) 82g:68053 68D22 (68F05, 68F10, 92A05)

Grammatical families. Automata, languages and programming (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 543–554, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (From the introduction) 82a:68155 68F05

(with Maurer, Hermann A.; Wood, Derick) Context-free grammar forms with strict interpretations. J. Comput. System Sci. 21 (1980), no. 1, 110-135. (S. Ginsburg)

Formal power series in noncommuting variables. 18th Scandinavian Congress Mathematicians (Aarhus, 1980), pp. 104–124, Progress in Math., 11, Birkhäuser, Bosto Mass., 1981. (From the introduction) 82k:68048 68F10 (05A15, 16A05, 68D30)

(with Maurer, Hermann A.; Wood, Derick) Colorings and interpretations: a connection between graphs and grammar forms. Discrete Appl. Math. 3 (1981), no. 2, 119-135. (B. Zelinka) 82k:05049 05C15 (68F05) (with Maurer, Hermann A.; Wood, Derick) Derivation languages of grammar forms.

Internat. J. Comput. Math. 9 (1981), no. 2, 117-130. (Authors' summary) 82a:68148

non, J. (with Atlan, H.; Fogelman-Soulie, F.; Weisbuch, G.) Random Boolean networks. Cybernet. Systems 12 (1981), no. 1-2, 103-121. (Authors' summary) 82m:94053 94C10 (68J05)

son, P. (with Lang, C. B.; Skagerstam, Bo-Sture K.) A study of exactly solvable lattice gauge theories in two space-time dimensions. Phys. Lett. B 100 (1981), no. 1, 29-33. (Authors' summary) 82d:81105 81E99

sa, Sandro (with Della Mattia Maderna, Carla) Symmetrization in Neur Applicable Anal. 9 (1979), no. 4, 247-256. (Russell C. Thompson) 82b:35049 (35B99, 49G05)

tanov, M. V. A generalized variational model of stratified fluids in the Eulerian representation. A translation from Stratified and turbulent flows (Russian), pp. 90-99, "Naukova Dumka", Kiev, 1979. Fluid Mech.-Soviet Res. 9 (1980), no. 4, 104-114 (1981). (Author's summary) 82d:76089 76V05 (49H05)

(with Oleinik, A. Ja.; Jariš, R. R.) Investigation of the plane steady flows of a stratified fluid. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 5, 53-57. (Authors' summary) 82g:76044 76V05

Saltenis, Vydūnas (with Radvilavičiūtė, Janina) Investigation of an algorithm for the separation of essential variables. (Russian. Lithuanian and English summaries) Teor. Optimal. Rešenii—Trudy Sem. Processy Optimal. Upravlenija VI Sekcija No. 6 (1980), 41–47, 153. (A. I. Schiop) 82c:65040 65K10

man, David J. The Brauer group is torsion. Proc. Amer. Math. Soc. 81 (1981), no. 3, 385–387. (Manuel Ojanguren) 82n:16005 16A16 (13A20)

Saluja, K. K. (with Venkatraman, C. S.) Transition count testing of sequential machines July B. M. (With Veillatiannus, 1997). Fault-Tolerant Comput., Kyoto, 1980), pp. 167–172, IEEE. New York, 1980. (From the summary) 82a:68096 68D15

(with Lidgey, F. J.) Fault detection in combinational circuits using Gunn effect logic devices. Electron. Lett. 17 (1981), no. 6, 222-223. (Authors' summary) 824:94080

Salut, G. (with Aguilar-Martin, J.; Lefebvre, S.) Canonical input-output representation of linear multivariable stochastic systems and joint optimal parameter and state estimation. Stochastica 3 (1979), no. 1, 17-38. (Authors' summary) 82g:93041 93E03 (93E10)

radori, Anna (with Brandi, Primo) Martingales and Burkill-Cesari integrals. (Itali English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 3-4, 197-203 (1980). (S. D. Chatterji) 82m:28016 28B05 (49F25, 60G44) (with Brandi, Primo) A representation theorem for the parametric integral of

Weierstrass in the calculus of variations. (Italian. English summary) Ann. Mat. Pura Appl. (4) 124 (1980), 39-58. (U. D'Ambrosio) 82e:49061 49F25 (28A75)

Salvadori, Luigi (with Negrini, Piero) Stability problems for Hopf bifurcation. Appl nonlinear analysis (Proc. Third Internat. Conf., Univ. Texas, Arling pp. 273-286, Academic Press, New York, 1979. (F. Visentin) 824:34066 Arlington, Tex., 1978),

(with Bernfeld, S. R.) Generalized Hopf bifurcation in R" and h-asymptotic stability. Differential equations (Proc. Eighth Fall Conf., Oklahoma State Univ., Stillwater, Okla., 1979), pp. 127-134, Academic Press, New York, 1980. (F. Visentin) 82c:34060 34D20 th Bernfeld, S. R.; Negrini, Piero) Stability and generalized Hopf bifurcation through a reduction principle. Nonlinear differential equations (Proc. Internat. Conf., Trento, 1980), pp. 29-40, Academic Press, New York, 1981. (N. D. Kazarinoff) 82;58071 58F10 (34C25, 58F14)

See also Nonlinear differential equations, 82d:34003

bertrán-Salvans, M. See Bertrán-Salvans, M.

Salvas-Bronsard, Lise (with Bronsard, Camille) Sur les différentes formes structurelles engendrées par la théorie de la demande et leur utilisation en économétrie: systèmes direct, réciproque, mixte et système avec rationnement quantitatif. (English and Spanish summaries) Ann. I.N.S.É.É. No. 40 (1980), 3-31. (Authors' summary) 824:90042 90A19 (62P20)

Salvatori, M. Cesarina See Cesarina Salvatori, M. Salvi, Rodolfo On a functional calculus in a comm On a functional calculus in a commutative algebra. (Italian) Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 10-17 (1981). (Paolo de Bartolomeis) 82m:32003 32A25 (46H30, 46J05)

Salvi Zagaglia, Norma On the circuits of a self-complementary tournament. (Italian. English nary) Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 426-435 (1981). (Aldo G. S. Ventre) 82m:05051 05C20 (05C38)

Salwach, Chester J. Planes, biplanes, and their codes. Amer. Math. Monthly 88 (1981), no. 2, 106-125. (E. F. Assmus, Jr.) 82c:05018 05B05 (05-01)

Salwen, Harold (with Grosch, Chester E.) The continuous spectrum of the Orr-Sommerfeld equation. II. Eigenfunction expansions. J. Fluid Mech. 104 (1981), 445-465. (Authors'

summary) 82k:76036 76E99 (35Q20)

Salwicki, Andrzej On the algorithmic theory of stacks. Fund. Inform. (4) 3 (1980), no. 3, 311–331. (Derick Wood) 82g:68013 68B05 (68C01) 311-331. (Derick Wood) 82g:68013 68B05 (68C01)

Satyga, B. O. Analogue of a multipoint problem for a hyperbolic operator (in the sense of Gårding). (Ukrainian. Russian summary) Studies in the qualitative theory of differential

- equations and its applications (Ukrainian), pp. 55-58, 76, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Author's summary) 225:35115 351.25
 Selygia, L. L. (with Musalimov, V. M.) Invariant solutions of an equation of deflection of an orthotropic plate. (Russian) Problems in mechanics and applied mathematics (Russian), pp. 27-31, 87, Tomsk. Gos. Univ., Tomsk, 1979. (Authors' summary) 823:73054
 73K10
- therg, Public M. (with Seibert, Peter) A unified theory of attraction in general s. Internat. J. Gen. Systems 6 (1980/81), no. 3, 119-128. (G. R. Sell) 82b:58050

The minimal generating space of a polynomial. Linear Algebra Appl. 36 (1981), 89–96. (Daniel Lazard) 82k:13005 13B25 (13N05) ser, Herbert E. Note on trigonometric divided differences. BIT 20 (1980), no. 3,

351-355. (John A. Roulier) 82c:41008 41A05 (65D05)

Errata: A history of numerical analysis from the 16th through the 19th century [Springer, New York, 1977; MR 58 #4774] by H. H. Goldstine. Math. Comp. 36 (1981), no. 153,

01A05 (01A50, 01A55, 65-03) 319-320. (Editors) 82h:01001

Rational interpolation using incomplete barycentric forms. (German and Russian amaries) Z. Angew. Math. Mech. 61 (1981), no. 3, 161-164. (P. Vértesi) 82:41004 41A05 (41A20)

rmann, Helmut Projectivities and the topology of lines. Geometry—von Staudt's point of view (Proc. NATO Adv. Study Inst., Bad Windsheim, 1980), pp. 313-337, NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci., 70, Reidel, Dordrecht, 1981. (H. Groh) 51H10 (54H15)

Kompakte, 8-dimensionale projektive Ebenen mit großer Kollineationsgrup Math. Z. 176 (1981), no. 3, 345-357. (H. Groh) 82:51026 51H10 (54H15)

r, S. N. A Bess el-Watson transform pair. J. Math. Phys. 22 (1981), no. 1, 39-41.

(Author's summary) 82x:44003 44A15

main, A. (with Dubois, M. A.) Disruptions in tokomaks. Intrinsic stochasticity in plasmas

(Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 261–272, École

Polytech., Palaiseau, 1979, (J. S. Joel) 82e:76085 76X05 (82A45) mary) 82a:44003

nal, G. (with Pratihari, D.) Number of real zeros of a random algebraic po Indian J. Math. 20 (1978), no. 3, 225-232. (J. E. A. Dunnage) 82d:60103 (60H25)

nal, M. (with Ray, Brajakishore) On the summability of a sequence associated with the Fourier coefficients of a monotonic function with an infinite limit. Bull. Inst. Math.

Acad. Sinica 9 (1981), no. 1, 93-99 (Shri Nivas Bhatt) 822-42007 42A16 (42A24) naniego, Francisco J. (with Gong, Gail) Two characterizations for Pascal signals in additive noise. Sankhyā Ser. A 41 (1979), no. 3-4, 219-231. (D. N. Shanbhag) 82k:62039

(with Gong, Gail) Pseudomaximum likelihood estimation: theory and applications Ann. Statist. 9 (1981), no. 4, 861-869. (V. P. Godambe) 82g:62010 n. Statist. 9 (1981), no. 4, 861-869. (V. P. Godambe) 82g:62010 62A10 (with Jones, Lowell) Maximum likelihood estimation for a class of multinomial

utions arising in reliability. J. Roy. Statist. Soc. Ser. B 43 (1981), no. 1, 46-52. (Z.

W. Birnbaum) 82e-62164 62N05 haris, Nicolas Some remarks on the $L^{\rho}(\mathbb{R}^{n})$ spaces. (Italian summary) Boll. Un. Mat. Ital. A (5) 17 (1980), no. 3, 509–515. (José L. Rubio de Francia) 82b-42010 42B10

marova, S. S. Asymptotic behavior of the maximum sojourn time in a fixed state of an ergodic Markov chain. (Russian) Uspehi Mat. Nauk 35 (1980), no. 6(216), 169–170. (Robert Bartoszyński) 82a/s60118 60105 (66F05) marskaja, E. A. (with Goloviznin, V. M.) Locally barotropic difference schemes of gas dynamics. (Russian) Differencial mye Uraonenija 17 (1981), no. 7, 1228–1238, 1342. (Authors' summary) 82i:76065 76N15 (65L99)

arskii, A. A. (with Budak, B. M.; Tihonov, A. N.) ★Сборинк задач по

математической физике. (Russian) [A collection of problems in mathematical physics]
Third edition. "Nauka", Moscow, 1980. 687 pp. (Editors) 82a:35002 35-01 (00A69)
New iterative methods for solving difference equations. Colloq., Keszthely, 1977), pp. 525-543, Colloq. Math. Soc. János Bolyai, 22, North-Holland, Amsterdam, 1980. (C. Wayne Mastin) 82a:65028 65F10 (65N20.

(with Goloviznin, V. M.; Favorskii, A. P.) A variational approach to the construction of discrete models in multidimensional hydrodynamics. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 141, 31 pp. (Authors' summary) 76N15 (65P05, 76A60)

(with Goloviznin, V. M.; Favorskii, A. P.) A variational principle for systems with distributed parameters of hydrodynamic type. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 147, 20 pp. (Vadim Komkov) 82k:49058 49H05 (76B99)

(with Erugin, N. P.) Aleksa andr Andreevič Šestakov (on the occasion of his 60th birthday). (Russian) Differencial'nye Uravnenija 16 (1980), no. 3, 564-570. (Editors)

Some problems of the theory of differential equations. (Russian) Differencial nye Uravnenija 16 (1980), no. 11, 1925–1935, 2107. (A. Dzuraev) 824:35003 35–02 (00A69)

(with Kurdjumov, S. P.; Kurkina, E. S.; Malineckii, G. G.) Dissipative structures in an inhomogeneous nonlinear burning medium. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 3, 587-591. (From the text) 82c:80015 80A25 (with Makarov, V. L.) Application of exact difference schemes to estimation of the

rate of convergence of the method of lines. (Russian. Georgian and English summaries Sem. Inst. Prikl. Mat. Dokl. No. 14 (1980), 18-23. (Authors' summary) 82d:65045

(with Makarov, V. L.) Application of exact difference schemes to the estimate the rate of convergence for the method of lines. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 2, 371-387, 550. (S. A. Vološin) 82f:65099 65M20 (65N40)

Numerical methods for solving multidimensional problems of mechanics ar (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 6, 1416–1464, 1629. (E. Schechter) 82g:65061 65P05 (76A60, 76F99, 76R99, 76W05)

To give wide publicity for the ideas and methods of numerical experiment. (Russian) An interview by A. P. Kružilina. Vestnik Akad. Nauk SSSR 1981, no. 3, 61-65. (Editors) 01A70 (00A69, 65-01)

(with Goloviznin, V. M.; Koršija, T. K.; Tiškin, V. F.; Favorskii, A. P.) Variational es of magnetohydrodynamics in an arbitrary coordinate system. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 1, 54-68, 253. (Authors' summary) 82e:76073 76W05 (49H05)

(with Goloviznin, V. M.; Favorskii, A. P.) Variational principle for obtaining equations of magnetohydrodynamics in mixed Euler-Lagrange variables. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 2, 409-422, 526. (Ilija Lukačević) 821:76041

See also Tihonov, A. N.; et al., 82j:01074

see also Immony, A. N.; et al., 84201074

markki, V. G. Isometries of operator spaces. (Russian) Application of functional analysis in approximation theory (Russian), pp. 115–122, 162, Kalinin. Gos. Univ., Kalinin, 1979.

(E. D. Gluskin) 826047099 47D30

mbandan, A. (with Chaodrasekharan, P. C.) Eigenvector assignment using output feedback. Internat. J. Control 34 (1981), no. 6, 1143–1152. (Authors' summary)

abe, Yuriko (with Mimura, Mamoru) Collapsing of the Eilenberg-Moore spectral sequence mod 5 of the compact exceptional group E_8 . J. Math. Kyoto Univ. 21 (1981), no. 2, 203–230. (J. F. Adams) 82 \pm 57040 57T35

ch, Ahmed H. (with Kuck, David J.) Parallel direct linear system solvers-a survey.

Parallel computers—parallel mathematics (Munich, 1977), pp. 25-30, North-Holland,
Amsterdam, 1977. (See 822-68003) 68C05 (65F05)

(with Grear, J.) On certain parallel Toeplitz linear system solvers. SIAM J. Sci.
Statist. Comput. 2 (1981), no. 2, 238-256. (Authors' summary) 82e:65030 65F05

n, Hans (with Schiffer, Menahem M.) Dedicated to the memory of Stefan Bergman.

Applicable Anal. 8 (1978/79), no. 3, 195-199 (1 plate). (Editors) 82c:01053 01A70 nelson, Klaus (with Bauer, F. L.; Golub, Gene H.; Householder, A. S.) Eduard L. Stiefel: 4/21/1909-11/27/1978. With a German translation. Numer. Math. 32 (1979), no. 4, 480-481. (Editors) 82e:01083 0 See also Götze, H.; et al., 82g:01051 01A70

Samet, Hanan Connected component labeling using quadtrees. J. Assoc. Comput. Mach. 28 (1981), no. 3, 487-501. (Author's summary) 82g:68086 68Gi0
Samfarova, O. V. See Systems for control of networks, 82d:94048

Sami, R. (with Harrington, Leo) Equivalence relations, projective and beyond. Logic Colloquium '78 (Mons, 1978), pp. 247-264, Stud. Logic Foundations Math., 97, North-Holland, Amsterdam, 1979. (Douglas Cenzer) 824:03080 03E15 (03D55, 03E60)

lov, A. H. (with Maksudov, F. G.; Bagirova, S. Ju.) Smoothness of certain functionals, given in implicit form by a functional equation. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 35 (1979), no. 11, 3-7. (Dorde Đukić) 70N05 (49G99)

Smoothness of some special operators. (Russian. Azerbaijani and English sum Izv. Akad. Nauk Azerbaĭdžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1979, no. 5, 80-86. (R. R. Ahmerov) 82a:34081 34K05 (70N05)

On a problem for partial differential equations. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 12, 9–12. (L. von Wolfersdorf) 82i:35047 35J05 (35R35)

On differentiable dependence of the solution of a ballistic problem on initial data. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 2 (1981), no. 1, 43-48. (R. R. Ahmerov) 82k:34076 34K05

Samina, V. A. Two-dimensional variant of nonlinear relations in the theory of continuum deformation. (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 82-89, 309, Leningrad. Univ., Leningrad, 1980. (A. Radu) 82c:73051 73K15

minddin, M. (with Asad, H.) A simple procedure of unequal probability sampling.

Biometrika 68 (1981), no. 3, 728–731. (Authors' summary) 82k:62025 62D05

ako, S. G. (with Vekua, N. P.; Litvinčuk, G. S.; Nikol'skii, S. M.; Rogožin, V. S.; Simonenko, I. B.; Hvedelidze, B. V.; Čerskii, Ju. I.) Fedor Dmitrievič Gahov. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 193-194. (Editors) 82c:01056 01A70

an, G. S. (with DeWitt-Morette, C.; Elworthy, K. D.; Nelson, B. L.) A stochastic scheme for constructing solutions of the Schrödinger equations. Ann. Inst. H. Poincaré
Sect. A (N.S.) 32 (1980), no. 4, 327–341. (Aubrey Truman) 82m:81028 81C35 (35J10,

nmet, Jean E. An overview of high-level languages. Advances in computers, Vol. 20, pp. 199-259, Academic Press, New York, 1981. (See 82:68002) 68-02 (01A65, 68-03, 68B05)

rov, A. A. Problem of the center and the integrating factor for a Liénard equation. (Russian) Differencial'nye Uravnenija 17 (1981), no. 5, 936-940, 960. (L. Reizinš) 82h:34039 34C05 (58F14)

ohvalov, K. F. Simplicity of empirical theories. (Russian) Vyčisl. Sistemy No. 79 Empir. Predskazanie i Raspoznavanie Obrazov (1979), 12-14, 123. (Author's summ 821-03020 03.405

noîlenko, A. M. (with Mosēenkov, V. B.) Iteration methods for solving nonlinear partial differential equations that are nearly linear. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 10, 44 pp. (Rémi Vaillancourt) 82c:35010 35D05 (35G20, 35D05 (35G20, 47H17, 65P05)

Necessary conditions for the existence of invariant tori of linear extens dynamical systems on a torus. (Russian) Differencial'nye Uraonenija 16 (1980), no. 8, 1427-1437, 1533. (A. Pelczar) 82d:34057 34C35 (58F25)

Green's function of a linear extension of a dynamical system on a torus, conditions for its uniqueness, and properties that follow from these conditions. (Russian) Ukrain. Mat. Z. 32 (1980), no. 6, 791-797. (A. A. Reinfelds) 82m:34046 34C30

(with Teplins'kii, Ju. V.) The Green function in the problem of invariant tori of countable systems of differential equations. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 1, 26-30, 91. (M. Tvrdý) 82g:34027 34B27

(with Ronto, V. A.) A numerical-analytic method for solving boundary value problems for ordinary differential equations. (Russian) Ukrain. Mat. Z. 33 (1981), no. 4, 467-475. (A. Coțiu) 82k:65043 65L10 (34A45)

40.7–47. (A. Copu) 828:00043

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5)

60.110 (34.44.5) (From the text) 82i:86005 86A15

lenko, Ju. I. See Control of objects with distributed parameters, 82i:76041a lenko, Ju. S. (with Kolomicev, V. I.) The countable selection of commuting

selfadjoint operators and canonical noncommutation relations. (Russian) Methods of functional analysis in problems of mathematical physics (Russian), pp. 115-128, 182, Ak.
Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Authors' summary) 82c:47029 47B (47A70, 81C10)

(with Kondrat'ev, Ju. G.) Generalized derivatives of probability measures on Roo. (Russian) Methods of functional analysis in problems of mathematical physics (Russian), pp. 159–176, 183, Akad. Nauk Ukrain. SSR, Inst. Mat., Kieo, 1978. (Dimo B. Dimitrov) 82m:28028 28C20 (46G10, 60B11, 81E99)

82m:28028 28.20 (40C10, 00B11, 01E97)
nollenko, Stanislav I. (with Siforov, V. I.; Dobrušin, R. L.; Cybakov, B. S.; Bojarinov,
I. M.; Gel'fand, S. I.; Košelev, V. N.; Štarkov, Ju. M.) The theory of information transmission and its applications. (Russian) Cybernetics—in the service of Communism. Vol. 9: Control and information (Russian), Joel) 82e:94001 94-02 (01A65, 94A15) ation (Russian), pp. 28-57, "Energija", Moscow, 1978. (J. S.

(with Agajan, A. A.) Methods of search for solutions. (Russian) Problemy Shučain. Poiska No. 8 Voprosy Strukturnoï Adaptacii (1980), 15-62, 332. (P. Neumann) 82k:90067

Optimization problems in computer network design. Comput. Networks 5 (1981), no. 3, 177-186. (Author's summary) 82f:68010 68A05 (03E72, 90B10, 90C39)

ako, V. G. (with Berezans'kil, Ju. M.) Selfadjointness of differential operators with a finite and infinite number of variables, and evolution equations, (Russian) Akad, Nauk Ukrain. SSR Inst. Mat. Preprint No. 16 (1979), 64 pp. (M. M. Skriganov) 82c:47059

Second-order elliptic operators with an infinite number of variables. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 3, 405-409. (Angelo Favini) 82e:35078 35R15 (35J99,

- Division theorems and closed ideals in algebras of analytic functions with a majorant of finite growth. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 15 (1980), no. 4, 323-331, 334. (Toma V. Tonev) 82e:30073 30H05 (32B05, 46J15)
- okiš, B. A. (with Komarov, V. M.) On the numerical solution of a radiation problem by the difference method. (Russian) Metody Vyčisl. No. 12 (1981), 138–146, 233–234. (Authors' summary) 82m:78013 78A40 (65P05) (Authors' summary) 82m:78013 78A40 (6 noylenko, S. I. See Samoilenko, Stanislav I.

- Sampath, G. (with Srinivasan, S. K.) On a cumulative process resulting from interacting renewal processes and its applications. J. Math. Phys. Sci. 15 (1981), no. 1, 39–46. (Torgny Lindvall) 82m:60109 60K05 (60K35)
- son, Allan R. Representations of simultaneous pairwise comparisons. Analysis of nce, pp. 623-629, Handbook of Statistics, 1, North-Holland, Amsterdam, 1980. (See 62115

8dr8a2404)
1950n, G. (with Jurkat, W. B.) The L^p mapping problem for well-behaved convolutions.
1950n, G. (with Jurkat, W. B.) The L^p mapping problem for well-behaved convolutions.
1950 Studia Math. 65 (1979), no. 3, 227–238. (Eugene B. Fabes) 82c:47063 47G05 (45P05)

- npson, Jeffrey (with Brindle, Anne) Genetic algorithms for function optimization. Proceedings of the Ninth Manitoba Conference on Numerical Mathematics and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 31–47, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (Y. Cherruault) 82c:92016 92A10 (65K10)
- isa, B. V. (with Sviridov, V. V.) Choice of essential variables in identification problems (Russian) Mathematical methods in cybernetics (Russian), pp. 40-42, 84, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Authors' summary) 82b:93047
- nson, C. Commande adaptative de systèmes à non minimum de phase. (English summary) Rev. CETHEDEC No. 62 (1980), 1–30. (J. C. Geromel) 824:49036
 - (with Fuchs, J.-J. J.) Discrete adaptive regulation of not-necessarily mini systems. Proc. IEE-D 128 (1981), no. 3, 102-108. (Authors' summary) 82d:93068
- nadze, E. T. On partition functions. (Russian. Georgian and English summaries) Trudy Tbiliss. Univ. 204 (1978), 76-90, 132. (W. H. Simons) 82b:10014 (05A17, 10B35)
- (sonija, Z. V. (with Kveselava, D. A.) Quasiconformal mapping of domains. (Russian) Metric questions of the theory of functions (Russian), pp. 53-66, 159, "Naukova Dumka", Kiev, 1980. (P. Caraman) 82b:30016 30C60
- Nec, 1980. (P. Caraman) 828-30016 300-00 for stiffness distribution of a rib on an elastic plate. Izv. Akad. Nauk SSSR Meh. Tverd. Tela 15 (1980), no. 1, 136-144 (Russian); translated as Mech. Solids 15 (1980), no. 1, 122-129. (From the introduction) 82j:73059 73K40 (49B22)
- nov, Ju. P. (with Mišenkov, G. V.) Induced vibrations of coaxial viscoelastic cylindrical shells in a fluid. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 459 (1980), 102-108, 135. (Authors' summary) 82e:73050 73306 (76005)
- muel, C. Exemples d'espaces de Banach ayant la propriété de projection uniforme.

 Colloq. Math. 43 (1980), no. 1, 117-126 (1981), (S. Cobzas) **82g-46047 46B25*

 Sur les sous-espaces de l_p ⊗ l_q. Math. Scand. 47 (1980), no. 2, 247-250. (Klaus-Dieter Bierstedt) **82i-46029 46B20 (46A45)

uel, M. A. (with Laursen, M. L.) The n-bubble diagram contribution to g-2. J. Math. Phys. 22 (1981), no. 5, 1114-1126. (S. Deser) 82h:81166 81L05 (81E15)

nuel, Pierre See Mathematics, mathematicians and society, 82f:01191 nuel, Stuart U(N) integrals, 1/N, and the De Wit-'t Hooft anomalies. J. Math. Phys. 21

(1980), no. 12, 2695–2703. (J.-P. Antoine) 82c81116 81E99 (22E70, 43A75, 81G05)
The use of anticommuting variable integrals in statistical mechanics. I. The computation of partition functions. J. Math. Phys. 21 (1980), no. 12, 2806–2814. (Author's summary) 82f.82011a 82A05 (81E10)

The use of anticommuting variable integrals in statistical mechanics. II. The computation of correlation functions. J. Math. Phys. 21 (1980), no. 12, 2815–2819. (Author's summary) 82f:82011b 82A05 (81E10)

The use of anticommuting variable integrals in statistical mechanics. III. Unsolved odels. J. Math. Phys. 21 (1980), no. 12, 2820-2833. (Author's summary) 82f:82011c 82A05 (81E10)

The pseudofree 128 vertex model. J. Phys. A 14 (1981), no. 1, 191-209. (Author's nary) 82e:82025 82A67

The correlation functions in the 32-vertex model. J. Phys. A 14 (1981), no. 1, 211-218. (Author's summary) 82b:82084 82A67 (with Rabinovici, Eliezer) The CP^{N-1} model: a strong coupling lattice approach.

- Phys. Lett. B 101 (1981), no. 5, 323-326. (Authors' summary) 82d:81110 (with Green, Frederic) The large-N phase transition in the U(N) lattice theory. Phys. Lett. B 103 (1981), no. 1, 48-50. (Authors' summary) 82h:81101
- muels, Stephen M. (with Campbell, Gregory) Choosing the best of the current crop. Ado. in Appl. Probab. 13 (1981), no. 3, 510-532. (W. T. Rasmussen) 82h:62133 62L15
- elsen, M. R. Approximate rotationally symmetric solutions to the sine-Gordon equation. Phys. Lett. A 74 (1979), no. 1-2, 21-22. (Author's summary) 82f:35174 35Q20 (81C05)
- (with Olsen, O. H.) Interaction between solitary wave solutions to a double sine-Gordon equation. *Phys. Lett. A* 80 (1980), no. 4, 209-212. (Authors' sum 824:35097 35Q20 (35B99, 81C99) 824:35097

- schez, E. Medical diagnosis and composite fuzzy relations. Advances in fuzzy set theory and applications, pp. 437-444, North-Holland, Amsterdam, 1979. (Author's summary) 82k-92008 92A07 (03E72, 90A05)
 - (with Thayse, André) Implementation and transformation of algorithms based on automata. III. Optimization of evaluation programs. *Philips J. Res.* 36 (1981), no. 3, 159-172. (Michael Bauer) 82j:68020e 68C05 (68B05, 68D05) chez, Luís Periodic solutions of a nonlinear evolution equation with a linear dissipative
- term. Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 1, 183-191. (O. Vejvoda) 82f:35012 35B10 (35L35) 35B10 (35L35)
- chez, R. (with McCormick, N. J.) Inverse problem transport calculations for anisotropic scattering coefficients. J. Math. Phys. 22 (1981), no. 1, 199-208. (Authors' summary) 82A70 (85A25)

- nco Sánchez, Ramón See Blanco Sánchez, Ramón celez-Dehesa, J. Direct and inverse eigenvalue problems of Jacobi matrices in physics and biology. Proceedings of the First World Conference on Mathematics at the Service of Man (Barcelona, 1977), Vol. I, pp. 73–81, Univ. Politec., Barcelona, 1980. (From the introduction) 82:15013 15A18 (82A57, 92A15)
- introduction) edg. 19913 1476 (ed. 27.1), 22/13)
 https://doi.org/10.1001/10.10
- chez P., J. M. (with Vaquero, A.; Troya, J. M.) Linear arrangement of a digraph. Second International Conference on Information Sciences and Systems (Univ. Pairas, Pairas, 1979), Vol. II, pp. 70-79, Reidel, Dordrecht, 1980. (See 82&93002) 68C25
- chez P., Javier Logical entailment and semantic intension of Boolean formulas in relevant logic. (Russian) Studies in logical methodology (Russian), pp. 313-331, Moskov. Gos. Univ., Moscow, 1980. (Wiesław Dziobiak) 821:03016 03B45
- chez-Palencia, Enrique *Nonhomogeneous media and vibration theory. Lecture Notes in Physics, 127. Springer-Verlag, Berlin-New York, 1980. ix + 398 pp. ISBN 3-540-10000-8 (P. G. Ciarlet) 82j:35010 35B20 (35Q20, 46N05, 73-02, 76-02, 78-02)
- (with Lobo-Hidalgo, M.) Perturbation of spectral properties for a class of stiff problems. Computing methods in applied sciences and engineering (Proc. Fourth Internat. Sympas., Versailles, 1979), pp. 683-697, North-Holland, Amsterdam, 1980. (A. M. Il'in) 82b:35017 35B25 (35P30, 47A55, 49B22)
- (with Geymonat, Giuseppe) On the vanishing viscosity limit for acoustic phenomena in a bounded region. Arch. Rational Mech. Anal. 75 (1980/81), no. 3, 257-268. (Authors' summary) 82c:76089 76Q05 (35B40, 76D99)
- (with Geymonat, Giuseppe) Dégénérescence de la loi de Darcy pour un écoulement à
- travers des obstacles de petite concentration. (English summary) [Degeneration of Darcy's law for flow past obstacles in low concentration] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 2, 179-181. (Authors' summary) 82k:76068
- (with Ene, Horia I.) Sur la propagation de la chaleur dans les milieux poreux. (English summary) C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci. Univers Sci. Terre 292 (1981), no. 17, 1181-1184. (Authors' summary) 82g:80011 80A20 (76S05)
- chez-Ron, J. M. (with Salas, A.) Fokker-type dynamics with three-body correlation (Italian and Russian summaries) Nuovo Cimento A (11) 63 (1981), no. 1, 85-107. (Authors' summary) 82i:70015 70F99 (81E99)
- (with Sanz, J. L.) A new understanding of the Lorentz-Dirac equation for one particle. I. The nonrelativistic case. (Italian and Russian summaries) Nuovo Cimento B (11) 61 (1981), no. 1, 62-72. (Authors' summary) 82e:78003 78A35
- schez-Velasco, E. The trace anomaly in coloured black holes. Phys. Lett. B 105 (1981), no. 1, 41-42. (Author's summary) 82i:83055 83C99 (83C47)
- Sancho, J. M. (with Garrido, Luis) Relation between canonical and Fokker-Planck dynamics. Phys. Lett. A 68 (1978), no. 3-4, 299-301. (Authors' summary) 82b:81028
 - (with San Miguel, M.) Fokker-Planck approximation for N-dimensional non-Markovian Langevin equations. Phys. Lett. A 76 (1980), no. 2, 97-100. (Authors' summary) 82a:82026 82A35 (60J65)
- ncho, N. G. F. (with Ng, K. Y. K.) Dynamic programming algorithm for optimizing distributed parameter trajectories with constraints. Automatica—J. IFAC 16 (1980), no. 2, 197-203. (Authors' summary) 82i:49024 49C20
- Moberg, Irwin W. Diffeomorphisms and Newton-direction algorithms. Bell System Tech.

 J. 59 (1980), no. 9, 1721–1733. (Sadayuki Yamamuro) 82e:58014

 58C15 (65J15)

 Global inverse function theorems. IEEE Trans. Circuits and Systems 27 (1980),
- no. 11, 998-1004. (Sadayuki Yamamuro) 82e:58015 58C15 (26B10)
- On Newton-direction algorithms and diffeomorphisms. Fourteenth Asilomar Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 15-18, IEEE, New York, 1981. (See 824:93001) 58C15 (58F40, 65J15, 94C05)
- On Newton-direction algorithms and diffeomorphisms. Bell System Tech. J. 60 (1981), no. 3, 339-346. (Marian Fabian) 82g-58011 58C15 (65105, 90C30)
 Global implicit function theorems. IEEE Trans. Circuits and Systems 28 (1981),
- no. 2, 145–149. (Marian Fabian) 821:58014 58C15
 ndefur, James T., Jr. (with Goldstein, Jerome A.) Equipartition of energy for higher-order hyperbolic equations. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 2, part 1, 698. (Authors' summary) 821:34078 34G10 (35L99, 47A50)
- ndell, Nils R., Jr. (with Tenney, Robert R.) Detection with distributed sensors. IEEE
 Trans. Aerospace Electron. Systems 17 (1981), no. 4, 501-510. (Authors' summary)
 82h:93071 93E10

(with Lehtomaki, Norman A.; Athans, Michael) Robustness results in

linear-quadratic Gaussian based multivariable control designs. IEEE Trans. Auto Control 26 (1981), no. 1, 75-93. (Authors' summary) 82b:49063 49E25

Control 26 (1981), no. 1, 75–93. (Authors' summary) 82h-9963 49E25

(with Wall, Joseph E., Jr.; Willsky, Alan S.) On the fixed-interval smoothing problem. Stochastics 5 (1981), no. 1-2, 1-41. (Authors' summary) 82h-93092 93E11 ruley-Sander, Desmond See Fearnley-Sander, Desmond propagation of electromagnetic waves. Electronics Tests for Engineers and Scientists. Cambridge University Press, Cambridge-New York, 1978. x+410 pp. ISBN 0-521-21924-8, 0-521-29312-X (R. Kress) 82c-78014 78A40 (78-01, 78A40)

er, V. N. Vector fields and differential equation ons on supermanifolds. (Russ sal. Anal. i Priložen. 14 (1980), no. 2, 91-92. (A. Verona) 82c:58004

(81E99, 83E99)

r. Wolfgang Ein Beitrag zur Baire-Kategorie-Theorie. (English summary) Ma fath. 34 (1981), no. 1, 71-83. (J. C. Oxtoby) 82e:22004 22A10 (28C10) A decomposition theorem. Proc. Amer. Math. Soc. 83 (1981), no. 3, 553-554. (J. C. Oxtoby) 828:28016 28C10 (54E52)

Oxiooy) auxonia 26.10 (3422)
selers, J. W. (with Brown, Gavin) Lognormal genesis. J. Appl. Probab. 18 (1981), no. 2, 542-547. (Donald R. Jensen) 82g:62029 62E10
ulers, Jan A. Asymptotic approximations on arbitrary time scales for systems with a limit-cycle. Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. II (Prague, 1978), pp. 601-602, Academia, Prague, 1979. (See 82k:70002b) 34C05 (70K10)

Second quantization and averaging: Fermi resonance. J. Chem. Phys. 74 (1981), no. 10, 5733-5736. (Author's summary) 82j:81068 81G55

Merson, John G. ★A relational theory of computing. Lecture Notes in Computer Science, 82. Springer-Verlag, Berlin-New York, 1980. vi+147 pp. ISBN 3-540-09987-5 (Henry Africk) 82m:68004 68-02 (04A05, 08A02, 68B05, 68C01)

(Henry Attick) azarosouse

8-02 (0Ad03, 08A02, 08003, 08C01)

8-03 (0Ad03, 08A02, 08003, 08C01)

M. ★Using sophisticated models in resolution theorem proving. Lecture

Notes in Computer Science, 90. Springer-Verlag, Berlin-New York, 1980. xi+239 pp.

ISBN 3-540-10231-0 (M. M. Richter) 82mc68135 68G15 (03B35)

68G15 (03B35)

68G15 (03B35)

68G15 (03B35)

68G16 (03B35)

78Unit hiu, Hon H.) Analysis of consolidation of viscoelastic soils. Numerical methods in geomechanics, Aachen 1979 (Proc. Third Internat. Conf., Aachen, 1979), Vol.

11. pp. 1255-1263, Balkema, Rotterdam, 1980. (R. D. Bhargava) 82e:73081 73Q05

di, Claudio Subgradient optimization. Combinatorial optimization (Lectures, Sur School, Urbino, 1977), pp. 73-91, Wiley, Chichester, 1979. (See 82a:90099)

See also Combinatorial optimization, 82a:90099

dig, Anna-Margarete Das Maximum-Prinzip vom Miranda-Agmon-Typ für Lösungen der biharmonischen Gleichung in einem Rechteck. Math. Nachr. 96 (1980), 49-51. (1. Netuka) 824:31003 31A30 (35J40)

uka) <u>Gazzistus</u> Über das Randverhalten schwacher Lösungen von elliptischen ferentialgleichungen höherer Ordnung in beschränkten Gebieten im R^N. *Math.* Nachr. 97 (1980), 147-158. (M. Biroli) 82c:35026 35J40 (35B65)

dland, R. L. (with Kirkwood, G. P.) Estimation of survival in marked populations with possibly dependent sighting probabilities. Biometrika 68 (1981), no. 2, 531-541. (Authors' summary) 82h:62181 62P10

dibbes, Ginter Perfect groups of order less than 10⁴. Comm. Algebra 9 (1981), no. 5, 477-490. (W. E. Deskins) 824:20020 20D05 (20F22) solovici, P. (with Enghis, P.; Tarinā, Marian) Sur la récurrence de la métrique de

Schwartzschild. (Romanian summary) Studia Univ. Babez-Bolyai Math. 25 (1980), no. 3, 48-49. (Editors) 82k-83008 83C15 (53B50)

ndqvist, Allan (with Andersen, Kurt Munk) Existence and uniqueness results for Liénard's equation having a dead band. IEEE Trans. Circuits and Systems 27 (1980),

no. 12, 1251-1254. (B. B. Lieberman) 82a:34055 34C25 (34B30, 58F22)
(with Andersen, Kurt Munk) Some results concerning periodic solutions of plane autonomous differential systems. (German and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 11, 623–629. (W. S. Loud) 82f;34046 34C25 (34D30, 58F22)

nds, Bill (with Grätzer, G.; Platt, C. R.) Embedding lattices into lattices of ideals.

Pacific J. Math. 85 (1979), no. 1, 65-75. (Authors' summary) 82k:06005 06B10 (with Poguntke, Werner) On finitely generated lattices of finite width. Canad. J.

Math. 33 (1981), no. 1, 28-48. (Ralph Freese) 82:16609 06B20
Counting antichains in finite partially ordered sets. Discrete Math. 35 (1981), 213-228. (Joseph Neggers) 82:06003 06A10 (05A15, 06D05) (with Rival, Ivan; Ruckelshausen, W.) On the ubiquity of herringbones in finitely generated lattices. Proc. Amer. Math. Soc. 82 (1981), no. 3, 335-340. (L. Beran)

ne, K. V. (with Saxena, R. P.) On the evaluation of one-centre matrix elements of a modified Coulomb interaction operator. Proc. Indian Acad. Sci. Sect. A Chem. Sci. 89 (1980), no. 5, 495-501. (Authors' summary) 82c:81163 81G45

e, Sharad S. Some new constructions of balanced incomplete block designs. *Utilitas Math.* 18 (1980), 217-224. (Henk van Tilborg) 82e:05019 05B05

New integer pairs for Hjelmslev planes. Geom. Dedicata 10 (1981), no. 1-4, 35-48. (David A. Drake) 824:05043 05B25 (05B20, 51E30)

Some new invariant pairs (1,3) for projective Hjelmslev planes. J. Geom. 15, no. 1, 64–73 (1981). (Dieter Jungnickel) 82c:51013 51E30 (05B30, 51C05) sekata, Nobuhiro Some remarks on quasilinear evolution equations in Banach spaces.

Tokyo J. Math. 3 (1980), no. 2, 291-302. (Robert H. Martin, Jr.) 82d:34094 (47H15)

er, Viliam The solution of boundary value problems for linear parabolic equations of higher order. (Slovak. English and Russian summaries) Acta Fac. Rerum Nai Comenian. Math. 33 (1977), 81–99 (1978). (R. Výborný) 82f:35092 35K35

feld, Albert (with Dalle-Vedove, Walter) Instabilité hydrodynamique interfaciale induite par une réaction enzymatique non autocatalytique. (English summary) [Interfacial hydrodynamic instability induced by a nonautocatalytic enzyme reaction] C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci. Univers Sci. Terre 292 (1981), no. 20, 1371–1374. (Authors' summary) 82mr92021 92A09 (76E99, 76V05, 80A32)
ger, Fritz (with Kerber, Adalbert; Wagner, Bernd) Quotienten und Kerne von Young-Diagrammen, Brettspiele und Plethysmen gewöhnlicher irreduzibler

Darstellungen symmetrischer Gruppen. Mitt. Math. Sem. Giessen No. 149 (1981), 131–175. (A. O. Morris) 82k:20020 20C30 ginor, A. (with Mulloev, S.) A system of equations of composite type in space. 131-175. (A. O. Morris) 82k:20020

ons, No. 3, pp. 77-83, Tadžik. Gos. Univ., (Russian) Differential and integral equations, Dushanbe, 1980. (See 82m:34002) 35M05

giovanni-Vincentelli, Alberto (with Visvanathan, V.) Diagnosability of nonlinear circuits and systems. I. The dc case. IEEE Trans. Circuits and Systems 28 (1981), no. 11, 1093-1102. (Authors' summary) 82m:93054a 93C10 (93C25)

1093-1102 (Authors' summary) 82m:93054a 93C10 (93C25)
(with Saeks, Richard; Visvanathan, V.) Diagnosability of nonlinear circuits and systems. II. Dynamical systems. IEEE Trans. Circuits and Systems 28 (1981), no. 11, 1103-1108. (Authors' summary) 82m:93054b 93C10 (93C25)
See also Halemane, Keshava P.; et al., 82æ94092
ugwine-Yager, J. R. The mean value of the area of polygons circumscribed about a plane

convex body. Israel J. Math. 37 (1980), no. 4, 351-363. (Erwin Lutwak) 82e:52009

in, N. A. See Maslov, S. Ju.; et al., 82g:01063 ini, Aristide Conformal and projective variations of a Riemannian metric. (Italian. English summary) Rend. Sem. Mat. Univ. Politec. Torino 37 (1979), no. 3, 81-87 (1980). (M. Barros) 82b:53057 53C21 (53A20, 53A30)

(M. Barros) 826-3487

30-21 (33-20, 33-30)

rodriguez Sanjurjo, José M.

Sankappanavar, H. P. On pseudocomplemented semilattices with Stone congruence lattices.

(Russian summary) Math. Slovaca 29 (1979), no. 4, 381-395. (Author's introduction) 82c:06010 06A12 (06E05)

On the congruence lattice of a finite pseudocomplemented semilattice. Proceedings of the Third Brazilian Conference on Mathematical Logic (Inst. Math., Fed. Unit

Pernambuco, Recife, 1979), pp. 281-307, Soc. Brasil. Lógica, São Paulo, 1980. (W. Nemitz) 82b:06005 06A12 (06D15)

Remarks on subdirectly irreducible pseudocomplemented semilattices and

distributive pseudocomplemented lattices. Math. Japon. 25 (1980), no. 5, 519-521. (Author's summary) 82a:06015 06D15 (08B10)

aran, N. (with Bastos, G. G.) Analogue of Greenberg's theorem for Henselian fields of finite rank. An. Acad. Brasil. Ciênc. 52 (1980), no. 2, 211-212. (Gail L. Carns) 824:12014 12E05

nkaranarayanan, G. (with Parthasarathy, P. R.) Age-dependent branching processes with immigration when interarrival times are correlated. J. Indian Statist. Assoc. 16 (1978), 83-96. (From the introduction) 82m:60105 60J80

nkaranarayanan, K. A note on the admissibility of some nonnegative quadratic estimators. J. Roy. Statist. Soc. Ser. B 42 (1980), no. 3, 387-389. (K. Vijayan) 82e:62013

Šan'ko, T. M. (with Gavriljuk, I. P.; Makarov, V. L.; Elenin, G. G.; Zdorenko, Ju. N.; Zmitrenko, N. V.) Two algorithms for numerical solution of problems of quasilinear heat conduction and their comparison. (Russian. English summary) Vyčisl. Prikl. Mat. (Kiev)

1980, no. 41, 92-105, 159 (Murli M. Gupta) 82a:65095 65P05 (65M05)
Sankoff, D. (with Bochi, S.; Brossier, G.; Celeux, Gilles; Charles, Christian; Chifflet, R.; Darcos, J.; Diday, E.; Diebolt, J.; Fevre, P.; Govaert, G.; Hanani, O.; Jacquet, D.; Lechevallier, Yves; Lemaire, Jacques; Lemoine, Y.; Molliere, J. L.; Morisset, G.; Ok-Sakun, Y.; Rousseau, P.; Schroeder, A.; Sidi, J.; Taleng, F.) ★Optimisation en classification automatique. Tome 1, 2. (French) [Optimization in automatic classification. Vol. 1, 2] Institut National de Recherche en Informatique et en Automatique Rocquencourt, 1980. vii + 896 pp. ISBN 2-7261-0219-0 (A. Aiello) 82k:62116 (92A05)

San Miguel, M. (with Garrido, Luis; Lurié, D.) Stochastic quantization and path integral alation of Fokker-Planck equation. Phys. Lett. A 67 (1978), no. 4, 243-245.

(Authors' summary) 82c:81035 81C20 (58D30, 81C35)

(with Abaurrea, J.) Unconditional basic sequences of random variables in $L^p(E)$. Collect. Math. 30 (1979), no. 3, 189-197. (Werner Linde) 82g:60012 60B12 (46B25) (with Sancho, J. M.) Fokker-Planck approximation for N-dimensional

non-Markovian Langevin equations. Phys. Lett. A 76 (1980), no. 2, 97-100. (Authors' mmary) 82x82026 82A35 (60165) (with Gunton, James D.) Metastability in tricritical systems. Phys. Rev. B (3) 23

(1981), no. 5, 2317–2333. (Author's summary) 82-82036 82A25 (8105) (with Gunton, James D.; Dee, Gregory; Sahni, Paramdeep S.) Theory of spinodal

decomposition in relaxational tricritical models. Phys. Rev. B (3) 23 (1981), no. 5, 2334–2345. (Authors' summary) 82c:82037 82A25

o, Bartolo On space-time of Petrov's type III. (Italian. English summary) Rend. Sem. Fac. Sci. Univ. Cagliari 49 (1979), no. 3-4, 535-540. (R. Roşca) 82e:83015 (53B30, 83C40)

omiya, Nobuo (with Tsukabe, Masayuki) A method for decomposing mixed-integer linear programming problems with angular structure. Internat. J. Systems Sci. 12 (1981), no. 9, 1031–1043. (Authors' summary) 82m:90122 90C10 (90C05)

Samuti, P. Singular perturbations in the state space approach of linear electrical networks. Internat. J. Circuit Theory Appl. 9 (1981), no. 1, 47–57. (Author's summary) 82a:94102

Sano, Shigeru The Plancherel formula for SL(2, C)/SL(2, R). Sci. Papers College Gen. Ed.
Univ. Tokyo 30 (1980), no. 2, 93–105. (S. Ju. Priščepionok) 82h:43008 43A85 (43A90)
semenov-tjan-Šanskii, M. A. See Semenov-Tjan-Šanskii, M. A.

Sansò, Fernando Molodensky's problem in gravity space: a review of the first results. Optimization of design and computation of control networks (Proc. Internat. Sympos., Sopron, 1977), pp. 683–693, Akad. Kiadò, Budapest, 1979. (Author's summary) 86A20 (31B20, 35R35)

Internal collocation. (Italian sur pary) Atti Accad. Naz. Lincei Mem. Cl. Sci. Fis. Mat. Natur. Sez. Ia (8) 16 (1980), no. 1, 52 pp. (V. M. Isakov) 82i:31006 (65N35, 86A20)

The geodetic boundary value problem and the coordinate choice problem. Bull. Géodésique 55 (1981), no. 1, 17-30. (W. Buchheim) 82m:86007

sone, Giovanni The points with rational coordinates and in particular those with integer coordinates on the elliptic cubic $y^2 = x^3 - x + 1$. (Italian) Ann. Mat. Pura Appl. (4) 125 (1980), 1-11. (Andrew Bremner) 82g:10037 10B10 See also Conti, Roberto, 82b:01039

Jean-Jacques (with Colliot-Thélène, Jean-Louis) La descente sur les variétés

rationnelles. Journées de Géometrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers, 1979, pp. 223-237, Sijthoff & Noordhoff, Alphen aan den Rijn, 1980. (Daniel Coray) 82d:14016

aniel Coray) 82d:14016 14G05 (14C15) (with Colliot-Thélène, Jean-Louis; Coray, Daniel F.) Descente et principe de Hasse pour certaines variétés rationnelles. J. Reine Angew. Math. 320 (1980), 150-191. (A.

Pfister) 82:14020 14G05 (10C02)
stagati, Giuseppe (with Pulvirenti, Giuseppe) A minimum problem relative to a control process with distributed parameters. (Italian) Matematiche (Catania) 31 (1976), no. 2, 371-389 (1977). (T. Zolezzi) 82g:49017 49B22

stalò, Luis Antonio Integral geometry: history and perspectives. Proceedings of the IV International Colloquium on Differential Geometry (Univ. Santiago de Compostela, Santiago de Compostela, 1978), pp. 1–48, Cursos Congr. Univ. Santiago de Compostela, 15, Univ. Santiago de Compostela, Santiago de Compostela, 1979. (M. Stoka) 82h:53083 53C65 (01-02)

(with Fava, N. A.) Random processes of manifolds in R. Z. Wahrsch. Verw. Gebiete 50 (1979), no. 1, 85-96. (R. V. Ambarcumjan) 82c:60021 60D05 (53C65, 60G55)

Cauchy and Kubota's formula for convex bodies in elliptic n-space. Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 1, 51-58. (Dumitru Filipescu) 82k:53092

See also Bio phy: Santaló, Luis Antonio, 82f:01165

inos Santalucia, Vicente See Montesinos Santalucia, Vicente

nato, E. (with Lavenda, B. H.) Transformation of complex diffusion processes and nonrelativistic quantum mechanics. II. Lett. Nuovo Cimento (2) 28 (1980), no. 12, 409-413. (From the text) 82i:81041b 81C20

(with Lavenda, B. H.) Transformation of complex diffusion processes and nonrelativistic quantum mechanics. *Phys. Lett. A* 77 (1980), no. 2-3, 115–117. (Authors' summary) 82i:81041a 81C20

Santana, O. (with Mendez, J. A.: Moreno-Diaz, R.) Normalized moments for processing visual data. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 75 (1981), no. 1, 287-289. (Authors' summary) 82m:92089 92A25 (68G10)

Santander, Mariano (with Cariñena, José F.) Projective covering group versus representation groups. J. Math. Phys. 21 (1980), no. 3, 440-443. (U. Cattaneo)

22E45 (20C25, 81C40)

(with Cariñena, José F.) Antiunitary symmetry operators in quantum mechanics. Internat. J. Theoret. Phys. 20 (1981), no. 3, 97-103. (Authors' summary) 824:81652

(with Cariñena, José F.; del Olmo, Mariano A.) Kinematic groups and dimensional analysis. J. Phys. A 14 (1981), no. 1, 1-14. (Stanley H. Benton, Jr.) 82f:00016 (22E70, 70B99)

(with Cariñena, José F.) Galilean relativistic wave equations. J. Phys. A 15 (1982), no. 2, 343-353. (Authors' summary) 82m:81041 81D25 (58F35) ttaniello, A. (with Burattini, E.; Massarotti, A.) A graph colouration technique. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. III, pp. 326-333, Reidel, Dordrecht, 1980. (O. V. Borodin) 82g:05045 05C15 (68E10)

mam, T. S. (with Biswas, S. N.) Coherent states of para-Bose oscillators. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 2, 210-217. (Authors' summary) 82x81017 81C99 (81D05)

checo-Santiago, N. See Pacheco-Santiago, N. ntina, M. (with Naimpally, A.; Jordanides, T. J.; Nguyen, L.) Feedforward control of biochemical reactors. Fourteenth Asilomar Conference on Circuits, Systems and Compute (Pacific Grove, Calif., 1980), pp. 149-152, IEEE, New York, 1981. (See 824:93001)

tini, P. M. Asymptotic behaviour (in t) of solutions of the cylindrical KdV equation. I. (Italian and Russian summaries) Nuovo Cimento A (11) 54 (1979), no. 2, 241-258. (Gustavo Perla Menzala) 82j:35136a 35Q20 (35B40, 76B25)

(with Manakov, S. V.; Tahtadžjan, L. A.) Asymptotic behavior of the solutions of the Kadomtsev-Pyatviashvili equation (two-dimensional Korteweg-de Vries equation). Phys. Lett. A 75 (1979/80), no. 6, 451-454. (Hans Kaper) 82c:35072 35Q20

Asymptotic behaviour (in t) of solutions of the cylindrical KdV equation. II. (Italian and Russian summaries) Nuovo Cimento A (11) 57 (1980), no. 4, 387-396. (Gustavo Perla Menzala) 82j:35136b 35Q20 (35B40, 76B25)

(with Levi, D.; Pilloni, L.) Integrable three-dimensional lattices. J. Phys. A 14 (1981), no. 7, 1567-1575. (L. A. Takhtajan (Tahtadžjan)) 82j:35132 35Q20 (58F07) On the evolution of two-dimensional packets of water waves over an uneven botto Lett. Nuovo Cimento (2) 30 (1981), no. 8, 236-240. (A. M. J. Davis) 82i:76010 761 (35Q20)

(with Levi, D.; Pilloni, L.) Bäcklund transformations for nonlinear evolution equations in 2+1 dimensions. Phys. Lett. A 81 (1981), no. 8, 419-423. (Authors' summary) 82e:35070 35Q20 (76B25, 81C99)

de Santis, Romano M. See De Santis, Romano M.

intner, Thomas J. (with Mykytyn, Stephen W.) Maximum likelihood estimation of the survival function based on censored data under hazard rate assumptions. Comm. Statist. A-Theory Methods 10 (1981), no. 14, 1369-1387. (Bruce W. Turnbull) 82k:62187 62N05 (62G05)

Designing two-factor experiments for selecting interactions. J. Statist. Plann. Inference 5 (1981), no. 1, 45-55. (H. Bandemer) 82g:62112 62K15

storo, A. (with Mighell, A. D.; Rodgers, J. R.) The determination of the relationship between derivative lattices. Acta Cryst. Sect. A 36 (1980), no. 5, 796-800. (H. Groemer)

SZL453 (15A90, 52A15, 8ZA60)

toro, Nicola

On the parallel evaluation of general arithmetic expressions. Proceedin the Ninth Manitoba Conference on Numerical Mathematics and Computing (Univ. ine vinin munitoot Conjerence on Numerical mathematics and Company (Onto. Manitoba, Winnipeg, Man., 1979), pp. 385–392, Congress. Numer, XXVII, Utilitas Math., Winnipeg, Man., 1980. (From the text) 82a:680-46 68B20 (68C25)

Four O(n•2) multiplication methods for sparse and dense Boolean matrices. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and

Computing, Vol. II (Winnipeg, Man., 1980). Congr. Numer. 31 (1981), 241-251. (Author's

summary) 82m:65039 65F99 (15A99, 68C25) toro, Paolo Contributions to the study of the center for nonlinearizable autonomous differential equations. (Italian) Riv. Mat. Univ. Parma (4) 5 (1979), part 2, 715-724

(1980). (P. Talpalaru) 82h:34040 34C05

(1760), (F. Ianpataru) 8222-84-05 1608, Emilio (with Lapidera, R.) Classical relativistic statistical mechanics: the case of a hot dilute plasma. *Phys. Rev. D* (3) 23 (1981), no. 10, 2181–2188. (Authors' summary) 82g:82044 82A45 (82A05)

Santos, F. C. (with de Oliveira, L. A. R.; Kodama, T.) Path integrals for arbitrary canonical transformation. (Italian summary) Nuovo Cimento B (11) 58 (1980), no. 2, 251-266. (L. S. Schulman) 82±81649 81C35 (58D30)

Santos, F. D. (with Colby, P. C.) Coulomb effects on single-particle exchange singularities. Nuclear Phys. A 367 (1981), no. 2, 197-214. (Authors' summary) 82±81134 81F20

(with Barros, Manuel) On normal curvature tensor of Kaehler submanifolds. Chinese J. Math. 8 (1980), no. 2, 105-112. (Bang-yen Chen) 82h:53070 53C40 (53C42)

dos Santos, Francisco Eulálio Alves (with Jayaraman, J.) Some remarkable spin-1-like algebraic properties of spin-2 matrices. J. Phys. A 14 (1981), no. 3, 745-751. (Authors'

summary) 82g:81026 81C40 (22E70)

ntos, J. P. de Oliveira (with Bondarenko, B. A.; Mangeron, Dumitru Ion; Shimemura, Etsujiro) Problèmes concernant certaines extensions des équations polyvibrantes, dites équations de Mangeron. (Romanian summary) Bul. Inst. Politehn. Iași Secț. I 26(30) (1980), no. 1-2, 9-12. (Authors' summary) 82b:35146 35099

tos, N. O. Interior solutions for Reissner-Nordström field with |q|>m. Progr. Theoret.

Phys. 64 (1980), no. 6, 2021–2028. (L. K. Patel) 82k:83040 83C50
(with Banerjee, A.) Static perfect fluid in Brans-Dicke theory. Internat. J. Theoret.
Phys. 20 (1981), no. 5, 315–329. (Authors' summary) 82k:83054 83D05 (83C55) (with Banerjee, A.) Static charged perfect fluid in a conformally flat spacetime. J.

Math. Phys. 22 (1981), no. 4, 824-826. (Brian O. J. Tupper) 82h:83042

(with Banerjee, A.) Homogeneous radiation-filled universe in general scalar tensor theory. J. Phys. A 14 (1981), no. 10, 2829-2835. (Authors' summary) 82i:83058 83D05 (83F05)

(with Banerjee, A.) Homogeneous cosmological model in general scalar-tensor theory. Phys. Rev. D (3) 23 (1981), no. 10, 2111-2115. (Authors' summary) 82f:83067 83D05 (83F05)

Santos, R. R. (with Sneddon, L.; Stinchcombe, R. B.) The 2D transverse Ising model at T=0: a finite-size rescaling transformation approach. J. Phys. A 14 (1981), no. 12, 3329–3339. (Authors' summary) 82m:82018 82A25 (82–04, 82A68)

(with Sneddon, L.) Finite-size rescaling transformations. Phys. Rev. B (3) 23 (1981), no. 7, 3541-3546. (Authors' summary) 824:82035 82A25 (82A05)

tos, Rafael F. Analyse asymptotique des équations de transport dans le cas d'évolution. (English summary) [Asymptotic analysis of transport equations in the evolution case] C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 23, 995-998. (Author's summary) 45K05 (82A70)

Sur l'approximation de diffusion de la solution de l'équation de transport. (English summary] [Diffusion approximation of the solution of the transport equation] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 1, 43-45. (Author's summary) 82j:82073 82A70 (45K05)

ntosa, Fadil (with Carroll, Robert Wayne) Inverse scattering techniques in geophysics.

Applicable Anal. 11 (1980/81), no. 1, 79-81. (Pierre C. Sabatier) 82g86006 86Al.

(with Carroll, Robert Wayne) Résolution d'un problème inverse qui détermine complètement les données géophysiques. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 23-26. (I. M. Longman) 82d:86008 86A15 (35R30, 73D99)

ntos Filho, José Ruidival Propagation of singularities through radial points. Com Partial Differential Equations 6 (1981), no. 4, 399–435. (Vesselin M. Petkov) 82i:58069

tucci Patini, Lia (with Ghizzetti, Aldo) A problem of approximation in $L^2[0, 1]$. (Italian) Pubbl. Istit. Mat. Appl. Fac. Ingr. Univ. Stud. Roma Quaderno No. 16 (1980), 55-64. (Wilhelm Sippel) 82i:41021 41A30 (41A50) nyal, B. C. See Fox, Karl August, 82d:90043a

nz, J. L. (with Sanchez-Ron, J. M.) A new understanding of the Lorentz-Dirac equation for one particle. I. The nonrelativistic case. (Italian and Russian summaries) Nuovo mento B (11) 61 (1981), no. 1, 62-72. (Authors' summary) 82e:78003

nz, M. (with Nualart Rodón, David) Random Gaussian Markov fields. Proceedings of the First World Conference on Mathematics at the Service of Man (Barcelona, 1977), Vol. I, pp. 629-642, Unio. Politec., Barcelona, 1980. (J. Szpirglas) 82e:60087 60G60

(with Nualart Rodón, David) The conditional independence property in filtrations associated to stopping lines. Two-index random processes (Paris, 1980), pp. 202-210, Lecture Notes in Math., 863, Springer, Berlin, 1981. (Bernard Prum) 82k:60099 60G40 (with Nualart Rodon, David) Changing time for two-parameter strong martingales.

(French summary) Ann. Inst. H. Poincaré Sect. B (N.S.) 17 (1981), no. 2, 147-163.

(L. Sucheston) 82i:60081 60G40 (60G44, 60G60, 60J65) Sanz Alix, Miguel A. (with Martinez Carracedo, Celso) Relations between certain uniformities and the algebraic structure of a ring. (Spanish) Rev. Real Acad. Cienc.

Exact. Fis. Natur. Madrid 73 (1979), no. 2, 185-189. (Melvin Henriksen) 82h:46069 46J10 (54E15)

About certain subrings of C(X). (Spanish) Rev. Real Acad. Cienc. Exact. Fls. Natur. Madrid 73 (1979), no. 3, 407-422. (Melvin Henriksen) 82h:46070 (with Martinez Carracedo, Celso) Multiplicative linear forms on certain subrings of

C(X). (Spanish) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 4, 565-575, (Melvin Henriksen) 82k-86046 46E25 (54C40)
sz Serna, J. M. Linearly implicit variable coefficient methods of Lambert-Sigurds

type. IMA J. Numer. Anal. 1 (1981), no. 1, 39-45. (J. D. Lambert) 82f:65082 (with Guo, Ben Yu) Convergence of methods for the numerical solution of the Korteweg-de Vries equation. IMA J. Numer. Anal. 1 (1981), no. 2, 215-221. (Authors' mmary) 82e:65092

summary) 82e:65092 65M05 (76B15) (with Christie, I.) Petrov-Galerkin methods for nonlinear dispersive waves. J. Comput. Phys. 39 (1981), no. 1, 94–102. (Authors' summary) 82e:65074 65N30

agovas, Mifodijus (with Sapagovienė, D.) Some numerical results on the solution of nonlinear and nonselfadjoint problems by the alternatively triangular method. (Russian.

- aries) Litocok. Mat. Sb. 20 (1980), no. 2, 149-157, 210. (G. 65N10 (65F10, 65H10, 65N05, 65N20)
- nees) 32:e65062 65N10 (65F10, 65F10, 65N05, 65N20) 65N10 (65F10, 65F10, 65N10, 65N20) 60N10, 65N10, 65N10, 65N10, 65N10, 65N10, 65N10, 65N10, 65N10, 65N10, 65N10, 65N10, 65N10, 65N20)
- akidze, L. D. On the bifurcation of fluid flows between two rotating permeable cylinders. (Russian. Georgian and English summaries) Soobič. Akad. Nauk Gro
- cymoters, (Russian, Georgian and English summaries) soone. Asad. Nauk Grazin. SSK 99 (1980), no. 2, 325-322, 76505)

 neer, V. P. (with Raspopov, V. E.) D-properties of certain second-order equations.

 (Russian) Čisl. Metody Meh. Spložn. Sredy 9 (1978), no. 6 Mat. Modelirovanie, 119-124.

 (Russell C. Thompson) 82f-35045

 35C99 (65P05)

 Lördw. V. (with Suhanov, E. V.) Varieties of periodic semigroups. (Russian) Izv. Vysš.

 Učebn. Zaved. Matematika 1981, no. 4, 48-55. (Anna Ja. Alzenštat) 82f-20108
- 20M07
- iro, A. V. (with Allahverdiev, Dž. È.) Conditions for the complete controllability of linear systems in Banach spaces. (Russian. Azerbaijani and English summaries) Aka Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 10, 16-19. (Authors' summary) 82k:93010
- iro, E. I. Stable solution of the problem of nonlinear filtering in discrete time. Acto i Telemeh. 1980, no. 5, 99-105 (Russian. English summary); translated as Auto. Remote Control 41 (1980), no. 5, part 2, 671-675. (Author's summary) 82h:6216 62M10 (93E10)
- iro, Ja. L. (with Igošin, V. A.) Stability theorem for fibres of Riemannian parallel foliations. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 7, 74-76. (N. M. Mišačev) 82c:57015 57R30
 - A quasigeodesic mapping. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 9, 53-55. (J. D. Zund) 82b:53027 53B20 (53A99, 83C99)
 - (with Žukova, N. I.) Global structure of reducible Rie Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 10, 60-62. (Valentin Boju) 82e:53068 53C20 (53C05)
 - (with Igošin, V. A.) Monomorphisms of quasigeodesic flows. (Russian) Izv. Vysš. Učebn. Zared. Matematika 1980, no. 11, 85-87. (A. Morimoto) 824:59057 58F17 apiro, V. D. See Nonlinear and turbulent processes in physics, 82c:82902 apiro, V. E. (with Loginov, V. M.) Behavior of an oscillator under a periodic parametric
- tion with chaotic modulation. Izv. Akad. Nauk SSSR Meh. Toerd. Fela 15 (1980), no 5, 42-50 (Russian); translated as Mech. Solids 15 (1980), no. 5, 35-41. (James M. D'Archangelo) 82j:58061 58F13 (34F05, 70K50, 70L05)
- Tightness and related notions. (Russian) Topological spaces and their mappings (Russian), pp. 119–131, 154, Lato. Gos. Univ., Riga, 1979. (Andrzej Szymański) 82b:54014 54A25 (54D30)
 - Special types of embeddings in Tychonoff cubes. Subspaces of Σ-products and
 - cardinal invariants. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 1055-1086, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (Teodor Przymusiński) 824:54010 54C05 (54B10)
 - Mappings on Tihonov cubes. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 122–130. (Author's introduction) 824:54018 54C99 (54D30)
- logov, N. A. The problem of stability of a uniqueness theorem of a characteristic function that is analytic in the neighborhood of the origin t=0. (Russian) Problems of stability of stochastic models (Proc. Fourth All-Union Sem., Palanga, 1979) (Russian), pp. 88-94, 124, "Vsesojuz. Nauč.-Issled. Inst. Sistem. Issled.", Moscow, 1980. (G. P. Čistjakov) 82h:60034
- ondžian, O. M. Bending of a thin plate under partial heating. (Russian. Armenian and English summaries) Izo. Akad. Nauk Armjan. SSR Ser. Meh. 33 (1980), no. 3, 3–17, 78. (Author's summary) 82c:73087 73U05 (35J30)
- orta, Gilbert (with Deville, Jean-Claude) Analyse harmonique qualitative. (English summary) Data analysis and informatics (Proc. Second Internat. Sympos., Versailles, 1979), pp. 375–389, North-Holland, Amsterdam, 1980. (See 82:62004) 92A27
- wa, T. O. (with Maz'ja, V. G.) Multipliers in spaces of differentiable functions. (Russian) Theory of cubature formulas and the application of functional analysis to problems of mathematical physics (Proc. Sem. S. L. Soboleo, No. 1, 1979) (Russian), pp. 37-90, 154, Trudy Sem. S. L. Soboleva, No. 1, 1979, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1979. (Angelo Favini) 82e:46048 46E35
 - (with Maz'ja, V. G.) Theory of multipliers in spaces of differentiable functions and their applications. (Russian) Theory of cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 225–233, 255, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (P. Szeptycki) 821:46036 46E35
 - (with Maz'ja, V. G.) A coercive estimate for solutions of elliptic equations in spaces
- of multipliers. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 1, 41–47, 118–119. (C. V. Coffman) 82c:35025 35J40 (46E35) Astronom. 1980, vpl. 1, 41–47, 118–119. (C. V. Collman) 82C-55025 35140 (40E-55) (with Maz'ja, V. G.) Multipliers on the spaces W., and their applications, (Russian, English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vpp. 1, 42–47, 120. (H. Triebel) 82c-46049 46E35 (47G05) outnakis, A. Measures on totally ordered spaces. Mathematika 27 (1980), no. 2, 225–235 (1981). (A. G. A. G. Babiker) 82k:28018 28C15 (28A12, 54F05, 54H05)
- (with Babiker, A. G. A. G.) Some regularity conditions on topological measure spaces. J. London Math. Soc. (2) 23 (1981), no. 3, 496-502. (J. D. Knowles) 82i:28015
- walenko, V. V. The invariant imbedding method for discrete quasiconformal mappings. (Russian) Metric questions of the theory of functions (Russian), pp. 136-139, 163, "Naukova Dumka", Kiev, 1980. (I. A. Volynec) 82a:30058 30G25
- ovalov, V. N. Separation of variables in a second-order linear differential equation. (Russian) Differencial nye Uravnenija 16 (1980), no. 10, 1864–1874, 1918. (Vlajko Lj. 35A25 (35C99, 58A15)
 - (with Bagrov, V. G.; Gitman, D. M.; Zadorožnyi, V. N.; Lavrov, P. M.) New exact solutions of the Dirac equation. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 4, 10-16. (Authors' summary) 82c:81009 81C05
- oralors kii, V. I. An integer mathematical programming problem with a network formulation. (Ukrainian. Russian summary) Studies in the qualitative theory of differential

- equations and its applications (Ukrainian), pp. 65–66, 76, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (See 824:00007) 90C35
- Mdt., Rev. (1976. (See Canadouni) 20033 odenko, A. A. Estimation of the length and number of deadlock disjunctive normal forms for almost all not everywhere defined Boolean functions. (Russian) Mat. Zametki 28 (1980), no. 2, 279-300, 320. (Koriolan Gilezan) 82b:94044 94C10
- Saprykin, V. A. (with Dokunin, A. E.; Kienja, E. N.) Questions of the theory of invariant transformations in hydroacoustics. (Russian) Proceedings of the Seventh All-Union School-Seminar on Statistical Hydroacoustics (L'voo, 1975) (Russian), pp. 217-224, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1977. (From the text) 82b:76048 76005
- ukov, B. N. An almost product structure on a vector bundle. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 11 (1979), 100-110. (K. M. Egiazarjan) 82h:53053 53C15
 - (with Višnevskii, V. V.; Il'inskii, N. B.; Norden, A. P.; Širokov, A. P.) Boris Lukič aptev (on the occasion of his 75th birthday). (Russian) Izv. Vysš. Učebn. Zaved.
 - tematika 1980, no. 10, 3-5. (Editors) 82k:01067 01A70

 Connections on a differentiable fiber bundle. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 12 (1980), 97-110. (D. I. Papuc) 82m:53031 53C05 (53C15)
- raceno, Marcos (with Kramer, Peter) *Geometry of the time-dependent variational principle in quantum mechanics. Lecture Notes in Physics, 140. Springer-Verlag, Berlin-New York, 1981. iv +98 pp. 158Pt 3-540-10579-4 (From the introduction)
 82m81001 81-02 (22E70, 49H05, 58F22, 81C40)
- Sarada, K. Approximation of linear forms of a class of E-functions. Proceedings of the
- Sarada, K. Approximation of linear forms of a class of E-functions. Proceedings of the Conference on Number Theory (Mysore, 1979), pp. 93–97, Matscience Rep., 101, Inst. Math. Sci., Madras, 1980. (P. Bundschuh) 82i:10041 10F10 (10F37)
 Sarafjan, V. V. (with Safarjan, R. G.) Diffusion processes with averaging, and propagation of concentrated waves (Russian Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 5, 274–279. (Pierre-Louis Lions) 82d:35023 35B25 (35K55, 60J60)
- Sarafyan, D. (with Adomian, George) Numerical solution of differential equations in the deterministic limit of stochastic theory. Appl. Math. Comput. 8 (1981), no. 2, 111-119. (Toshio Yamada) 82e:60092 60H10 (34A05, 65L05)
- raga, W. (with Filanovsky, I. M.; Stromsmoe, K. A.; Talbot, A.) Property of analytic functions related to band-pass transformation. Proc. IEE-G 127 (1980), no. 4, 176. (A. A.
- Pervozvanskii) 82d:94055 94C05 tov, S. Probability of moderate deviations and probability inequalitites for sums of weakly dependent random variables. (Russian) Dokl. Akad. Nauk UzSSR 1981, no. 2, 5-7. (From the text) 82i:60049 60F10
 - Probability inequalities for sums of random variables satisfying the condition of uniform strong mixing. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1981, no. 2, 42-47, 99. (Werner Wolf) 82g:60030 60E15
- Sarakšanė, A. A. (with Rusanov, V. V.) Investigation of a linearized nonstationary model of flow around an infinite wedge. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 103, 29 pp. (Authors' summary) 82g:76023
- (76L05) ramito, B. (with Maschke, E. K.) On the possible importance of generalized Lorenz equations in the theory of magneto-hydrodynamic stability. Intrinsic stochasticity in plasmas (Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 383-392, École Polytech., Palaiseau, 1979. (Authors' summary) 82h:76042 76W05 (58F13)
- en, Jukka Some remarks on the convergence of the horizontal line method for Maxwell's equations. Ber. Univ. Jyväskylä Math. Inst. No. 23 (1980), 15 pp. (From the text) 82a:78008 78A25 (65N40)
 - (with Neittaanmäki, Pekka) Finite element approximation of electromagnetic fields in three-dimensional space. Numer. Funct. Anal. Optim. 2 (1980), no. 6, 487-506 (1981). (Authors' summary) 82b:78005 78A25 (65N30, 65P05)
 - (with Neittaanmäki, Pekka) On the finite element approximation for Maxwell's roblem in polynomial domains of the plane. Applicable Anal. 12 (1981), no. 1, 73-83. (David F. Griffiths) 82h:65085 65N30
 - (with Neittaanmäki, Pekka) A mixed finite element method for the heat flow problem. BIT 21 (1981), no. 3, 342-346. (Authors' summary) 82m:65092 65M60
 - (with Neittaanmäki, Pekka) On finite element approximation of the gradient for solution of Poisson equation. Numer. Math. 37 (1981), no. 3, 333-337. (Authors' summary) 82h:65086 65N30
 - (with Neittaanmäki, Pekka) Semidiscrete Galerkin approximation method applied to initial-boundary value problems for Maxwell's equations in anisotropic, inhomogeneous media. Proc. Roy. Soc. Edinburgh Sect. A 89 (1981), no. 1-2, 125-133. (Authors' summary) 82h:65070 65M60
- Sarangi, Sangappa M. (with Uralegaddi, Basappa A.) On the radius of univalence of certain analytic functions. J. Karnatak Univ. Sci. 23 (1978), 18-24. (Edward J. Moulis, Jr.)
 - (with Uralegaddi, Basappa A.) The radius of convexity and starlikeness for certain classes of analytic functions with negative coefficients. II. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 16-20 (1980). (Herb Silverman) 82k:30016 30C45
- Sarangov, C. S. Passage to the limit as analogy. (Russian. English summary) History and methodology of the natural sciences, No. XXI (Russian), pp. 21-26, Moskov. Gos. Univ., Moscow, 1979. (I. Grattan-Guinness) 82i:00023 00A25 (81-03)
- Sarapa, N. A note on the cosine equation for probability measures on compact semigroups. (Serbo-Croatian summary). Glas. Mat. Ser. III 15(35) (1980), no. 2, 383-385. (Miloslav Duchoň) 82f:43001 43A05 (60B15)
- on, Donald (with Guillory, Carroll) Division in H[∞] + C. Michigan Math. J. 28 (1981), no. 2, 173-181. (Sheldon Axler) 82j:46066 46115 (30H05)
 rason, Leonard Second-order equations of fixed type in regions with corners. I. Trans.
- er. Math. Soc. 261 (1980), no. 2, 387-416. (M. H. Protter) 82j:35036 (35J25, 35K20, 35L20)
- Saraswat, S. K. (with Ahmad, Z. U.) Absolute convexity in the spaces of strongly o-summable sequences. Comm. Fac. Sci. Univ. Ankara Sér. A₁ Math. 29 (1980), no. 6, 47-53 (1981). (M. S. Rangachari) 82g:46020 46A45 (40C05)
 - (with Ahmad, Z. U.; Mursaleen) Invariant means and multiplicative matrices.
 - (Turkish summary) Comm. Fac. Sci. Univ. Ankara Sér. A. Math. 29 (1980), no. 7, 55-61 (1981). (R. A. Raimi) 82i:40004 40C05 (43A07)

Some sequence spaces and generalized almost boundedness. Soochow J. Math. 6 (1980), 123-128. (R. A. Raimi) 82;-46009 46A45 (40F05)

Sarath, B. Structure of some Noetherian injective modules. Canad. J. Math. 32 (1980),

no. 6, 1277-1287. (A. V. Jategaonkar) 82f:16016 16A38 (16A52)

(with Haghany, A.) Krall dimension and reflexivity in some Noetherian rings. Proc. er. Math. Soc. 83 (1981), no. 1, 1–7. (Authors' summary) 82m:16003 16A08

Saraykar, R. V. (with Joshi, N. E.) Nondissipative hydromagnetic flows: existence an some properties. J. Math. Phys. Sci. 14 (1980), no. 1, 31-49. (J. F. Heyda) 82f:35155 35Q10 (58D30, 76W05)

(with Joshi, N. E.) Linearization stability of Einstein equations coupled with self-gravitating scalar fields. J. Math. Phys. 22 (1981), no. 2, 343-347. (M. Carmeli) 83C05 (58D25, 58D30)

(with Deshpande, D. G.) Analytic and generic properties of stationary viscous hydromagnetic flows. J. Math. Phys. Sci. 15 (1981), no. 3, 191-207. (Authors' summary) 76W05

našvili, G. A. Gravity as a Goldstone field in the Lorentz gauge theory. Phys. Lett. A

75 (1979/80), no. 4, 257-258. (John Madore) 82a:83041 83C99 (57R99) rdella, L. (with Peano, A.; Fanelli, M.; Riccioni, R.) Self-adaptive convergence at the crack tip of a dam buttress. Numerical methods in fracture mechanics (Swansea, 1978), pp. 268-280, Univ. College Swansea, Swansea, 1978. (See 82:73003) (73K25)

novillo Sardi, J. E. See Novillo Sardi, J. E.

novillo Sardi, J. E. See Novillo Sardi, J. E.
Sargent, R. W. H. An efficient implementation of the Lemke algorithm and its extension to deal with upper and lower bounds. Survey of mathematical programming (Proc. Ninth Internat. Math. Programming Sympos., Budapest, 1976), Vol. 2. pp. 63-82, North-Holland, Amsterdam, 1979. (Michael Minkoff) 82a:90172 90C33 (90C20)
Sargent, Robert G. (with Balci, Osman) A methodology for cost-risk analysis in the statistical validation of simulation models. Comm. ACM 24 (1981), no. 4, 190-197.

(Authors' summary) 82d:68061 68J10

Sargent, Thomas J. (with Hansen, Lars Peter) Formulating and estimating dyna rational expectations models. J. Econom. Dynamics Control 2 (1980), no. 1, 7-46. (Jacob Paroush) 82c:62146 62P20 (90A19)

rhan, A. E. (with El Mawaziny, Ahmed H.) The distribution of the ratio of two consecutive order statistics. Essays in probability and statistics, pp. 413-418, Shinko Tsusho, Tokyo, 1976. (Authors' introduction) 82c:62027 62E15 (62G30)

Sari, Tewlik Sur les variétés de contact localement affines (English summary) C. R. Acad.
Sci. Paris Sér. I Math. 292 (1981), no. 17, 809–812. (Author's summary) 82e:53061 53C15

Sur le comportement asymptotique des solutions dans un problème aux limites semi-linéaire. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 18, 867-870. (M. C. Irwin) 82g:34083 34E15 (03H05, 58F13, 58F21)

(with Lutz, Robert) Sur le comportement asymptotique des solutions dans un problème aux limites non linéaires. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 20, 925-928. (Authors' summary) 82f:34015 34B10 (03H05, 34E15, 58F22, 92A15)

Sarian, Edward Property L and W*-algebras of type I. Töhoku Math. J. (2) 31 (1979), no. 4, 491–494. (Jun Tomiyama) 82k:46094 46L10
 Saridis, George N. On an approximation theory of nonlinear optimal control. Analysis and control of systems (IRIA Sem., Rocquencourt, 1978), pp. 181–189, IRIA, Rocquencourt, 1978. (Emmanuel Nicholas Barron) 82e:49042 49C05 (93C50)

★Самоорганизующиеся стохастические системы управления. (Russia [Self-organizing control of stochastic systems] Translated from the English by T. G. Abramjanc, R. Š. Lipcer and A. S. Mandel'. "Nauka", Moscow, 1980. 400 pp. (Editors) 92-01 (92A05, 92A20, 93Exx)

Application of pattern recognition methods to control systems. IEEE Trans. Automat. Control 26 (1981), no. 3, 638-645. (Author's summary) 82m:93095 (68G10, 92A25)

riev, A. Compactness of the E'-topology of the lattice of subgroups of a topologic group. (Russian. Turkmen summary) Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk 1980, no. 6, 12-15. (K. A. Ross) 82h:22004 22D05

in, Rakesh K. (with Winkler, Robert L.) Performance-based incentive plans. nent Sci. 26 (1980), no. 11, 1131-1144. (Authors' summary) 82a:90009 90A05

Sarin, V. I. Analytic continuation with respect to a parameter and multiplication of generalized functions. (Russian) Ural. Gos. Univ. Mat. Zap. 11 (1978/79), no. 4, 120-128, 133. (Bl. P. Damyanov) 82m:46043 46F10 (32A35, 32G10)

(with Zavališčin, S. T.) A construction of multiplication of generalized functions, and its application to singular differential equations. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 31 Obobščen. Funkcii i Vektor. Mery (1979), 20-32, 91. (Authors' summary) 82i:46050 46F10 (34A25)

io, Leo (with Nakai, Mitsuru) Existence relations between harmonic and biharmo Green's functions. (Italian summary) Rend. Istit. Mat. Univ. Trieste 9 (1977), no. 1-2, 6-20 (1978). (M. Brelot) 82f:30047 30F15 (31B30)

O (1978). (M. Brelot) 82:30047 30F15 (31B30) (with Nakai, Mitsuru) Duffin's function and Hadamard's conjecture. Pacific J.

Math. 75 (1978), no. 1, 227-242. (O. I. Maisaia) 824:31002 31A30 (35140)
(with Chung, Lung Ock; Wang, Cecilia) Harmonic L^p functions on the Poincaré
N-ball. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 4, 499-512. (M. Nakai) 82k:31010 31C12 (31B05)

(with Chung, Lung Ock; Wang, Cecilia) Quasiharmonic L^p functions and biharmonic degeneracy. Töhoku Math. J. (2) 32 (1980), no. 3, 439-445. (M. Nakai) 82c:31006 31B30

ipov, N. Regularity of boundary points in relation to the Dirichlet problem for linear parabolic equations. (Russian) Research in mathematics and physics (Russian), pp. 107-114, 147, Taškent. Gos. Ped. Inst., Tashkent, 1979. (See 81i:00004)

ripov, S. R. (with Sattarov, F. H.) Some criteria for the existence and uniqueness of periodic motions. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 5, 11-13. (M. Švec) 82b:34056 34C25

(with Husanov, B.; Mamašev, S. H.) On some questions of the trajectories of an n-dimensional generally homogeneous differential system. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 3, 38-43, 91-92. (L. M. Kuks) 82k:34034

(34D40)

Sarkadi, K. The asymptotic distribution of certain goodness of fit test statistics. The First Pannonian Symposium on Mathematical Statistics (Bad Tatzmannsdorf, 1979), pp. 245–253, Lecture Notes in Statistic, 8, Springer, New York, 1981. (J. V. Deshpande)

82g 62068 62G10 rkar, Mira (with Mukherjee, Tarun Kumar) On a class of almost discrete spaces. Mat. Vesnik 3(16)(31) (1979), no. 4, 459–474. (Anne K. Steiner) 82j:54047 54D99
On fuzzy topological spaces. J. Math. Anal. Appl. 79 (1981), no. 2, 384–394. (Ying Ming Liu) 82h:54005 54A40 (03E72)

Sarkar, Tapan K. (with Weiner, Donald D.; Jain, Vijay K.) Some mathematical considerations in dealing with the inverse problem. IEEE Trans. Antennas and Propagation 29 (1981), no. 2, part 1, 373-379. (Authors' summary) \$2e:65071

(with Raychaudhuri, A.) New solutions of Yang-Mills equations with static external sources. Phys. Lett. B 102 (1981), no. 6, 421-425. (Authors' summary) 82h:81094 81E10 (81G05)

Sarkaria, K. S. On coloring manifolds. Illinois J. Math. 25 (1981), no. 3, 464-469. (Steve Fisk) 82k:05050 05C15 (57M15)

Sarker, S. K. (with Krumhansl, J. A.) Effect of solitons on the thermodynamic properties of a system with long-range interactions. Phys. Rev. B (3) 23 (1981), no. 5, 2374-2387.

(Authors' summary) 82c-82102 82.467 (82A25)

Sarkhel, D. N. (with De, A. K.) The proximally continuous integ

Soc. Ser. A 31 (1981), no. 1, 26-45. (Yôto Kubota) 82h:26014 integrals. J. Austral. Math. 26A39 (26A46)

Soc. ser. A 31 (1981), no. 1, 2b—45. (Yolo Kubota) 82h:26014 26A39 (26A46)

Kimok, V. I.; Kordzadze, A. A.; Kuzin, V. I.; Protasov, A. V.; Suhorukov, V. A.;

Cvetova, E. A.; Ščerbakov, A. V.) ★Marchatruveckule monent guppy, samme b oncane.

(Russian) [Mathematical models of circulation in the ocean] "Nauka" Sibirak. Oidel.,

Novosibirsk, 1980. 288 pp. (Jiří Nedoma) 82c:86002 86A05 (76V05)
Sarkisjan, I. S. (with Avetisjan, A. E.; Akopjan, S. A.; Arakeljan, N. U.; Nersisjan, A. B.;
Zaharjan, V. S.; Hačatrjan, I. O.) Mhitar Mkrtičevič Džrbašjan (on his sixtieth birthday). (Russian) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 13 (1978), no. 5-6,

360-375. (R. P. Boas, Jr.) 82::01044 01A70
Sarkisjan, S. C. Some analogues of Wiman-Valiron theorems. (Russian) Metric questions of theory of functions (Russian), pp. 115-125, 162, "Naukova Dumka", Kiev, 1980. (W. H. J. Fuchs) 82d:32003 32A15

Sarkisov, V. G. Birational automorphisms of conic bundles. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 4, 918-945, 974. (Werner Kleinert) 82g:14035 14J10

Sarko, V. V. Exact Morse functions on simply connected manifolds with non-simply connected boundary. (Russian) Questions of the theory of the approximation of functions (Russian), pp. 172-178, 202, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (From the text) 82i:57029 57R70

Minimum resolvents and Morse functions. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 11, 31-33. (V. Oproiu) 82m:57019b On equivalence of nice Morse functions. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 12, 18-20, 92. (V. Oproiu) 82m:57019a 57R70 Stable algebra and Morse theory. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 5, 112. 113. [Cont. of the cont. o

711-713. (D.-M. Popescu) 82g:18009 18G10 (57R70, 58E05) Šarkov, Ju. A. Some structural properties of completely 0-simple semigroups. (Russian) Special questions of algebra and topology (Russian), pp. 91-104, "Élm", Baku, 1980. (B.

20M10 rkovs'kii, O. M. Oscillations described by autonomous difference and

differential-difference equations. (Russian) Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. II (Prague, 1978), pp. 1073-1078, Academia, Prague, 1979. (See 82k:70002b) 34C15 (78A55, 94C05)

(with Maistrenko, Ju. L.; Romanenko, O. Ju.) The qualitative behavior of solutions of quasilinear differential-difference equations. (Russian) An investigation of differential and differential-difference equations (Russian), pp. 38-50, 187, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (V. G. Angelov) 82g:34103 34K15 (34K20)

Qualitative analysis of some types of differential-difference equations. Functional differential systems and related topics (Proc. First Internat. Conf., Blażejewko, 1979), pp. 334-340, Higher College Engrg., Zielona Góra, 1980. (Waldyr M. Oliva) 82h:58081 58F99 (34K15, 58A17)

(with Romanenko, O. Ju.) Qualitative investigation of a class of differential-difference equations. (Russian) Qualitative investigations of functional-differential equations (Russian), pp. 129–144, 186, "Naukova Dumka", Kiev, 1980. (P. Talpalaru) 821:34108 34K25 (58A17)

See also Investigation of differential and difference-differential equations, 82a:34069 and Qualitative investigations of functional differential equations, 82a:34070 Sárközy, A. (with Erdős, Paul) On differences and sums of integers. II. Bull. Soc. Math.

Grèce (N.S.) 18 (1977), no. 2, 204-223. (I. Ruzsa) 82m:10079 (with Erdős, Paul) On differences and sums of integers. L. J. Number Theory 10 (1978), no. 4, 430-450. (Authors' summary) 82m:10078 10L02

On a theorem of Erdős and Fuchs. Acta Arith. 37 (1980), 333-338. (B. Garrison)

(with Erdős, Paul) On the number of prime factors in integers. Acta Sci. Math. (Szeged) 42 (1980), no. 3-4, 237-246. (M. Ram Murty) 82e:10053 10H15 (10H30) (with Erdős, Paul; Szemerédi, Endre) On some extremal properties of sequ integers. II. Publ. Math. Debrecen 27 (1980), no. 1-2, 117-125. (Ernst Heppner)

82b:10077 10L99 Sárközy, F. (with Márkus, B.) Optimization of horizontal control points. Optimization of design and computation of control networks (Proc. Internat. Sympos., Sopron., 1977), pp. 163–173, Akad. Kiadó, Budapest, 1979. (Authors' summary) 821:86003 86A30

(90B05) Sarlet, Willy (with Cantrijn, Frans) Note on symmetries and invariants for second-order ordinary differential equations. Phys. Lett. A 77 (1980), no. 6, 404-406. (Authors' summary) 82f:70009 70H99 (49C05, 58F05, 58F35)

mary) 82i:70009 70H99 (49C05, 38F05), 38F35) (with Cantrijn, Frans) Higher-order Noether symmetries and constants of the notion. J. Phys. A 14 (1981), no. 2, 479-492. (Vadim Komkov) 82e:70018 (49C99, 58F05)

- Symmetries, first integrals and the inverse problem of Lagrangian mechanics. J. Phys. A 14 (1981), no. 9, 2227-2238. (Author's summary) 82k:70023 70H99
 Särtvik, B. (with Upton, G. J. G.) A loyalty-distance model for voting change. J. Roy. Statist. Soc. Ser. A 144 (1981), no. 2, 247-259. (Authors' summary) 82i:92038 92A20
- ma, C. R. (with Rettrup, S.) A program for the study of many-body correlations: matrix elements of the generators of U(n). J. Phys. A 13 (1980), no. 7, 2267-2274. (William H. Klink) 32a:17006 17B10 (22E70, 81C40)
 - Permutation group and interacting subsystems of particles. J. Phys. A 14 (1981), no. 3, 567-573. (Author's summary) 82a:20026 20C35 (81G50) akrishna Sarma, Y. See Ramakrishna Sarma, Y.
- mant-Durix, Marie-Claude Décomposition en produit de facteurs de fonctions méromorphes. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 2,
 - 127-130. (Author's summary) 82h:12017 12B40 (30D30)
- ndal, Carl-Erik (with Cassel, Claes-Magnus; Wretman, Jan H.) Prediction theory for finite populations when model-based and design-based principles are combined. With an application to a study of choice of transportation mode across the Öresund Straits. nd. J. Statist. 6 (1979), no. 3, 97-106. (Authors' summary) 82e:62016
 - Two model-based inference arguments in survey sampling. Austral. J. Statist. 22 (1980), no. 3, 341-348. (Kenneth R. W. Brewer) 821:62028 62D05

 - On s-inverse weighting versus best linear unbiased weighting in probability sampling.

 metrika 67 (1980), no. 3, 639-650. (Ashok Sahai) 82e-62020 62D05 A two-way classification of regression estimation strategies in probability sampling
- (French summary) Canad. J. Statist. 8 (1980), no. 2, 165–177 (1981). (V. P. Godambe) 82g-62021 62D05
- augmaear orgini, K. (with Bhise, V. M.) On a new class of integral operators. J. Indian Acad. Math. 2 (1980), no. 2, 59-62. (I. Fenyő) 82x45024 45P05
- no, R. S. (with Cooperstock, F. I.; Bayin, S. Ş.) The localisation of energy in general relativity. II. J. Phys. A 14 (1981), no. 1, 181-189. (P. A. Goodinson) 82c:83047
- al-Sarraj, A. W. See Al-Sarraj, A. W.
- Sarray, A. W. See Ar-Sarray, A. W. Mar-Sarroste, Denise artahanov, Ž. A. Pseudoperiodic solution of a system of ordinary differential equations. (Russian) Qualitative theory of differential equations (Russian), pp. 42–45, Kazah. Gos. Ped. Inst., Alma-Ata, 1979. (L. Pinter) 82m:34045 34C25
 A pseudoperiodic solution of a system of partial differential equations. (Russian) Poliferation of the property of the
- Differential equations a 1980. (See 82k:93003) ations and their applications, pp. 101-108, Kazah. Gos. Univ., Alma-Ata, 35B15
- ulanjan, A. G. (with Agajan, S. S.) Generalized &-codes and construction of Hadamard matrices. Problemy Peredači Informacii 16 (1980), no. 3, 50-59 (Russian); translated as Problems Inform. Transmission 16 (1980), no. 3, 203-211 (1981). (L. D. Baumert)
- - On the complexity of minimizing a linear form on a set of cyclic permutations. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 3, 533-535. (V. N. Agafonov) 68C25
- rate, D. V. (with McEliece, Robert J.) On sharing secrets and Reed-Solomon codes. Comm. ACM 24 (1981), no. 9, 583-584. (Authors' summary) 82h:94024 94B35
- Saryèer, A. V. Stability of mappings of Hilbert space and the equivalence of control systems. (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 1(9), 146-160, 176. (P. Brunovský) 82f:93036 93C10 (58C25)
 - Index of second variation of a control system. (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 3(11), 464-486, 496. (P. Brunovský) 82f:49020 49B10 (49E15, 58E99)
- Saryèev, V. A. (with Zlatoustov, V. A.; Sazonov, V. V.) Forced periodic oscillations of the simple pendulum. Prikl. Mat. Meh. 43 (1979), no. 2, 250-261 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 2, 270-281 (1980). (Hiroshi Onose) 82h:34048 34C15 (70E25)
 - (with Sazonov, V. V.) The effect of atmospheric resistance on single-axis
 - gravitational orientation of a satellite. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 152, 27 pp. (Authors' summary) 82h:70031 V. V.) Gravitational orientation of a rotating satellite. (Russian) (with Sazonov. Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 72, 28 pp. (Authors' summary) 70M05
- Saryev, M. A. A two-parameter boundary value problem. (Russian) Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk 1981, no. 1, 3-9. (K. S. Mamedov) 34B25
- Sarymsakov, A. T. The trajectories of some quadratic transformations of a two-dimensional simplex. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1981, no. 1, 34-37, 91. (Ju. I. Ljubič) 82j-51036 51N25 (S8F1)
 rymsakov, T. A. (with Abdurasulov, H.) A martingale analogue of the strong law of large
- mbers. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 4, 803-805. (Zdzisław 60F15 (60G42)
- (with Džuraev, T. D.; Kabulov, V. K.; Polubarinova-Kočina, P. Ja.; Salahitdinov, M. S.; Siraždinov, S. H.) Ivan Semēnovič Aržanyh. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 195-202. (Editors) 82b:01042
- evskii, A. M. See Birthday: Sarževskii, A. M., 82g:01082
- Sasabuchi, S. A test of a multivariate normal mean with composite hypotheses determined by linear inequalities. *Biometrika* 67 (1980), no. 2, 429-439. (Akio Kudô) 82a:62078
- gawa, Fumiyoshi (with Suzuki, Masuo; Kaneko, Kunihiko; Fang, Fu Kang) The variational theory and rate equation method with applications to relaxation near the instability point. Phys. A 105 (1981), no. 3, 631-641. (Authors' summary) 82d:82044
- (with Suzuki, Masuo; Kaneko, Kunihiko) Phase transition and slowing down in nonequilibrium stochastic processes. Progr. Theoret. Phys. 65 (1981), no. 3, 828-849. (Ronald F. Fox) 82k:60073 60G07 (82A35)

 agawa, Tetsushi On the exponential stability and instability of linear stochastic systems.
- Internat. J. Control 33 (1981), no. 2, 363-370. (A. A. Pervozvanskii) 82d:93071

- A note on the exponential asymptotic properties of linear stochastic systems. Internat. J. Control 33 (1981), no. 6, 1155-1163. (Author's summary) 82h:93084
- Sasaki, Hideharu The sangaku dedicated to the Oshio Hachiman-gü Shrine. (Japanese) Sûgakushi Kenkyû No. 83 (1979), 30-52. (S. Hitotumatu) 82j:01014 01A27
- Sasaki, Hiroki Some transfer theorems for Schur multipliers. J. Algebra 67 (1980), no. 1, 54–67. (Thomas Laffey) 82g:20079 20106
- saki, Isao (with Kishi, Genya) On intersection functions of shortest paths in a
- nondirected graph. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 92–95, IEEE, New York, 1979. (See 82e:94002) 90B35
- ki, Masafumi (with Yanagi, Shigeru) Maintainability analysis of a system with partial redundancy. (Japanese summary) J. Oper. Res. Soc. Japan 23 (1980), no. 2, 134-145. (Wayne Winston) 82b:60112 60K05 (60K25)
- Sasaki, Misao (with Sato, Katsuhiko; Kodama, Hideo; Maeda, Kei-ichi) Creation of wormholes by first order phase transition of a vacuum in the early universe. Progr. Theoret. Phys. 65 (1981), no. 4, 1443-1446. (Authors' summary) 82e:83044 83F05
- Sasaki, Ryu (with Drechsler, W.) Solutions of invariant field equations in the (4, 1) de Sitter space. (Italian and Russian summaries) *Nuovo Cimento A* (11) 46 (1978), *no.* 4, 527–568. (Authors' summary) **82c:8186** 81M05 (22E70, 53C05, 83C99)
 - Pseudopotentials for the general AKNS system. Phys. Lett. A 73 (1979), no. 2, 77–80. (Kurt Bernardo Wolf) 82a:35027 35G99 (35Q20, 58A17, 81F05)
 Canonical structure of Bäcklund transformations. Phys. Lett. A 78 (1980), no. 1,
 - 7-10. (Author's summary) 82i:35159 35Q20 (58A15, 58F07, 58H10, 70H15, 81C05)
 - Geometric approach to soliton equations. Proc. Roy. Soc. London Ser. A 373 (1980), no. 1754, 373-384. (Alexander A. Pankov) 82e:58051 58F07 (35O20, 58A10, 81C05) (with Bullough, Robin K.) Geometric theory of local and nonlocal conservation laws
- for the sine-Gordon equation. Proc. Roy. Soc. London Ser. A 376 (1981), no. 1766, 401-433. (G. L. Lamb, Jr.) 82j:58067 58F07 (35Q20, 58A20, 81C05)
- Sasaki, Ryuji Bounds on the degree of the equations defining Kummer varieties. J. Math. Soc. Japan 33 (1981), no. 2, 323-333. (Jayant M. Shah) 82i:14023 14J25 (14K05) Some remarks on the equations defining abelian varieties. Math. Z. 177 (1981), no. 1, 49-60. (Werner Kleinert) 82h:14028 14K25 (14K05)
- aki, Shigeo On paracontact Riemannian manifolds. TRU Math. 16 (1980), no. 2, 75-86. (V. Mihova-Nehmer) 82j:53070 53C15
- Sasaki, Takeshi (with Kobayashi, Shoshichi) Projective structures with trivial intrinsic pseudodistance. Minimal submanifolds and geodesics (Proc. Japan-United States Sem., Tokyo, 1977), pp. 93-99, North-Holland, Amsterdam, 1979. (J. T. Davidov) 82h:53029 53B10 (32H15)
- (with Takano, Kyoichi) On Appell's systems of hypergeometric differential equations. Recent developments in several complex variables (Proc. Conf., Princeton Univ., Princeton, N. J., 1979), pp. 345–356, Ann. of Math. Studies, 100, Princeton Univ. Press, Princeton, N. J., 1981. (D. A. Lutz) 82i35030 35C15 (14D05, 32C40, 35C05) ano, Kazubiro Topological entropy and periodic points of maps of the circle. J. Fac.
- Sci. Univ. Tokyo Sect. IA Math. 27 (1980), no. 3, 521-534. (Ethan M. Coven) 82j:58098
- 58F20 (28D20, 54C70) Šašić, M. Application of quaternion functions for solving approximate fluid flow equations. Z. Angew. Math. Mech. 60 (1980), no. 7, T216-T218. (L. Debnath) 82j:76027 76B99 (30G35)
- Saškin, A. P. Construction of a monotone scheme of the second order of approximation. (Russian) Numerical analysis (Russian), pp. 111-118, 137, Akad. Nauk SSSR Sibirsk Otdel., Inst. Teoret. i Prikl. Meh., Novosibirsk, 1978. (J. F. Heyda) 82j:76005 76A6 (65P05, 76N99)
- Šaškin, Ju. A. The moment problem in spaces of vector-valued continuous functions. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 31 Obobščen. Funkcii i Vektor. Mery (1979), 61-67, 92. (Ju. M. Berezanskii) 82f:44005
- Šaškov, M. Ju. (with Koršija, T. K.; Tiškin, V. F.; Favorskii, A. P.) Variational-flux difference schemes for the calculation of magnetic field diffusion. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1388-1391. (Ll. G. Chambers) 82a:78005 78A25
- Sastry, D. (with Gauvrit, M.) Optimal simultaneous maximum a posteriori estimation of states, noise statistics and parameters. I. Algorithm. Internat. J. Systems Sci. 11 (1980), no. 11, 1351-1381. (Authors' summary) 82h:49014a 49A60 (93E10)
- (with Gauvrit, M.) Optimal simultaneous maximum a posteriori estimation of states noise statistics and parameters. II. Numerical performance. Internat. J. Systems Sci. 11 (1980), no. 11, 1383-1395. (Authors' summary) 82h:49014b
- (with Chemouil, P.; Katebi, M. R.; Singh, Madan G.) Maximum a posteriori parameter estimation in large-scale systems. Automatica—J. IFAC 17 (1981), no. 6, 845-851. (Authors' summary) 82m:93082 93E10
- Sastry, D. V. S. (with Raju, B. Syam Prasad) Some nonisomorphic graphs. Indian J. Pure Appl. Math. 12 (1981), no. 2, 191-192. (J. Sedláček) 82e:05115
- Sastry, K. P. R. (with Rama Bala, D. V.) Additive set functions with values in a complete lattice ordered group. Math. Student 45 (1977), no. 4, 7-12 (1979). (Editors) 82a:06030 06F15 (28B10)
- Sastry, M. P. (with Narasimhulu, Y. C.) Problem of optimization in theory of dams. Proceedings of the Conference on Probability, Stochastic Processes and Statistical Mechanics (Mysore, 1979), pp. 12-21, Matscience Rep., 97, Inst. Math. Sci., Madras, 1979. (Authors' summary) 82a:60146 60K30 asimha Sastry, N. S. See Narasimha Sastry, N. S.
- Sastry, S. R. N. Shear flow past a flat plate in hydromagnetics. Internat. J. Math. Math. Sci. 3 (1980), no. 3, 521-534. (J. A. Bennett) 82d:76090 76W05
 Sastry, Shankar (with Varaiya, Pravin) Coherency for interconnected power systems.
- IEEE Trans. Automat. Control 26 (1981), no. 1, 218-226. (Authors' summary) 82b:94036 94(0)5 (93(15)
- Sastry, Sundaram M. A. (with Srinivasan, Sundaraian: Viswanath, K.) Orthogonality in Banach space and approximation theory. J. Madurai Kamaraj Univ. 8 (1979), no. 2, 93-97. (Geetha S. Rao) 82a:41035 41A65 (46B20)
- Sastry, V. V. S. S. (with Chakrabarti, Aloknath) Diffraction of a cylindrical pulse by a metallic half plane. (French summary) Canad. J. Phys. 58 (1980), no. 4, 433-442. (V. H. Weston) 82b:78015 78A45

(with Chakrabarti, Aloknath) A note on diffraction by a strip under mixed boundary conditions. J. Indian Inst. Sci. 62 (1980), no. 2, 25-33. (Authors' summary) 82b:78016 78A45

Satake, Ichirò *Algebraic structures of symmetric domains. Publications of the Mathematical Society of Japan, 14. Kanô Memorial Lectures, 4. Iwanami Shoten, Tokyo; Princeton University Press, Princeton, N.J., 1980. xvi+321 pp. (S. Murakami) 82i:32003 32-02 (17C35, 32Mxx, 53C35)

ov, V. E. (with Sternin, B. Ju.) Analytic Lagrangian manifolds and Feynman integrals. (Russian) Uspehi Mat. Nauk 34 (1979), no. 6(210), 194-198. (Rémi Vaillancourt)

58G15

1982

(with Sternin, B. Ju.) Asymptotic behavior in the large of the characteristic Cauchy problem on a complex analytic manifold. (Russian) Partial differential equations (Proc. Conf., Nocosibirsk, 1978) (Russian), pp. 188–190, 254, "Nauka" Sibirsk. Otdel., Nocosibirsk, 1980. (From the text) 82e:58093 58G17 (35B40)

(with Sternin, B. Ju.) A method for calculating diffraction by a convex body.

(Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 191–193, 254, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (J. S. Joel) 82b:58091 58G20 (58G15, 78A45)

(with Sternin, B. Ju.) A method of calculating diffraction by a convex body. (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 2, 347-349. (J. S. Joel) 82k:78010 78A45 (58G15)

(with Sternin, B. Ju.) Legendre uniformization of multivalued analytic functions. (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 2(10), 263-284, 350. (Stephan Rempel) 58G15 (32A25, 35S99)

Global asymptotic expansions in the characteristic Cauchy problem for

nplex-valued analytic functions. (Russian) Uspehi Mat. Nauk 35 (1980), no. 4(214), -182. (Rémi Vaillancourt) 82b:35024 35C20 (81E05) 181-182. (Rémi Vaillancourt) 82b:35024

(with Nazaïkinskiĭ, V. E.; Ošmjan, V. G.; Sternin, B. Ju.) Fourier integral operators and the canonical operator. (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 81-140. (Alaa Weinstein) 82h:58049 58G15 (35S05, 47G05, 81C15)

Satanin, A. M. Metastable states of a nonlinear vector field with values on a sphere. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 4, 45-48. (Q. K. Ghori) 824:58030 58F05 (57R25, 70G30)

Šatašvili, A. D. (with Sohadze, G. A.) Nonlinear transformations of Gaussian measures in Hilbert space. (Russian) Theory of random processes, No. 7 (Russian), pp. 109-114, 132, "Naukova Dumka", Kiev, 1979. (V. V. Buldigin) 82i:60067 60G15 (60B11)

Sathaye, Avinash (with Eakin, Paul) R-automorphisms of finite order in R[[X]]. J. Algebra 67 (1980), no. 1, 110-128. (L. J. Ratliff, Jr.) 82j:13023 13F25 (13B99)

A further note on estimation of variance in exponential density. Sankhyā Ser. B 41 (1979), no. 1-2, 122-123. (Author's summary) 82f:62059 62F10

(with Shah, S. P.) On estimating P(X>Y) for the exponential distribution. Comm. Statist. A—Theory Methods 10 (1981), no. 1, 39-47. (Authors' summary) 821:62060

(with Lingras, S. R.) Bounds for the confidence coefficients of outer and inner confidence intervals for quantile intervals. J. Amer. Statist. Assoc. 76 (1981), no. 374, 473-475. (Smiley W. Cheng) 82i:62076 62G30

(with Joshi, Suneeta) A k-sample slippage test for location parameter. J. Statist. Plann. Inference 5 (1981), no. 1, 93-98. (Chien-Pai Han) 82k:62087 62G10

ma, V. (with Kannappan, Pl.) On the generalized "extra" functional equation. Indian J. Math. 20 (1978), no. 1, 15-23. (From the text) 82a:39005 39B50 (20N05)

Satimov, N. (with Rihsiev, B. B.) On a complete study of L. S. Pontrjagin's generalized control example. (Russian) Differencial'nye Uravnenija 15 (1979), no. 3, 436-443, 572. (Authors' summary) 82i:90131 90D26

(with Azamov, A.) Problems of pursuit and evasion in differential games with an arbitrary number of players. (Russian) Dokl. Akad. Nauk UzSSR 1979, no. 10, 6-7. (Editors) 82e:90129 90D26

Two methods of pursuit in linear discrete games. (Russian) Dokl. Akad. Nauk UzSSR 1979, no. 11, 3-4. (A. I. Subbotin) 82b:90141 90D26

(with Nikol'skii, M. S.) A problem of evasion from certain pursuers. (Russian) Boundary value problems for equations of mathematical physics (Russian 170, "Fan", Tashkent, 1980. (Authors' summary) 82m:90183 90D26 ssian), pp. 133-146,

Šatnii, A. N. (with Klepikov, N. P.) On the covariant separation of the center-of-mass variables of a system of relativistic particles. Jadernaja Fiz. 31 (1980), no. 3, 841-844 (Russian); translated as Soviet J. Nuclear Phys. 31 (1980), no. 3, 434-435 (1981). (Authors' summary) 82c:81133 81F20 (22E70)

o, Enji A note on some singular measures. *Bull. Yamagata li no.* 1, 19-24. (William Moran) **82c:43001** 43A05 (42A85)

Satō, Fumihiro Fonctions zêta associées à des espaces vectoriels préhomogènes. Analytic number theory (Proc. Sympos., Tokyo, 1980) (French), pp. 67-81, Monograph. Sci. Maison Franco-Japon., 3, Maison Franco-Japon., Tokyo, 1981. (See 82h:10004) 12A70

Zeta functions in several variables associated with prehomogeneous vector spaces. I. Functional equations. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 1, 74-79. (T. Ono) 82m:12009a 12A70

Zeta functions in several variables associated with prehomogeneous vector spaces. II. convergence criterion. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 2, 126-127. (T. Ono) 82m:12009b 12A70

Zeta functions in several variables associated with prehomogeneous vector spaces. III. Eisenstein series for indefinite quadratic forms. Proc. Japan Acad. Ser. A Math. Sci.

57 (1981), no. 3, 191-193. (T. Ono) 82m:12009c 12A70

Sato, Hajime La classe de Hardy H¹ de fonctions bi-harmoniques sur R**+1×R**+1; sa caractérisation par les transformations de Riesz. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A91-A94. (Author's summary) 82a:31008 31B30
Sato, Hideo Semigroup ring construction of Frobenius extensions. J. Reine Angew. Math.

324 (1981), 211-220. (Hubert Grassmann) 82h:20084 20M25 (16A36)

Sato, Hiroshi Gaussian measurable dual and Bochner's theorem. Ann. Probab. 9 (1981), no. 4, 656–662. (R. M. Dudley) 82k:60012 60B11 (28C20, 46E20)

Sato, Humitaka Gravitational field of spinning mass: Kerr metric and Tomimatsu-Sato metric. Physics and astrophysics of neutron stars and black holes (Proc. Internat. School Phys. "Enrico Fermi", Course LXV, Varenna, 1975), pp. 624-634, North-Holland, Amsterdam, 1978. (From the summary) 82h:83018 83C15 (83C10)

Gravitational collapse and exact solutions of Einstein equations. Relativity, qu and cosmology in the development of the scientific thought of Albert Einstein, Vol. I, II, pp. 659-679, Johnson, New York, 1979. (See 82b:83002) 83F05

(with Oohara, Ken-ichi) Structure of superposed two Kerr metrics. Progr. Theoret. Phys. 65 (1981), no. 6, 1891–1900. (Colin B. G. McIntosh) 82m:83009 83C15

Sato, Isuke On invariant hypersurfaces of hyperbolic spaces. Bull. Yamagata Univ. Natur. Sci. 10 (1980), no. 1, 15-18. (S. Takizawa) 82b:53074 53C40

iko (with Sasaki, Misao; Kodama, Hideo; Maeda, Kei-ichi) Creation of wormholes by first order phase transition of a vacuum in the early universe. Pn Theoret. Phys. 65 (1981), no. 4, 1443-1446. (Authors' summary) 82e:83044 833

Sato, Kazuo The "natural" index and utility functions. Statist. Hefte (N.F.) 21 (1980),

no. 2, 117-126. (Author's introduction) 82m:90061 90A99 (90A10)
Sato, Ken-iti Convergence of a class of Markov chains to multidimensional degenerate diffusion processes. Proceedings of the International Symposium on Stochastic Differenti Equations (Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1976), pp. 367-383, Wiley, New York, 1978. (H. A. Guess) 82c:60125 60J10 (60J60, 60J80, 92A10)

A remark concerning the prime decomposition in Q(ξ, \sqrt{n}). J. College Engrg. Nihon Univ. Ser. B 22 (1981), 9–15. (Yoshiomi Furuta) 82f:12002 12A35 (12A20, 12A65)

Sato, Kimio (with Saishu, Kazuo; Onodera, Rikio) Comments on: "Computer generation of trees and co-trees in a cascade of multiterminal networks" [IEEE Trans. Circuit Theory 16 (1969), 518-526; MR 40 #7023] by W. K. Chen. IEEE Trans. Circuits and Systems 28 (1981), no. 7, 747-748. (Authors' summary) 821:68072 68E10 (05C05)
Sato, Masahisa Weakly codivisible modules and strongly n-projective modules. Proceedii

of the 13th Symposium on Ring Theory (Okayama Univ., Okayama, 1980), pp. 116-125, Okayama Univ., Okayama, 1981. (M. Teply) 82b:16029 16A63 (16A53)
Sato, Mikio (with Miwa, Tetsuji; Jimbo, Michio) Holonomic quantum fields. I. Publ. Res.

Inst. Math. Sci. 14 (1978), no. 1, 223-267. (Authors' review (Zbl 383:35066)) 82k:81030 81099

See also Andronikof, Emmanuel, 82i:58062

Sato, Nobuyuki Alexander modules of sublinks and an invariant of classical link

concordance. Illinois J. Math. 25 (1981), no. 3, 508-519. (From the introduction) 82m:57002 57M25

Free coverings and modules of boundary links. Trans. Amer. Math. Soc. 264 (1981),

no. 2, 499-505. (J. P. Levine) 82j:57020 57Q45
Algebraic invariants of boundary links. Trans. Amer. Math. Soc. 265 (1981), no. 2, 359-374. (J. P. Levine) 82j:57021 57Q45

Sato, Ryotaro Operator averages for subsequences. Math. J. Okayama Univ. 22 (1980), no. 2, 161-168. (James W. England) 82a:47008 47A35 (28D05)
An extrapolation theorem for contractions with fixed points. Canad. Math. Bull. 24

(1981), no. 2, 199-203. (Yves Derriennic) 82m:47006

Ergodic theorems for d-parameter semigroups of Dunford-Schwartz operators Math. J. Okayama Univ. 23 (1981), no. 1, 41-57. (R. J. Nagel) 82m:47007 47A3

 Individual ergodic theorems for pseudoresolvents.
 Math. J. Okayama Univ. 23

 (1981), no. 1, 59-67. (R. J. Nagel)
 82m:47008
 47A35 (47D05)

 On a mean ergodic theorem.
 Proc. Amer. Math. Soc. 83 (1981), no. 3, 563-564.

(Michael Lin) 82h:47009 47A35

ato. Shawich On the Nebenhülle of bounded domains. Kum moto J. Sci. (Math.) 14 (1980/81), no. 1, 64-75. (Marcus Wright) 82f:32038a 32D15

Pseudodistance defined by a set of holomorphic functions and n-convex domains. oto J. Sci. (Math.) 14 (1980/81), no. 1, 76-80. (Marcus Wright) 82f:32038b

Sato, Shizuko On holomorphically subprojective complex manifolds. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 1, 12-18. (G. R. Jensen) 82h:53032 53B35

nichi A note on a Fourier multiplier of two variables. Tohoku Math. J. (2) 33 (1981), no. 1, 139-143. (Colin C. Graham) 82e:42016 42B15

Sato, Takuji The spectrum of the Laplacian for some 6-dimensional K-spaces. Kodai Math. J. 4 (1981), no. 1, 129-136. (Domenico Perrone) 82g:58092 58G25 (53C35)

Sato, Tohru (with Iyanaga, Shôkichi; Itô, Shuntarô) *Girisha no sūgaku. (Japanese [Greek mathematics] Sugaku no Rekishi [History of Mathematics], I. Kyoritsu Shuppan Co., Ltd., Tokyo, 1979. v+279 pp. (S. Hitotumatu) 82h:01008 01A20 Archimedes' On the measurement of a circle, Proposition 1: an attempt at reconstruction. Japan. Stud. Hist. Sci. No. 18 (1979), 83-99. (J. L. Berggren) 82h:01009

Sato, Tsuneo Remarks on the deficiencies of algebroid functions of finite order. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 2, 101-105. (A. Edrei) 82e:30034

01A20

Sato, Yoshiharu (with Ingarden, Roman Stanisław; Sugawa, Kazuaki; Kawaguchi, Michiaki) Information thermodynamics and differential geometry. Tensor (N.S.) 33 (1979), no. 3, 347-353. (M. E. Mayer) 82g:82024 82A30 (53B50)

(1979), no. 3, 341–353. (M. E. Mayer) 8428-8024 82A-30 (33B30) (with Yamanoi, Takahiro; Kawaguchi, Michiaki) A bilinear model of factor analysis. Tensor (N.S.) 35 (1981), no. 1, 58–62. (Minoru Siotani) 82g:62082

Sato, Yoshiyuki On infinite-dimensional unitary representations of certain discrete groups J. Math. Soc. Japan 33 (1981), no. 2, 191-202. (L. Corwin) 82i:22010 22D30 (60B99.

ofuka, Nobuyuki (with Iwatani, Mitsuo) A four-step iterative finite-differen for hyperbolic systems in conservation-law form. Mem. Kyoto Tech. Univ. Sci. Tech. 27 (1978), 15-24. (Alexander Doktor) 82b:65159 65P05 (35L65)

(with Abe, Kanji) Recurrence of initial state of nonlinear ion waves. Phys. Fluids 24 (1981), no. 6, 1045-1048. (Authors' summary) 82i:76013 76B25 (58F13, 76F99, 82A45)

Sator, F. G. Small disturbance swirl flow in turbomachinery bladings. Recent developin theoretical and experimental fluid mechanics, pp. 557-567, Springer, Berlin, 1979. (See 82c:76004) 76U05

atov, A. K. (with Gabov, S. A.; Svešnikov, A. G.) On the theory of steady waves on surface of a spherical layer of a stratified liquid. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 2, 343-346. (A. S. Alekseev) 821:76007 76B15 (35C20, 86A99) Satra, M. (with Valenta, Ja.; Matoušek, I.; Plundrová, I.) Identification of the

Names, Junkichi (with Ablowitz, Mark J.; Kodama, Yuji) On an internal wave equation describing a stratified fluid with finite depth. Phys. Lett. A 73 (1979), no. 4, 283–286. (Authors' summary) 82t:35175 35Q20 (76V05) (with Hirota, Ryogo) Soliton solutions of a coupled Korteweg-de Vries equation. Phys. Lett. A 85 (1981), no. 8-9, 407–408. (Authors' summary) 82j:35128 35Q20

(76B25)

(with Kodama, Yuji; Ablowitz, Mark J.) Nonlinear intermediate long-wave

equation: analysis and method of solution. Phys. Rev. Lett. 46 (1981), no. 11, 687-690.

(G. L. Lamb, Jr.) B2c.35971

strow, F. H. (with Saripov, S. R.) Some criteria for the existence and uniqueness of periodic motions. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 5, 11-13. (M. Švec) 34C25

arov. M. A. (with Juldašev. I.) Nonlinear models of one-dimensional vertical water filtration in soils. (Russian. Tajiki summary) Dokl. Akad. Nauk Tadžik. SSR 23 (1980), no. 11, 629–633. 82k-76071 76S05

no. 11, 023-033. Total T ry) 82e:76006 76A05 (92A09)

inger, D. H. Group representation theory, bifurcation theory and pattern formation. J. Funct. Anal. 28 (1978), no. 1, 58-101. (Editors) 82f:58034 58E07 (58C27, 58C40) Funct. Anal. 28 (1978), no. 1, 58-101. (Editors) 821:58034 58ED7 (58C27, 58C40)

**Les symétries des équations et leurs applications dans la mécanique et la physique. (French) [The symmetries of equations and their applications in mechanics and physics]

Publications Mathématiques d'Orsay 80 [Mathématical Publications of Orsay 80], 8. Université de Paris-Sud, Département de Mathématique, Orsay, 1980. ii+101 pp. (J. Chrastina) 821:58001 58-02 (22E99, 35A30, 35Q20, 58G35, 70-02, 76-02)

Her, Jürgen (with Commentz-Walter, Beate) Size-depth tradeoff in nonmonotone

dae. Acta Inform. 14 (1980), no. 3, 257-269. (A. Massarotti) 82g:94026 94C10 (03D15, 03G05, 68C25)

ldyev, D. Local limit theorems for the stopping time of a Brownian motion. (Rus Limit theorems, random processes and their applications (Russian), pp. 175-183, 235, "Fan", Tanhkent, 1979. (A. A. Novikov) 82d:60681 60G40 (60F05, 60J65) styamurthi, K. R. Density, derived from measured distances, for studying the spatial

patterns. Sankhyā Ser. B 40 (1978/79), no. 3-4, 197-203. (Author's summary) 82e:62168

yanarayana, K. (with Kuppuswamy Rao, K.) A note on a paper of M. L. Narayana Rao and E. H. Davis: "Construction of translation planes from t-spread sets" [J. Combin. Theory Ser. A 14 (1973), 201-208; MR 47 #3202]. J. Combin. Inform. System Sci. 5 (1980), no. 2, 104-106. (F. Wilke) 82c:05032 05B25 (51A40)

tyanarayana, M. Finitely convergent and concentric semigroups. Proc. Amer. Math. Soc. 81 (1981), no. 1, 9-13. (J. L. Chrislock) 82d:20058 20M10

(with Kaya, Arif) Semirings satisfying properties of distributive type. Proc. Amer. Math. Soc. 82 (1981), no. 3, 341-346. (J. R. Mosher) 82h:16030 16A78 (06D05) On the additive semigroup structure of semirings. Semigroup Forum 23 (1981), no. 1, 7–14. (S. Sribala) 82k:20084 20M25 (16A78) telephysyula V. A note on Riemann-Stielies integrals. Amer. Math.

Monthly 87 (1980), no. 6, 477-478. (E. R. Love) 82b:26012 26A42 (28A25) (with Weiss, Max L.) Restricted principal values of bounded analytic and har functions. J. Math. Soc. Japan 33 (1981), no. 1, 105-123. (V. I. Gavrilov) 82g:30057

yanarayana Murthy, P. V. von Neumann regularity in alternative algebras. Math. Ed. (Siwan) 14 (1980), no. 4, 61-65. (C. Tsai) 82j:17024 17D05 (16A30) ucier, G. (with Bellon, C.) Étude de la contamination par des erreurs externes dans un

système distribué. (English summary) RAIRO Automat. 14 (1980), no. 4, 375–392. (Authors' summary) 82e:68104 68K05

(Authors' summary) 82e-85194 68KU3
ere, Ann (with Taylor, Peter D.) The selective advantage of sex-ratio homeostasis. Amer.
Natur. 116 (1980), no. 2, 305–310. (Ivar Heuch) 82e-92032 92A10

ner, Norbert (with Milner, E. C.) Remarks on the cofinality of a partially ordered set, and a generalization of König's lemma. Discrete Math. 35 (1981), 165-171. (J. R. Griggs) 82g:04004 04A20 (05C35, 05C38, 06A10)

(with Milner, E. C.) On chains and antichains in well-founded partially ordered sets. J. London Math. Soc. (2) 24 (1981), no. 1, 15-33. (Diana Schmidt) 82j:04002 (04A05, 04A10, 06A10)

m, G. (with Turschner, H.) Variational principle for derivation of macroscopic uations. J. Statist. Phys. 25 (1981), no. 3, 459-473. (Authors' summary) 82j:82025

lis. L. A general lemma on the density of a distribution taking large deviations into account. (Russian. Lithuanian and English summaries) Litowsk. Mat. Sb. 20 (1980), no. 4, 165–185, 211. (S. A. Book) 824:60051

rs. Anthony (with Ho. Thomas) A catastrophe model of bank failure. J. Finance 35 (1980), no. 5, 1189-1207. (Authors' summary) 82m:90022 90A09 (58C28)

nders, B. David (with Berman, Abraham) Matrices with zero line sums and maximal rank. Linear Algebra Appl. 40 (1981), 229-235. (George D. Poole) 82i:15029 15A99 (05C50, 15A21)

ders, David S. (with Peterson, Eric L.) The circadian eclosion rhythm in Sarcophaga argyrostoma: a limit cycle representation of the pacemaker. J. Theoret. Biol. 86 (1980), no. 2, 265-277. (Authors' summary) 82b:92018 92A09

rs, I. W. An approximate maximum likelihood estimator for chain binomial models. Austral. J. Statist. 22 (1980), no. 3, 307–316. (Author's summary) 82f:62061 62F10
 Epidemics in competition. J. Math. Biol. 11 (1981), no. 3, 311–318. (K. Dietz)

rs, Michael A. (with Gill, Philip E.; Murray, Walter; Wright, Margaret H.) Methods for large-scale nonlinear optimization. Electric power problems: the mathematical challenge (Proc. Conf., Seattle, Wash., 1980), pp. 352–377, SIAM, Philadelphia, Pa., 1980. (Authors' summary) 82c-90079 90C30 (90-02, 90C06) (with Gill, Philip E.; Murray, Walter; Wright, Margaret H.) Aspects of mathematical modelling related to optimization. Appl. Math. Modelling 5 (1981), no. 2,

71-83. (Authors' summary) 82e:90116 90C99 (00A69)
mders, Roy (with Hill, David L.; Laud, Purushottam W.) Maximum likelihood estimation for mixtures. (French summary) Canad. J. Statist. 8 (1980), no. 1, 87-93. (Takeru Suzuki) 82b:62030 62F10

(with Kryscio, Richard J.; Funk, Gerald M.) Normal approximations for binary ns. J. Appl. Probab. 17 (1980), no. 3, 674-685. (David Pickard) 82g:60136 60K35 (60F05, 60G60, 62F05)

(with Kryscio, Richard J.; Funk, Gerald M.) Poisson limits for a hard-core clustering model. Stochastic Process. Appl. 12 (1982), no. 1, 97-106. (Brian D. Ripley) 82k:60215 60K35 (60G55)

pupe, Dietmar (with Jürgens, Hartmut; Peitgen, Heinz-Otto) Topological perturbations in the numerical study of nonlinear eigenvalue and bifurcation problems. Analysis and computation of fixed points (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1979), pp. 139-181, Publ. Math. Res. Center Univ. Wisconsin, 43, Academic Press, New York, 1980. (Kurtt Georg) 82e-65963 65H15 (38C40, 58E07, 90C30) (with Peitgen, Heinz-Otto; Schmitt, Klaus) Nonlinear elliptic boundary value

problems versus their finite difference approximations: numerically irrelevant solutions J. Reine Angew. Math. 322 (1981), 74–117. (W. F. Ames) 82h:65076 65N20 (34B15) 65N20 (34B15. 58E07, 90C30)

ut, Jean-Claude Quelques généralisations de l'équation de Korteweg-de Vries. II. J. Differential Equations 33 (1979), no. 3, 320-335. (Author's review (Zbl 435:35067)) tial Equations 35 (... 35Q20 (76B99) 82m-35134

Sur quelques généralisations de l'équation de Korteweg-de Vries. J. Math. Pures Appl. (9) 58 (1979), no. 1, 21-61. (Amy Cohen) 82m:35133 35Q20 (76B99)

Remarks on a nonlinear equation arising in population genetics. Bifurcation and nonlinear eigenvalue problems (Proc., Session, Univ. Paris XIII, Villetaneuse, 1978), pp. 265-282, Lecture Notes in Math., 782, Springer, Berlin, 1980. (J. Smoller) 82a:35041

(with Scheurer, Bruno) Un théorème de prolongement unique pour des opérateurs elliptiques dont les coefficients ne sont pas localement bornés. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 13, A595-A598. (R. C. MacCamy) 82c:35020 35115

(with Temam, Roger) Generic properties of Navier-Stokes equations: genericity with respect to the boundary values. Indiana Univ. Math. J. 29 (1980), no. 3, 427-446. (A. A. Arsen'ev) 82g:35096 35Q10 (58D30, 76D05)

ster, E. G. Improvement on the WKB method using an algebraic formalism. J. Phys. A 12 (1979), no. 8, 1155-1164. (Author's summary) 82m:34059 34E20

Sava, V. A. On the existence of solutions of the micropolar fluid equations. Rev. Rou Math. Pures Appl. 25 (1980), no. 7, 1111-1123. (M. N. L. Narasimhan) 82c:76008 76A05 (35O99, 76A10)

Savage, Carla Maximum matchings and trees. Inform. Process. Lett. 10 (1980), no. 4-5, 202-205. (Author's introduction) 82a:68129 68E10 (68C25)
 Savage, I. Richard (with Berk, Robert H.) Dirichlet processes produce discrete measures: an

elementary proof. Contributions to statistics, pp. 25-31, Reidel, Dordrecht, 1979. (G. Simboan) 82e:60069 60G30 age, J. R. (with Künzle, H. P.) Equilibrium configurations of fluids in general relativity.

Differential geometrical methods in mathematical physics (Proc. Conf.,

Differential geometrical methods in maintenanceal physics (Proc. Conf., Aix-en-Procence/Salamanca, 1979), pp. 211-220, Lecture Notes in Math., 836, Springer, Berlin, 1980. (From the introduction) 82h:83044 83C55 (58D30)

(with Künzle, H. P.) A global analysis approach to the general relativistic fluid ball problem. Gen. Relativity Gravitation 12 (1980), no. 2, 155-174. (A. H. Taub) 82g:83016

83C55 (58D25) (with Künzle, H. P.) On the uniqueness of the equilibrium configurations of slowly rotating relativistic fluids. J. Math. Phys. 21 (1980), no. 11, 2654-2661. (Authors'

summary) 82b:83044 83C55 (58D30) rage, Leonard Jimmie See Lindley, Dennis V., 82e:01096 and Writings of Leona Jimmie Savage—a memorial selection, 82k:01044

Savage, Thomas R. Generalized inverses in regular rings. Pacific J. Math. 87 (1980), no. 2, 455-466. (J. Luh) 82b:16010 16A30 (16A48)

Savageau, Michael A. Growth equations: a general equation and a survey of special cases. Math. Biosci. 48 (1980), no. 3-4, 267-278. (Author's summary) 82g-92021a 92A0 (92 - 02)

Erratum: "Growth equations: a general equation and a survey of special cases".

Math. Biosci. 50 (1980), no. 3-4, 297. (Editors) 82g:92021b 92A09 (92-02)

Accuracy of proofreading with zero energy cost. J. Theoret. Biol. 93 (1981), no. 1, 179-195. (Author's summary) 82m:92052 92A10 (49D29, 92A09)

Saveenko, Ju. B. On the solvability of the Dirichlet problem for a quasilinear elliptic equation. (Russian. Lithuanian and English summaries) Differencial'nye Uravnenija i Primenen. —Trudy Sem. Processy Optimal. Upravlenija I Sekcija No. 27 (1980), 83–98, 145. (Author's summary) 82i:35067 35165 vedoff, M. P. (with Richardson, M. B.; Van Horn, H. M.) A code for general relativistic

stellar evolution. Astrophys. J. Suppl. 39 (1979), no. 1, 29-48. (Authors' summary) 82k-85004 85A15 (85-04)

Savel'ev, I. V. Topology of the complex-analytic normalization. (Russian) Mat. Sb. (N.S.) 112(154) (1980), no. 2(6), 283-294. (C. Bânicā) 82j:32024 32C20 (57M10)

See also Homotopic theory of differential forms, 82k:55001

Savel'ev, Ju. V. Study of systems of differential equations near the boundaries of the

stability region. Prikl. Mat. Meh. 42 (1978), no. 2, 359-361 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 2, 374-376 (1979). (V. G. Zadorožnii) 82i:34057 34D20

Savel'ev, L. Ja. Extension of outer measures. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 4, 830-833. (T. S. Fofanova) 82j:28006 28B15

Savel'ev, M. V. (with Leznov, A. N.) Representation of zero curvature for the system of nonlinear parial differential equations $x_{a,i\bar{z}} = \exp(kx)_a$ and its integrability. Lett. Math. Phys. 3 (1979), no. 6, 489–494. (Authors' summary) 82k:58045 58F07 (35G20,

(with Leznov, A. N.; Smirnov, V. G.) Explicit solutions to two-dimensionalized Volterra equations. Lett. Math. Phys. 4 (1980), no. 6, 445–449. (A. Degasperis) 82g:35108 35Q20 (45D05, 58F07)

(with Leznov, A. N.; Leites, D. A.) Superalgebra b(0,1) and explicit integration of

the supersymmetric Liouville equation. Phys. Lett. B 96 (1980), no. 1-2, 97-99. (Jiři Niederle) 82c:81149 81G25 (17A70, 35Q20)

Savenko, P. A. (with Voitović, N. N.) Synthesis of antennas from a specified amplitude pattern and related problems in quasioptics (review). Radiotehn. i Elektron. 24 (1979), no. 8, 1485-1500 (Russian); translated as Radio Engrg. Electron. Phys. 24 (1979), no. 8, 1-13 (1980). (Authors' summary) 82h:78027 78A50

Continuity of random fields on a compact subset of a Banach space. (Russian) Theory of random processes, No. 7 (Russian), pp. 103-105, 132, "Naukova Dumka", Kiev, 1979. (R. Morkvenas) 82d:60100 60G60 avenkov, A. I. (with Jakovlev, V. P.) Matrix algorithm of control of spectral characteristics

of vector-valued random processes with a degenerate matrix of frequency characteristic of the object. (Russian) Complex control systems (Russian), pp. 86-94, 100, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (See 82e:93002) 93E20

Some questions of stabilization and placement of poles of control systems described by difference matrix equations. (Russian). Discrete control systems (Russian), pp. 40-49, 71, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (Author's summary) 82j:93031

93D15 (93B55)

venkov, V. A. (with Prusov, I. A.) Integral equation of a contact problem of elasticity theory for an isotropic band. (Russian) Vestnik Beloruss. Gas. Univ. Ser. I 1981, no. 2, 57-59, 78. (Authors' summary) 82k:73076 73T05 (45L05)

rgulidze, E. T. A diffeomorphism of a locally convex space. (Russian) Uspehi Mat. Nauk 34 (1979), no. 5(209), 231–232. (M. Craioveanu) 824-58007 58B05 (58C25) vgulidze, K. S. Cusp and quadratic forms of type (-4, q, 1). (Russian. Georgian and English summaries) Trudy Tbiliss. Univ. 214 (1980), 194–219, 234. (Author's summary) 82m:10040 10C15 (10D15)

Savić, Vladimir N. Evaluation of the supremum of norms of functions belonging to certain classes. (Serbo-Croatian. English summary) Mat. Vesnik 4(17)(32) (1980), no. 1, 85-104. (Naza Tanović-Miller) 82j:42001 42A10

Estimate of the upper bound of the norm of some transformations of functions belonging to the classes $W_{M,0}$ ($r \in \mathbb{N}$). (Scrbo-Croatian. French summary) Mat. Vesnik 4(17)(32) (1980), no. 2, 223–233. (Author's summary) 82d:46055 46E35 (42A10)

Calculation of the suprema of norms of some transformations of functions that belong to the classes W_i/H_w (r∈N). (Serbo-Croatian. French summary) Mat. Vesnik 4(17)(32) (1980), no. 3, 349–367. (S. Aljančić) 82j-42014 42A85 (42A38)

Savickaja, T. I. (with Kreinin, M. I.; Nikonov, V. A.) Solution of a problem of job-shop

loading (Russian) Computational methods and computer software (Russian), pp. 76–83, Kazan. Univ., Kazan, 1979. (Witold Lipski) 821:90048 90B35

Savin, N. E. The Bonferroni and the Scheffe multiple comparison procedures. Rev. Econom. Stud. 47 (1980), no. 1, 255-273. (Donald R. Jensen) 82i:62108 62J15 (with Evans, G. B. A.) The calculation of the limiting distribution of the least

squares estimator of the parameter in a random walk model. Ann. Statist. 9 (1981), no. 5,

1114-1118. (M. M. Rao) 82m:62074 62F12 (62E20) (with Evans, G. B. A.) Testing for unit roots. I. Econometrica 49 (1981), no. 3, 753-779. (Toshihisa Toyoda) 82g:62116 62M02

Savinkov, Ju. A. (with Bahtin, I. A.) Fixed points of positive C-compact operators

(Russian) Functional analysis, No. 14 (Russian), pp. 25-35, Ul' janovsk. Gos. Ped. Inst., Ul' yanovsk, 1980. (P. P. Zabreiko) 82a:47052 47H10 vinov, G. V. Investigation of the convergence of a generalized method of conjugate

gradients for determining the extremal eigenvalues of a matrix. (Russian) Numerical methods and questions in the organization of calculations. 5. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 111 (1981), 145-150, 237. (Author's ary) 82h:65030 65F15

Savir, Jacob Testing for single faults in modular combinational networks. J. Design Automat. Fault-Tolerant Comput. 3 (1979), no. 2, 69-82. (Author's summary) 82m:94061 94C10

Savit, Robert Phase structure and dual properties of Z_N-symmetric models on a triangular lattice. Phys. Rev. B (3) 22 (1980), no. 7, 3443-3451. (From the summary) 82b:82085

Savits, Thomas H. (with Block, Henry W.) Multidimensional IFRA processes. An Probab. 9 (1981), no. 1, 162–166. (B. W. Stuck) 82g:60114 60K10 (62N05) (with Block, Henry W.) Multivariate classes of life distributions in reliability theory. . Oper. Res. 6 (1981), no. 3, 453-461. (Authors' summary) 82i:62138 (90B25)

konstadilaki-Savopoulou, Ch. See Konstadilaki-Savopoulou, Ch. Savoy, C. A. (with Ferrara, S.; Zumino, Bruno) General massive multiplets in extended supersymmetry. Phys. Lett. B 100 (1981), no. 5, 393-398. (Authors' summary) 82f:81085 81G20 (17B70)

Savoyant, Michel Limites de suites bornées de polynômes. Enseign. Math. (2) 26 (1980), no. 3-4, 211-217 (1981). (M. Reade) 82e:30041 30D55 (30H05) Savruk, M. P. (with Panasjuk, V. V.; Nazarčuk, Z. T.) Diffraction of a plane

electromagnetic wave by a periodic system of curvilinear screens (H-polarization). (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 3, 57-60, 95. (Authors' summary) 82h:78016 78A45

(with Panasjuk, V. V.; Nazarčuk, Z. T.) Diffraction of electromagnetic waves on an arbitrary profile cylinder containing a system of curvilinear screens. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 4, 61-65, 97. (Authors' summary) 82g:78018 78A45

Sävulescu, St. (with Dumitrescu, H.; Cleja, V.) A new prediction method of the turbulent boundary layer characteristics near separation. I. Analytical treatment. Rev. Roumain. Sci. Tech. Sér. Méc. Appl. 25 (1980), no. 3, 371-378. (From the summary) 82c:76044

ra, Takamitsu (with Morimune, Kimio) Decision rules for the choice of structural equations. J. Econometrics 14 (1980), no. 3, 329-347. (D. E. A. Giles) 82c:62149

Sawa, Yoshiya (with Yasui, Kazumi; Motoori, Mitsuo; Nakagawa, Toshio) Reliability analysis of an inspection policy and its application to a computer system. (Japanese. English summary) J. Oper. Res. Soc. Japan 23 (1980), no. 3, 273-286. (From the summary) 82a:90066 90B25 (68A05)

wada, Hideki Some infinite-dimensional indecomposable modules of Chevalley groups Arch. Math. (Basel) 36 (1981), no. 5, 414–422. (Naohisa Shimomura) 82j:20082

Sawada, Katuro (with Wadati, Miki) New representations of the soliton solution for the Korteweg-de Vries equation. J. Phys. Soc. Japan 48 (1980), no. 1, 312–318. (G. L. Lamb, Jr.) 82a:35100 35Q20 (76B25, 81E99)

(with Wadati, Miki) Application of the trace method to the modified

Korteweg-de Vries equation. J. Phys. Soc. Japan 48 (1980), no. 1, 319-325. (G. L. Lamb, Jr.) 824:35101 35Q20 (76B25, 81E99)

a, Ken Extended f-orbits are approximated by orbits. Nagoya Math. J. 79 (1980), 33-45. (Alan Dankner) 82e:58056 58F10

waki, K. Piecewise linear Markov decision processes with an application to partially observable models. Recent developments in Markov decision processes (Proc. Internat. Conf., Univ. Manchester, Manchester, 1978), pp. 245-260, Academic Press, London, 1980. (See 82k:90128) 90C40

rami, Hideo (with Ikeuchi, Masatoshi; Inoue, Kazuo; Niki, Hiroshi) Arbitrarily shaped hollow waveguide analysis by the a-interpolation method. SIAM J. Appl. Math. 40

(1981), no. 1, 90-98. (J. S. Colonias) 822:78024 78A50 (65N30)

Sawan, M. E. (with Cruz, J. B., Jr.) Low-sensitivity optimal feedback control for linear discrete-time systems. IEEE Trans. Automat. Control 24 (1979), no. 1, 119-122. (Jiří V. Outrata) 82a:49031 49B50 (93C55)

Sawano, Kensuke Positively invariant sets for functional differential equations with infinite delay. Tõhoku Math. J. (2) 32 (1980), no. 4, 557-566. (J. Kato) 82b:34099

aragi, Yoshikazu (with Nakamori, Yoshiteru; Miyamoto, Sadaaki; Ikeda, Saburo) Measurement optimization with sensitivity criteria for distributed parameter systems IEEE Trans. Automat. Control 25 (1980), no. 5, 889-901. (Authors' summary) 82f:49046

(with Baba, N.; Soeda, Takashi; Shoman, T.) An application of the stochastic automaton to the investment game. Internat. J. Systems Sci. 11 (1980), no. 12, 1447-1457. (From the introduction) 82c:90096 90D10 (68D25, 68D27)

(with Tanino, Tetsuzoh) Conjugate maps and duality in multiobjective optimization.

J. Optim. Theory Appl. 31 (1980), no. 4, 473-499. (J. Borwein) 82k:90091 90C31

(with Tanino, Tetsuzoh; Nakayama, Hirotaka) Domination structures and their parametrization in group decision making. (Japanese. English summary) Systems and Control 24 (1980), no. 12, 807-815. (Authors' summary) 82m:90009 90A07
Sawashita, Norichika (with Mimura, Mamoru) On the group of self-homotopy equivalences

of H-spaces of rank 2. J. Math. Kyoto Univ. 21 (1981), no. 2, 331-349. (J. W. Rutter) 55P10

Sawczuk, A. (with Lellep, J.) Optimal project of a cylindrical shell for moderately large deflections. Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 431–446, North-Holland, Amsterdam, 1980. (See 82g:93003)

warzecha-Sawoń, Aleksandra See Warzecha-Sawoń, Aleksandra
Sawoń, Zbigniew (with Warzecha-Sawoń, Aleksandra) Maximal subalgebras of algebra C(X). (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 5-6, 257-260 (1981). (T. W. Gamelin) 82g:46090 46J10 (46J30) Arens-Singer measures in uniform Banach algebras. (Russian summary) Bull. Acad.

Polon. Sci. Sér. Sci. Math. 28 (1980), no. 5-6, 261-268 (1981). (T. W. Gamelin) 82g:46091 46J10

Saworotnow, Parleny P. Stationary processes on a semigroup. Bull. Calcutta Math. Soc. 71

(1979), no. 3, 143-156. (Franz Schmidt) 82a:60050 60G10 (43A65) Irreducible representations of a Banach algebra on a Hilbert module. Houston J.

Math. 7 (1981), no. 2, 275-281. (T. W. Palmer) 82m:46060 46K10 A simple characterization of the trace-class of operators. Internat. J. Math. Math.

Sci. 4 (1981), no. 2, 411-412. (E. D. Gluskin) 82f:47055 47D25 (46K05, 47B10) Errate to: "Linear spaces with an H*-algebra-valued inner product" [Trans. Amer. Math. Soc. 262 (1980), no. 2, 543-549; MR 81m:46080]. Trans. Amer. Math. Soc. 270 (1982), no. 1, 349. (Editors) 82m:46061 46K99 (46G10, 46H99)

Sawyer, Eric Good/irreducible inner functions on a polydisc. (French summary) Ann. Inst. Fourier (Grenoble) 29 (1979), no. 2, vi. 185-210. (E. L. Stout) 82a:32011 32A35

Sawyer, Stanley Random walks and probabilities of genetic identity in a tree. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 290-295, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (Author's introduction) 82g:92041 92A15

(with Felsenstein, Joseph) A continuous migration model with stable demography J. Math. Biol. 11 (1981), no. 2, 193-205. (Andrew D. Barbour) 82h:60153 (92A10, 92A15)

(with Hartl, Daniel) On the evolution of behavioral reproductive isolation: the Wallace effect. Theoret. Population Biol. 19 (1981), no. 2, 261-273. (Authors' summary) R2k:92046 92A10

Sawyer, W. W. *Ein Weg zur modernen Mathematik. (German) [A path to modern mathematics] Translated from the English by Anneliese Oberschelp. Klett Studienbücher Mathematik. [Klett Textbooks for Mathematics] Ernst Klett Verlag, Stuttgart, 1973. 182 pp. ISBN 3-12-983150-9 (Table of contents) 82d:00001 00A05

wyers, Kenneth N. (with Rivlin, Ronald S.) Some stability conditions for a compressible elastic material. (German summary) Z. Angew. Math. Phys. 32 (1981), no. 3, 255-266. (From the introduction) 82h:73048 73H99 (73G99)
Saxee, Gery (with Nguyen Dang Hung; Gladwell, G. M. L.) Finite element analysis of

contact problems based on the unilateral constraints formulation. Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 341–373, North-Holland, Amsterdam, 1980. (See 82g:93003) 49D99

Saxe, James B. (with Bentley, Jon Louis) Transforming static data structures to dynamic structures (abridged version). 20th Annual Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 148-168, IEEE, New York, 1979. (See

Dynamic-programming algorithms for recognizing small-bandwidth graphs in polynomial time. SIAM J. Algebraic Discrete Methods 1 (1980), no. 4, 363-369. (Author's summary) 82a:68086 68C25 (68E10)

Saxena, Ashok K. (with Prasad, Rajendra) On the summabilities of the derived series of the Fourier series. J. Math. Sci. 12(13) (1977/78), 33-44 (1981). (H. P. Dikshit) 82j:42006

(with Prasad, Rajendra) On the uniform matrix summability of Fourier series. An. Stiint. Univ. "Al. 1. Cuza" Iaşi Sect. I a Mat. (N.S.) 26 (1980), no. 2, 281-286. (H. P. Dikshit) 82h:42014 42A24 (40C05)

(with Nikitina, I. V.) The spectral structure of turbulent convection. (Russian) Ž.

Prikl. Meh. i Tehn. Fiz. 1981, no. 4, 88–97, 175. (Authors' summary) 82k:76040

tneva, L. V. Perfect s-structures. (Russian) Kaliningrad. Gos. Univ. Differencial naja Geom. Mnogoobraz. Figur No. 10 (1979), 97-103, 163. (P. Ver Eecke) 82;:53059 53C05 (53C35)

rlan, Silviu Variational inequalities in finite elastostatics. Variatio optimization problems (Proc. Summer School, Constanţa, 1979), pp. 179-190, Minist. Ed. Invaidmintului, Constanţa, 1979 (R. J. Knops) 82;73015 73C50 (49A29) dalla chiara Scabia, Maria Luisa See Dalla Chiara Scabia, Maria Luisa tallini Scafati, Maria See Tallini Scafati, Maria

appino, D. J. (with Sugar, R. L.) Method for performing Monte Carlo calculations for systems with fermions. *Phys. Rev. Lett.* 46 (1981), no. 8, 519–521. (Authors' summary)

Szelli 46 81F99 (65C05)
Szellia, A. (with Ciarletta, M.) On some relative problems concerning thermodynamic restrictions for hereditary materials. (Italian. English summary) Matematiche (Catania) 33 (1978), no. 1, 99–106 (1980). (Authors' summary) 82d:73005 73B30

(with Giordano, R.; Gutkowski, D.; Schiffrer, G.) Scattering theory for a class of potentials, including both local and nonlocal ones. (Italian and Russian summaries) 1000 Cimento A (11) 61 (1981), no. 4, 269-293. (W. O. Amrein) 82i:81127

Scalia-Tomba, Gian-Paolo (with Andersson, Per-Ake) A mathematical model of an urban bus route. Transportation Res. Part B 15 (1981), no. 4, 249-266. (Authors' summary) 82m:90077 90B20

undizzo, Pasquale L. (with Norton, Roger D.) Market equilibrium computations in activity analysis models. Oper. Res. 29 (1981), no. 2, 243-262. (Authors' summary) 90A14 (90C05)

cronin-Scanlon, Jane See Cronin-Scanlon, Jane Scapellato, Raffaele On the existence of Steiner functions. (Italian. English summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 1, 127-131. (G. Zappa) 82c:20048 20D15 (51E10) rowsky, Manuel (with Boyarsky, Abraham) A theorem on the denseness of orbits in metric spaces. Canad. Math. Bull. 23 (1980), no. 4, 469-471. (R. K. Thomas) 82d:54017 54C99 (28D05, 54E35)

Scarpellini, Bruno Conditional expectations of stationary processes. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 4, 427-441. (J. B. Robertson) 82k:60080 60G10 (62M20)

Scarpini, F. Some nonlinear complementarity systems algorithms and applications to unilateral boundary value problems. Ann. Mat. Pura Appl. (4) 123 (1980), 185-202. (W. 49A29 (35R35, 47H17) Velte) 82h:49015

(with Fusciardi, A.) A mixed finite element solution of some biharmonic unilateral problem. Numer. Funct. Anal. Optim. 2 (1980), no. 5, 397–420. (P. G. Ciarlet) 82c:73056 73K25 (65N30)

Scarselli, Alessandro Inseparable finite groups. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 65 (1978), no. 6, 244–246 (1979). (Richard 20D10

On some minimal non-9-groups. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 2, 103-109. (H. Heineken) 82c:20046

Some observations on Fitting classes of locally finite groups. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 6, 498-501. (John F. Bowers) 82f:20053 20E25

(with Biliotti, Mauro) On translation structures with nontrivial dilatations. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 75-80 (1980). (L. A. Rosati) 82j:51002 51E30

On a class of inseparable finite groups. II. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 68 (1980), no. 1, 22–25. (Hartmut Laue) 82m:20021 20D10

tucci Scarselli, Sandra See Tucci Scarselli, Sandra

Ščedrin, A. I. (with Golubinskii, A. I.) Hypersonic gas flow over a delta wing. A translation of Aeromechanics (Russian), pp. 39-45, "Nauka", Moscow, 1976. Fluid Mech.
-Soviet Res. 9 (1980), no. 2, 27-32. (Authors' summary) 82a:76052 76K05

Ščehorskii, A. I. Some boundary and solid properties of holomorphic functions in C*. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1979, no. 12 Issled. po Teorii Funkcii i Topologii, 27–36. (Harold P. Boas) 82b:32009 32A40 (26B05)

Some differential properties of holomorphic mappings. (Russian) Akad. Nat Ukrain. SSR Inst. Mat. Preprint 1979, no. 17 Struktur. Svoistva Integralov Tipa Koši v C i Golomorfnyh Otobražen. v C" i ih Prilozen, 3-9. (Harold P. Boas) 82a:32012 32A40 (26B05)

Ščelkačev, V. N. (with Sedov, L. I.) Leonid Samuilovič Leibenzon (on the hundredth anniversary of his birth). (Russian) Izv. Akad. Nauk SSSR Meh. Židk. Gaza 1979, no. 4, 3-9 (1 plate). (Editors) 82i:01062 01A70

Scennikov, V. N. Estimate of error of linearization of a nonlinear differential system in the critical case. (Russian) Differencial'nye Uravnenija 17 (1981), no. 3, 568-571, 576. (V. Šeda) 82d:34014 34A34 (34A30)

Ščepakin, M. B. (with Nenahov, È. I.) A modification of the sequential projection method. (Russian) Methods in operations research and reliability theory in systems of analysis (Russian), pp. 60-66, 101, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev. 1979.

(Author's summary) 82e-9082 90C25
Ščepanović, Radoje The method of variations and fixed points. (Serbo-Croatian. Russian summary) Mat. Vesnik 4(17)(32) (1980), no. 2, 251-254. (From the text) 82d:47062

n, E. V. Functors and uncountable degrees of compacta. (Russian) Uspehi Mat. Nauk 36 (1981), no. 3(219), 3-62, 255. (M. Hušek) 82k:54012 54B30 (54B35, 54D30) Ščepočkina, I. M. Orbit method in restriction and induction problems for a normal

subgroup of a solvable Lie group. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 8, 1039-1042. (A. Verona) 82m:22012 22E27

Principal components and its use in regression analysis: the problem revisited. (Italian and French summaries) Statistica (Bologna) 40 (1980), no. 3, 363-368. (Author's introduction) 82i:62156 62P20 (62H25)

(with Prasad, Rajendra) Uniform matrix su ability of Fourier series. Serdica 7 (1981), no. 1, 76-78. (Shri Nivas Bhatt) 82j:42005 42A24 (40G05)

ems, K. M. Lai Distribution-free tolerance bounds for the lifetime of an m-out-of-k system of components. *Technometrics* 23 (1981), no. 1, 97–103. (William E. Thompson) 82c:62137 62N05

ena, K. P. (with Rao, C. V.) On approximation of power of a test procedure based on EXEMB. B. P. (with Rao, C. V.) On approximation of power of a test procedure based on preliminary tests of significance. Comm. Statist. A—Theory Methods 10 (1981), no. 13, 1305-1321. (Authors' summary) 82hc62117 62110 EXEMB. P. K. (with Bhandari, M. C.) A note on Levitzki radical of near-ring. Kyungpook Math. J. 20 (1980), no. 2, 183-188. (J. R. Clay) 82i:16038 16A76 EXEMB. B. Degree of approximation of a function by Nörlund means of its Fourier series. Bull. Austral. Math. Soc. 23 (1981), no. 3, 395-412. (S. M. Mazhar) 82kc42001 42A10 (40C65)

42A10 (40G05)

rema, R. P. (with Sane, K. V.) On the evaluation of one-centre matrix elements of a modified Coulomb interaction operator. Proc. Indian Acad. Sci. Sect. A Chem. Sci. 89 (1980), no. 5, 495-501. (Authors' summary) 82::81163

(1980), No. 5, 495-501. (Authors' summary) 82c:81163 81G45
ena, Rajendra K. (with Mahajan, R. R.) Evaluation of finite integrals involving M-function of two variables by using E operator. (Spanish) With an English translation. Repúb. Venezuela Bol. Acad. Cienc. Fis. Mat. Natur. 39 (1979), no. 117, 25-44 (1980). (C. K. Sharma) 82g:33011 33A35

(with Joshi, V. G.) Abelian theorems for distributional H-transform. Math. Ann.

256 (1981), no. 3, 311–321. (V. P. Mairra) 82aa-84007 44A20 (33A30) ema, Ram Kishore On the H-function of n-variables. II. Kyungpook Math. J. 20 (1980), no. 2, 273-278. (R. G. Buschman) 82g:33015 33A35

Saxl, Jan On multiplicity-free permutation representations. Finite geometries and designs (Proc. Conf., Chelwood Gate, 1980), pp. 337-353, London Math. Soc. Lecture Note Ser., 49, Cambridge Univ. Press, Cambridge, 1981. (Author's introduction) 82i:20018 20C30

On points and triples of Steiner triple systems. Arch. Math. (Basel) 36 (1981), no. 6,

558-564 (A. E. Brouwer) 82j:20012 20B25 (05B07, 51E10)
xon, Stephen A. (with Narayanaswami, P. P.) Metrizable (LF)-spaces, (db)-spaces, and the separable quotient problem. Bull. Austral. Math. Soc. 23 (1981), no. 1, 65-80. (P. Pérez Carreras) 82g:46007 46A12

d-Saved, Abu-Bakr See El-Saved, Abu-Bakr

Sayer, F. P. (with Gaydon, F. A.) The transformation of concentric circles into concentric rectangles. Mathematika 28 (1981), no. 1, 141-152. (D. Gaier) 82i:30007

Sayers, D. K. See Computational techniques for ordinary differential equations, 82a:65053 Sayward, Charles (with Hugly, Philip) The lessons of the liar. Language theory. Theory and Decision 11 (1979), no. 1, 55-70. (Jan Berg) 82c:03005 03A05

Relativistic and separable classical Hamiltonian particle dynamics. Physics 136 (1981), no. 1, 136-189. (Author's summary) 82m:70009

arable interactions in classical relativistic Hamiltonian mechanics. Lett. Math. Phys. 5 (1981), no. 4, 319-325. (Author's summary) 82m:70019 70H05 (83A05) onov, A. A. Upper bounds of deviations of interpolation splines on some classes of

Romov, A. A. Upper bounds of deviations of interpolation splines on some classes of functions. (Russian) Vipical. Sistemy No. 81 Metody Splain-Funkcii (1979), 31–41, 102. (A. A. Ligun) 82h:41016 41A17
Romov, A. Ju. Fourier's method for singular hyperbolic equations. (Russian) Some questions of the qualitative theory of differential equations and theory of the control of motion, pp. 76–78, 165, Mordov. Gos. Univ., Saransk, 1980. (See 82m:34004) 35L10 The convergence of bilinear series consisting of eigenfunctions of singular elliptic operators. (Russian) Boundary value problems for nonstationary equations. Mat. Issled. No. 58 (1980), 76-89, 142-143. (B. Hellwig) 82e:35060 35P10 (35J25)

onov, Ju. V. (with Mjasnikov, V. P.; Novikov, V. L.) A direct problem of salt dome modeling. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1105-1107. 82b:86007

onov, L. I. (with Mjasnikov, A. G.) On singular operators with a non-Carleman shift and their symbols. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1076-1080. (I. A. Džaršeisvili) 82a:47034 47B38 (47G05)

(with Mjasnikov, A. G.) Singular integral operators with non-Carleman shift.

(Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 3, 22-31. (Ju. I. Karlovič) 47G05 (47B35)

Normal solvability of bisingular operators. (Russian) Teor. Funkcii Funkcional. Anal i Priložen. No. 34 (1980), 111-119, iv. (Ju. I. Karlovič) 82e:47042 47B38 (45P05,

nov, V. N. (with Zacepin, S. V.) On statistics of the ensemble of oscillators under excitation. I. Classical nonlinear oscillators excited by a weak external force. Chem. Phys. 52 (1980), no. 3, 305-311. (Authors' summary) 82b:82019 82A05 (35B40,

nov, V. V. (with Zlatoustov, V. A.; Saryčev, V. A.) Forced periodic oscillations of the simple pendulum. Prikl. Mat. Meh. 43 (1979), no. 2, 250-261 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 2, 270-281 (1980). (Hiroshi Onose) 82h:34048

The method of composition and estimates for the rate of convergence in the central limit theorem. (Russian) Third International Summer School on Probability Theory and matical Statistics (Varna, 1978) (Bulgarian), pp. 65-84, B"lgar. Akad. Nauk, Sofia, 1980. (J. R. Leslie) 82e:60040 60F05

(with Saryčev, V. A.) The effect of atmospheric resistance on single-axis gravitational orientation of a satellite. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 152, 27 pp. (Authors' summary) 82h:70031 70M05

(with Saryčev, V. A.) Gravitational orientation of a rotating satellite. (Russian) and Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 72, 28 pp. (Authors' summary) 82g:70055 70M05

variables. (Russian) Metody Vyčisi. No. 12 (1981), 186–190, 235. (Author's summary) 82m-41029 \$2m:41029 41A63 (41A30)
ntor, A. G. Concerning the selection of convective structures in a fluid with

(with Alekseevskii, D. V.; Leites, D. A.) Examples of simple infinite-dimensional Lie superalgebras of vector fields. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 9, 1187-1190. (Janusz Grabowski) 82k:17010 17B70 (17A70) rbak, S. B. (with Mahviladze, G. M.) Numerical method of investigating nonstationary

spatial motions of a compressible gas. In2.-Fiz. Z. 38 (1980), no. 3, 528-537 (Russian); translated as J. Engrg. Phys. 38 (1980), no. 3, 317-323. (H. K. Cheng) 821:76022

Scerbak, V. F. (with Koval'ov, O. M.) The possibility of determining variables of the force and Magnus moment coefficients by methods of identification theory. (Russian) Meh. Toerd. Tela No. 13 (1981), 124–127, 139. (Authors' summary) 82i:70006 70E99

rbak, V. V. Solution of diffraction problems for restricted screens with circular and linear slots. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 4, 69-71. (Author's summary) 82g:78020 78A45

Diffraction of waves by gratings with ridge elements. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 5, 78-81. (Author's summary)

82g:78021

78021 78A45 ov, A. V. (with Marčuk, G. I.; Kočergin, V. P.; Sarkisjan, A. S.; Bubnov, M. A.; Zalesnyi, V. B.; Klimok, V. I.; Kordzadze, A. A.; Kuzin, V. I.; Protasov, A. V.; Suhorukov, V. A.; Cvetova, E. A.) ★Математические модели пиркулялии в океане. (Russian) [Mathematical models of circulation in the ocean] "Nauka" Sibirsk. Otdel., Novasibirsk, 1980. 288 pp. (Jiří Nedoma) 82e:86002 86A05 (76V05)

Ščerbakov, B. A. See Investigations in functional analysis and differential eq 82i:00013

Ščerbakov, S. A. (with Javorskaja, I. M.; Beljaev, Ju. N.; Monahov, A. A.; Astal'eva, N. Sceronatov, S. A. (with Javorskaja, I. M.; Berjaev, Ju. N.; Monanov, A. A.; Astar eva, N. M.; Vvedenskaja, N. D.) Stability, nonuniqueness and transition to turbulence in the flow between two rotating spheres. Theoretical and applied mechanics (Proc. 15th Internat. Congr., Univ. Trorotto, Toronto, Ont., 1980), pp. 431–443, North-Holland, Amsterdam, 1980. (See 82de00008) 76F99
Scerbina, A. A. (with Zabin, V. I.; Korneičuk, V. I.; Tarasenko, V. P.) Structural method

of fast solution of systems of algebraic equations with a tridiagonal matrix. Automat. i Vyčisl. Tehn. (Riga) 1979, no. 6, 73-80, 93 (Russian); translated as Automat. Control Comput. Sci. 13 (1979), no. 6, 64-70. (Authors' summary) 82h:65025

Ščerbina, G. V. Nonlinear boundary value problems for second-order equations. (Russian) Differencial nye Uravnenija 17 (1981), no. 6, 1050-1059, 1149. (B. L. Schter) 82j:34018

Ščerbina, Ju. M. A class of iteration methods for the solution of nonlinear operator equations in a Banach space. (Ukrainian. Russian summary) Visnik L'viv. Derž. Univ. Ser. Meh.-Mat. No. 12 (1977), 57-60, 96. (Roman Andrushkiw) 82a:65042

chaafsma, Willem (with Steerneman, Ton) Discriminant analysis when the number of features is unbounded. IEEE Trans. Systems Man Cybernet. 11 (1981), no. 2, 144–151. (Authors' summary) 82k:92075 92A27 (62H30)
aap, C. E. (with van der Poel, W. L.; van der Mey, G.) New arithmetical operators in

the theory of combinators. I, II, III. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 3, 271-286, 287-302, 303-325. (John Staples) 82a:68163 68F20 (03B40)

haar, Günter Zur Struktur von Graphen, deren Kuben 2-Hamiltonsch-zusammenhängend sind. Contributions to graph theory and its applications (Internat. Colloq., Oberhof, 1977) (German), pp. 218-226, Tech. Hochschule Ilmenau, Ilmenau, 1977. (Donald L. Goldsmith) 82g:05063 05C45 (05C40)

(with Heinrich, Peter) Zur Charakterisierung von Graphen mit p-hamiltonscher (p+1)-ter Potenz im Falle p=3. Arch. Math. (Brno) 15 (1979), no. 3, 155-170. (H. 05C75 ner) 82b:05103

Aback, Robert Eine rundungsgenaue Formel zur maschinellen Berechnung der Prager-Oettli-Schranke. (English summary) Computing 20 (1978), no. 2, 177–182. (Author's summary) 82f:65045 65F99

Numerical error evaluation in linear approximation—the least-squares case.

Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 791-798,

Academic Press, New York, 1980. (Michael Tortorella) 82c:41025 41A45 (41A65)

nach, Siegfried (with McNeil, Donald R.) Central limit analogues for Markov population processes. Computational probability (Proc. Actuarial Res. Conf., Brown Univ., Providence, R.I., 1975), pp. 39-69, Academic Press, New York, 1980. (Walter A. Rosenkrantz) 82f:60070 60F17 (60J60, 60J70, 60J80)

hach, Stephen R. (with Becker, Ronald I.; Perl, Yehoshua) A shifting algorithm for min-max tree partitioning. Automata, languages and programming (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 64–75, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (G. P. Bhattacharjee) 82c:68018 68C05 (05C05, 68E10)

Schacher, Murray (with Fein, Burton) Divisible groups that are Brauer groups. Comm. Algebra 7 (1979), no. 10, 989–994. (Authors' summary) 82k:12012 12A80 (with Fein, Burton) Brauer groups of rational function fields over global fields. The Brauer group (Sem., Les Plans-sur-Bex, 1980), pp. 46-74, Lecture Notes in Math., 844, Springer, Berlin, 1981. (Jean-Pierre Tignol) 82h:12025 12F20 (13A20, 16A74) (with Fein, Burton) Relative Brauer groups. I. J. Reine Angew. Math. 321 (1981),

179-194. (F. DeMeyer) 82f:12027 12E15 (16A16, 16A39) achermayer, Walter (with Weis, Lutz) Almost compactness and decomposability of integral operators. Proc. Amer. Math. Soc. 81 (1981), no. 4, 595-599. (V. S. Pilidi)

47G05 (45P05, 47B05, 47B38)

gur-Schächter, Mioara See Mugur-Schächter, Mioara
uack, B. Random fields as fixed points of stochastic operators. (Russian) Math. Nachr. 96 (1980), 125-149. (H.-J. Engelbert) 82i:60101 60G60 (60K35, 82A05)

Schade, D. Topologische Matrizen in den Gleichungen diskreter, ebener, dehnsteifer Schwinger. (English and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 9, 393-408. (Author's summary) 82e:73066 73K99

ader, Martin (with Opitz, Otto) Zur Berücksichtigung informeller Beziehungen in der Aufbauorganisation mit Hilfe von Klassifikationsmethoden. (English summary) Decision in small group (Workshop, Jungholt, 1977) (Group), 218–228, Math. Systems in Econom., 45, Hain, Königstein/Ts., 1979. (See 82e:90130) 62H30

Distance minimale entre partitions et préordonnances dans un ensemble fini. (English summary) Métriques et relations. Math. Sci. Humaines No. 67 (1979), 39-47,

efer, Christoph Invariant sets and contractions for weakly coupled systems of parabolic

differential equations. Rend. Mat. (6) 13 (1980), no. 3, 337-357 (1981). (J. W. Bebernes) 35K55 (35B45) 82v:35058

efer, Clen ns See Gauß, Carl Friedrich, 82e:01123

Schaefer, H. H. Aspects of Banach lattices. Studies in functional analysis, pp. 158-221, MAA Stud. Math., 21, Math. Assoc. America, Washington, D.C., 1980. (Ju. A Abramovič) 82g:46048 46B30 (46-02)

fer, Paul Sum-preserving rearrangements of infinite series. Amer. Math. Monthly 88 (1981), no. 1, 33-40. (M. E. Cohen) 82je05003 05A05 (40A05)
Schaefer, Philip W. (with Alexiades, Vasilios; Elcrat, Alan R.) Existence theorems for some

nonlinear fourth order elliptic boundary value problems. Nonlinear Anal. 4 (1980), no. 4, 805-813. (S. Kamin) 82c:35027 35J65

neffer, David G. (with Golubitsky, Martin; Keyfitz, Barbara Lee) A singularity theory approach to qualitative behavior of complex chemical systems. New approaches to nonlinear problems in dynamics (Proc. Conf., Pacific Grove, Calif., 1979), pp. 257–270, SIAM, Philadelphia, Pa., 1980. (Aubrey B. Poore) 82i:89011 80A30 (58C28)

(with Golubitsky, Martin) A singularity theory approach to steady-state bifurcation theory. Nonlinear partial differential equations in engineering and applied science (Proc. Conf., Univ. Rhode Island, Kingston, R. I., 1979), pp. 229-254, Lecture Notes in Pure a Appl. Math., 54, Dekker, New York, 1980. (B. V. Loginov) 82a:58018 58E07 (58C 58C40)

(with Golubitsky, Martin; Keyfitz, Barbara Lee) A singularity theory analysis of a thermal-chainbranching model for the explosion peninsula. Comm. Pure Appl. Math. 34 (1981), no. 4, 433-463. (I. Stewart) 82h:58010 58C28 (58E07, 80A30)

Schaeffer, Helmut Automorphisms of Laguerre-geometry and cone-preserving mappings of metric vector spaces. Geometry and differential geometry (Proc. Conf., Univ. Haifa, Haifa, 1979), pp. 143-147, Lecture Notes in Math., 792, Springer, Berlin, 1980. (Norman L. Johnson) 82i:51014 51B15
Zur Möbiusgeometrie über Alternativkörpern. Geom. Dedicata 10 (1981), no. 1-4,

183-189. (A. Schleiermacher) 82j:51010 51B10 (20B27)

Schaer, C. (with Mansouri, F.) SU(N)-extended conformally invariant actions in superspace. Phys. Lett. B 101 (1981), no. 1-2, 51-54. (Authors' summary) 824:83063 83E99 (81G20)

Schäfer, E. Spectral approximation for compact integral operators by degenerate kernel methods. Numer. Funct. Anal. Optim. 2 (1980), no. 1, 43-63. (P. M. Anselone) 82c:45018 45L05

Schäfer, Gerhard The gravitational quadrupole formulae and gravitationally bound matter systems. Astrophys. J. 250 (1981), no. 1, part 2, L5-L8. (Author's summary) 82j:83018

Gravitational radiation resistance, radiation damping and field fluctuations. J. Phys. A 14 (1981), no. 3, 677-685. (Author's summary) 824:83024 83C30

fer, James A. Relation modules for extensions of nilpotent groups. Michigan Math. J. 28 (1981), no. 1, 39-51. (L. R. Vermani) 82f:20079 20J05 (20C05)

Schäfer, Norbert (with Beth, Thomas; Hain, Manfred; Sagerer, Gerhard) Materialien zur Codierungstheorie. II. Arbeitsber. Inst. Math. Masch. Datenverarb. (Inform.) 12 (1979/80), no. 10, vi + 190 pp. (Z. Takeda) 82e:94056b 94B35 (94B15)

Schäfer, Werner (with Delvos, F.-J.) Boolean methods in surface interpolation. Fourier analysis and approximation theory (Proc. Colloq., Budapest, 1976), Vol. I, pp. 307-315, Colloq. Math. Soc. János Bolyai, 19, North-Holland, Amsterdam, 1978. (Werner Haussmann) 82d:41044 41A63 (41A65)

Schiffer, Juan Jorge Girth, super-reflexivity, and isomorphic classification of normed spaces and subspaces. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 11-12, 573-584 (1981). (Ivan Singer) 82k:46028 46B20

On the structure of translation-invariant core-memories. J. Differential Equations 37 (1980), no. 2, 225-237. (Jean Mawhin) 82e:34091 34K30

Natural metrics on faceless cones. Ann. Mat. Pura Appl. (4) 127 (1981), 173-185. (S.

Gudder) 82k:46015 46A40 (52A07)

Schaffrin, Burkhard A study of the second-order design problem in geodetic networks.

Optimization of design and computation of control networks (Proc. Internat. Sympos. Sopron, 1977), pp. 175-177, Akad. Kiadó, Budapest, 1979. (Author's summary) 82j:86008 86A30 (62K99)

Best invariant covariance component estimators and application to the generalized multivariate adjustment of heterogeneous deformation observations. Bull. Géodésique 55 (1981), no. 1, 73-85. (Peter Schmidt) 82h:62193 62P20 (86A20)

Schäfke, F. W. Zur Theorie der Neumannschen und Kapteynschen Reihen. Arch. Math. (Basel) 34 (1980), no. 2, 132-139. (F. M. Arscott) 82c:33017 33A55

Schäfke, Reinhard (with Schmidt, Dieter) Connection problems for linear ordinary differential equations in the complex domain. Geometrical approaches to differential equations (Proc. Fourth Scheveningen Conf., Scheveningen, 1979), pp. 306-317, Lecture Notes in Math., 810, Springer, Berlin, 1980. (Shlomo Strelitz) 82c:34009 (with Schmidt, Dieter) The connection problem for general linear ordinary

differential equations at two regular singular points with applications in the theory of special functions. SIAM J. Math. Anal. 11 (1980), no. 5, 848-862. (D. A. Lutz) 82a:34010a 34A20 (34A20, 34C05)

The connection problem for two neighboring regular singular points of general linear complex ordinary differential equations. SIAM J. Math. Anal. 11 (1980), no. 5, 863-875. (D. A. Lutz) 82a:34010b 34A20 (34G10)

agen, I. P. Stochastic interpolation applied to the optimisation of expensive objective functions. Compstat 1980 (Proc. Fourth Sympos. Comput. Statist., Edinburgh, 1980),

pp. 362-367, Physica, Vienna, 1980. (K. Schittkowski) 82a:99149 90C30 (65K05)
Stochastic interpolating functions—applications in optimization. J. Inst. Math.
Appl. 26 (1980), no. 1, 93-101. (Wolfgang Wetterling) 82c:68006 65D05 (65C20,

A stochastic model for the occurrence of oil fields and its application to some North Sea data. J. Roy. Statist. Soc. Ser. C 29 (1980), no. 3, 282-291. (Author's summary)

aible, Siegfried (with Zang, Israel) On the convexifiability of pseudoconvex **C2-functions. Math. Programming 19 (1980), no. 3, 289–299. (Jean-Paul Penot) 82x:90124 90C25 (26825, 58C15)

Fractional programming: applications and algorithms. European J. Oper. Res. 7 (1981), no. 2, 111-120. (Author's summary) 82f:90094 90C32

alkwijk, J. P. M. Convolutional-codes: a state-space approach. The information theory approach to communication, pp. 81–125, CISM Courses and Lectures, 229, Springer, Vienna, 1978. (See 824:94024) 94B10

alm, Glutter (with Dahnn, Joachim; Kastelewicz, Alfred) Zur numerischen Berechnung der Eigenwerte und Eigenfunktionen der Hillschen Differentialgleichung mit periodischen Randbedingungen. (Russian, English and French summaries) Wiss. Z. Humbodit-Univo. Berlin Math.-Natur. Reihe 28 (1979), no. 4, 495–504. (Eugene Allgower)

apira, Pierre Conditions de positivité dans une variété symplectique complexe.

Applications à l'étude de l'hypoellipticité analytique. Journées: Équations aux Dérioèes

Partielles (Saint-Cast, 1979), Exp. No. 5, 6 pp., École Polytech., Palaiseau, 1979. (Editors)

24:58062 58G07

Conditions de positivité dans une variété symplectique complexe. Applications à l'étude des microfonctions. (English summary) Complex analysis, microlocal calculus and relativistic quantum theory (Proc. Internat. Colloq., Centre Phys., Les Houches, 1979), pp. 111-116, Lecture Notes in Phys., 126, Springer, Berlin, 1980. (Editors) 82b:32034 32F99 (58G07)

problems (Proc. NATO Ado. Study Inst., Maratea, 1980), pp. 185–212, NATO Ado. Study Inst., Maratea, 1980), pp. 185–212, NATO Adv. Study Inst. Ser., Ser. C. Maih. Phys. Sci., 65, Reidel, Dordrecht, 1981. (Ju. V. Egorov) 82m-58054 58G17 (35A30)

Conditions de positivité dans une variété symplectique complexe. Application à l'étude des microfonctions. Ann. Sci. École Norm. Sup. (4) 14 (1981), no. 1, 121-139. (A. Hirschowitz) 82i:58067 58G15 (35A30, 35H05)

(with Grigis, Alain; Sjöstrand, Johannes) Propagation de singularités analytiqu pour des opérateurs à caractéristiques multiples. (English summary) [Propagation of analytic singularities for operators with multiple characteristics] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 8, 397-400. (Authors' summary) 82m:58053 58G17 (35A20)

sposnik, Fidel (with Solomin, J. E.) Fibre bundle analysis of topological charges in spontaneously broken gauge theories. J. Math. Phys. 19 (1978), no. 10, 2229-2231. (Authors' summary) 82c81117 81E99 (55R99, 81D20)

(with Roskies, Ralph) Comment on Fujikawa's analysis applied to the Schwinger odel. Phys. Rev. D (3) 23 (1981), no. 2, 558-560. (Authors' summary) 82b:81068 81E10 (81C35)

appacher, Norbert (with Goldstein, Catherine) Séries d'Eisenstein et fonctions L de courbes elliptiques à multiplication complexe. [Eisenstein series and L functions of elliptic curves with complex multiplication J. Reine Angew. Math. 327 (1981), 184–218. (Kenneth Kramer) 82m:12007 12A70 (14K22)

necher, Wilhelm (with Kunisch, Karl) Mild and strong solutions for partial differential equations with delay. Ann. Mat. Pura Appl. (4) 125 (1980), 193-219. (G. F. Webb) 82i:34100 34K30 (35R20, 47H20)

(with Kunisch, Karl) Variation of constants formulas for partial differential ations with delay. Nonlinear Anal. 5 (1981), no. 2, 123-142. (Wolfgang Alt) 35R10 (34K30, 47H15)

See also Abstract Cauchy problems and functional differential equations, 82d:34001 was under the fundamental unit in quadratic extensions of imaginary quadratic fields. Arch. Math. (Basel) 34 (1980), no. 6, 534-537. (Charles J. Parry) 82c:12005 s and functional differential equations, 82d:34001 12A30 (12A45)

arlau, Winfried (with Quebbernann, Heinz-Georg; Schulte, M.) Quadratic and Hermitian forms in additive and abelian categories. J. Algebra 59 (1979), no. 2, 264-289. (A. A. Ranicki) 824:18015 18F25 (10C05)

(with Knebusch, Manfred) *Algebraic theory of quadratic forms. Generic methods and Pfister forms. Notes taken by Heisook Lee. DMV Seminar, 1. Birkhäuser, Boston, ass., 1980. i+44 pp. ISBN 3-7643-1206-8 (A. A. Bondarenko) 82b:10023 (10C01)

(with Opolka, Hans) *Von Fermat bis Minkowski, (German) [From Fermat to Minkowski] Eine Vorlesung über Zahlentheorie und ihre Entwicklung. [A course on number theory and its development]. Springer-Verlag, Berlin-New York, 1980. xi+224 pp. ISBN 3-540-10086-5 (G. Frei-Imfeld) 82g:10001 10-01 (01A

10-01 (01A05, 10-03) tionen auf einfachen Algebren. II. Math. Z. 176 (1981), Zur Existenz von Invole no. 3, 399-404. (Carl Riehm) 82k:12013 12A80 (16A28)

marlemann, Martin The subgroup of Δ_2 generated by automorphisms of tori. Math. Ann. 251 (1980), no. 3, 263–268. (Klaus Johannson) 82a:57039 57S99

erger, Rolf Mathematische Probleme aus der Theorie verzweigter

Bedienungssysteme. Eleventh Styrian Mathematical Symposium (Graz, 1979). Ber. Math.-Statist. Sekt. Forsch. Graz No. 124-132 (1979), Ber. No. 125, 31 pp. (F. Beichelt) 60K25 (90B22)

(with Daduna, H.) A discrete-time round-robin queue with Bernoulli input a general arithmetic service time distributions. Acta Inform. 15 (1981), no. 3, 251-263. (Carl M. Harris) 82j:60170 60K25 (68C15, 90B22)

On the response time distribution in a discrete round-robin queue. Acta Inform. 16 (1981), no. 1, 57-62. (Nasser Hadidi) 82k:60200 60K25 (68C15, 90B22) (with Barbour, A. D.) Insensitive average residence times in generalized

Markov processes. Adv. in Appl. Probab. 13 (1981), no. 4, 720-735. (Mark Berman) 60K15 (60K20) 82k:60177

The doubly stochastic server: a time-sharing model. (German summary) Z. Oper Res. Ser. A-B 25 (1981), no. 7, 179–189. (Author's summary) 82k:68015 68B20 (68C15, 90B22)

Schatte, Peter On the finite population GI/M/1 queue and its application to multiprogrammed computers. (German and Russian summaries) Elektron.

insverarb. Kybernet. 16 (1980), no. 8-9, 433-441. (C. M. Woodside) 82h:60188 60K25 (68C15)

attke, W. (with Jaspers, M.) Stochastic properties of a one-dimensional discrete Ginzburg-Landau field. Z. Naturforsch. A 36 (1981), no. 1, 1-9. (V. Protopopescu) 82h:82041 82A35

ttner, Ruprecht (with Streubel, Michael) Properties of extended bodies in spacetimes isometries. (French summary) Ann. Inst. H. Poincaré Sect. A (N.S.) 34 (1981), admitting isometries. (Freight Sammary) 82:e3051a 83C99 (83C40)
(with Streubel, Michael) The connection between local and asymptotic structures for

isolated gravitating systems with isometries. (French summary) Ann. Inst. H. Poincaré Sect. A (N.S.) 34 (1981), no. 2, 145-152. (Authors' summary) 82c:83051b 83C99 83(*99 (83C30)

(with Trümper, Manfred) World vectors, Jacobi vectors and Jacobi one manifold with a linear symmetric connection. J. Phy T. J. Dodson) 82;:53030 53B05 (53B20, 83C99) etric connection. J. Phys. A 14 (1981), no. 9, 2345-2352. (C.

attschneider, Doris In praise of amateurs. The me Wadsworth, Belmont, Calif., 1981. (See 82b:00003) 52A45 (05B45)

Schatz, A. H. (with Wahlbin, L. B.) On the quasi-optimality in L_{∞} of the \hat{H}^1 -projection into finite element spaces. Math. Comp. 38 (1982), no. 157, 1–22. (Authors' summary)

82m:65106 65N30 65N30 Schatz, James R. The second order Reed-Muller code of length 64 has covering radius 18. IEEE Trans. Inform. Theory 27 (1981), no. 4, 529-530. (Author's summary) 82m:94042

atzman, J. C. (with Saffman, Philip G.) Properties of a vortex street of finite vortices. SIAM J. Sci. Statist. Comput. 2 (1981), no. 3, 285-295. (Authors' introduction) 76C05

82k:76018 76C05

atzman, Michelle Fonctionnelle de Glimm continue. (English summary) C. R. Acad.

Sci. Paris Sér. A-B 291 (1980), no. 9, A519-A522. (C. Bardos) 82k:35074 35L45

The penalty method for the vibrating string with an obstacle. Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ. Nijmegen, Nijmegen, 1980), pp. 345-357, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (Author's summary) 82:35124 35L75 (49D30, 73K03)

Amsteraum, 1961. (Autusof Summary) 64:25144 351.75 (49D30, 75K03) taituble, Manfred (with Walther, Hansjoachim) Über den Shortness Exponenten normaler Landkarten. Contributions to graph theory and its applications (Internat. Colloq., Oberhof, 1977) (German), pp. 287–299, Tech. Hochschule Ilmenau, Ilmenau, 1977. (E. Olaru) 82e:05089 05C38 (05C35, 05C99)

Anmerkungen zu einem abstrakten Maximumprinzip von Halkin. (English and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 11 (1980), no. 1, 31-39. (Rolf Klötzler) 82d:90113 90C30 (49B27)

er, Juliusz Paweł See Forster, Walter, 82h:01048; Leray, Jean, 82h:01049 and 82k-01035

Schaufele, Ronald A. (with Pyke, Ronald) Correction to: "The existence and uniqueness of stationary measures for Markov renewal processes" [Ann. Math. Statist. 37 (1966), 1439-1462; MR 34 #3658]. Ann. Probab. 9 (1981), no. 2, 348. (Editors) 82c:60156 60K15

Schechter, Eric Evolution generated by continuous dissipative plus compact operators. Bull. London Math. Soc. 13 (1981), no. 4, 303-308. (James V. Herod) 82h:47060 47H15 (34G20, 47H20)

ous dependence of maximal solutions. J. Differe One-sided contin (1981), no. 3, 413-425. (Gustaf Gripenberg) 82e:45002 45D05 (34A10)

froda-Schechter, M. See Froda-Schechter, M.

Schechter, Martin (with Bers, Lipman; John, Fritz) *Partial differential equations. With supplements by Lars Gàrding and A. N. Milgram. With a preface by A. S. Householder. Reprint of the 1964 original. Lectures in Applied Mathematics, 3A. America Mathematical Society, Providence, R.I., 1979. xiii + 343 pp. ISBN 0-8218-0049-3 (Editors)

82c:35001 35-02

Spectral and scattering theory for propagative systems. Spectral theory of differential operators (Birmingham, Ala., 1981), pp. 361–368, North-Holland Math. Studies, 55, North-Holland, Amsterdam, 1981. (See 82k:34002) 47A40 (35P25) (with Weder, Ricardo) A theorem on the existence of dyon solutions. Ann. Physics

132 (1981), no. 2, 292–327. (José M. Cerveró) 82h:81095 81E10 (58E30) sechtman, G. (with Johnson, William B.; Maurey, B.; Tzafriri, L.) Symmetric structures in Banach spaces. Mem. Amer. Math. Soc. 19 (1979), no. 217, v + 298 pp. (Z. Chanturia

(Zbl 421:46023)) 82j:46025 46B25 (46E30, 47B38)

ecter, Stephen (with Singer, Michael F.) Singular points of planar vector fields. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 393-409, Lecture Notes in Math., 819, Springer, Berlin, 1980. (Freddy

| Dumortier| 82d:58054 | 58F14 | (with Singer, Michael F.) Separatrices at singular points of planar vector fields. Acta Math. 145 (1980), no. 1-2, 47-78. (Freddy Dumortier) 82e:58075 | 58F14 (34C20) (with Singer, Michael F.) Planar polynomial foliations. Proc. Amer. Math. Soc. 79

(1980), no. 4, 649-656. (Michael J. Field) 82j:58096a 58F18 (57R30) (with Singer, Michael F.) Addendum to: "Planar polynomial foliations". Amer. Math. Soc. 83 (1981), no. 1, 220. (Michael J. Field) 82j:58096b 58F18 (

Schefe, Peter On foundations of reasoning with uncertain facts and vague concepts Internat. J. Man-Mach. Stud. 12 (1980), no. 1, 35-62. (Siegfried Gottwald) 82g:03040 03B52 (03E72, 94D05)

Scheffe, Henry
See Chernoff, Herman, 82c:01046 and Daniel, C.; et al., 82i:01047
Scheffold, Egon
Über die Konvergenz positiver Operatoren mit Werten in atomaren

Banachverbänden mit ordnungsstetiger Norm. (English summary) J. Approx. Theory 31 (1981), no. 1, 90–96. (R. J. Nagel) 82m:47029 47B55

FF-Banachverbandsalgebren. Math. Z. 177 (1981), no. 2, 193-205. (W. Żelazko) 46J35 (46B30)

eibe, Erhard On the structure of physical theories. The logic and epistemology of scientific change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn. 30 (1978), no. 2-4, 205-224 (1979). (See 82i:00024) 00A25 (00A69, 03A05) eiblich, H. E. The free elementary *-orthodox semigroup. Semigroups (Proc. Conf.,

Monash Univ., Clayton, 1979), pp. 191-206, Academic Press, New York, 1980. (H. Jürgensen) 82e:20069 20M05

Scheidecker, J.-P. (with Benettin, Giancarlo; Froeschlé, C.) Kolmogorov entropy of a dynamical system with an increasing number of degrees of freedom. Phys. Rev. A (3) 19 (1979), no. 6, 2454-2460. (Authors' summary) 82k:58063 82A05)

vom Scheidt, Jürgen (with Purkert, W.) Limit theorems for solutions of stochastic differential equation problems. Internat. J. Math. Math. Sci. 3 (1980), no. 1, 113–149. (G. Papanicolaou) 82c:60107 60H10

in, Boris M. Pseudosimple commutative semigroups. Monatsh. Math. 91 (1981), no. 1, 77-78. (Author's summary) 82g:20101 20M14

On two papers of B. M. Schein. Semigroup Forum 23 (1981), no. 1, 87–88. (From the text) 82j:20118 20M10

einberg, Stephen Erratum: "Uniform approximation by meromorphic functions having prescribed poles" [Math. Ann. 243 (1979), no. 1, 83-93; MR 81a:30021]. Math. Ann. 256 (1981), no. 4, 574. (Editors) 82h:30040 30E10 (30F99)

Erratum: "Uniform approximation by meromorphic functions having prescribed poles" [Math. Ann. 243 (1979), no. 1, 83-93; MR 81a:30021]. Math. Ann. 257 (1981),

poles (read).
no. 1, 135. (Editors) 82k:30056 30E10 (30F99)
einkman, José Alexandre (with Green, Jerry R.) Introduction. General equilibrium.

growth, and trade, pp. 1-10, Academic Press, New York, 1979. (From the text) 82d:01027 01A70 (90Axx) (with de Araujo, Aloisio) Notes on comparative dynamics. General equilibria

growth, and trade, pp. 217-226, Academic Press, New York, 1979. (R. N. Kaul) 82e:90024 Scheja, Günter (with Wiebe, Hartmut) Zur Chevalley-Zerlegung von Derivationen. (English summary) Manuscripta Math. 33 (1980/81), no. 2, 159–176. (P. Schenzel) 82d:13008 32B05 (13B10, 14B10)

rved currents for nonlinear σ-models on symmetric spa eler, Klaus Local cons Phys. C 6 (1980), no. 4, 365-369. (José M. Cerveró) 82h:81099 81E99 (53C35, 58F07)

Schell, Hans-Joachim Asymptotische Entwicklungen für die unvollständige Gammafunktion. Wiss. Z. Tech. Hochsch. Karl-Marx-Stadt 22 (1980), no. 5, 477–485.

(P. Anandani) 82th33004 33A15 (41A60) Schellenberg, P. J. (with Rosa, Alexander; Vanstone, S. A.) Generalized starter and adder constructions for Howell designs. Proceedings of the Tenth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1979), pp. 833–842, Congress. Numer., XXIII–XXIV, Utilitas Math., Winnipeg, Man., 1979. (R. C. Mullin) 82e:05037 05B15 (05B30)

(with Vanstone, S. A.) The existence of Howell designs of side 2n and order 2n+2. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer.

29 (1980), 879–887. (William B. Poucher) 82k-09037 05830 (05815) (with Mullin, R. C.; Van Rees, G. H. J.; Vanstone, S. A.) On the construction of perpendicular arrays. Utilitas Math. 18 (1980), 141-160. (T. G. Ostrom) 82a:05024 05B15

(with Stinson, D. R.; Vanstone, S. A.; Yates, J. W.) The existence of Howell designs of side n+1 and order 2n. Combinatorica 1 (1981), no. 3, 289-301. (W. D. Wallis) 82m:05028 05B30 (05B15)

elp, R. H. (with Burr, Stefan A.; Erdős, Paul; Faudree, R. J.; Rousseau, C. C.) An extremal problem in generalized Ramsey theory. Ars Combin. 10 (1980), 193-203. (J. Spencer) 82b:05096 05C55 (05C35) (with Faudree, R. J.; Rousseau, C. C.; Schuster, Seymour) Embedding graphs in

their complements. With a loose Russian summary. Czechoslovak Math. J. 31(106) (1981), no. 1, 53-62. (Paul A. Catlin) 82e:05105 05C70

empp, Walter Über einige geometrische Aspekte der Approximationstheorie.

B. G. Teubner, Stuttgart, 1980. 300 pp. ISBN 3-519-02220-6 (Tom H. Koornwinder) 43-01 (22-01, 42-01)

Wiener-Hopf techniques in approximating holomorphic functions. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 799-804, Academic Press,

 New York, 1980. (Albert Baernstein, II) 82g:30060 30D55 (41A35, 47B35)
 Schwartz kernels on Siegel II domains. Math. Z. 171 (1980), no. 2, 101-112. (A. Korányi) 82c:32036 32M15 (32A35)

On Schwartz kernels relative to the function space $\mathcal{H}_{\infty}(E)$. Resultate Math. 3 (1980), no. 2, 227–234. (Martin Schottenloher) 82i:46041 46E20 (32A15) On cardinal spline interpolants. Approximation theory and applications (Proc.

Workshop, Techniom—Israel Inst. Tech., Haifa, 1980), pp. 303–310, Academic Press, New York, 1981. (Author's introduction) 82e:30046 30E05 (41A15)

Periodic splines and nilpotent harmonic analysis. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 2, 69–74. (Author's summary) 82e:41014 41A15 (43A75, 65T05)

endel, J. (with Winicour, Jeffrey) Restrictions on relativistically rotating fluids. J. Math. Phys. 22 (1981), no. 8, 1696–1702. (C. J. S. Clarke) 82m:83029 83C55 (83C20,

enk, Dieter Zur Resolvente des mehrdimensionalen Schrödinger-Operators. Wiss. Z. Tech. Hochsch. Karl-Marx-Stadt 22 (1980), no. 5, 487-497. (Woodford W. Zachary) 81F05 (35P99, 81C10)

no. 3, 223–230. (Markus Brodmann) 82e:13014 13D25 (13H10, 14B15)

On Buchsbaum rings and their canonical modules. Seminar D. Eisenbud/B. Singh/W. Vogel, Vol. 1, pp. 65-77, Teubner-Texte zur Math., 29, Teubner, Leipzig, 1980. (Manfred Herrmann) 82i:13023 13H10

On the number of faces of simplicial complexes and the purity of Frobenius. Math. Z. 178 (1981), no. 1, 125-142. (Melvin Hochster) 82k:13022 13H10 (52A20, 57Q15)

(with Achilles, Rüdiger; Vogel, Wolfgang) Bemerkungen über normale Flachheit und normale Torsionsfreiheit und Anwendungen. Period. Math. Hungar. 12 (1981), no. 1, 49–75. (Manfred Herrmann) 82i:13018 13C99 (14E15) (with Brand, H.) A soluble stochastic model for first-order type

nonequilibrium phase transitions. Phys. Lett. A 68 (1978), no. 5-6, 427-429. (Authors' summary) 82g:82025 82A35 (82A70)

Schenzle, Dieter (with Kramer, Peter; John, Gero) *Group theory and the interaction of composite nucleon systems. Clustering Phenomena in Nuclei, 2. Friedr. Vieweg & Sohn, Braunschweig, 1981. viii + 224 pp. ISBN 3-528-08449-9 (John J. Sullivan) 82m:81085 81G30 (81-02, 81H10)

On neuroendocrine control of ovarian function. Mathematical aspects of physiology (Proc. Summer Sem., Univ. Utah, Salt Lake City, Utah, 1980), pp. 261–264, Lectures in Appl. Math., 19, Amer. Math. Soc., Providence, R.I., 1981. (Editors) 82j:92031

Schep, A. R. On compactness of integral operators. Measure theory and its applications (Proc. Conf., Northern Illinois Univ., De Kalb, Ill., 1980), pp. 255-259, Northern Illinois Univ., DeKalb, Ill., 1981. (See 82g:28002) 47B38 (47G05)

Compactness properties of an operator which imply that it is an integral operator Trans. Amer. Math. Soc. 265 (1981), no. 1, 111-119. (Peter Dodds) 82i:47088 47G((45P05, 47B05, 47B38)

Schep, T. J. (with Pegoraro, F.) Low-frequency modes with high toroidal mode nur general formulation. Phys. Fluids 24 (1981), no. 3, 478-497. (Authors' summary) 82a:76094 76X05

epers, P. (with Akkerboom, J. C.; v. d. Werff, J.) Thin layer chromatograph study. Statist. Neerlandica 34 (1980), no. 4, 173-187. (S. Talwalker) 82h:62146 (92A07, 92A40)

chepper, I. M. (with Ernst, M. H.; Cohen, E. G. D.) The incoherent scattering function and related correlation functions in hard sphere fluids at short times. J. Statist. Phys. 25 (1981), no. 2, 321-360. (Authors' summary) 82h:82035 82A50 ser, Gary (with Smith, Malcolm; Baranger, Michel) Numerical calculations in

clementary quantum mechanics using Feynman path integrals. Ann. Physics 130 (1980), no. 2, 290–306. (Authors' summary) 824:81050 81C35

Scher, H. (with Wu, C. H.) Random walk theory of a trap-controlled hopping transport process. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 1, part 1, 22-26. (Authors' ummary) 82ac82053 82A70

stationary) declaration is a control of the characteristic polynomials of the characteristic polynomials of the L₂-projections on splines for a geometric mesh. Approximation theory, III (Proc. Conf., Unio. Texas, Austin, Tex., 1980), pp. 517-522, Academic Press, New York, 1980. (Allan 41A15

(with Schumaker, Larry L.) A dual basis for L-splines and applications. J. Appr Theory 29 (1980), no. 2, 151-169. (Philip W. Smith) 32k:41015 41A15 (41A25) On optimal global error bounds obtained by scaled local error estimates. Num

Math. 36 (1980/81), no. 2, 151-176. (Author's summary) 82e:65053 erer, R. (with Zeller, K.) Gestufte Approximation in zwei Variablen. (English summary) Numerical methods of approximation theory, Vol. 5 (Conf., Math. Res. Inst., Oberwolfach, 1979), pp. 282–288, Internat. Ser. Numer. Math., 52, Birkhäuser, Basel, 1980. (Werner Haussmann) 82d-41046 41A63 (41A50, 65D05)
Über Fehlerschranken bei Produkt-Kubatur. Z. Angew. Math. Mech. 60 (1980),

no. 7, T315-T317. (D. C. Handscomb) 82k:65012 65D32

Scheringer, D. Präsentation der GL_n(D) und Dieudonné-Determinante. SK₁ of divisi algebras (Sem., Bielefeld/Göttingen, 1976) (German), pp. 9-20, Lecture Notes in Math., 778, Springer, Berlin, 1980. (See 82b:16014) 20G35 (16A39, 20G10)

Scherk, J. An overview of supersymmetry and supergravity. Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 343-357, Lecture Notes in Phys., 116, Springer, Berlin, 1980. (Author's summary) 82a:83055 83E99 (81G20, 83C45)

erk, Peter (with Fischer, E.) A remark on Schwarz' inequality. C. R. Math. Rep. Acad.
 Sci. Canada 2 (1980), no. 4, 171–174. (H. Minc) 82e:15022 15A45 (15A63)
 A remark on strips. I. C. R. Math. Rep. Acad. Sci. Canada 2 (1980), no. 6, 309–314.

Brauner) 821:3003a 53A04 A remark on strips. II. C. R. Math. Rep. Acad. Sci. Canada 2 (1980), no. 6, 321-326. (H. Brauner) 82f:53003a

(H. Brauner) 82f:53003b 53A04 Schervish, Mark J. Asymptotic expansions for the means and variances of Biometrika 68 (1981), no. 1, 295–299. (A. D. Gordon) 82l:62111 62H30 sions for the means and variances of error rates.

Scherzler, Eberhard (with Kupisch, Herbert) Symmetric algebras of finite representation type. Representation theory, II (Proc. Second Internat. Conf., Carleton Unio., Ottawa, Ont., 1979), pp. 328-368, Lecture Notes in Math., 832, Springer, Berlin, 1980. (From the 16A64

(with Waschbüsch, Josef) A class of self-injective algebras of finite representation type. Representation theory, II (Proc. Second Internat. Conf., Carleton Un Ont., 1979), pp. 545-572, Lecture Notes in Math., 832, Springer, Berlin, 1980. (From the text) 82i:16034 16A64

Schettini, Andrea See Maggiolo-Schettini, Andrea

Scheu, Günter Optimale, beidseitig monotone bzw. alternierende Iterationsverfahren mit überlinearer Konvergenz. Praxis Math. 22 (1980), no. 2, 40-52. (J. G. Herriot) 65H05 (65G10)

seuer, Ernest M. (with Blischke, Wallace R.) Applications of renewal theory in analysis of the free-replacement warranty. Naval Res. Logist. Quart. 28 (1981), no. 2, 193–205. (Authors' summary) 82f:90042 90B25 (60K10)

(Authors summary) 643:7002 7002 7003 (ON 10) when the design of schemas for the relational model. IEEE Trans. Software Engrg. 7 (1981), no. 1, 99–111. (Authors' summary) 82a:68026 68B15

cunert, M. (with Grassberger, P.) Fock-space methods for identical classical objects Fortschr. Phys. 28 (1980), no. 10, 547-578. (Steven M. Moore) 82d:81060 (92A15)

eurer, Bruno (with Saut, Jean-Claude) Un théorème de prolongement unique pour des opérateurs elliptiques dont les coefficients ne sont pas localement bornés. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 13, A595-A598. (R. C. MacCamy) 82c:35020 35J15

eurle, Jürgen Über die Konstruktion invarianter Tori, welche von einer stationären Grundlösung eines reversiblen dynamischen Systems abzweigen. (English summary) Constructive methods for nonlinear boundary value problems and nonlinear oscillations (Proc. Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 134–144, Internat. Ser. Numer. Math., 48, Birkhäuser, Basel, 1979. (Helmut Rüssmann) 82e:34038 34C15 (58F05,

Newton iterations without inverting the derivative. Math. Metho

(1979), no. 4, 514-529. (Helmut Rüssmann) 82e:65072 65J15 (47H17, 58C15)
Schiaffino, Andrea (with Tesei, Alberto) On the asymptotic stability for abstract Volterra integro-differential equations. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Mat. Natur. (8) 67 (1979), no. 1-2, 67-74 (1980). (G. S. Jordan) 82g:45025 (34K05, 47D05)

(with Tesei, Alberto) Asymptotic stability properties for nonlinear diffusion Volterra equations, (Italian summary) Atti Accad. Naz. Lincet Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 3-4, 227-232 (1980). (Gustaf Gripenberg) 82i-45012 45K05 (92A15) (with de Mottoni, P.) Bifurcation of periodic solutions for some systems with

periodic coefficients. Nonlinear differential equations (Proc. Internat. Conf., Trento,

- 1980), pp. 327-338, Academic Press, New York, 1981. (Yiannis Slicas) 82f:34045 34C25 (92A15)
- (with Tesei, Alberto) Global attractivity for diffusion delay logistic equations. hemic Press, New York, 1981. (Gustaf Gripenberg) 82:45013 45K05 (92A15)
- (with de Mottoni, P.) Competition systems with periodic coefficients: a geometric proach. J. Math. Biol. 11 (1981), no. 3, 319-335. (Hal Leslie Smith) 82i:92027 92A15 (34C25)
 - (with de Mottoni, P.) Bifurcation results for a class of periodic quasilinear paraboli ations. Math. Methods Appl. Sci. 3 (1981), no. 1, 11-20. (Hans Kaper) 82g:35012
- chi, Rosanna Disymmetric spaces with weight and applications to nonli quasielliptic problems. (Italian) Matematiche (Catania) 32 (1977), no. 2, 239–257. (H. Triebel) 826:35048 35165 (46E35)
 - Quasicliptic problems in a half space. (Italian) Rend. Circ. Mat. Palermo (2) 29 (1980), no. 1, 103-138. (Elvira Mascolo) 82h:35031 35140 iaroni, N. On poles of a transfer-function matrix, poles of the associated characteristic
- gain function, and fixed and semifixed modes. Internat. J. Control 33 (1981), no. 5, ary) 82e:93042 93B55
- ehlen, Werner O. (with Müller, Peter C.) *Forced linear vibrations. CISM Courses and Lectures, 172. Springer-Verlag, Vienna, 1977. 146 pp. ISBN 3-211-81487-6 (Vimal 70Jxx (70-02)
- iemangk, Christina (with Sulanke, Rolf) Submanifolds of the Möbius space. Math. Nachr. 96 (1980), 165–183. (Leopold Verstraelen) 82d:53017 53A30 (53C40, 53C42)
 - demann, Ganther Die Homologiegruppen singularitätenfreier algebraischer Hyperflächen. Beiträge zur Algebra und Geometrie, 8. Wiss. Beitr. Martin-Luther-Unio. Halle-Wittenberg M 12 (1979), 91-97. (Gerhard Pfister) 82a:14005 14F25 (13D99)
- Schiff, B. (with Fishelov, D.; Whiteman, J. R.) Determination of a stress intensity factor using local mesh refinement. Mathematics of finite elements and applications, III (Proc. Third MAFELAP Conf., Brunel Univ., Uxbridge, 1978), pp. 55–64, Academic Press, London, 1979. (H. K. Verma) 82e:73078 73M05 (65N30, 73K25)

 iiffer, Menahem M. (with Samelson, Hans) Dedicated to the memory of Stefan
- Bergman. Applicable Anal. 8 (1978/79), no. 3, 195-199 (1 plate). (Editors) 82c:01053 01A70
- nmel, James A.; Pinchuk, Bernard) Bounded univalent functions which cover a fixed disc. J. Analyse Math. 36 (1979), 118-138 (1980). (D. R. Wilken) 82×30031 30C70
- Stefan Bergman (1895-1977): in memoriam. Ann. Polon. Math. 39 (1981), 5-9 (1 plate). (Editors) 82e:01100 01A70
- Fredholm eigenvalues and Grunsky matrices. Ann. Polon. Math. 39 (1981), 149–164. (Jacob Burbea) 82k:30010 30C40 (30C75, 44A15)
- (filman, Stephen J. A mod p Whitchead theorem. Proc. Amer. Math. Soc. 82 (1981), no. 1, 139–144. (Peter J. Eccles) 82e:55021 55P60
- Schiffmann, G. (with Rallis, S.) On a relation between SL₂ cusp forms and cusp forms on tube domains associated to orthogonal groups. Trans. Amer. Mati no. 1, 1-58. (Martin L. Karel) 82c:10040 10D40 (22E50, 32N10) Amer. Math. Soc. 263 (1981),
- no. 1, 1-35. (Martin L. Karel) 822:10040 101340 (22253), 328103 Schiffmann, Y. The centrality of selection rules in bifurcation theory. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 351-354, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81004) 35R32
- Classification in bifurcation theory and reaction-diffusion systems. Phys. Rep. 64 80), no. 3, 87-169. (I. Stewart) 82j;35016 35B32 (35K55, 58E07, 92A05) (1980), no. 3, 87-169. (I. Stewart) 82j-35016 35B32 (35K55, 58E07, 92A05)
 Schiffrer, G. (with Giordano, R.; Gutkowski, D.; Scalia, A.) Scattering theory for a class
- of potentials, including both local and nonlocal ones. (Italian and Russian summaries) vo Cimento A (11) 61 (1981), no. 4, 269-293. (W. O. Amrein) 82i:81127 (47A40)
- chikhol, W. H. p-adic monotone functions. Symposium dedicated to A. F. Monna (French), pp. 6-25, Commun. Math. Inst. Rijksuniv. Utrecht, 12, Rijksuniv. Utrecht, Utrecht, 1980. (W. A. J. Luxemburg) 82b:26025 26E30 (12B40)
- (W. A. J. Luxemburg) 82b:26025 26E30 (12B40)
 ilid, Wilma (with Grecksch, Wilfried) Über eine realisierungsweise partielle
- usa, winna (with creaxed, will red) User eine reanserungsweise partielle Differentialgleichung. Wiss. Z. Tech. Hochsch. Leuna-Merseburg 23 (1981), no. 1, 123–128. (Z. Poracká-Divis) 82;60111 60H15 (35R60, 47H10) ailders, W. H. A. (with Doolan, E. P.; Miller, J. J. H.) ★Uniform numerical methods for problems with initial and boundary layers. Boole Press, Din Laoghaire, 1980. xv+324 pp. ISBN 0-906783-02-X (Kevin Burrage) 82le65053 65L05 (65L10, 76A60)
 - (with Doolan, E. P.) Uniform numerical methods for two-point boundary value problems. Boundary and interior layers—computational and asymptotic methods (Proc. Conf., Trinity College, Dublin, 1980), pp. 260–264, Boole, Dun Laoghaire, 1980. (Joachim 65L10
- ilperoort, Tom (with Bagchi, Arunabha) Optimal linear stochastic control for systems with multiplicative noise. IEEE Trans. Automat. Control 25 (1980), no. 5, 1005-1007.
- (Authors' summary) 82±3090 93E20

 Schilpp, Paul Arthur See Albert Einstein: philosopher and scientist, 82±01077

 Schiltz, Dominique (with Vaillant, Jean; Wagschal, Claude) Problème de Cauchy ramifié à caractéristiques multiples en involution. Seminar on Hyperbolic and Holomorphic Partial Differential Equations, 1979–1980 (French), Exp. No. 10, 5 pp., Univ. Paris VI, Paris, 1980. (From the text) 82;35004 35A20
 - (with Vaillant, Jean; Wagschal, Claude) Problème de Cauchy ramifié à
- caractéristiques multiples en involution. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 13, A659-A662. (Authors' summary) 82a:35062 35L30
- anovich, Werner An axiomatic theory of winning mathematical games and economic actions. Cybernet. Systems 12 (1981), no. 1-2, 1-19. (Author's summary) 82k:90148 90D42 (68G99)
- ng, Rainer Lineare Differentialoperatoren zweiter Ordnung mit metrischem
- Hauptteil und die Methode der Koinzidenzwerte in der Riemannschen Geometrie. Beiträge Anal. No. 15 (1980), 77-91 (1981). (A. H. Taub) 82h:59051 58G17 (83C99) Le problème de Cauchy pour les équations de Bach de la relativité générale. (English mmary) [The Cauchy problem for the Bach equations in general relativity theory] C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 22, 975-977. (Author's summary)

- Schindler, Z. (with Outrata, Jiří V.) An augmented Lagrangian method for a class of convex continuous optimal control problems. (Russian summary) Problems Control Inform. Theory/Problemy Upravlen. Teor. Inform. 10 (1981), no. 2, 67-81. (Werner Krabs) 82m:49045 49D30 (49A10, 65K10)
- inzel, Andrzej The papers of Henryk Iwaniec on the sieve method in number theory. (Polish) Wiadom. Mat. (2) 22, no. 1, 13-16 (1979). (Editors) 82f:01140 01A70 (10H30)
 - On the relation between two conjectures on polynomials. Acta Arith. 38 (1980/81), no. 3, 285–322. (D. J. Lewis) 82g:12004 12A20 (10M05)

 See also Biography: Stark, Marceli, 82g:01080

 stop, A. I. An alternative proof of a result of Lees. An. Univ. Craiova Mat. Fiz.-Chim. 6 (1978), 43–45. (L. Fox) 82b:65072 65L10

 sipke, Siegfried *Bibliographic zur Quadratur und Kubatur. (German) (Bibliography on understure and cubature). J. Ferikursen. 1977 (Eirst Supplement, 1977)

- quadrature and cubature] 1. Ergänzung, 1977. [First Supplement, 1977].
 Weiterbildungszentrum für Mathematische Kybernetik und Rechentechnik [Center for Continuing Education for Mathematical Cybernetics and Computing Technique], 29.
 Technische Universität Dresden, Dresden, 1977. 157 pp. (Editors) 82g:00004 00A15
- systeme-ein Hilfsmittel bei der Entwicklung von n Verfahren. [Systems for formula manipulation—an aid in the development of numerical procedures] Wiss. Z. Tech. Univ. Dresden 30 (1981), no. 4, 127-128. (Author's summary) 65D30 (68C20)
- Schipp, Ferenc Fast Fourier transform and conditional expectation. Numerical methods (Third Collog., Keszthely, 1977), pp. 565-577, Collog. Math. Soc. János Bolyai, 22, North-Holland, Amsterdam, 1980. (Pierre Bois) 82a:42008 42A16 (42C10, 65T05,
 - Martingales with directed index set. The First Pannonian Symposium or Mathematical Statistics (Bad Tatzmannsdorf, 1979), pp. 254-261, Lecture Notes in Statist.,
- 8, Springer, New York, 1981. (Xavier Guyon) 82j:60074 60G42 (60G48) Schipper, R. M. (with van Houwelingen, J. C.) The efficiency of a test based on the
- asymptotic distribution of the MLE for a linear functional relationship. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Statist. 12 (1981), no. 1, 21-30. (J. Steinebach) 82f:62046 62F05 (62H12)
- Schippers, H. Multiple grid methods for oscillating disk flow. Boundary and interior layers -computational and asymptotic methods (Proc. Conf., Trinity College, Dublin, 1980), pp. 410-414, Boole, Dún Laoghaire, 1980. (William H. H. Banks) 82a:76025 76D05 (65N05)
- Schirmer, Helga Conditions for the uniqueness of the fixed point in Kakutani's theorem Canad. Math. Bull. 24 (1981), no. 3, 351-357. (R. E. Smithson) 82k:54079 54H2
- dirotzek, Winfried On Farkas-type theorems. Comment. Ma. no. 1, 1-14. (W. F. Tyndall) 82m:90159 90C48 (46A99) nent. Math. Univ. Carolin. 22 (1981),
- Schittkowski, Klaus Numerical solution of a time-optimal parabolic boundary value control problem. J. Optim. Theory Appl. 27 (1979), no. 2, 271-290. (Author's summary) 93B40
 - A numerical comparison of 13 nonlinear programming codes with randomly generated test problems. Numerical optimisation of dynamic systems, pp. 213-234,
- North-Holland, Amsterdam, 1980. (Author's summary) 82i:90100 90C30 (65K05) (with Hock, Wilhelm) ★Test examples for nonlinear programming codes. Lecture Notes in Economics and Mathematical Systems, 187. Springer-Verlag, Berlin-New York,
- 1981. v+177 pp. ISBN 3-540-10561-1 (From the preface) 82f:90084 90C30 (90-04) Schizas, C. (with Evans, F. J.) The structural aspects of pole assignment. Internat. J. Control 34 (1981), no. 5, 991-1015. (Authors' summary) 82m:93039 93B55
- Schlee, Walter Parallel mathematics in graphs with deterministic and stochastic valuation Parallel computers—parallel mathematics (Munich, 1977), pp. 239-242, North-Holland, Amsterdam, 1977. (See 82k:68003) 68E10 (90B15)
 - Estimation nonparamétrique des propriétés de la courbe de régression. (English summary) Data analysis and informatics (Proc. Second Internat. Sympos., Versailles, 1979), pp. 109–119, North-Holland, Amsterdam, 1980. (See 82:62004) 62G05
 - Fraktilen-Regression. Z. Angew. Math. Mech. 60 (1980), no. 7, T369-T371. (Theo Gasser) 82m:62096 62G05
- Schlee-Kössler, W. A single server queue with two types of customers and alternating service in pieces of I₁ and I₂. Point processes and queuing problems (Colloq., Keszthely, 1978), pp. 343–357, Colloq. Math. Soc. János Bolyai, 2A, North-Holland, Amsterdam, 1981 (William Henderson) 82i:60167 60K25
- Schlesinger, M. (with Kent, R. D.) Unitary group approach to the treatment of mixed-orbital configurations. Phys. Rev. A (3) 23 (1981), no. 3, 979-990. (Authors' summary) 82d:81165 81G40 (81G50)
- Schleusner, John W. (with Reynolds, Donald F.) A note on the equiweak topology. The Proceedings of the 1980 Topology Conference (Univ. Alabama, Birmingham, Ala., 1980). Topology Proc. 5 (1980), 243-245 (1981). (C. M. Pareck) 82::54032
- Schlicht, Ekkehart A seasonal adjustment principle and a seasonal adjustment method derived from this principle. J. Amer. Statist. Assoc. 76 (1981), no. 374, 374-378. (Author's summary) 82h:62162 62M10
- Schlichtiger, Peter Partitioned chain grammars. Automata, languages and programming (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 555-568, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (Mark Benard) 82j:68083 68F05 (68F25)
- Schlichting, G. Operationen mit periodischen Stabilisatoren. Arch. Math. (Basel) 34 (1980), no. 2. 97-99. (M. I. Kabeniuk) 82m:20007 20C07 (22D15, 57S99)
- Polynomidentitäten und Darstellungen von Gruppen. (English summary) Monatsh. Math. 90 (1980), no. 4, 311–313. (M. I. Kabenjuk) 82g:22006 22D15 (20C20) van de velde-Schlick, Barbara F. B. See van de Velde-Schlick, Barbara F. B. Schlick, Moritz ★Philosophical papers. Vol. I. 1909-1922. Edited by Henk L. Mulder and
- Barbara F. B. van de Velde-Schlick. Translations from the German by Peter Heath. With a memoir by Herbert Feigl. Vienna Circle Collection, 11. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1979. xxxvi+376 pp. (1 plate). ISBN 90-277-0314-0, 90-277-0315-9 (Editors) 82b:03021a 03A05 (03-03, 81-03, 83-03)
 - ★Philosophical papers. Vol. II. 1925-1936. Edited by Henk L. Mulder and Barbara F. B. van de Velde-Schlick. Translations from the German by Peter Heath, Wilfrid Sellars, Herbert Feigl and May Brodbeck. With a foreword by Friedrich Waismann.

- Vienna Circle Collection, 11. D. Reidel Publishing Co., Dordrecht-Baston, Mass., 1979. xxxiii+538 pp. (1 plate). ISBN 90-277-0941-6, 90-277-0942-4 (Editors) 82b:03021b
- 3AOS (03-03, 81-03), 83-03)
 Schlicker, Wolfgang Genesis and duration of quarrels about Albert Einstein in Germany from 1920 to 1922/23. (Polish. Russian and English summaries) Translated from the German by T. M. Nowak. Kwart. Hist. Nauk. Tech. 24 (1979), no. 4, 789-804 (8 plates). (Author's summary) 82g-91068 01A70 (01A80)
 Schlieder, S. Some remarks on charges and their conservation in a classical SU₂ Yang-Mills

theory. (Italian and Russian summaries) Nuovo Cimento A (11) 63 (1981), no. 2,

- 137-154. (José M. Cerveró) 82i:81096 81E10 (58E30)
 Schlörer, Jan Security of statistical databases: multidimensional transformation. ACM Trans. Database Systems 6 (1981), no. 1, 95-112. (Author's summary) 82h:68018
- Schlosser-Haupt, Silke (with Wyrwich, Herbert) Über die Stokes-Multiplikatoren gewisser linearer Differentialgleichungen n-ter Ordnung. Math. Nachr. 95 (1980), 107-117. (M. Otelbaev) 82d:34009 34A20 (34E05)

Schlote, Karl-Heinz Einige Aspekte der verstärkten Hinwendung der Mathematik zur Praxis in der Zeit um 1900. NTM Schr. Geschichte Natur. Tech. Medizin 17 (1980), no. 1, 15-22.

- (F. J. Murray) 82:61068 01A74 (00A69, 01A55)

 hlüssler, Karl-Heinz On optimal control problems in civil-engineering and technology.

 Nonlinear analysis (Berlin, 1979), pp. 255-266, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1981, 2, Akademie-Verlag, Berlin, 1981. (Author's summary) 82m:73061 73K40 (49A22)
- malensee, R. (with Ashley, Richard; Granger, C. W. J.) Advertising and aggregate consumption: an analysis of causality. Econometrica 48 (1980), no. 5, 1149-1167. (P. C. B. Phillips) 82b:90036 90A20 (62M10)
- mandt-Besserat, Denise Decipherment of the earliest tablets. Science 211 (1981), no. 4479, 283–285. (Bruno Poizat) 82j:01010 01A17
 meichel, E. F. (with Hakimi, S. Louis) The number of triangles in a triangulation of a
- set of points in the plane. Elem. Math. 35 (1980), no. 6, 137-142. (John D. McFall) 82a:05044 05B99 (05A15)
- meidler, David Walrasian analysis via strategic outcome functions. *Econometrica* 48 (1980), no. 7, 1585–1593. (Andrew Schotter) 82h:90022 90A14 (58E17, 90A06,

(with Postlewaite, Andrew) Approximate Walrasian equilibria and nearby economies. Internat. Econom. Rev. 22 (1981), no. 1, 105-111. (From the introduction)

921-90038

- neisser, G. (with Brass, Helmut) The definiteness of Filippi's quadrature formulae and related problems. Numerische Integration (Tagung, Math. Forschungsinst., Oberwolfoch, 1978), pp. 109–119, Internat. Ser. Numer. Math., 45, Birkhäuser, Basel, 1979. (S. Dubuc) 65D32
 - (with Gervais, Robert; Rahman, Q. I.) Approximation by (0,2)-interpolating entire functions of exponential type. J. Math. Anal. Appl. 82 (1981), no. 1, 184-199. (Helmut Brass) 82i:30050 30E05 (30D15, 41A05)

with Brass, Helmul) Error estimates for interpolatory quadrature formulae. Numer. Math. 37 (1981), no. 3, 371–386. (David R. Hill) 82j:65012 65D30

- eisser, Hans-Jürgen On spaces of functions and distributions with mixed smoothness properties of Besov-Triebel-Lizorkin type. I. Basic properties. Math. Nachr. 98 (1980), 233-250. (J. Peetre) 82i:46054 46E35
- nerl, James Henry Decidability and finite axiomatizability of theories of 80-categorical partially ordered sets. J. Symbolic Logic 46 (1981), no. 1, 101-120. (Wolfgang Thomas) 82h:03024 03C35 (03B25, 03C65, 06A10)
- See also Logic Year, 82e:03007 ding, S. (with Peil, J.) Empirical regression as a conditional expected value of a special distribution-mixture for a modelfree quantitative recording of stochastical relations. (German summary) Biometrical J. 22 (1980), no. 6, 487-495. (A. L. Nagar)
- 62J05 (62G05) mets, Jean An example of the barrelled space associated to C(X; E). Functional analysis, holomorphy, and approximation theory (Proc. Sem., Univ. Fed. Rio de Janeiro, Rio de Janeiro, 1978), pp. 561-571, Lecture Notes in Math., 843, Springer, Berlin, 1981. (Klaus-Dieter Bierstedt) 82g:46075 46E40 (46A07)

(Klaus-Dieter Bierstedt) 82g-46075 46E40 (46A07)
Schmetterer, Leopold See Symposium: Pannonian, Mathematical Statistics, 8.
Schmid, Albert (with Kree, Reiner) Stochastic properties of the resistivity in a atical Statistics, 82f:62005

- one-dimensional disordered conductor. Z. Phys. B 42 (1981), no. 4, 297-304. (Authors' summary) 82i:82059 82A57
- Schmid, H. J. Interpolatory cubature formulae and real ideals. Quantitative approximation (Proc. Internat. Sympos., Bonn, 1979), pp. 245-254, Academic Press, New York, 1980. (H. M. Möller) 82b:41032 41A55 (65D32)
- Schmid, Jürg *-compactifications. Portugal. Math. 37 (1978), no. 3-4, 191-201 (1981). (Olav Njåstad) 82j:54040 54D35 (03H05)
 - Multipliers on distributive lattices and rings of quotients. I. Houston J. Math. 6 (1980), no. 3, 401–425. (I. Gy. Maurer) 82g:06021 06D99 amid, K. W. (with Grümmer, F.) Variational equations for the solution of the
- Hartree-Fock problem with angular momentum projection before the variation. Z. Phys.
- A 292 (1979), no. 1, 15-26. (Authors' summary) 82g:81114 81G35 (Proc. Internat. Summer School, Frankfurt a.d. Oder, 1978), pp. 167–175, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1979, 4, Akademie-Verlag, Berlin, 1980. (Peter
- Wiss. DDK, Adt. Malin. Naturwiss. 1ecn., 1977, 4, Radiaemic Feing, 1981, 1982,
- midt, B. G. The decay of the gravitational field. Comm. Math. Phys. 78 (1980/81), no. 3, 447-454. (R. F. Biljalov) 82e:83016 83C30 (83C20) midt, Bernd (with Bolch, G.) Ein erweitertes Modell für Paging-Trommeln. (English
- summary) Computing 23 (1979), no. 2, 99-118. (From the summary) 82f:68019
- Schmidt, Bernd H. Platz- und Zeiteffiziente Realisierung des Laufzeitkellers bei blockstrukturierten Programmiersprachen. GI—10. Jahrestagung (Saarbrücken, 1980) (German), pp. 336–348, Informatik-Fachber., 33, Springer, Berlin, 1980. (See 82b:68003) 68C25

- nidt, Bernd J. F. See Recent developments in theoretical and experin
- medidi, C.-G. Der Definitionskörper für den Zerfall einer abelschen Varietät mit komplexer Multiplikation. *Math. Ann.* 254 (1980), no. 3, 201–210. (Reinhard Bölling) 14K22 (10D25)
- nidt, D. S. (with Meyer, Kenneth R.) Entrainment domains. Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. I (Prague, 1978), pp. 479-482, Academia, Prague, 1979. (Authors' summary) 82j:34038 34C25
- nidt, Darrell (with Bartelt, Martin W.) On strong unicity and a conjecture of Henry and Roulier. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 187-191, Academic Press, New York, 1980. (A. Kroó) 82d:41035 41A52 (41A50) A characterization of strong unicity constants. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 805-810, Academic Press, New York, 1980. (A. Kroó) 82d:41034 41A50 (41A52)

Strong uniqueness for Chebyshev approximation by reciprocals of polynomials on $[0,\infty]$. J. Approx. Theory 30 (1980), no. 4, 277-283. (Martin Bartelt) 82h:41020

(with Henry, Myron S.) Error bounds for polynomial product approximation. J. Approx. Theory 31 (1981), no. 1, 6-21. (Wieslaw Pleśniak) 82i:41008 41A10

- nidt, Diana The relation between the height of a well-founded partial ordering and the order types of its chains and antichains. J. Combin. Theory Ser. B 31 (1981), no. 2, 183-189. (R. P. Dilworth) 82i:06002 06A10 (04A20)
- midt, Dieter (with Schäfke, Reinhard) Connection problems for linear ordinary differential equations in the complex domain. Geometrical approaches to differential equations (Proc. Fourth Scheveningen Conf., Scheveningen, 1979), pp. 306-317, Lecture Notes in Math., 810, Springer, Berlin, 1980. (Shlomo Strelitz) 82c:34009 34A20 (with Schäfke, Reinhard) The connection problem for general linear ordinary

differential equations at two regular singular points with applications in the theory of special functions. SIAM J. Math. Anal. 11 (1980), no. 5, 848-862. (D. A. Lutz) 82a:34010a 34A20 (34A20, 34C05)

- mild, E. Thomas The ideal lattice of a distributive lattice with 0 is the congruence lattice of a lattice. Acta Sci. Math. (Szeged) 43 (1981), no. 1-2, 153–168. (R. Beazer) 82g:06015 06D05 (06B10)
- midt, Eberhard Teilalgebren zweier mehrsortiger Funktionenalgebren. I. [Subalgebras of two many-sorted function algebras. I] Rostock. Math. Kolloq. No. 17 (1981), 5-16. (Chris 03G25 (68D20)
- midt, Eckard Chebyshev approximation with sums of logarithmic functions. J Theory 26 (1979), no. 2, 124–131. (Author's introduction) 82j:41026 41A50
- Schmidt, Franz On moving average representations of Banach-space valued stationary processes over LCA groups. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Błażejewko, 1979), pp. 251-258, Lecture Notes in Math., 828, Springer, Berlin, (with Makagon, Andrzej) A decomposition theorem for densities of positive

operator-valued measure. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 1-2, 41-43 (1981). (S. D. Chatterji) 82m:46047 46G10 (28B05)

- Schmidt, G. (with Köhler, W. E.; Hess, Siegfried) On the kinetic theory of the Enskog fluid. Viscosity and viscoelasticity, heat conduction and thermal pressure. Z.
- Naturforsch. A 36 (1981), no. 6, 545–553. (Authors' summary) 82j:82044 82A40 hmidt, George Stochasticity and fixed-point transitions. Phys. Rev. A (3) 22 (1980), no. 6, 2849–2854. (P. J. Holmes) 82e:58024 58F05 (58F10, 70K99, 82A05) hmidt, Günter (with Förste, Joachim) Nachruf für Kurt Schröder. Z. Angew. Math. Mech. 58 (1978), no. 9, 369–370. (Editors) 82t:01096 01A70
- Forced and parametrically excited nonlinear random vibrations. Proceed lings of the
 - VIIIth International Conference on Nonlinear Oscillations, Vol. II (Prague, 1978), pp. 633-638, Academia, Prague, 1979. (See 82k:70002b) 70L05
 - Schwingungen unter gleichzeitiger zufälliger Zwangs- und Parametererregung. (English and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 9, 409-419. 701.05
- (Author's summary) 82g:70050 (with Prössdorf, Siegfried) A finite element collocation method for singular integral tions. Math. Nachr. 100 (1981), 33-60. (From the introduction) 82m:65127 65R20 (45E05)
- (with Prössdorf, Siegfried) Notwendige und hinreichende Bedingungen für die Konvergenz des Kollokationsverfahrens bei singulären Integralgleichungen. Math. Nachr. 89 (1979), 203-215. (R. Kress (Zbl 434:45011)) 82m:45022 (45E05, 65R20)
- " (with Papageorgiou, M.) On the hierarchical solution of nonlinear ol problems. Large Scale Systems 1 (1980), no. 4, 265-271. (Guy midt, Gunther optimal control problems. 49D20 (93A13, 93C55)
 - Programs as partial graphs. I. Flow equivalence and correctness. Theoret. Comput. Sci. 15 (1981), no. 1, 1-25. (Author's summary) 82k:68011a 68B10 (03G15, 05C99) Programs as partial graphs. II. Recursion. *Theoret. Comput. Sci.* **15** (1981), no. 2, 159–179. (Author's summary) **82k:68011b** 68B10 (03G15, 05C99)
- idt, Heinz-Jürgen *Axiomatic characterization of physical geometry. Lecture Notes in Physics, 111. Springer-Verlag, Berlin-New York, 1979. v+163 pp. ISBN 3-540-09719-8
- (H. W. Guggenheimer) 82f:51016 51M05 (20A05, 22E70, 51N30, 73A05) nidt, Jochen W. Zur Numerik nichtlinearer Probleme-Aufgaben, Algorithmen und Programme. Wiss. Z. Tech. Univ. Dresden 28 (1979), no. 5, 1081-1087. (Editors) 82f-65002 65-01 (65-03)
- Monotone Eingrenzung von inversen Elementen durch ein quadratisch konvergentes Verfahren ohne Durchschrittsbildung. Z. Angew. Math. Mech. 60 (1980), no. 4, 202–204. (U. Tippenhauer) 82j:65019 65F05 (65J05) mildt, Klaus D. On periodic expansions of Pisot numbers and Salem numbers. Bull.
- London Math. Soc. 12 (1980), no. 4, 269-278. (D. G. Cantor) 82c:12003
 - Asymptotically invariant sequences and an action of SL(2, Z) on the 2-sphere. Israel J. Math. 37 (1980), no. 3, 193-208. (V. Losert) 82e:28023a 28D15 (22D40) (with Moore, Calvin C.) Coboundaries and homomorphisms for nonsingular actions
- and a problem of H. Helson. Proc. London Math. Soc. (3) 40 (1980), no. 3, 443-475. (K. R. Parthasarathy) 82a:22007 22D40 (28D15)
- On the convergence of a bounded amart and a conjecture of Chatterji. J. riate Anal. 11 (1981), no. 1, 58-68. (Allan Gut) 82f:60116 60G48 (60G40)

issue dedicated to Olaf Pedersen on his sixtieth birthday. Centaurus 24 (1980), 4-13.

(William C. Waterhouse) 82g:91004 01A17 (10-03)

which, Peter Substitution methods for the automatic symbolic solution of differential equations of first order and first degree. Symbolic and algebraic computation (EUROSAM "79, Internat. Sympos., Marseille, 1979), pp. 164-176, Lecture Notes in Comput. Sci., 72, Springer, Berlin, 1979. (Author's summary) 82ec68034 68C20

Further results on the value of sample separation information. Econ (1981), no. 5, 1339-1343. (V. K. Srivastava) 82h:62121 62J99

(with Hoffman, Dennis L.) Testing the restrictions implied by the rational expectations hypothesis. J. Econometrics 15 (1981), no. 2, 265–287. (Authors' 82462166 62P20 trics 15 (1981), no. 2, 265-287. (Authors' summary)

unidt, Roland Projektivitäten direkter Produkte endlicher Gruppen. Arch. Math. (Basel) 35 (1980), no. 1-2, 79-84. (R. R. Struik) 82b:20034 20D30 (06B99)

Untergruppenverbande involutorisch erzeugter Gruppen. Rend. Sem. Mat. Univ. adooa 63 (1980), 95-126. (Charles S. Holmes) 82g:20053 20E15 (20B22)

(with Gaschütz, Wolfgang) Affinitäten endlicher Gruppen. J. Reine Angew. Math. 326 (1981), 187-197. (Charles S. Holmes) 82m:20026 20D45 (20B25)

Radiger Zyklische Orienterungen endlicher bewerteter Graphen. (English nary) Monatsh. Math. 88 (1979), no. 3, 253–263. (Author's summary) 82e:05087 05C38 (05C20)

nidt, S. L. (with Larter, R.; Ortoleva, Peter) Electrical effects in no physico-chemical systems: field chemical wave interaction and bio-self electrophoresis.

Pattern formation by dynamic systems and pattern recognition (Proc. Internat. Sympos. Synerget., Garmisch-Partenkirchen, 1979), pp. 144–154, Springer Ser. Synergetics, 5, Springer, Berlin, 1979. (See 822-09028) 92A09 (35K55, 80A30, 92A40)

(with Feeney, R.; Ortoleva, Peter) Experiments on electric field-BZ chemical wave interactions: annihilation and the crescent waves. Phys. D 2 (1981), no. 3, 536-544. (Authors' summary) 82h:92013 92A09 (78A55, 80A30)

midt, Volker (with Franken, Peter; König, Dieter) On time-dependent and stationary queue length characteristics. Elektron. Informationsverarb. Kybernet. 16 (1980), no. 8-9, 463–466. (Authors' summary) 82f:60211 60K25

Equations and inequalities between various stationary queueing characteristics. ktron. Informationsverarb. Kybernet. 16 (1980), no. 8-9, 466-469. (Author's summary) Elektron. Informa

(with König, Dieter) Relationships between time- and customer-stationary characteristics of service systems. Point processes and queuing problems (Colloq., Kesthely, 1978), pp. 181–225, Colloq. Math. Soc. János Bolyai, 24, North-Holla Amsterdam, 1981. (Stig I. Rosenlund) 82h:66184 60K25

(with König, Dieter; Rykov, V. V.) Stationary queueing systems with dependencies. (Russian) Probability theory. Mathematical statistics. Theoretical cybernetics, Vol. 18 (Russian), pp. 95–186, 188, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. (Bruce D. Craven) 82k:60191 60K25 (60–02, 60G55)

sidt, W. (with Engelbert, H. J.) Zero-one law for certain functionals of the Wiener process and some applications. C. R. Acad. Bulgare Sci. 34 (1981), no. 6, 759-762. (From the text) 82k:60155 60J65 (60H10)

(German and Russian summaries) Math. Operationsforach. Statist. Ser. Statist. 10 (1979), no. 3, 353–366. (Donald R. Jensen) 82h:62084 62J05

(with Bunke, Helga) Asymptotic results on nonlinear approximation of regression noctions and weighted least squares. (German and Russian summaries) Math. eerationsforsch. Statist. Ser. Statist. 11 (1980), no. 1, 3–22. (M. Hušková) 82m:62137

(with Mauersberger, R.) Berry-Esseen type bounds for nonlinear models. Math. tionsforsch. Statist. Ser. Statist. 11 (1980), no. 4, 465-473. (A. N. Philippou) 62E20 (62J02)

midit, Wolfgang M. Diophantine inequalities for forms of odd degree. Adv. in Math. 38 (1980), no. 2, 128-151. (A. J. van der Poorten) 82k-10033 10C10 (10B45)
Simultaneous p-adic zeros of quadratic forms. Monatsh. Math. 90 (1980), no. 1, 45-65. (S. A. Stepanov) 82k-10026 10C20 (10F10, 12B05)
unidt-Bichler, Ursula (with Behrends, Ehrhard) M-structure and the Banach-Stone

theorem. Studia Math. 69 (1980/81), no. 1, 33-40. (F. Cunningham, Jr.) 82d:46020 46B20 (46E40)

der, Gerald (with Kasten, Volker) Über eine Klasse von Trinomen. Arch. Math. (Basel) 35 (1980), no. 4, 374-385. (S. Ruscheweyh) 82e:30018 30C45 unipf, David J. (with MacMahon, James A.; Andersen, Douglas C.; Smith, Kimberly

G.; Bayn, Robert L., Jr.) An organism-centered approach to some community and ecosystem concepts. J. Theoret. Biol. 88 (1981), no. 2, 287-307. (Authors' summary) 92A17

doef, W. E. Optimal control of systems with multiple criteria when disturbances are present. J. Optim. Theory Appl. 27 (1979), no. 1, 135-146. (J. M. Skowroński) 82m:90175 90D25 (90D12)

(with Barmish, B. Ross) New results on controllability of systems of the form =A(t)x(t)+f(t,u(t)). IEEE Trans. Automat. Control 25 (1980), no. 3, 540-547. (Ethelbert N. Chukwu) 82i:93005 93B05 (93C50)

(with Barmish, B. Ross; Leitmann, G.) A note on avoidance control. Trans. ASME Ser. G J. Dynamic Systems Measurement Control 103 (1981), no. 1, 69-70. (Authors' nary) 82m:90180 90D26

ithals, Bodo Konstruktion imaginärquadratischer Körper mit unendlichem

akõrperturm. Arch. Math. (Basel) 34 (1980), no. 4, 307-312. (Harvey Cohn) 12A65 (12A25) 82f:12017

Eine Verallgemeinerung der Klassenrangabschätzung für Zahlkörper von Roquette Zassenhaus. Arch. Math. (Basel) 34 (1980), no. 5, 412-415. (Kurt Girstmair) 82f:12010 12A50 (12A65)

mitt, Bruno V. Deux methodes numériques simples dans le domaine des oscillations non linéaires. Constructive methods for nonlinear boundary value problems and nonlinear oscillations (Proc. Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 145-149, Internat. Ser.

Numer. Math., 48, Birkhäuser, Basel, 1979. (Editors) 82h:65060 65L05
mitt, Charles B. Filippo Fantoni, Galileo Galilei's predecessor as mathematics lecturer at

Pisa. Science and history, pp. 53-62, Studia Copernicana, XVI, Ossolineum, Wrocław, 1978. (See 82e:01003) 01A40

tt, G. Experiences with the second-order design problem in theoretical and practical geodetic networks. Optimization of design and computation of control networks. Internat. Sympos., Sopron, 1977), pp. 179–206, Akad. Kiadó, Budapest, 1979. (See 82c:90026) 86A30 tation of control networks (Proc.

Second order design of a free distance network, considering different types of criterion matrices. Bull. Géodésique 54 (1980), no. 4, 531-541. (Author's summary) 82c:90034 90B05 (86A30)

nitt, Klaus (with Peitgen, Heinz-Otto) Perturbations topologiques globales des problèmes non linéaires aux valeurs propres. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 4, A271-A274. (Authors' introduction) 82a:58019 58E07

Oscillations in nonlinear differential-delay equations. Abstract Cauchy problems and functional differential equations (Proc. Workshop, Leibnitz, 1979), pp. 191-211, Res. Notes in Math., 48, Pitman, Boston, Mass., 1981. (B. S. Lalli) 82h:34103 34K15 (94A05)

(with Peitgen, Heinz-Otto; Saupe, Dietmar) Nonlinear elliptic boundary value problems versus their finite difference approximations: numerically irrelevant solutions J. Reine Angew. Math. 322 (1981), 74-117. (W. F. Ames) 82h:65076 65N20 (34B1: 65N20 (34B15.

nitt, Robert C. Early Hawaiian statistics. Amer. Statist. 35 (1981), no. 1, 1-3. (Author's

summary) 82b:01002 01A10
mitz, G. (with Edenhofer, J.) Ein implizites Charakteristikenverfahren zur Lös Anfangsrandwertaufgaben bei hyperbolischen Systemen und seine Konvergenz. (English summary) Computing 26 (1981), no. 3, 257–264. (Authors' summary) 82f:65126

nüdgen, Konrad Two theorems about topologies on countably generated Op *-algebras. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 1-2, 139-150. (P. Ch. Sinha) 82c:47052

On topologization of unbounded operator algebras. Rep. Math. Phys. 17 (1980), no. 3, 359-371. (Julio Alcántara) 82j:47064 47D40 (46L99)

Perturbations of selfadjoint operators with point spectra by restrictions and djoint extensions. Math. Ann. 256 (1981), no. 2, 233-248. (R. C. Gilbert) 82h:47024 47B25 (47A10, 81D05)

tzer, Ernst *Теория относительности—современное представление. (Russian) The theory of relativity—a modern representation] Hyrk k emmersy физики. [A way to the unity of physics] Translated from the German by A. S. Dobroslavskii. With a foreword by Ja. B. Zel'dovič. "Mir", Moscow, 1981. 232 pp. (Editors) 82i:83001 83-03 (01A60)

See also Kramer, Dietrich; et al., 82h:83002

mabel, Rudolf Eine ringtheoretische Kennzeichnung metabelscher Gruppen. Arch. Math. (Basel) 36 (1981), no. 1, 6-9. (B. H. Neumann) 821:20063 20F16 (20F16 (16A26. 20H25)

abl, Roman Die Algebra der Bernsteinoperatoren und symmetrische Funktionen Multivariate approximation theory (Proc. Conf., Math. Res. Inst., Oberwolfach, 1979), pp. 378-395, Internat. Ser. Numer. Math., 51, Birkhäuser, Basel, 1979. (Walter Schempp) 46H99 (41A35, 46E27)

nakenberg, J. *Thermodynamic network analysis of biological systems. Second edition. Universitext. Springer-Verlag, Berlin-New York, 1981. x+149 pp.
ISBN 3-540-10612-X (Richard J. Field) 82h:92002 92-02 (80A10, 92A05, 92A40)

natz, Klaus (with Colgen, Rainer) Continuity properties in semi-infinite parametric linear optimization. Numer. Funct. Anal. Optim. 3 (1981), no. 4, 451-460. (Authors'

summary 82.m-90103 90C05 (90C31)

meeberger, H. Unzulässige Lösungen bei optimaler Schichtung. Z. Angew. Math. Mech.
60 (1980), no. 7, T371–T372. (H. T. Amundsen) 82k:62026 62D05

meewelss, W. G. On the number of defective system's components or erroneous bits in binary coding. (German summary) Z. Oper. Res. Ser. A-B 25 (1981), no. 2, B49-B53. (Author's summary) 821:90044

Schneewind, Elizabeth Hughes See Kraft, Victor, 82:01071
Schneid, Josef (with Frank, Reinhard; Ueberhuber, Christoph W.) The concept of B-convergence. SIAM J. Numer. Anal. 18 (1981), no. 5, 753-780. (Authors' summary) 65L05

neider, Albert On spectral theory for the linear selfadjoint equation $Fy = \lambda Gy$. Ordin and partial differential equations (Proc. Sixth Conf., Univ. Dundee, Dundee, 1980), pp. 306-332, Lecture Notes in Math., 846, Springer, Berlin, 1981. (William N. Everitt) :34027 34B25 (47E05)

neider, Claus Product integration for weakly singular integral equations. Math. Con 36 (1981), no. 153, 207-213. (P. M. Anselone) 82c:65090 65R20 (45L05)

ider, E. On the speed of convergence in the random central limit theorem for φ-mixing processes. Z. Wahrsch. Verw. Gebiete 58 (1981), no. 1, 125-138. (Gutti J. Babu) 60F05 (60G05) 82k:60051

neider, Fred B. (with Denning, Dorothy E.) Master keys for group sharing. Process. Lett. 12 (1981), no. 1, 23-25. (From the introduction) 82d:94046

Process. Lett. 12 (1981), no. 1, 23–25. (From the mitroducture)

eider, Hans See Large scale matrix problems, 82;65017

eider, Hans-Jürgen Hochheben multiplikativer Untergruppen. Arch. Math. (Basel) 35

eider, Hans-Jürgen Hochheben multiplikativer Untergruppen. 422 (20020)

14 23 (Ernet-Wilhelm Zink) 821:14046 14L20 (20020)

15 25 269–593. (1980), no. 5, 416-423. (Ernst-Wilhelm Zink) 82f:14046

Zerlegbare Erwiterungen affiner Gruppen. J. Algebra 66 (1980), no. 2, 569-593. (Klaus Pommerening) 821:14044 14L15 (2010)

Restriktion und Corestriktion für algebraische Gruppen. J. Algebra 68 (1981), no. 1, 177-189. (Klaus Pommerening) 82f:14045 14L15 (20J05)

Zerlegbare Untergruppen affiner Gruppen. Math. Ann. 255 (1981), no. 2, 139-158. (Klaus Pommerening) 82h:14029 14L15 (20G15)

eider, Hans-Jürgen Set-theoretic concepts in programming languages and their implementation. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 42-54, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Author's summary) 82h:68007 68B enthal-Schneider, Ilse See Rosenthal-Schneider, Ilse 68B05 (04A99, 68F10)

eider, Ivo The contributions of the sceptic philosophers Arcesilas and Carneades to the development of an inductive logic compared with the Jaina-logic. Proceedings of the sium on the 1500th Birth Anniversary of Aryabhata I (New Delhi, 1976). Indian J.

Hist. Sci. 12 (1977), no. 2, 173-180. (B. Brainerd) 82a:01009 01A32 (03-03, 60-03) ★Archimedes (German) Ingenieur, Naturwissenschaftler und Mathematiker. [Engineer, natural scientist and mathematician] Erträge der Forschung [Research Results], 102. Wissenschaftliche Buchgesellschaft, Darmstadt, 1979. viii + 209 pp. ISBN 3-534-06844-0 (E. Neuenschwander) 82a:01005 01A20 See also Vogel, Kurt, 82j:01080

neider, J. Der Satz von Gerschgorin für gedämpfte Schwingungen. Z. Angew. Math. Mech. 60 (1980), no. 5, 266–268. (Rudolf Veselkov) 82a:70018 70J20

neider, K. R. On the application of integral manifolds to Hopf bifurcation. Math. Nachr. 97 (1980), 313-323. (J. K. Hale) 82f:34053 34C45 (58F14, 92A15) Andronov-Hopf-Bifurkation im Falle stetiger Parameterabhängigkeit. (English and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 1, 19-24. (J. K. Hale) 34C15 (58F14, 92A15)

eider, Michael Einschränkung stabiler Vektorraumbündel vom Rang 3 auf Hyperebenen des projektiven Raumes. J. Reine Angew. Math. 323 (1981), 177-192. (P. E. Newstead) 82;:14014 14F05

eider, N. Monotone Einschließung durch Verfahren vom Regula-falsi-Typ unter Verwendung eines verallgemeinerten Steigungsbegriffes. (English summary) Computing 26 (1981), no. 1, 33-44. (Author's summary) 82f:65067 65J15 (65H10) meider, Peter Über die Werte der Riemannschen Zetafunktion an den ganzzahligen

J. Reine Angew. Math. 313 (1980), 189-194. (Krystyna Bartz) 82g:10057 10H05 (12A70)

Schneider, Rolf (with Gruber, Peter M.) Problems in geometric convexity. Contributions to geometry (Proc. Geom. Sympos., Siegen, 1978), pp. 255-278, Birkhäuser, Basel, 1979. (Bernd Kind) 824:52001 52-02

A local formula of translative integral geometry. Arch. Math. (Basel) 36 (1981), no. 5, 466–469. (M. Stoka) 82j:53119 53C65 (52A22, 53C30)

(with Wieacker, John André) Approximation of convex bodies by polytopes. London Math. Soc. 13 (1981), no. 2, 149-156. (J. M. Wills) 82g:52008 52A20 (52A25) Zur optimalen Approximation konvexer Hyperflächen durch Polyeder. Math. Ann.

256 (1981), no. 3, 289-301. (J. M. Wills) 82m:52003 52A20 (53A05) uneider, Toni (with Stoll, E.) Classical statistical mechanics of soliton-bearing systems Physics in one dimension (Proc. Internat. Conf., Fribourg, 1980), pp. 75-86, Springer Ser. Solid-State Sci., 23, Springer, Berlin, 1981. (See 82g:82003) 82A05

(with Stoll, E.) Classical statistical mechanics of the sine-Gordon and φ^4 chain. II. Dynamic properties. Phys. Rev. B (3) 23 (1981), no. 9, 4631-4660. (Authors' summary) 82A68

See also Physics in one dime sion, 82g:82003

Schneider, W. (with Potsch, K.) Weak buoyancy in laminar vertical jets. Recent developments in theoretical and experimental fluid mechanics, pp. 501-510, Springer, Berlin, 1979. (See 82c:76004) 76R10

neider, W. R. (with Alexander, Shlomo; Bernasconi, Jakob; Orbach, R.) Excitation dynamics in random one-dimensional systems. Rev. Modern Phys. 53 (1981), no. 2, 175-198. (Authors' summary) 824:82051 82A42 (58F13)

neider, Walter J. Approximation and harmonic measure. complex analysis (Proc. NATO Adv. Study Inst., Univ. Durham, Durham, 1979), pp. 333-349, Academic Press, London, 1980. (Bernt Øksendal) 82g:30058 30

neider, Wolfgang (with Güttler, Reiner; Mehlhorn, Kurt) Binary search trees: average and worst case behavior. (German and Russian summaries) Elektron. Informationsverarb. Kybernet. 16 (1980), no. 1-3, 41-61. (E. M. Reingold) 82g:68057

68E05 (90B05)

unitzler, M. Graph grammars and the complexity gap in the isomorphism problem for acyclic digraphs. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 137–149, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Author's summary) 82h:68095 68E10 (05C20, 68F05)
Schnorr, C. P. Refined analysis and improvements on some factoring algorithms.

Automata, languages and programming (Akko, 1981), pp. 1–15, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (Author's summary) 82k:10004 10–04 (10A25,

How many polynomials can be approximated faster than they can be evaluated? Inform. Process. Lett. 12 (1981), no. 2, 76-78. (Maurice Mignotte) 82g:12002 12-04 (68C25)

nober, Glenn Coefficient estimates for inverses of schlicht functions. Aspects of contemporary complex analysis (Proc. NATO Adv. Study Inst., Univ. Durham, 1979), pp. 503–513, Academic Press, London, 1980. (W. C. Royster) 82j:30021 m, Durh (with Bshouty, D.; Hengartner, Walter) Estimates for the Koebe constant and the second coefficient for some classes of univalent functions. Canad. J. Math. 32 (1980), no. 6, 1311-1324. (Z. Lewandowski) 82f:30009 30C45 (30C50)
(with Baernstein, Albert, II) Estimates for inverse coefficients of univalent functions

from integral means. Israel J. Math. 36 (1980), no. 1, 75-82. (V. Linis) 82a:30022

ochet, Claude (with Rosenberg, Jonathan) The classification of extensions of C*-algebras. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 1, 105-110. (Vern Paulsen) 46L05 (18G99, 46M20)

(with Schreiber, Bertram) Open centralizers and the continuity of group representations. Proc. Amer. Math. Soc. 82 (1981), no. 1, 99-104. (Pierre Eymard)

Schock, Rolf A complete system of indexical logic. Notre Dame J. Formal Logic 21 (1980), no. 2, 293-315. (Victor K. Finn) 82c:03023 03B45

Schoeller, C. Homologie d'anneaux locaux de dimension d'immersion 3. [Homology of local rings of imbedding dimension 3] Paul Dubreil and Marie-Paule Malliaoin Algebra Seminar, 33rd Year (Paris, 1980), pp. 214-233, Lecture Notes in Math., 867, Springer, Berlin, 1981. (Jürgen Herzog) 82m:13010 13D25 (13H99)

Doman, M. J. Quasisplitting abelian groups. Algebra Symposium (Potchefstroom Univ., Potchefstroom, 1979), pp. 97-104, Potchefstroom Univ. for Christian Higher Ed., Potchefstroom, 1980. (See 82:16002) 20K21

Potchefstroom, 1980. (See 82:16002) 20K21 (with Beukes, J. S.) Induced endomorphisms in module theory. (Afrikaans. English nary) Tydskr. Natuurwetenskap. 20 (1980), no. 3, 95-102. (Frans Loonstra) 16A53

Schoen, Richard (with Yau, Shing Tung) The energy and the linear momentum space-times in general relativity. Comm. Math. Phys. 79 (1981), no. 1, 47-51. (Beverly K. Berger) 82;83045 83C99 (53C55, 58E20, 83C30)

(with Simon, Leon) Regularity of stable minimal hypersurfaces. Comm. Pure Appl. Math. 34 (1981), no. 6, 741-797. (F. J. Almgren, Jr.) 82k-49854 49F22 (53C42, 58E15)

uer, Mare Quelques résultats de régularité pour un système elliptique avec conditions aux limites couplées. Portugal. Math. 36 (1977), no. 3-4, 301-310 (1980). (E. Giusti) 82g:35035 35J55

Quelques résultats de régularité pour un système elliptique avec conditions aux limites couplées. (English summary) Ann. Fac. Sci. Toulouse Math. (5) 2 (1980), no. 2, 125-135. (Rudolf Švarc) 82b:35057 35J55 (35D10)

Some regularizing effects for the Hamilton-Jacobi-Bellman equation for two

parabolic operators. Comm. Partial Differential Equations 6 (1981), no. 8, 929–949. (Pierre-Louis Lions) 82m:35086 35K60 (93E20) oenberg, I. J. The Landau problem for motions on curves and time-optimal control problems. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 811-821, Academic Press, New York, 1980. (Dorde Dukić) 821:70035 (49A10, 70G99)

(with Pollin, Jack M.) On the matrix approach to Fibonacci numbers and the conacci pseudoprimes. Fibonacci Quart. 18 (1980), no. 3, 261-268. (Jau-Shyong Shiue) 10A35

A direct derivation of a Jacobian identity from elliptic functions. Amer. Math. Monthly 88 (1981), no. 8, 616-618. (N. C. Jain) 82j:33003

oener, Thomas W. Generality of the size-distance relation in models of optimal feeding.

Amer. Natur. 114 (1979), no. 6, 902-925. (Howard B. Stauffer) 82a:92036 92A17

hoenfeld, David Tests based on linear combinations of the orthogonal components of the Cramér-von Mises statistic when parameters are estimated. Ann. Statist. 8 (1980), no. 5, 1017-1022. (Georg Neuhaus) 82b:62048 62G10

Chi-squared goodness-of-fit tests for the proportional hazards regression model. ometrika 67 (1980), no. 1, 145-153. (Author's summary) 82k:62189 62N05 (62P10) The asymptotic properties of nonparametric tests for comparing survival distributions. Biometrika 68 (1981), no. 1, 316-319. (R. D. Gill) 82a:62069

enfeld, Lowell (with Berndt, Bruce C.) Corrigendum to the paper: "Periodic analogues of the Euler-Maclaurin and Poisson summation formulas with applications to nun theory" [Acta Arith. 28 (1975/76), no. 1, 23-68; MR 52 #5586]. Acta Arith. 38

(1980/81), no. 3, 323. (Editors) 822:10040 10G05

oenfelder, John R. (with Shachtman, Richard H.; Hogue, Carol J.) Using a stochastic model to investigate time to absorption distributions. Oper. Res. 29 (1981), no. 3,

589-603. (Authors' summary) 82i:92031 92A15 (60J70, 62D05)

Schofield, R. (with Lord, B. I.) Some observations on the kinetics of haemopoietic stem cells and their relationship to the spatial cellular organisation of the tissue. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 9-22, Lecture Notes in Biomath.,

38, Springer, Berlin, 1980. (See 82c:92004) 92A07

Schofield, S. L. (with Bowers, R. G.) The Curic-Weiss-Néel model of a ferrimagnet. (French summary) Canad. J. Phys. 59 (1981), no. 7, 883-887. (Authors' summary)

82h:82045 82A68 (82A25)

Schoissengeler, Johannes (with Hlawka, Edmund) *Zahlentheorie. (German) [Number theory] Eine Einführung. Vorlesungen über Mathematik. Manzsche Verlags- un Universitätsbuchhandlung, Vienna, 1979. iii + 159 pp. (loose errata). ISBN 3-214-00005-5 (G. J. Rieger) 82d:10001 10-01 (10Axx)

Scholl, H. (with Froeschle, C.) The stochasticity of peculiar orbits in the 2/1 Kirkwood

gap. Astronom. and Astrophys. 93 (1981), no. 1-2, 62-66. (Authors' summary) 82d:85012

85A99 (58F40)

Scholl, Michel New file organizations based on dynamic hashing. ACM Trans. Database Systems 6 (1981), no. 1, 194–211. (Author's summary) 82c:68016 68B15

Scholz, F. W. Towards a unified definition of maximum likelihood. (French st Canad. J. Statist. 8 (1980), no. 2, 193-203 (1981). (Rashid Ahmad) 82m:62002 62A10

Scholz, H. J. (with Graham, Robert) Analytic approximation of the Lorenz attractor by invariant manifolds. Phys. Rev. A (3) 22 (1980), no. 3, 1198-1204. (L. A. Bunimovich) 82b:58054 58F13 (76F99)

Scholz, Hans-Eberhard Einige für die Konstruktion und Untersuchung stetiger Monte-Carlo-Methoden nützliche Definitionen und Sätze aus der Theorie der homogenen Markoffschen Prozesse. Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Natw. Reihe 29 (1980), no. 1, 41-46. (K. K. Sabel'fel'd) 82g:60104 60J60 (62E25, 65C05)

Scholz, K. On scheduling multiprocessor systems with algebraic objectives. (Germannia) summary) Computing 20 (1978), no. 3, 189-205. (Author's summ 68CO5 (68R20, 90R35)

Scholz, Roland W. Vergleich zweier Anspruchsniveau-Vorhersagemodelle mit der Gleichaufteilungsvorhersage in einer dyadischen Verhandlungssituation mit vollständiger Information. (English summary) Decision in small groups (Workshop, Jungholz, 1977) (German), pp. 181–192, Math. Systems in Econom., 45, Hain, Königstein/Ts., 1979. (See

mberg, H. (with Havixbeck, D.) A parallel finite difference method for the magnetostatic equation. Advances in computer methods for partial differential equations, 11 (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 198-204, IMACS, New Brunswick, N.J., 1977. (Authors' summary) 82c:78007 78A30 (65N20)

ers, W. Inertial frames of reference: mass coupling to space and time. Internat. J. Theoret. Phys. 20 (1981), no. 6, 411-431. (Author's summary) 82i:83006 83A05

on, Rolf A remark on the Hilton-Roitberg-Zeeman comparison theorem for fibrations.

Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 126, 235-237. (From the introduction) 82f:55023 55R20 (55T99)

wer, Willi (with Raith, Karlheinz; Glotz, Gerhard) The principle of the difference of difference quotients as a key to the self-adaptive solution of nonlinear partial differential capations. Comput. Methods Appl. Mech. Engrg. 28 (1981), no. 3, 327–359. (Authors' summary) 82k:65041 65L05 (65N15)

nbek, M. E. A priori estimates of higher order derivatives of solutions to the

- FitzHugh-Nagumo equations. J. Math. Anal. Appl. 82 (1981), no. 2, 553-565. (J. Smoller) 82:35095 35K55 (65P05, 92A09)
- theory and its applications (Internat. Colloq., Oberhof, 1977) (German), pp. 227–234, Tech.
 Hockschule Ilmenau, Ilmenau, 1977. (Peter Kleinschmidt) 82c:52011 52A25 (05C99)
 Bachers, R. (with Kirk W. A. 7
- Macheng, R. (with Kirk, W. A.) Zeros of m-accretive operators in Banach spaces. Israel J. Math. 35 (1980), no. 1-2, 1-8. (Simeon Reich) 82a:47049 47H06 (with Baillon, Jean-Bernard) Asymptotic normal structure and fixed points of expansive mappings. Proc. Amer. Math. Soc. 81 (1981), no. 2, 257–264. (C. P. Gupta)
- nonexpansive mappings.

 82c:47068 47H10 (46B20, 47H09)

 onfeld, Jonathan F. (with Kwong, Waikwok; Rosner, Jonathan L.; Quigg, C.; Thacker,

 onfeld, Jonathan F. (with Kwong, Waikwok; Rosner, Jonathan L.; Quigg, C.; Thacker,
- H. B.) Degeneracy in one-dimensional quantum mechanics. *Amer. J. Phys.* **48** (1980), no. 11, 926–930. (Authors' summary) **82c81020** 81C05 (34B25, 81F99)
- (with Kwong, Waikwok; Rosner, Jonathan L.; Quigg, C.; Thacker, H. B.) On the convergence of reflectionless approximations to confining potentials. Ann. Physics 128 (1980), no. 1, 1-28. (Marcel Coz) 82b:81104 81F05 (34B25, 81G05)
- (1980), no. 1, 1–28. (Marcel Cox) 82081104 81F05 (3482., 81C05)

 Dynamical symmetry and magnetic charge. J. Math. Phys. 21 (1980), no. 10,
 2528–2533. (Author's summary) 82a:81018 81C99 (22E70, 58F06, 70F99, 83C45)

 Rinhage, A. Storage modification machines. SIAM J. Comput. 9 (1980), no. 3, 490–508.

 (Robert M. Baer) 82b:68040 68C40 (03D15)

 Partial and total matrix multiplication. SIAM J. Comput. 10 (1981), no. 3, 434–455.

 (Author's summary) 82b:68070 68C25 (03D15, 65F30)
- (Authors Sammany) Sakedown 60522 (1991s, 1973); With Huang, Charlotte) Decomposition of K_n into dragons. Canad. Math. Bull. 23 (1980), no. 3, 275–279. (Jean-Claude Bermond) 82c05082 05C99 (with Caro, Y.) Generalized 1-factorization of trees. Discrete Math. 33 (1981), no. 3,
- 319-321. (David P. Sumner) 82c:05041 05C05 (05C70)
- **Notherr**, Siegfried The existence of waiting time moments for single server queues with mixed renewal and Poisson inputs. (German and Russian summaries) Math. usforsch. Statist. Ser. Statist. 12 (1981), no. 2, 225-232. (William Henderson) 82i:60168 60K25
- accounted to the sound of the radial Schrödinger equation by the Rayleigh-Ritz finite element method. IMA J. Numer. Anal. 1 (1981), no. 1, 47-63. (Woodford W. Zachary) 82i:65072 65N30 (49G10, 81C05)
- hopd, G. Construction of an entire function of several variables with a given asymptotic distribution of its zero points. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 4, 476–481. (Guy 32A15
- Mathematicians (Plitoice, 1980) (German), Ber. No. 160, 4 pp., Bericht, 154-162, Forschungszentrum Graz, Graz, 1981. (Editors) 82h:52007 52A99 (58C20)
- horr, B. (with Mülthei, Heinrich N.) Error analysis for a special X-splin nary) Computing 25 (1980), no. 3, 253-267. (Authors' summary) 82e:65011 65D07 (41A15)
- hoteth, P. K. (with Jennings, R. E.) Epistemic logic, skepticism, and nonnormal modal logic. Philos. Stud. 40 (1981), no. 1, 47-67. (Douglas Walton) 82j:03022 03B45
- Schott, René (with Gallardo, Léonard) Marches aléatoires sur les espaces homogènes de certains groupes de type rigide. (English summary) Conference on Random Walks (Kleebach, 1979) (French), pp. 149-170, 4, Astérisque, 74, Soc. Math. France, Paris, 1980. (Yves Guivarc'h) 82e:60107a 60J15 (60B15)
 - Une loi du logarithme itéré pour certaines intégrales stochastiques. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 4, 295-298. (Author's
 - summary) 82c:60142 60J65 (60B15) Croissance et moyennabilité des espaces homogènes. (English summary) [Growth and amenability of homogeneous spaces] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 8, 373–376. (Author's summary) 82m:22011 22E25 (43A07)
- Schott, Thomas *Fundamental research in small countries: mathematics in Denmark, 1928-1977. Various Publications Series, 32. Aarhus Universitet, Matematisk Institut, Aarhus, 1979. ii + 130 pp. (H. W. Guggenheimer) 82g:01090 01A80
- otte, K. D. (with Truong, T. T.) Phase transition of one-dimensional Coulomb system. Phys. Rev. A (3) 22 (1980), no. 5, 2183-2188. (Authors' summary) 82c:82038 82A2 (with Truong, T. T.) Inhomogeneous eight-vertex system and the one-dimensional Fermi gas. Phys. Rev. Lett. 47 (1981), no. 5, 285-288. (Authors' summary) 82g:82023 82A25 (82A15, 82A67)
- n der duyn Schouten, F. A. See van der Duyn Schouten, F. A.
- Schrader, Robert (with Hogreve, H.; Seiler, R.) On dia- and paramagnetic properties of Yang-Mills potentials. Quantum fields—algebras, processes (Proc. Sympos., Univ. Bielefeld, Bielefeld, 1978), pp. 355–360, Springer, Vienna, 1980. (Authors' sum
 - (with Hess, Harald; Uhlenbrock, D. A.) Kato's inequality and the spectral distribution of Laplacians on compact Riemannian manifolds. J. Differential Geom. 15 (1980), no. 1, 27-37 (1981). (G. V. Rozenbljum) 82g:58090 58G25
 - (with Trankle, E.) Analytic and numerical evidence from quantum field theory for the hyperscaling relation $d_P = 2\Delta \gamma$ in the d = 3 Ising model. J. Statist. Phys. 25 (1981), 269-290. (Authors' summary) 82h:81105 81E25 (81-04)
- Schrage, Linus Some comments on hidden structure in linear programs. Computer-assisted analysis and model simplification (Proc. First Sympos., Univ. Colorado, Boulder, Colo., 1980), pp. 389–395, Academic Press, New York, 1981. (See 82g:00016) 90C35
 - (with Gunawardane, Gamini; Hoff, Stephen) Identification of special structure constraints in linear programs. Math. Programming 21 (1981), no. 1, 90-97. (Authors' nary) 82m:90106 90C05
- hram, John Michael Recursively prime sequences. J. Recreation no. 4, 282-284. (Roy W. Ryden) 82:10012 10A35 (10A25) nal Math. 13 (1980/81),
- m, Ruben On piecewise linear functions and piecewise linear equations Oper. Res. 5 (1980), no. 4, 510-522. (Romesh Saigal) 82k:55005 55M20 (90C05)
- Schräpel, H.-D. Kanonische Transformationen, Lagrangesche und Poissonsche Klammern. (English and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 8, 309–316. (F. Nahon) 82h:70021 70H15 (58F05)
 - Analytische Berechnung nichtlinearer Eigenschwingungen durch kanonische Transformation. (English and Russian summaries) Z. Angew. Math. Mech. 61 (1981), no. 1, 29–40. (W. S. Loud) 82m:70020 70H05 (58F05)

- Schreckengost, Jack F. (with Yang, Mark C. K.) Difference sign test for comovements
- between two time see: Comm. Statist. A.—Theory Methods 10 (1981), no. 4, 355–369. (Theo Gasser) 82m:62209 62M10

 Schreiber, Bertram (with Schochet, Claude) Open centralizers and the continuity of group representations. Proc. Amer. Math. Soc. 82 (1981), no. 1, 99–104. (Pierre Eymard) 22D05
- Schreiber, J. (with Aksenov, V. L.) On the method of double-time Green functions in the theory of spin systems. Phys. Lett. A 69 (1978/79), no. 1, 56-57. (Authors' summary) 82A67 (82A25)
- Schreiber, Peter Zur optimalen Lösung von Konstruktionsaufgaben. Vorträge von der Tagung Geometrie und Anwendungen (Gaussig, 1977), pp. 114-126, Weiterbildungszentrum h. Kybernet. Rechentech., 28, Tech. Univ. Dresden, Dresden, 1978. (Dov Avishalom) 03F65 (68G15)
 - Axiomatischer Aufbau der sphärischen Geometrie. Beiträge Algebra Geom. No. 9
- (1980), 73–81. (E. J. F. Primrose) 82h:51010 51B05

 welber, Robert (with Eisenstat, Stanley C.; Schultz, Martin H.) Finite element methods for spherically symmetric elliptic equations. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ.,
 - Bethlehem, Pa., 1977), pp. 93-99, IMACS, New Brunswick, N.J., 1977. (From the introduction) 82b:65119 65N30
 - Finite element methods of high-order accuracy for singular two-point boundary value problems with nonsmooth solutions. SIAM J. Numer. Anal. 17 (1980), no. 4, 547–566. (Rolf Rannacher) 82b:65139 65N30 (65D07, 65L10)
 - Regularity of singular two-point boundary value problems. SIAM J. Math. Anal. 12 (1981), no. 1, 104-109. (Tassilo Küpper) 82b:34021 34B05 (65L10) (with Eisenstat, Stanley C.) Finite element methods for spherically symmetric elliptic
 - tions. SIAM J. Numer. Anal. 18 (1981), no. 3, 546-558. (David F. Griffiths) 65N30 (65L10) 826-65118
- rempt, Wolfgang (with Kuhn, Harald) Superposition stetiger Abbildungen. Arch. Math. (Basel) 34 (1980), no. 3, 249-253. (R. Doss) 82b:26016 26B40 (46A10)
- de Schreye, D. See De Schreye, D.
- Schrieffer, J. R. (with Jackiw, R.) Solitons with fermion number 1 in condensed matter and relativistic field theories. Nuclear Phys. B 190 (1981), no. 2, FS 3, 253-265. (From the introduction) 82h:81109 81E99 (82A55)
- Schrijver, A. Matroids and linking systems. J. Combin. Theory Ser. B 26 (1979), no. 3, 349–369. (Colin J. H. McDiarmid) 824:05051 05B35 (05C70)
- On cutting planes. Combinatorics 79 (Proc. Colloq., Univ. Montréal, Montreal, Que., 1979), Part II. Ann. Discrete Math. 9 (1980), 291-296. (Author's summary) 90C10 (90C05)
- (with Valiant, W. G.) On lower bounds for permanents. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 4, 425-427. (H. Minc) 82a:15004 15A15
- (with van Lint, Jacobus Hendricus) Construction of strongly regular graphs two-weight codes and partial geometries by finite fields. Comb atorica 1 (1981), no. 1. 63-73. (Joseph A. Thas) 82d:05041 05B25 (05C25, 94B25)
- Schröck, Werner Zur Verbesserung des Lokalitätsverhaltens von Programmen durch optimale Zerlegung der Programmgraphen. GI—9. Jahrestagung (Bonn, 1979) (German), pp. 389-401, Informatik-Fachber., 19, Springer, Berlin, 1979. (Author's summary) 68B05 (68B10)
 - Ein Modell zur Konstruktion optimaler Konfigurationen von Rechensystemen. [A model for constructing optimal configurations of computing systems] Measurement, modeling and evaluation of computing systems (Jülich, 1981), pp. 163-178 Informatik-Fachber., 41, Springer, Berlin, 1981. (Author's summary) 82i:94038
- öder, Eberhard M. Zur Kennzeichnung distanztreuer Abbildungen in nichteuklidischen Räumen. (English summary) J. Geom. 15 (1980), no. 2, 108-118. (R. A. Melter) 51F99 (15A04) 82h-51025
- öder, Gunnar Bemerkung zur Differentiation von intervallwertigen Funktionen (English summary) Computing 26 (1981), no. 3, 271-274. (Author's summary) 82f:65055
 - (with Kracht, Manfred; Kreyszig, Erwin) Definitionsprinzipien für Operatoren Bergmanscher Art und einige Anwendungen. Elem. Math. 36 (1981), no. 2, 25-36. (G. Wildenhain) 82f:35040 35C15 (30C40)
- (with Ratschek, H.) Centered forms for functions in several variables. Anal. Appl. 82 (1981), no. 2, 543-552. (Authors' summary) 82m:65045 65G10
- Schröder, Kurt See Förste, Joachim; et al., 82f:01096
 Schröder, M. Analogues of the compact-open topology. Math. Chronicle 10 (1981), no. 1-2, 83-98. (From the introduction) 82k:54020 54C35
- Schrodi, Ewald *Optimale Steuerung linearer dynamischer Systeme durch Lösen Fredholmscher Integralgleichungen. (German) [Optimal control of linear dynamic
 - systems through the solution of Fredholm integral equations] HochschulSamr Ingenieurwissenschaft Datenverarbeitung [Hochschul Collection: Engineering Science and Data Processing], 5. HochschulVerlag, Stuttgart, 1979. iv + 132 pp. ISBN 3-8107-2062-3 (Editors) 82i:49011 49A34 (45B05, 93C10)
- eder, A. (with Bochi, S.; Brossier, G.; Celeux, Gilles; Charles, Christian; Chifflet, R.; Darcos, J.; Diday, E.; Diebolt, J.; Fevre, P.; Govaert, G.; Hanani, O.; Jacquet, D.; Lechevallier, Yves; Lemaire, Jacques; Lemoine, Y.; Molliere, J. L.; Morisset, G.; Ok-Sakun, Y.; Rousseau, P.; Sankoff, D.; Sidi, J.; Taleng, F.) ★Optimisation en classification automatique. Tome 1, 2. (French) [Optimization in automatic classification. Vol. 1, 2] Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. vii + 896 pp. ISBN 2-7261-0219-0 (A. Aiello) 82k:62116 (92A05)
- Schroeder, M. R. Modulation transfer functions: definition and measurement. (German and French summaries) Acustica 49 (1981/82), no. 3, 179-182. (Author's summary) 94A17 (94A05) 22k-94010
- Schroeder-Gudehus, Brigitte Isolation und Kooperation der nationalen scientific communities. Einstein Symposion, Berlin (1979), pp. 517–536, Lecture Notes in Phys., 100, Springer, Berlin, 1979. (Joong Fang) 82c:01076 01A80 (83-03)
- Schroeppel, Richard (with Shamir, Adi) A $T \cdot S^2 = O(2^n)$ time/space tradeoff for certain NP-complete problems. 20th Annual Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 328–336, IEEE, New York, 1979. (Authors' summary)

- Schroer, Bert Quantenfeldtheorie und Topologie. Einstein Symposion, Berlin (1979), pp. 245-258, Lecture Notes in Phys., 100, Springer, Berlin, 1979. (J. S. Joel) 82b:81071 81E10 (53C05)
 - (with Hortacsu, M.; Rothe, K. D.) Zero-energy eigenstates for the Dirac boundary problem. Nuclear Phys. B 171 (1980), no. 3, 530-542. (Authors' summary) 82c:81081 81E10 (58G11, 81G05)
 - (with Rothe, K. D.) Do quark correlation functions exist in confining gauge theories? Nuclear Phys. B 172 (1980), no. 2-3, 383-412. (Authors' summary) 82a:81050 81G10 81G10
 - (with Hortaçsu, M.; Rothe, K. D.) Still more about the fermion determinant in two-dimensional QED. Phys. Rev. D (3) 22 (1980), no. 12, 3145-3146. (Authors' 81E10 (58E20)
- Schroeter, Gerhard (with Meyer, Reinhold) The application of differential geometry to ray acoustics in inhomogeneous and moving media. (German and French summaries) Acustica 47 (1980/81), no. 2, 105-113. (Authors' summary) 824:76079 76Q05
 - The application of the Hankel transformation to spherically symmetric coverage problems. J. Appl. Probab. 17 (1980), no. 4, 1121-1126. (Lawrence D. Stone) 82d:90070 90B40 (60D05)
 - Expected coverage of a randomly located target by multiple independent salvos.
- Oper. Res. 28 (1980), no. 6, 1299-1318. (Author's summary) 82:90067 90B99 urbter, J. (with Oevel, W.) Balance equations for micromorphic materials. J. Statist. Phys. 25 (1981), no. 4, 645-662. (Authors' summary) 82m:82013 82A05 (73B99) (with Oevel, W.) On the asymmetry of the stress tensor of materials with internal degrees of freedom. Phys. A 105 (1981), no. 1-2, 169-186. (Authors' summary) 73B99 (82A99)
- Schroth, P. Scalar-valued production functions on indivisible commodities. IX.

 Oberwolfach Conference on Operations Research (Oberwolfach, 1978), pp. 243-248,

 Operations Research Verfahren, 36, Athenäum/Hain/Scriptor/Hanstein, Königstein/Ts.,

 1980. (From the introduction) 82k:90034 90A11
- Schruben, Lee W. Control of initialization bias in multivariate simulation response. Comm. ACM 24 (1981), no. 4, 246-252. (Author's summary) 82d:68060 68J05
- bert, Ernst (with Bendel, Udo) Zur Bedeutung von mathematischen Modellen in der Physiologie. Wiss. Z. Karl-Marx-Univ. Leipzig Math.-Natur. Reihe 29 (1980), no. 2, 91-101. (Authors' summary) 82g:92015 92A09 (00A69)
- Schubert, Hans Lichtensteins Verhältnis zu den Grundbegriffen der Mechanik Lichtenstein-Festkolloquium (Karl-Marx-Univ., Leipzig, 1978). Wiss. Z. Karl-Marx-Univ. Leipzig Math.-Natur. Reihe 29 (1980), no. 1, 27–35. (R. P. Boas, Jr.) 01A70 (01A80, 70-03, 76-03)
- ann *Kalkül der abzählenden Geometrie. (German) [Calculus of enumerative geometry] Reprint of the 1879 original. With an introduction by Steven L. Kleiman. Springer-Verlag, Berlin-New York, 1979. 349 pp. ISBN 3-540-09233-1 (Editors) 01A75 (14-03, 14N10)
- Schubert, Horst See Meeting: Oberwolfach, Operations Research, 82a:90007
 Schubert, M. (with Ponath, H.-E.) The time-space-dependent power spectrum for the description of nonstationary and inhomogeneous electromagnetic fields. (German Ann. Physik (7) 37 (1980), no. 2, 109-120. (Werner Kohler) 82d:78011 78A25 (94C05)
- abert, Uwe (with Luptáčik, Mikuláš) Optimale Investitionspolitik unter Berücksichtigung der Umwelt: Eine Anwendung der Kontrolltheorie. Third Symposium on Operations Research (Unio. Mannheim, Mannheim, 1978), Section 5, pp. 271–282, Operations Research Verfahren, 35, Hain, Meisenheim, 1979. (From the introduction)
- Schuberth, Ernst See Locher-Ernst, Louis, 82k:51001 Schuchman, Vladimir Uniqueness of the solution of the Cauchy problem for linear partial differential equations with characteristics of variable multiplicity. J. Differential
- Equations 39 (1981), no. 1, 120-129. (V.-V. Olariu) 82m:35003 35A07 thuck, Peter (with Ring, Peter) *The nuclear many-body problem. Texts and Monographs in Physics. Springer-Verlag, New York-Berlin, 1980. xvii + 716 pp. ISBN 0-387-09820-8 (Chindhu S. Warke) 82h:81155 81H10 (81G35)
- Schüffler, Karlheinz Stabilität mehrfach zusammenhängender Minimalflächen. (English summary) Manuscripta Math. 30 (1979/80), no. 2, 163-197. (R. Osserman) 82e:49060 49F10 (53A10, 58E12)
- Schüler, L. (with Wolff, H.) Automatic classification in the case of unknown number of clusters using global density estimates. (German summary) Biometrical J. 22 (1980), no. 8, 745–753. (Authors' summary) 824:62075 62G05 clusters. (with Newman, C. M.) Complex free energies and metastable
- lifetimes. J. Statist. Phys. 23 (1980), no. 2, 131-148. (P. D. F. Ion) 82k:82010 (35P99, 82A25)
 - ★Techniques and applications of path integration. A Wiley-Interscience Publication. John Wiley & Sons, Inc., New York, 1981. xv+359 pp. ISBN 0-471-76450-7 (Aubrey Truman) 82h:81003 81-02 (28C20, 58D30, 60J99, 81C35)
 - (with Newman, C. M.) Number and density of percolating clusters. J. Phys. A 14 (1981), no. 7, 1735-1743. (Andrzej Zardecki) 82i:82047 82A43
- alte, M. (with Quebbemann, Heinz-Georg; Scharlau, Winfried) Quadratic and Hermitian forms in additive and abelian categories. J. Algebra 59 (1979), no. 2, 264-289. (A. A. Ranicki) 82d:18015 18F25 (10C05)
- Wilte-Monting, Jürgen Merging of 4 or 5 elements with n elements. Theoret. Comput. Sci. 14 (1981), no. 1, 19–37. (Author's summary) 82]:68052 68E05 unlten, Klaus (with Schulten, Zan; Szabo, Attila) Dynamics of reactions involving
- diffusive barrier crossing. J. Chem. Phys. 74 (1981), no. 8, 4426-4432. (Authors summary) 82d:80035 80A30
- Schulten, Zan (with Schulten, Klaus; Szabo, Attila) Dynamics of reactions involving diffusive barrier crossing. J. Chem. Phys. 74 (1981), no. 8, 4426-4432. (Authors summary) 82d:80035 80A30
 - (with Gordon, R. G.; Anderson, Donald G. M.) A numerical algorithm for the evaluation of Weber parabolic cylinder functions U(a,x), V(a,x), and $W(a,\pm x)$. J. Comput. Phys. 42 (1981), no. 2, 213-237. (From the summary) 82::65012
- Schultz, Barbara Über die induktive Isomorphie von endlichen Gruppen. II. Wiss. Z. Tech.

- Hochsch. Karl-Marx-Stadt 22 (1980), no. 5, 423-431. (Hartmut Laue) 82f:20048
- Schultz, Cherie L. (with Perk, Jacques H. H.) New families of con in q-state vertex models. Phys. Lett. A 84 (1981), no. 8, 407-410. (Authors' summary) 82A05 (82A68)
- Solvable q-state models in lattice statistics and quantum field theory. *Phys. Rev. Lett.* **46** (1981), *no.* 10, 629–632. (Author's summary) **82h:82086** 82A67 (81E99) **ultz, Henry J.** The sum of the kth powers of the first n integers. *Amer. Math. Monthly*
- 87 (1980), no. 6, 478-481. (J. Knopfmacher) 82c:05014 05A19 (26-01)
- Schultz, Konrad (with Kühnrich, Martin) A hierarchy of models for Skala's set theory. Z. Math. Logik Grundlag. Math. 26 (1980), no. 6, 555-559. (Luiz Paulo de Alcantara) 03E30
- Schultz, Martin H. (with Chandra, R.; Eisenstat, Stanley C.) The modified conjugate residual method for partial differential equations. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., em, Pa., 1977), pp. 13-19, IMACS, New Brunswick, N.J., 1977. (See 82a:65004)
- (with Eisenstat, Stanley C.; Schreiber, Robert) Finite element methods for spherically symmetric elliptic equations. Advances in computer methods for partial
- differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Un Bethlehem, Pa., 1977), pp. 93-99, IMACS, New Brunswick, N.J., 1977. (From the introduction) 82h:65119 65N30
- (with Eisenstat, Stanley C.; Sherman, Andrew H.) Software for sparse Gaussian elimination with limited core storage. Sparse Matrix Proceedings 1978 (Sympos. Sparse Matrix Comput., Knoxville, Tenn., 1978), pp. 135-153, SIAM, Philadelphia, Pa., 1979.
- (uin S. Duff) 82ic59020 65F05 (with Eisenstat, Stanley C.; Sherman, Andrew H.) Algorithms and data structures for sparse symmetric Gaussian elimination. SIAM J. Sci. Statist. Comput. 2 (1981),
- no. 2, 225-237. (Authors' summary) 821:65629 65F05 (65N20)

 Schultz, Phillip Correction to: "The typeset and cotypeset of a rank 2 abelian group" [Pacific J. Math. 78 (1978), no. 2, 503-517; MR 80a:20062]. Pacific J. Math. 97 (1981), no. 2, 486. (Editors) 82m:20060 20K15
- Schultz, Reinhard Group actions on hypertoral manifolds. II. J. Reine Angew. Math. 325 (1981), 75–86. (Allan Edmonds) 82m:57022 57S15
- Schultze, Bernd A limit-point criterion for 2nth order symmetric differential expressions. Proc. Roy. Soc. Edinburgh Sect. A 90 (1981), no. 1-2, 1-12. (D. Hinton) 82m:34019 34B20 (34B25)
- Schulz, Christoph Geschlossene Flächen im Rand des Würfels. Abh. Math. Sem. Univ. Hamburg 50 (1980), 89-94. (Peter Kleinschmidt) 82c:52012 52A25 (57Q35)
- utz, Friedmar Innere Abschätzungen für Lösungen nichtlinearer elliptischer Differentialgleichungen zweiter Ordnung in n Variablen. Math. Z. 169 (1979), no. 1, 13–22. (R. C. MacCamy) 82m:35049 35160
- Über die Beschränktheit der zweiten Ableitungen der Lösungen nichtlinearer elliptischer Differentialgleichungen. Math. Z. 175 (1980), no. 2, 181-188. (Helmut Kaul)
- 82e:35033 35J15 Schulz, H. Pairing transition of a one-dimensional classical plasma. J. Phys. A 14 (1981),
- no. 12, 3277-3300. (Author's summary) 82m:82032 82A45 (82A65)
- Schulz, Jürgen Über die Konstruktion von im allgemeinen unstetigen inversen Operatoren. Beiträge Numer. Math. 8 (1980), 147–153. (H. Baumgärtel) 82d:47004 47A05 (65J10) Schulz, Konrad Zur Oberhalbstetigkeit der Extremalpunkt-Menge-Abbildung einer
- parameterabhängigen, polyedral konvexen Menge und einige Folgerungen. Wiss. Z. Tech. Hochsch. Karl-Marx-Stadt 22 (1980), no. 4, 379–388. (K. Zimmermann) 821:52010
- Schulz, Ulrich Ein mathematisches Modell für das Verhalten in Sequenzen von Prisoner's-Dilemma-Spielen unter Berücksichtigung von Erwartungen. (English summary) Decision in small groups (Workshop, Jungholz, 1977) (German), pp. 107-123, Math. Systems in Econom., 45, Hain, Königstein/Ts., 1979. (See 82e:90130) 90D99
- Schulze, Bert-Wolfgang Adjungierte elliptischer Randwert-Probleme und Anwendungen auf über- und unterbestimmte Systeme. Math. Nachr. 89 (1979), 225-245. (Gerd Grubb) 58G20 (35J55, 35N10)
 - (with Pillat, Ulf) Some classes of nonelliptic boundary value problems for pseudodifferential operators. II. Overdetermined and underdetermined systems. Comm. Partial Differential Equations 6 (1981), no. 4, 373-398. (Ja. A. Roitberg) \$2k:58090 58G20 (35J70, 47G05)
- Schulze, Dieter Methodological problems of the application of fuzzy set theory. (Russian) Studies in logical methodology (Russian), pp. 130-147, Moskov. Gos. Univ., Moscow, 1980. (Siegfried Gottwald) 82f:03047 03E72 (00A25)
- (Siegined Goltward) Astrophysics of Self (Most) (Sept.) (Self) (State Pellot, Rainer Struktur von Gle./D). Sk. jof division algebras (Sem., Bielefeld/Göttingen, 1976) (German), pp. 7–8, Lecture Notes in Math., 778, Springer,
 - Berlin, 1980. (See 82h:16014) 20G35 (16A39) Darstellung durch Spinorgeschlechter ternärer quadratischer Formen. (English summary) J. Number Theory 12 (1980), no. 4, 529–540. (Horst Pfeuffer) 82k:10024
 - Remark on a note of Hsia about classification of unimodular lattices.

 J. Number Theory 14 (1982), no. 1, 83-85. (J. S. Hsia) 82k:10025 10C02
- acher, Georg (with Bănică, Constantin; Putinar, Mihai) Variation der globalen Ext in Deformationen kompakter komplexer Räume. Math. Ann. 250 (1980), no. 2, 135-155.
- (K. Wolffhardt) 82e:32015 32C35 (14F05, 32G05) (with Axelsson, Reynir) Eine Künneth-Formel für die Tangentialkohomologie kompakter komplexer Räume. J. Reine Angew. Math. 321 (1981), 138-149. (H. Kerner)
- 82g:32023 32G10 (18G15) acher, H. C. See Gauß, Carl Friedrich, 82e:01124
- acher, Hans (with van Harten, Aart) Feedback control of systems with distributed parameters using a finite number of observators and control inputs. Analysis and control of systems (IRIA Sem., Rocquencourt, 1978), pp. 257-272, IRIA, Rocquencourt, 1978. (P. C. Parks) 82e:93056 93C20 (35B37)
- numacher, J. M. Compensator synthesis using (C,A,B)-pairs. IEEE Trans. Au Control 25 (1980), no. 6, 1133-1138. (Author's summary) 82e:93035 93B50 numacher, Konrad Travelling-front solutions for integro-differential equations. II.

ngical growth and spread (Proc. Conf., Heidelberg, 1979), pp. 296-309, Lecture Notes iomath., 38, Springer, Berlin, 1980. (A. Haimovici) 82f:35180 35R10 (45J05, 35R 10 (45J05. 92A07)

(with Hadeler, K. P.; de Mottoni, P.) Dyna mic models for a Math. Biol. 10 (1980), no. 4, 307-332 (T. Poggio) 82m-92024 22A09 (34H05, 90D26)
Remarks on semilinear partial functional-differential equations with infinite delay.
J. Math. Anal. Appl. 30 (1981), no. 1, 261-290. (Simeon Reich) 82h-47061 47H15 (34K30)

acher, M. Point estimation in quantal response models. (German summary) smetrical J. 22 (1980), no. 4, 315-334. (John M. Karon) 82x62154 62P10 (62F12)

unnaker, Larry L. (with Scherer, Karl) A dual basis for L-splines and application. Theory 29 (1980), no. 2, 151-169. (Philip W. Smith) 82i:41015 41A15 (41A25)

line functions: basic theory. Pure and Applied Mathematics. A

**Spline functions: basic theory. Pure and Applied Mathematics. A
Wiley-Interscience Publication. John Wiley & Sons, Inc., New York, 1981. xiv + 553 pp.
ISBN 0-471-76475-2 (D. D. Stancu) 82j:41001 41-02 (41A15, 65D07)

numann, Walter (with Cuche, Denis) Deformation of a holographic image in space. J.
Opt. Soc. Amer. 72 (1982), no. 1, 136-142. (Authors' summary) 82z:78002 78A05

numann, George F. Bounded properties in modal logic. Z. Math. Logik Grundlag. Math.
27 (1981), no. 3, 197-200. (David Makinson) 82z:63029 03B45

numtermann, Michael F. Hacking's law of likelihood und das kartenparadoxon von
Kerridge. Z. Allgemeine Wissenschafstheorie 11 (1980), no. 2, 354-356. (Steffen

Lauritzen) 822:63007 62A10

menters. J. On the theory of thermally weighted electron-phonon transition probabilities.

upfner, J. On the theory of thermally weighted electron-phonon transition probabilities.

Z. Naturforsch. A 35 (1980), no. 9, 902-914. (Author's summary) 82h:82065a 82A60 (81H20)

Errata: "On the theory of thermally weighted electron-phonon transition obabilities". Z. Naturforsch. A 35 (1980), no. 10, 1120. (Editors) 82b:82065b 82A60 (81H20)

mp. Paul E. (with Lyndon, Roger C.) ★Koss6maropmas reopus rpym. (Russian) [Combinatorial group theory] Translated from the English by Ju. A. Bahturin. "Mir", Mascow, 1980. 448 pp. (Editors) 82±20042 20F05 (20F10) (with Muller, David E.) Context-free languages, groups, the theory of ends, second-order logic, tiling problems, cellular automata, and vector addition systems. Bull.

Amer. Math. Soc. (N.S.) 4 (1981), no. 3, 331-334. (From the text) 82m:03051 03D05 (05C99, 20F10, 68F05)

(105.499, 201-10, 06705)

Schuppen, J. H. See Van Schuppen, J. H.

narer, F. (with Steutel, F. W.) Exact degrees of approximation for two-dimensional

Bernstein operators on C¹. Approximation theory, III (Proc. Conf., Univ. Texas, Austin,
Tex., 1980), pp. 823–828, Academic Press, New York, 1980. (P. C. Sikkema) 82h:41010 41A10 (41A44)

Greer, Klaus On a class of branching processes on a lattice with interactions. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 157–164, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (Walter Warmuth) 82h:60194 60K35 (60J80) A class of branching processes on a lattice with interactions. Adv. in Appl. Probab.

13 (1981), no. 1, 14-39 (Maury D. Bramson) 82e:60134 60170 (60K30, 92A15)

inster, Ingeborg *Philosophie und Wissenschaftspositivismus. (German) [Philosophy and scientific positivism] Die mathematischen Grundsätze in Kants Kritik der reinen and scientific positivism] Die mathematischen Grundsätze in Kants Kritik der reinen Vermmft und die Verselbständigung der Wissenschaften. [The mathematical fundamental laws of Kant's Kritik der reinen Vernunft and the autonomization of the sciences] Philosophische Abhandlungen [Philosophical Essays], 48. Vittorio Klostermann, Frankfurt a. M., 1979, viiii + 172 pp. 15RN 3-465-01349-2 (I. Ruzsa) 82x00012 (OA25 (03A05) uster, H. G. Vanishing of the Edwards-Anderson order parameter in XY and Heisenberg

spin glasses below four dimensions. Phys. Lett. A 76 (1980), no. 3-4, 269-270. (Author's

spin gases below tols ulmerature. Phys. Lett. N 10 (1704), no. 35, 20-20. (value summary) 82;82062 82A57

(with Hackenbracht, D.) On the possibility to create nonthermal solitons in a one-dimensional magnetic sine-Gordon system. I. Z. Phys. B 42 (1981), no. 4, 367–371. (Authors' summary) 82h:82046 82A68 (35Q20)

usster, Peter (with Sigmund, Karl; Wolff, Robert) Dynamical systems under constant organization. III. Cooperative and competitive behavior of hypercycles. J. Differential Cooperative and competitive behavior of hypercycles. J. Differential Cooperative and competitive behavior of hypercycles. J. Differential Cooperative and competitive behavior of hypercycles. J. Differential Cooperative and competitive behavior of hypercycles. J. Differential Cooperative and competitive behavior of hypercycles. J. Differential Cooperative and

uations 32 (1979), no. 3, 357-368. (C. P. Bruter) 82b:34035b 34C05 (58F12, 80A30, 92A09)

(with Sigmund, Karl; Wolff, Robert) Mass action kinetics of self-replication in flow ctors. J. Math. Anal. Appl. 78 (1980), no. 1, 88-112. (J. P. Kernevez) 82c:92012 92A09 (35R10, 80A30, 92A17)

(with Hofbauer, Josef; Sigmund, Karl; Wolff, Robert) Dynamical systems under constant organization. II. Homogeneous growth functions of degree p=2. SIAM J. Appl. Math. 38 (1980), no. 2, 282–304. (C. P. Bruter) 82h;34035a 34C05 (58F12, 80A30, 92A09)

(with Sigmund, Karl; Hofbauer, Josef; Wolff, Robert) Self-regulation of behaviour nimal societies. I. Symmetric contests. Biol. Cybernet. 40 (1981), no. 1, 1-8. (Peter D. 92A15 (90D40) Taylor) 82e:92039a

(with Sigmund, Karl; Hofbauer, Josef; Wolff, Robert) Self-regulation of behaviour in animal societies. II. Games between two populations without self-interacti Cybernet. 40 (1981), no. 1, 9-15. (Peter D. Taylor) 82e:92039b 92A15 (90D40)

(with Sigmund, Karl; Hofbauer, Josef; Gottlieb, Ramon; Merz, Philip) Self-regulation of behaviour in animal societies. III. Games between two populations with self-interaction. Biol. Cybernet. 40 (1981), no. 1, 17-25. (Peter D. Taylor) 82e:92039c 92A15 (90D40)

(with Hofbauer, Josef; Sigmund, Karl) Competition and cooperation in catalytic self-replication. J. Math. Biol. 11 (1981), no. 2, 155-168. (John J. Tyson) 82h:92062 92A40 (34C05, 80A30)

uster, Seymour (with Chartrand, Gary; Goldsmith, Donald L.) A sufficient condition for graphs with 1-factors. Colloq. Math. 41 (1979), no. 2, 339-344. (Moshe Rosenfeld) 82a:05070 05C70

(with Erdős, Paul) Existence of complementary graphs with specified independence numbers. The theory and applications of graphs (Kalamazoo, Mich., 1980), pp. 343-349, Wiley, New York, 1981. (G. Chartrand) 82m:05080 05C99 (05C35) (with Faudree, R. J.; Rousseau, C. C.; Schelp, R. H.) Embedding graphs in their

ements. With a loose Russian summary. Czechoslovak Math. J. 31(106) (1981),

no. 1, 53-62. (Paul A. Catlin) 82e:05105 05C70

Schütt, Carsten A remark on the unconditional structure of L(E, F). Israel J. Math. 39 (1981), no. 1-2, 16-24. (Yehoram Gordon) 82i:46030 46B20 (47D15)

On the uniqueness of symmetric bases in finite-dimensional Banach spaces. Israel J. Math. 40 (1981), no. 2, 97-117. (Lee W. Baric) 82k:46023 46B15

Schütt, Hans-Werner History of science in the Federal Republic of Germany. Isis 71 (1980), no. 258, 375-380. (K. Jacobs) 82401022 01A60

tte, Fritz-Joachim (with Hecht, Friedrich-Karl; Tiebel, Reinhard) Schallausbreitung in mikroinhomogenen Medien. (Russian and English summaries) Wiss. Z. Pädagog. Hochsch. "Karl Liebknecht" Potsdam 24 (1980), no. 1, 179-187. (Authors' sun 82i:73067 73S05 (73D99)

82;73067 73505 (73D99)

Schütte, Ilse Über einige Wachstumsmodelle, die Nachwirkungen berücksichtigen. (Russian, English and French summaries) Wiss. Z. Humboldt-Univ. Berlin Math.-Natur. Reihe 28 (1979), no. 4, 587–596. (Hansgeorg Jeggle) 824-92027 92A15 (34K15)

Schütte, Kurt (with Jäger, Gerhard) Eine syntaktische Abgrenzung der (Δ¹₁-CA)-Analysis. Bayer. Akad. Wiss. Math.-Natur. Kl. Sitzungsber. 1979, 15–34 (1980). (Carlo Cellucci)

03F35 (03F15)

Beweistheoretische Abgrenzung von Teilsystemen der Analysis. Monatsh. Math. 90 (1980), no. 1, 1-12. (Editors) 82g:03096 03F15

Proof theory. Modern logic—a survey, pp. 37-43, Synthese Library, 149, Reidel, Dordrecht, 1981. (See 82:00002) 03Ftx. (01A60, 03-02)
Schutz, B. E. The mutual potential and gravitational torques of two bodies to fourth order.
Celestial Mech. 24 (1981), no. 2, 173-181. (Author's summary) 82h:70034 70M99 (70F15, 86A20)

tz, John W. An axiomatic system for Minkowski space-time. J. Math. Phys. 22 (1981), no. 2, 293-302. (Nicholas M. J. Woodhouse) 82i:83007 83A05

erger, M.-P. (with Foata, Dominique) H. O. Foulkes (1907-1977). Discrete

Math. 30 (1980), no. 1, 1 (1 plate). (Editors) 82a:01031 01A70

nuur, Susan E. On systems of three quadratic forms. Acta Arith. 36 (1980), no. 4, 315-322. (O. H. Körner) 82d:10034 10C03

nnirman, Henry See Ockham's theory of propositions, 820:01013 nurmans, M. F. H. (with Polder, D.) Superfluorescence and amplified spontaneous emission: a unified theory. Phys. Lett. A 72 (1979), no. 4-5, 306-308. (From the text) 81K05

wabik, Stefan Differential equations with interface conditions. (Czech summary) With a loose Russian summary. Časopis Pest. Mat. 105 (1980), no. 4, 391-408, 410. (A. M. Krall) 34B05 (34A30)

hwaiger, Jens (with Reich, Ludwig) Linearisierung formal-biholomorpher Abbildungen und Iterationsprobleme. Aequationes Math. 20 (1980), no. 2-3, 224-243. (G. N. Himšiašvili) 82g:39008 39B60 (15A24, 22E05, 32A10) hwalm, William A. (with Monkhorst, Hendrik J.) Electrostatics for periodic films of

atoms. Phys. Rev. B (3) 23 (1981), no. 4, 1729-1742. (Authors' summary) 82i:78014 78A30

Schwan, Wilhelm See Kirsch, Arnold, 82f:01117
Schwanengel, U. (with Eberhardt, V.; Dierolf, Susanne) On the product of two (totally) minimal topological groups and the three-space-problem. Math. Ann. 251 (1980), no. 2, 123-128. (M. I. Kabenjuk) 82d:22002 22A05

Schwartz, Benjamin L. See Mathematical solitaires and games, 82i:00005

Schwartz, Dietrich Polyadic MV-algebras. Z. Math. Logik Grundlag. Math. 26 (1980), no. 6, 561-564. (Alasdair Urquhart) 82d:03101 03G15 (03B50)

Schwartz, Jacob T. (with Ferro, Alfredo; Omodeo, Eugenio Giovanni) Decision procedures for elementary sublanguages of set theory. I. Multilevel syllogistic and some extensions Comm. Pure Appl. Math. 33 (1980), no. 5, 599-608. (G. Asser) 82i:03018a 03B2 (03E30, 04A99)

Fast probabilistic algorithms for verification of polynomial identities. J. Asset Comput. Mach. 27 (1980), no. 4, 701-717. (Author's summary) 82m:68078 (03B35, 12-04)

(with Breban, M.; Ferro, Alfredo; Omodeo, Eugenio Giovanni) Decision procedures for elementary sublanguages of set theory. II. Formulas involving restricted quantifiers, together with ordinal, integer, map, and domain notions. Comm. Pure Appl. Math. 34 (1981), no. 2, 177–195. (G. Asser) 82i:03018b 03B25 (03E30, 04A99)

vartz, Jean-Marie Kac algebras. Proceedings of the International Conference on Op Algebras, Ideals, and their Applications in Theoretical Physics (Leipzig, 1977), pp. 215–223, Teubner, Leipzig, 1978. (\$ Strătilà) 82æ46073 46L10 (22D45)

(with Enock, Michel) Actions d'une algèbre de Kac sur une algèbre de von Neumani et représentations. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 12, A631-A633. (Authors' summary) 82a:46072 46L10

(with De Cannière, Jean; Enock, Michel) Sur deux résultats d'analyse harm non-commutative: une application de la théorie des algèbres de Kac. J. Operator Theory 5 (1981), no. 2, 171-194. (Marc A. Rieffel) 82h46090 46L99 (22D25, 43A99) wartz, Laurent Survey of the theory of martingales. Bull. Malaysian Math. Soc. (2) 2

(1979), no. 2, 61-74. (S. D. Chatterji) 82d:60089 60G44 (60H05, 60J65)

French universities and grandes écoles. *Math. Medley* 7 (1979), no. 2-3, 38-47. (M. Kline) **822:01045** 01A80 (00A05, 01A73)

★Kurs analizy matematycznej. Tom II. (Polish) [A course on mathematical analysis Vol. II] Translated from the French by Tadeusz Trajdos. Państwowe Wydawnictwo Naukowe (PWN), Warsaw, 1980. 403 pp. (loose errata). ISBN 83-01-00965-9 (Editors) 00A05 (26-02)

★Semi-martingales sur des variétés, et martingales conformes sur des variétés analytiques complexes. (French) [Semimartingales on manifolds, and conformal martingales on complex analytic manifolds] Lecture Notes in Mathematics, 780 Springer-Verlag, Berlin-New York, 1980. xv+132 pp. ISBN 3-540-09749-X (Aline Bonami) 82m:60051 60G46 (32B99, 58G32, 60G48, 60H05)

Les semi-martingales et la théorie de la mesure. Seminar on Functi 1979-1980 (French), Exp. No. 26, 9 pp., École Polytech., Palaiseau, 1980. (Ralph Henstock) 824:60093 60G48 (28B05, 60H05)

Henstock) 82d:60093 60G48 (28B05, 60H05)
Les semi-martingales formelles. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 413-489, Lecture Notes in Math., 850, Springer,

Berlin, 1981. (Ralph Henstock) 82i:60093 60G48 (58D30, 60H10)
See also Mathematical analysis and applications, 82i:00014

Schwartz, Leonard W. (with Whitney, A. K.) A semi-analytic solution for nonlinear standing waves in deep water. J. Fluid Mech. 107 (1981), 147–171. (Authors' summary) 76B15 (35Q20)

A semi-analytic approach to the self-induced motion of vortex sheets. J. Fluid Mech.

111 (1981), 475–490. (Author's summary) \$2k:76019 76C05 (76G99)

Schwartz, Lionel Operations d'Adams en K-homologie et applications. (English summary)

Bull. Soc. Math. France 109 (1981), no. 2, 237–257. (J. F. Adams) \$2k:55006 55N15

Schwartz, M.-H. Classes et caractères de Chern des espaces linéaires. Publ. U.E. R. Math.

Pures Appl. IRMA 2 (1980), no. 3, exp. no. 3, 41 pp. (Author's summary) 82h:55019

Schwartz, Marie-Hélène (with Brasselet, Jean-Paul) Compléments à l'étude des classes de Chern d'une variété à singularités. Publ. U.E.R. Math. Pures Appl. IRMA 2 (1980),

no. 3, exp. no. 1, 25 pp. (Author's summary) 82g:57008 57R20 (32B30, 32C40)
Schwartz, Nancy L. (with Kamien, Morton I.) A generalized hazard rate. Econom. Lett. 5 (1980), no. 3, 245-249. (M. G. Akritas) 82i:62140 62N05 (60E99)

wartz, Niels Archimedean lattice-ordered fields that are algebraic over their o-subfields. Pacific J. Math. 89 (1980), no. 1, 189-198. (P. F. Conrad) 82e:06018 06F25 (12J15) Schwartz, Robert John Approximate truth and confirmation. Philos. Sci. 48 (1981), no. 4, 606-610. (Philip L. Quinn) 82m:03030 03B48

chwarz, A. S. See Svarc, A. S.

Schwarz, Friedhelm Connections between convergence and nearness. Categorical topology (Proc. Internat. Conf., Free Univ. Berlin, Berlin, 1978), pp. 345-357, Lecture Notes in Math., 719, Springer, Berlin, 1979. (Author's summary) 82m:54023 54A20)

Schwarz, G. F. The existence property with parameters for some extensions of the intuitionistic theory of types. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 3, 562-566. (Dietmar Soyka) 82a:03058 03F50 (03B20)

Schwarz, Gérald W. (with Bierstone, Edward) Division et prolongement de fonctions Com

(English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A75-A77. (Authors' summary) 82a:32013 32B20 (58C27)

Schwarz, Gideon (with Tversky, Amos) On the reciprocity of proximity relations. J. Math. Psych. 22 (1980), no. 3, 157-175. (Byron J. T. Morgan) 82i:92050 92A25 (04A99,

Schwarz, H. R. (with Waldvogel, J.; Kirchgraber, U.; Henrici, Peter) Eduard Stiefel (1909-1978). With a bibliography and comments on the bibliography by Stiefel. Z. Angew. Math. Phys. 30 (1979), no. 2, 133-142 (1 plate). (Editors) 82i:01063 01A70 Zur Methode der finiten Elemente. Elem. Math. 36 (1981), no. 1, 1-8. (C. Dierieck) 65N30 (73K25)

Die Methode der finiten Elemente zur Lösung von elliptischen Randwertaufgaben. [The finite element method for the solution of elliptic boundary value problems] Elem. Math. 36 (1981), no. 6, 158-166. (From the text) 82k:c65069 65N30 (65-01)

Schwarz, Jerald Using annotations to make recursion equations behave. IEEE Trans. Software Engrg. 8 (1982), no. 1, 21-33. (Author's summary) 82m:68015

Schwarz, John H. Quantum superspace representation of superconformal algebras. Nuclear Phys. B 185 (1981), no. 1, 221-232. (Author's summary) 82i:81149 81G20 (17A70) (with Brink, Lars) Quantum superspace. Phys. Lett. B 100 (1981), no. 4, 310-312. (Authors' summary) 82e:81055 81G20 (22E70)

(Authors summary) acceptions of Color (22210)
Schwarz, Stefam Infinite products of doubly stochastic matrices. (Slovak and Russian summaries) Acta Math. Univ. Comenian. 39 (1980), 131–150. (Ray C. Shiflett) 82i:15023 15A51 (60J10)

An unconventional problem in the elementary theory of numbers. With a loose Russian summary. Czechoslovak Math. J. 31(106) (1981), no. 1, 159-169. (J. E. Nymann) 82e:10026

See also Katriňák, Tibor; et al., 82a:01036 and Mišík, Ladislav, 82i:01055

Schwarz, Wolfgang Survey on analogues of the Waring problem: Diophantine inequalities.

Conference on Additive Number Theory (Bordeaux, 1977) (French), pp. 121–147, Univ. Bordeaux I, Talence, 1978. (Editors) 82g:10039 10B45 (10J06) kosunann-Schwarzbach, Yvette See Kosmann-Schwarzbach, Yvette Schwarze, J. An algorithm for hierarchical reduction and decomposition of a directed

graph. (German summary) Computing 25 (1980), no. 1, 47-57. (Author's summary) 82::68063 68E10 (05C20, 05C70)

Marzenberger, Rolf L. E. ** n-dimensional crystallography. Research Notes in Mathematics, 41. Pitman (Advanced Publishing Program), San Francisco, Calif.-London, 1980. iv+139 pp. ISBN 0-8224-8468-4 (T. Janssen) 82e:82018 82A60 (20H15, 51F15) (with Jarratt, John D.) Coloured frieze groups. Utilitas Math. 19 (1981), 295-303.

(T. Janssen) 82m:20050 20H15 weder, Tore Correction: "Window estimation of the asymptotic variance of rank estimators of location" [Scand. J. Statist. 2 (1975), no. 3, 113–126; MR 53 #14781]. Scand. J. Statist. 8 (1981), no. 1, 55. (Editors) 82d:62076 62G05

See also Jöreskog, Karl G., 82f:62137

Schweiger, Fritz An estimate for the length of a finite Jacobi algorithm. A collection of uscripts related to the Fibonacci sequence, pp. 16-18, Fibonacci Assoc., Santa Clara, f., 1980. (J. D. Dixon) 82j:10059 10F20 (10K10) Calif., 1980. (J. D. Dixon) 82j:10059

Ergodic properties of fibered systems. Proceedings of the Sixth Conference on Probability Theory (Braşov, 1979), pp. 221–228, Ed. Acad. R.S. România, Bucharest, 1981. (R. L. Adler) 82k:28019 28D05 (10K10)

weigert, Dietmar Polynomvollständige, atomistische Polaritätsverbände. [Polynomially complete, atomistic polarity lattices] Abh. Math. Sem. Univ. Hamburg 51 (1981), 50–54. (Hartmut Höft) 82m:06009 06C10 (08A40)

weiggert, F. On the relative complexity in deciding graph isomorphism. Discrete structures and algorithms (Proc. Conf., Berlin, 1979), pp. 65-76, Hanser, Munich, 1980. (Author's summary) 82g:68047 68C25 (05C99, 68E10)

weiker, Kevin S. (with Hunter, James H., Jr.) On the development of vorticity and waves in shearing media with preliminary application to the solar nebula. Astrophys. J. 243 (1980/81), no. 3, part 1, 1030-1039. (Authors' summary) 821:85002 85A30

weitzer, P. J. (with Federgruen, Awi) A survey of asymptotic value-iteration for undiscounted Markovian decision processes. Recent developments in Markov decision processes (Proc. Internat. Conf., Univ. Manchester, Manchester, 1978), pp. 73–109, Academic Press, London, 1980. (See 82k:90128) 90C40 (with Federgruen, Awi) Nonstationary Markov decision problems with converging parameters. J. Optim. Theory Appl. 34 (1981), no. 2, 207-241. (Authors' summary) 90A05

Schweizer, B. (with Sklar, A.) How to derive all L_p-metrics from a single probabil metric. General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978), pp. 429-434, Birkhäuser, Basel, 1980. (K. Sundaresan) 82d:46050 46E30 (08A02)

eizer, M. (with Straumann, N.; Wipf, A.) Post-Newtonian generation of gravitatio waves in a theory of gravity with torsion. Gen. Relativity Gravitation 12 (1980), no. 11, 951-961. (Authors' summary) 82h:83663 83D05 (83C25, 83C35) wenk, Allen J. (with Kimble, Robert J., Jr.) On universal caterpillars. The theory and

applications of graphs (Kalamazoo, Mich., 1980), pp. 437-447, Wiley, New York, 1981. (B. Zelinka) 82k:05044 05C05 (05C38)

On unimodal sequences of graphical invariants. J. Combin. Theory Ser. B 30 (1981), no. 2, 247–250. (H. Sachs) 82h:05036 05C50 (05C70)

(with Kimble, Robert J., Jr.; Stockmeyer, Paul K.) Pseudosimilar vertices in a graph. J. Graph Theory 5 (1981), no. 2, 171-181. (B. Manvel) 82f:05075

werdtleger, Hans *Geometry of complex numbers. Circle geometry, Moebius transformation, non-Euclidean geometry. A corrected reprinting of the 1962 edition. Dover Books on Advanced Mathematics. Dover Publications, Inc., New York, 1979.

xiii + 200 pp. ISBN 0-486-63830-8 (Editors) 82g:51032 51N25
Schwering, F. (with Whitman, G. M.; Leskiw, D. M.) Rigorous theory of scattering by perfectly conducting periodic surfaces with trapezoidal height profile. TE and TM polarization. J. Opt. Soc. Amer. 70 (1980), no. 12, 1495-1503. (Authors' summary) 82a:78017 78A45

rermer, Joachim A note on link complements and arithmetic groups. Math. Ann. 249 (1980), no. 2, 107-110. (Lee Rudolph) 82e:22027 22E40 (57M25)

(with Grunewald, Fritz J.) Arithmetic quotients of hyperbolic 3-space, cusp forms and link complements. Duke Math. J. 48 (1981), no. 2, 351-358. (Lee Rudolph) 82j:10046 10D07 (22E40, 57M25)

(with Grunewald, Fritz J.) Free nonabelian quotients of SL2 over orders of imaginary quadratic numberfields. J. Algebra 69 (1981), no. 2, 298-304. (W. W. Stothers) 10D07 (20H05)

wimmer, A. (with Halliday, I. G.) The phase structure of SU(N)/Z(N) lattice gauge theories. Phys. Lett. B 101 (1981), no. 5, 327-331. (Authors' summary) 82f:81086

Schwind, Camilla B. Natural language analysis by theorem proving methods: disambiguating pronouns in natural language texts. Representation of knowledge and reason in the human sciences (Colloq., Saint Maximin, 1979) (French), pp. 123-138, INRIA, Rocquencourt, 1980. (David Makinson) 82g:03045 03B65 (03B35, 03B45)

wing, J. (with Stenger, F.; Hagmann, M.) An algorithm for the electromagnetic scattering due to an axially symmetric body with an impedance boundary condition. J. Math. Anal. Appl. 78 (1980), no. 2, 531-573. (D. L. Colton) \$2b:78020 78A45

wingendorf, Keith E. Uniform polynomial approximation. J. Math. Anal. Appl. 75 (1980), no. 1, 81–101. (D. Sarason) 82d:30034 30E10 winn, Hans Über die Konvergenz und Summierbarkeit von Teilfolgen allgemeiner

Orthogonalreihen. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 4, 373-380. (K. Tandori) 82f:42021 42C15 (40F05, 40G05)

nmierbarkeit von Orthogonalreihen durch Euler-Verfahren (Russian summary) [On the strong summability of orthogonal series by Euler methods]

Anal. Math. 7 (1981), no. 3, 209-216. (G. Sunouchi) 82k:42020 42C15

Sciama, Dennis W. Black holes and fluctuations of quantum particles: an Einstein synthesis. Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein, Vol. I, II, pp. 681–724, Johnson, New York, 1979. (See 82b:83002) 83C25
(with Miller, J. C.) Gravitational collapse to the black hole state. General relativity and gravitation, Vol. 2, pp. 359-391, Plenum, New York, 1980. (Peter Szekeres) 821:83098

Issues in cosmology. Some strangeness in the proportion (Einstein Centennial Sympos., Inst. Ado. Study, Princeton, N.J., 1979), pp. 387-404, Addison-Wesley, Reading, Mass.,

1980. (See 82d:83002) 85A40 (83F05)

Sciarrino, A. (with Combe, Ph.; Sorba, P.) Little groups and Higgs representations for SU(n) gauge theories. Group theoretical methods in physics (Proc. Eighth Internat. Collog., Kiryat Anavim, 1979), pp. 267-269, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82):81904) 81E10

(with Girardi, G.; Sorba, P.) Some relevant properties of SO(n) representations for d unified theories. Nuclear Phys. B 182 (1981), no. 3, 477-504. (J. F. Cornwell) 82e:22035 81G20 (22E47, 22E70)

morgan-Sciarrino, Jacqueline See Morgan-Sciarrino, Jacqueline Sciarrico, L. (with De Maria, G.) On the dynamic behaviour of phase-locked loops. Ricerche Automat. 11 (1980), no. 1, 1-17 (1981). (Authors' summary) 82m:93067 93D05 (93D20)

Sienza, Giuseppe Elementary mathematics from an information-theoretic viewpoint: the real numbers. (Italian. French summary) Rend. Sem. Fac. Sci. Univ. Cagliari 49 (1979), no. 3-4, 475-504. (Carlo Cellucci) 82f:03055 03F60 (94A15)

lev, B. Yu. See Skobelev, B. Ju.

Scobey, P. (with Kabe, D. G.) On constrained least squares estimation. Multiva statistical analysis (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1979), pp. 179-189, North-Holland, Amsterdam, 1980. (I. S. Alalouf) 82&62115 62J05

(with Kabe, D. G.) Some correlation optimization problems of econometrics, statistics and psychology. Biometrical J. 22 (1980), no. 7, 651-670. (Authors' summary) 82f:62103 62H20 (62P20)

Scoppola, E. (with Jona-Lasinio, G.; Martinelli, F.) New approach to the semiclassical limit of quantum mechanics. I. Multiple tunnelings in one dimension. Comm. Math. Phys. 80 (1981), no. 2, 223-254. (C. Bardos) 82a:81013 81C10 (34B25, 58G15, 60J35,

cott, Alastair (with Wu, Chien Fu) On the asymptotic distribution of ratio and regression estimators. J. Amer. Statist. Assoc. 76 (1981), no. 373, 98-102. (K. Afsarinejad) 62D05 (62E20)

(with Rao, J. N. K.) The analysis of categorical data from complex sample surveys: chi-squared tests for goodness of fit and independence in two-way tables. J. Amer.

Statist. Assoc. 76 (1981), no. 374, 221-230. (Nanak Chand) 82j:62042 62H17
tt, Brian M. More about orthocompactness. The Proceedings of the 1980 Topology
Conference (Univ. Alabama, Birmingham, Ala., 1980). Topology Proc. 5 (1980), 155-184 (1981). (P. Fletcher) 82h;54029 54D20

racterization of well-orders. Fund. Math. 111 (1981), no. 1, 71-76. (E.

A characterization of well-orders. Fund. Math. 111 (1981), no. 1, 71-76. (E. Harrheim) 82:66001 06A05 (04A05)

A generalized pressing-down lemma and isocompactness. Proc. Amer. Math. Soc. 81 (1981), no. 2, 316-320. (Stephen Willard) 82i:54014 54A25 (54D30) oft, C. H. (with Jefferson, T. R.) A generalisation of geometric programming with an application to information theory. Inform. Sci. 12 (1977), no. 3, 263-269. (Authors' summary) 82i:90092 90C25 (94A15)

(with Jefferson, T. R.) Zero degree of difficulty programs and the distribution problem. Internat. J. Systems Sci. 11 (1980), no. 2, 129-138. (R. Serban) 82a:90150

indit, P.; Jefferson, T. R.) Dimensionality reduction for a class of convex network flow problem. Internat. J. Systems Sci. 11 (1980), no. 12, 1499–1503. (Authors' summary) 82a:90855 90B10 (90C25)

(with Jefferson, T. R.) Duality for quasiconcave programs with explicit constraints.

(German and Russian summaries) Math. Operationsforach. Statist. Ser. Optim. 11 (1980), no. 4, 519–530. (Authors' summary) 82;90064 90C30 (90A11) 44, Dana S. (with Fourman, Michael P.) Sheaves and logic. Applications of sheaves (Proc. Res. Sympos. Appl. Sheaf Theory to Logic, Algebra and Anal., Unio. Durham, Durham, 1977), pp. 302–401. Lecture Notes in Math., 753, Springer, Berlin, 1979. (B. Westler) 9-840064. Weglorz) 82d:03061 03C90 (03F55, 03G30)

with Gierz, Gerhard; Hofmann, Karl Heinrich; Keimel, Klaus; Lawson, Jimmie D.; Mislove, Michael W.) *A compendium of continuous lattices. Springer-Verlag, Berlin-New York, 1980. xx+371 pp. ISBN 3-540-10111-X (James W. Lea, Jr.) 82h:06005 06B30 (03G10, 30G30, 54H12)

Lambda calculus: some models, some philosophy. The Kleene Symposium (Proc. Sympos., Univ. Wisconsin, Madison, Wis., 1978), pp. 223-265, Stud. Logic Foundations Math., 101, North-Holland, Amsterdam, 1980. (Henk Barendregt) 824:03024 03B40

Relating theories of the λ-calculus. To H. B. Curry: essays on combin nbda calculus and formalism, pp. 403–450, Academic Press, London, 1980. (Henk rendregt) **82d-03025** 03B40 (03F55, 03G30, 18D15, 68C99)

See also Proceedings: Tarski Symposium, 82h:03006 and Stoy, Joseph E.

tt, David Selberg-type zeta functions for the group of complex two by two matrices of determinant one. *Math. Ann.* 253 (1980), no. 3, 177-194. (Joe Repka) 82e:10050 10D40 (22E30, 43A85)

At, David S. Solving sparse symmetric generalized eigenvalue problems without factorization. SIAM J. Numer. Anal. 18 (1981), no. 1, 102-110. (Author's summary) 65F15 (15A15)

icott, Del T. (with Bryce, G. Rex; Carter, Melvin W.) Estimation and hypothesis testing in linear models—a reparameterization approach to the cell means model. Special issue on analysis of variance with unbalanced data. Comm. Statist. A—Theory Methods 9 (1980), no. 2, 131-150. (Authors' summary) 82f:62132 62J10

Scott, Elizabeth L. Comparison of two treatments when there may be an initial effect. Essays in statistical science. J. Appl. Probab. 1982, Special Vol. 19A, 253-264. (Author's ary) 82m:62056 62F03

Scott, Elton (with Brown, Stewart) Biased estimators and unstable betas. J. Finance 35

(1980), no. 1, 49-55. (Jean-Louis Boursin) 821:90017 90A09 (62P20, 90A19)
Scott, J. F. The long time asymptotics of solutions to the generalized Burgers equation.

Proc. Roy. Soc. London Ser. A 373, no. 1755, 443-456 (1981). (Author's summary) 76Q05 (35B40, 35K55, 35Q20)

Uniform asymptotics for spherical and cylindrical nonlinear acoustic waves generated by a sinusoidal source. *Proc. Roy. Soc. London Ser. A* 375 (1981), *no.* 1761, 211-230. (Author's summary) 82e:76058 76Q05

et, L. R. (with Bona, Jerry L.; Pritchard, W. G.) A posteriori error estimates for exact and approximate solutions of time-dependent problems. Seminar on Numerical Analysis and its Applications to Continuum Physics (Rio de Janeiro, 1980), pp. 101–111, Soc. Brasil. Mat., Rio de Janeiro, 1980. (Rolf Rannacher) 82c:65059

cott, Leonard L. Representations of algebraic groups. Proceedings of the Symposium on Modular Representations of Finite Groups (Math. Inst., Univ. Aarhus, Aarhus, 1978), pp. 42-43, Various Publ. Ser., 29, Mat. Inst., Aarhus Univ., Aarhus, 1978. (Editors) 82m:20047 20G05

Representations in characteristic p. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 319-331, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (Editors) 82e:20052 20G05 (20C20,

(with Roggenkamp, K. W.) Nonsplitting examples for normalized units in integral apprings of metacyclic Frobenius groups. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 1, 29-32. (Editors) 82b:20009 20C05

(with Avrunin, George S.) A Quillen stratification theorem for modules. Bull. Amer. h. Soc. (N.S.) 6 (1982), no. 1, 75-78. (J. A. Schafer) 82m:20055 20J06 (57T10)

Scott, Melvin R. (with Watts, H. A.) Superposition, orthonormalization, quasilinearization the Method Review of the Market of the Market of the Method Review of th in Comput. Sci., 76, Springer, Berlin, 1979. (See 82b:65074) See also Codes for boundary value problems in ordinary differential equa

ott, P. J. (with Lambek, J.) Intuitionist type theory and the free topos. J. Pure Appl. Algebra 19 (1980), 215-257. (Andreas Blass) 82b:03112 03G30 (03F50, 18B25) cott, Paul R. An inequality for convex lattice polygons. Math. Mag. 52 (1979), no. 4, 239-240. (From the text) 82j:52021 52A40

On simplices and lattice points. J. Austral. Math. Soc. Ser. A 31 (1981), no. 1, 15-19. (H. Groemer) 82i:10037 10F05

Sets of constant width and inequalities. Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 127, 345-348. (G. D. Chakerian) 82k:52013 52A20 (52A10)

Scott, R. A. (with Dolph, Charles L.; Komkov, Vadim) A critique of the singularity

expansion and eigenmode expansion methods. Acoustic, electromagnetic and elastic wave scattering—focus on the T-matrix approach (Proc. Internat. Sympos., Ohio State Univ., Columbus, Ohio, 1979), pp. 453-461, Pergamon, Oxford, 1980. (See 82h:78002)

Mt, S. D. Nilpotent subsets of near-rings with minimal condition. Proc. Edinbu 8, S. D. Nupotent subsets of near-rings with minimal constituent. From Learning Science, 12, 26 (1980), no. 3, 297-299. (G. Betsch) 82k:16649 16A76 surfield, E. J. On the coprimality of certain multiplicative functions. Acta Arith. 38

(1980/81), no. 2, 175-195. (W. Narkiewicz) 82i:10062 10H25

zzafava, Romano Complete additivity, on suitable sequences of sets, of a simply additive and strongly nonatomic probability measure. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 16 (1979), no. 2, 639-648. (Z. Lipecki) 82c:28004 28A10 (28A12)

The initial digit of statistical data: its frequency and probability. (Italian) Pubbl. Istit. Mat. Appl. Fac. Ingr. Univ. Stud. Roma Quaderno No. 15 (1980), 51-55. (Mauro

(with Barone, E.; Giannone, Alberto) On some aspects of the theory and

applications of finitely additive probability measures. Pubbl. Istit. Mat. Appl. Fac. Ingr. Univ. Stud. Roma Quaderno No. 16 (1980), 43-53. (W. A. J. Luxemburg) 82f:28001 28A12 (03C20, 03E55, 03H05, 26E35)

Bayesian inference and inductive "logic". (Italian) With an English translation by R. Costa Barritt. Scientia (Milano) 115 (1980), no. 1-4, 37-53. (D. V. Lindley) 82c:62007

A concrete example of non-o-additive probability: the distribution of the first significant digit of statistical data. (Italian. English summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 3, 403-410. (Author's summary) 82k:62050 62E99

aton, R. E. (with Bunday, B. D.) The G/M/r machine interference model. Europe er. Res. 4 (1980), no. 6, 399-402. (J. Teghem, Jr.) 82c:60161 60K25 (68C15.

Some L-stable methods for stiff differential equations. Internat. J. Comput. Math. 9 (1981), no. 1, 81-87. (J. Mikliček) 82f:65094 65L20

Scriba, Christoph J. Hans Kangro—1916–1977. (German) Arch. Internat. Hist. Sci. 28 (1978), no. 102, 105–107. (Editors) 82f-91141 01A70

Viggo Brun in memoriam (1885-1978). Historia Math. 7 (1980), no. 1, 1-6 (1 plate). (Editors) 82i:01061a 01A70

Scriven, L. E. (with Brown, Robert Arthur) The shape and stability of rotating liquid drops. Proc. Roy. Soc. London Ser. A 371 (1983), no. 1746, 331-357. (Authors' sum 82m:76027 76E10 (49F10)

Ščučinskaja, E. F. On the Borel inequality for finite-order entire functions. (Russian) Izv. Central Mark. Park. The Botter Indicatory of Inter-order Centre Functions (Russian) 120. Severo-Kawkaz. Nauk. 1981, no. 1, 22–23, 101–102. (Author's summary) 824:30024 30D15

Scuderi, Santo (with Domingues, Hygino Hugueros) Some characterizations of epimorphisms of rings. (Portuguese. English summary) Métrica No. 1 (1979), exp. no. 5, 15 pp. (Authors' summary) 82i:16041 16A99

Sčukin, E. R. (with Barinova, M. F.; Ostrovskii, Ju. K.; Jalamov, Ju. I.) On the question of

peculiarities of a laminar flow of volatile binary gas mixtures in plane and coaxial channels. (Russian) Ž. Prikl. Meh. i Tehn. Fiz. 1980, no. 3, 50-56. (Simona Popp) 82;76065 76N99 (80A20)
Sculley, M. J. (with Nichol, L. W.; Winzor, D. J.) Interactions between micellar ligand

systems and acceptors: forms of binding curves. J. Theoret. Biol. 90 (1981), no. 3, 365-376. (Authors' summary) 82f:92018 92A09 (80A32)

Scully, Marian O. (with Boley, C. D.) The statistical mechanical resolution of a

"paradox". J. Statist. Phys. 24 (1981), no. 1, 159-174. (Jean-Paul thermodynamic Marchand) 82g:82016 82A15

(with Rogovin, D.; Nagel, Jonathan Allen) Quantum theory of the dc Josephson effect: current-biased eigenstates and excitation spectrum. Phys. Rev. B (3) 23 (1981), no. 3, 1156-1170. (Authors' summary) 82c:81171 81305

Scurie-Cudovan, Vlasta Ergänzende Untersuchungen eines Büschels der homothetischen Flächen 2. Grades und einiger Komplexe, die durch dieses Büschel bestimmt werden. (Serbo-Croatian summary) Rad Jugoslav. Akad. Znan. Umjet. No. 386 (1980), 5-34. (K. 51M20 (51M30) Strubecker) 82g:51027

Sczech, R. (with Meyer, Werner) Über eine topologische und zahlentheoretische Anwendung von Hirzebruchs Spitzenauflösung. Math. Ann. 240 (1979), no. 1, 69-96. (I. Dolgachev) 82c:10035 10D21 (12A50)

nde, Jesus The stability of Cournot revisited. J. Econom. Theory 23 (1980), no. 1, 15-27. (R. E. Gaines) 82c:90017 90A11 (90D25)

Seader, J. D. (with Hidalgo S., R.; Correa V., A.; Gomez M., A.) An optimal arrangement of simultaneous linearized equations for general systems of interlinked, multistaged separators. AIChE J. 26 (1980), no. 4, 585-593. (S. Dubuc) 826:65044 65H10

Seal, Hilary L. Ruin probabilities for mixed Poisson claim numbers without Laplace transforms. Mitt. Verein. Schweiz. Versicherungsmath. 1980, no. 3, 297-306. (Author's summary) 82b:62140 62P05

Sealey, H. C. J. Harmonic maps of small energy. Bull. London Math. Soc. 13 (1981), no. 5,

405-408. (George M. Rassias) 82m:58026 58E20 (53C20)

Searle, S. R. Arbitrary hypotheses in linear models with unbalanced data. Special issue on analysis of variance with unbalanced data. Comm. Statist. A—Theory Methods 9 (1980), no. 2, 181-200. (Author's summary) 82e:62102 62J05

(with Henderson, Harold V.) The vec-permutation matrix, the vec operator and Kronecker products: a review. Linear and Multilinear Algebra 9 (1980/81), no. 4, 271-288. (B. N. Moyls) 82h:15019 15A24

(with Speed, F. M.; Henderson, Harold V.) Some computational and model equivalences in analyses of variance of unequal-subclass-numbers data. Amer. Statist. 35 (1981), no. 1, 16-33. (Authors' summary) 82b:62087 62J10 (1981), no. 1, 16-33. (Authors' summary) 82b:62087

(with Henderson, Harold V.) On deriving the inverse of a sum of matrices. SIAM Rev. 23 (1981), no. 1, 53-60. (A. Lee) 82c:15005 15A09 (15-03, 62J99)

Seatzu, Sebastiano Best quadrature formulas in Sard's sense with almost all the coefficients cqual (Italian English summary) Rend. Mat. (7) 1 (1981), no. 2, 159–176. (Author's summary) 82k:41022 41A55 (65D32)

Sehald, A. V. (with Takenawa, T.) Optimal state estimation in the presence of deterministic perturbations of uncertain structure occurring at unknown times. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2,

- pp. 488-493, IEEE, New York, 1979. (Authors' summary) 82a:93057
- pp. 460–435, Jürgen (with Sieber, Norbert) * Spezielle Funktionen. (German) [Special functions] Second edition. Mathematik für Ingenieure, Naturwissenschaftler, Ökonomen und sonstige Anwendungsorientierte Berufe [Mathematics for Engineers, Natural Scientists, Economists and other Application-Oriented Occupations], 12. Verlag Harri Deutsch, Thun, 1980. 136 pp. ISBN 3-87144-428-6 (From the introduction) 82k:33001 33-01
- bbar, A. Prolongement des solutions holomorphes de certains opérateurs différentiels d'ordre infini à coefficients constants. Séminaire Pierre Lelong-Henri Skoda (Analyse). Années 1978/79 (French), pp. 199-220, Lecture Notes in Math., 822, Springer, Berlin, 1980. (A. Hirschowitz) 82f:35049 35E99 (32A15, 32D15)
- ek, Michael Multivariable deadbeat servo problem. Kybernetika (Prague) 16 (1980), no. 5, 442-453. (Author's summary) 82e:93061 93C35
 - Optimal tracking via polynomial matrix equations. *Internat. J. Systems Sci.* 12 (1981), no. 3, 357-369. (P. K. C. Wang) 82i:93040 93C05 (93C45)
- (with Kučera, Vladimir) Matrix equations arising in regulator problems. Kybernetika (Prague) 17 (1981), no. 2, 128–139. (M. F. Smiley) 82m:15020 15A24
- Seber, G. A. F. (with Felton, R.) Tag loss and the Petersen mark-recapture experiment.
- Biometrika 68 (1981), no. 1, 211-219. (R. M. Cormack) 82g:62135 berry, Jennifer (with Geramita, Anthony V.) *Orthogonal designs. Quadratic forms and Hadamard matrices. Lecture Notes in Pure and Applied Mathematics, 45. Marcel Dekker, Inc., New York-Basel, 1979. x+460 pp. ISBN 0-8247-6774-8 (Derbian F. Hsu) 05-02 (05B20)
- Higher-dimensional orthogonal designs and Hadamard matrices. Combinatorial thematics, VII (Proc. Seventh Australian Conf., Univ. Newcastle, Newcastle, 1979), pp. 220-223, Lecture Notes in Math., 829, Springer, Berlin, 1980. (Author's sun 82e:05043a 05B20
- (with Hammer, Joseph) Higher-dimensional orthogonal designs and Hadamard matrices. II. Proceedings of the Ninth Manitoba Conference on Numerical Mathematics and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 23-29, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (Authors' summary) 82e:05043b 05B20
- Some remarks on amicable orthogonal designs. Combinatorial mathematics, optimal designs and their applications (Proc. Sympos. Combin. Math. and Optimal Design, Colorado State Univ., Fort Collins, Colo., 1978). *Ann. Discrete Math.* 6 (1980), 289–291. (Giuseppe Pellegrino) 82a:05026 05B20
- An infinite family of skew-weighing matrices. Ars Combin. 10 (1980), 323-329. (J. Spencer) 82c:05027 05B20
- (with Street, Deborah J.) All DBIBDs with block size four exist. Utilitas Math. 18 (1980), 27-34. (H. Hanani) 82a:05019 05B05 (62K10)
- styén, Ákos (with Lukács, B.; Perjés, Z.) Null Killing vectors. J. Math. Phys. 22 (1981), no. 6, 1248-1253. (John Wainwright) 82i:83014 83C15 (83C40, 83C50)
- See also von Neumann, John, 82:81001
 Seboldt, Wolfgang Stability theory for inhomogeneous collision-free self-gravitating stellar systems. Astrophys. J. 243 (1980/81), no. 3, part 1, 1013–1029. (George Contopoulos) 82g:85004 85A05 (35B35)
- 82g:85004 85A05 (35B35)
 ecomb, T. W. Kinematics of close-packed red blood cells in shear flow. Mathem aspects of physiology (Proc. Summer Sem., Univ. Utah, Salt Lake City, Utah, 1980), pp. 167-170, Lectures in Appl. Math., 19, Amer. Math. Soc., Providence, R.I., 1981. (Author's introduction) 82i:92011 92A09 (76Z05)
- Secrest, Don (with Malik, David J.; Eccles, Joseph) On quantal bound state solutions and potential energy surface fitting. A comparison of the finite element, Numerov-Colley and finite difference methods. J. Comput. Phys. 38 (1980), no. 2, 157-184. (R. L. Ingraham) 81C05 (65N30)
- Seda, Anthony Karel On measures in fibre spaces. Cahiers Topologie Géom. Différentielle 21 (1980), no. 3, 247–276. (G. L. Litvinov) 82m:43002 43A07 (28C10, 58H05) Seda, Valter On a modification of the method of majorants. (Slovak and Russian
- mmaries) Acta Fac. Rerum Natur. Univ. Comenian. Math. 34 (1979), 137-155. (V. R. Fridlender) 82h:35002 35A05
 - Professor Marko Švec is sixty years old. (Slovak) Math. Slovaca 29 (1979), no. 4,
- 425-428. (Editors) 82b:01060 01A70
 On a generalization of the Thomas-Fermi equation. (Slovak and Russian sum Acta Math. Univ. Comenian. 39 (1980), 97-114. (J. W. Bebernes) 82g:34020 (34B30)
- A class of differential equations similar to linear equations. Math. Slovaca 30 (1980), no. 4, 433-441. (P. Talpalaru) 82th34015 34A34 (34A40)

 On a boundary value problem of the fourth order. (Czech summary) With a loose
- Russian summary. Časopis Pěst. Mat. 106 (1981), no. 1, 65-74. (John R. Graef) 34B10 (34B15)
- Sedaev, A. A. (with Braverman, M. S.) On a characteristic of symmetric spaces. (Russian) Anal. i Priložen. 15 (1981), no. 2, 65-66. (Aleksandr Mekler) 82j:46038 46E30 (46M35)
- Šedivá-Trnková, Věra General theory of relational automata. Fund. Inform. (4) 3 (1980), no. 2, 189-233. (K. G. Peeva) 82e:68058 68D30 (03D05, 18B20)
- (with Adamek, Jiří; Ehrig, Hartmut) On an equivalence of system-theoretical and categorical concepts. Kybernetika (Prague) 16 (1980), no. 5, 389-410. (E. G. Manes)
- sleckaja, N. I. (with Mihailenko, V. E.; Anpilogova, V. A.; Kovalev, S. N.; Levina, Z. G.; Malinovskaja, V. I.; Oleščuk, T. Ju.; Panasjuk, L. S.; Puhov, I. К.) ★Сборишк задач по начертательной геометрии с елементами программирования. (Russian) [A collection of problems in descriptive geometry with elements of programming] Second edition, revised and augmented. "Višča Škola", Kiev, 1980. 208 pp. (E. Otto) 82e:51004 51-01 (00A07)
- leckii, A. M. Extension of the convergence of quasipolynomials. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 5, 1131-1149, 1214. (Z. Rubinstein) 82f:30025 30C99 (30C10)
- ov, B. B. (with Rau, V. G.; Iljuhin, V. V.; Belov, N. V.) On an incomplete Patterson function. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1400-1403. (From the text) 82j:82064 82A60 (52A25)
- Sedov, L. I. Long-term trends and problems in continuum mechanics. (Russian) Current

- problems in theoretical and applied mechanics (Proc. Fourth All-Union Congress Theoret. Appl. Mech., Kiev, 1976) (Russian), pp. 7-24, 404, "Naukova Dumka", Kiev, 1978. (V. T. Golovchan) 82a:73001 73-02 (73B05)
 (with Zelnorovič, V. A.) On the variational method of derivation of equations of
- state for a material medium and a gravitational field. Prikl. Mat. Meh. 42 (1978), no. 5. 771-780 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 5, 827-838 (1979).
- (Authors' summary) 82e:83024 83C55 (49H05, 53B50)
 (with Ščelkačev, V. N.) Leonid Samuilovič Leibenzon (on the hundredth anniversary of his birth). (Russian) Izv. Akad. Nauk SSSR Meh. Židk. Gaza 1979, no. 4, 3–9 (1 plate). (Editors) 82i-01062 01A70 plate). (Editors) 82i:01062
- (with Cypkin, A. G.) On the construction of models of continuous media interacting with an electromagnetic field. Prikl. Mat. Meh. 43 (1979), no. 3, 387-400 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 3, 419-432 (1980). (Gérard A. Maugin) 82h:73076 73R05 (73B99)
- ★Размышления о вауке и об ученых. (Russian) [Reflections on acience and scientists] "Nauka", Moscow, 1980. 440 pp. (W. Kecs) 82h:00011 00A25 (01A75)
- On description of dynamic properties of the gravitational field in vacuum. Prikl.

 Mat. Meh. 44 (1980), no. 2, 195-204 (Russian); ranslated as J. Appl. Math. Mech. 44 (1980), no. 2, 141-146 (1981). (Editors) 82m:83014 83C20

 Sedov, V. N. (with Foht, O. S.) Well-posedness of the FitzHugh problem. (Russian)
- Differencial'nye Uravnenija 16 (1980), no. 6, 1114-1121, 1149-1150. (L. I. Rubinstein) 82e:35052 35K55 (92A09)
- Sedyh, N. D. (with Ginzburg, B. N.) Letter to the editors: "Algebraic zero surfaces of entire characteristic functions of multivariate-dimensional probabilistic distributions" [Teor. Funkcii Funkcional. Anal. i Priložen. No. 30 (1978), 30-36; MR 80d:60022]. (Russian) Teor. Funkcii Funkcional. Anal. i Priložen. No. 35 (1981), 126. (Editors) 82k:60033
- Sedyh, V. D. Structure of the convex hull of a space curve. (Russian. English summary) Trudy Sem. Petrovsk. No. 6 (1981), 239-256. (Vladislav Goldberg) 82j:32022 32B30 (53A04, 58C27)
- Seebach, J. Arthur See Index: Math. Mag., 82h:60006

 Seeder, Susan C. Combinatorial identities derived from units. A collection of manuscripts related to the Fibonacci sequence, pp. 132-134, Fibonacci Assoc., Santa Clara, Calif., 1980. (Rodney T. Hansen) 82m:05016 05A19 (12A45) (Rodney T. Hansen) 82m:05016 05A19 (12A45)

 Hand, Horst ★Algorithmische Theorien und konstruktive Geometrie. (German)
- [Algorithmic theories and constructive geometry] Dissertation, Univ. Stuttgart, Stuttgart, 1978. HochschulSammlung Naturwissenschaft Informatik [Hochschul Collection:
 - Natural Science and Information Sciences], 2. Hochschul Verlag, Stuttgart, 1978. viii + 72 pp. (loose errata). ISBN 3-8107-2055-0 (L. W. Szczerba) 82b:03034 (51D99, 68C20)
- eley, R. An estimate near the boundary for the spectral function of the Laplace operator. Amer. J. Math. 102 (1980), no. 5, 869-902. (V. M. Babič) 82k:58097 58G25 (35P99 58G25 (35P99)
- Seelig, Friedrich Franz Unrestricted harmonic balance. A general method to evaluate periodic structures in time and/or space of arbitrary stability for nonlinear chemical reaction-diffusion systems. I. Theory and computer program for time-dependent systems. Z. Naturforsch. A 35 (1980), no. 10, 1054-1061. (Author's summary) 82b:80024 80A30 (35K55, 65P05)
 - Unrestricted harmonic balance. II. Application to stiff ordinary differential equations in enzyme catalysis. J. Math. Biol. 12 (1981), no. 2, 187-198. (Author's summary) 92A09 (65L99, 80A30)
- v. Seeliger, Hugo Briefe Hugo v. Seeligers an Ernst Mach. Introduction and comments by Joachim Thiele. Philos. Natur. 17 (1978/79), no. 3, 391-399. (Introduction) 82g:01069 01A70 (01A55)
- ely, Justus (with Birkes, David) Estimability in partitioned linear models. Ann. Statist. 8 (1980), no. 2, 399–406. (Authors' summary) 82h:62108 62J05 (with Jacroux, Michael A.) Some sufficient conditions for establishing
 - M,S)-optimality. J. Statist. Plann. Inference 4 (1980), no. 1, 3-11. (K. R. Shah)
 - 62K05 (62K10)
- (with Birkes, David; Azzam, Abdul-Mordy) An efficient estimator of the mean in a two-stage nested model. Technometrics 23 (1981), no. 2, 143-148. (Authors' summary) 62J05 (62C07) 82d:62110
- Seery, J. B. (with Gatto, M. A.) Numerical evaluation of the modified Bessel functions I and K. Comput. Math. Appl. 7 (1981), no. 3, 203-209. (Authors' summary) 824:65020 65D20
- (Internat. Colloq., Oberhof., 1977) (German), pp. 235-238, Tech. Hockschule Ilmenau, Ilmenau, 1977. (Duro Kurepa) 82h:8956 05C05 (03C66, 05C55, 06A10) (with Baudisch, Andreas; Tuschik, Hans-Peter; Weese, Martin) ★Decidability and generalized quantifiers. Mathematical Research, 3. Akademie-Verlag, Berlin, 1980.

 - xii + 235 pp. (A. B. Slomson) 82i:03048 03C80 (03B25, 03C60, 05C05, 06A05, 20K99)
 - (with Herre, Heinrich) Concerning the monatic theory of the topology of well-orderings and scattered spaces. Bull. Acad. Polon. Sci. Ser. Sci. Math. 28 (1980), no. 1-2, 1-6 (1981). (J. M. Plotkin) 82f:03030 03C65 (03C85, 03D35, 03F25)
- (with Paljutin, E. A.; Taïmanov, A. D.) A remark on the topologization of algebraic structures. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 4, 617-618. (Authors' summary) 82:54083 54H99 (08A99)
- Stationary logic and ordinals. Trans. Amer. Math. Soc. 263 (1981), no. 1, 111-124. (Alan Mekler) 82f:03034 03C80 tharaman, M. (with Mathews, P. M.; Takahashi, Yasushi) On the degree of the minimal
- equation of the matrices in first-order relativistic wave equations. J. Phys. A 13 (1980), no. 9, 2863-2872. (Authors' summary) 82c,81037 81D25 (2E43, 58D25)

 (with Mathews, P. M.; Vijayalakshmi, B.; Takahashi, Yasushi) On the admissibility of repeated irreducible representations in barnacle-free unique-spin unique-mass
- ns. J. Phys. A 14 (1981), no. 5, 1193-1204. (N. D. Sengupta) relativistic wave equation 81D25 (22E70)
- (with Mathews, P. M.; Raghavan, Sekhar; Bhargava, V. T. A.) A simple accurate formula for the energy levels of oscillators with a quartic potential. *Phys. Lett. A* **83** (1981), no. 3, 118–120. (Authors' summary) **82h:81032** 81C12 evinck, E. Simple, wide-range approximations to trigonometric and inverse trigonometric functions useful in real-time signal processing. *Proc. IEE-G* **128** (1981), no. 1, 41–45. (A.

left, M. B. (with Potapenko, A. A.) ж Методы математической физики. (Russian) [Methods of mathematical physics] Severocapad. Zaočn. Politehn. Inst., Leningrad, 1979. 80 pp. (Editors) 82f:35001 35-01 (00A69)

Sefter, Z. G. (with Roltberg, Ja. A.) On general elliptic problems with strong degeneration. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1336–1342. (Johannes Elschner) 82h:35067 35J70 (47F05)

33.10 (6/190)
39.1. A. Discretization of the continuity equation for the solution of the Navier-Stokes equations using the finite element method. Colloquium: Numerical Solution of Partial Differential Equations (Delf), Nimegen, Americalm, 1980, pp. 133–151, MC Syllabus, 44, Math. Centrum, Amsterdam, 1980. (C. Taylor) 324:76027 76DDS (65N30)
On upwind discretizations of the convection diffusion equations. Colloquium:

Numerical Solution of Partial Differential Equations (Delft, Nijmegen, Amsterdam, 1980), pp. 152–174, MC Syllabus, 44, Math. Centrum, Amsterdam, 1980. (From the introduction) 82c:76693 76R99 (65N10) eggel, Daniel (with Grunewald, Fritz J.) Some general algorithms. I. Arithmetic groups. Ann. of Math. (2) 112 (1980), no. 3, 531–583. (J. D. Dixon) 82d:20048a 20H20 (03D40, 10C05, 20F10)

(with Grunewald, Fritz J.) Some general algorithms. II. Nilpotent gro Math. (2) 112 (1980), no. 3, 585-617. (J. D. Dixon) 824:20048b 20 20F18 (03D40. 10C05, 20F10)

(with Grunewald, Fritz J.) How to solve a quadratic equation in integers. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 1, 1-5. (H. London) 82j:10029 10B05 (90C10)

e (with James, I. M.) On equivariant home topy theory. Topo Siegen 1979 (Proc. Sympos., Univ. Siegen, Siegen, 1979), pp. 316-330, Lecture Notes in Math., 788, Springer, Berlin, 1980. (A. Dold) 821:55014 55P05 (57S99)

Unitary representations of some infinite-dimensional groups. Comm. Math. Phys. 80 (1981), no. 3, 301-342. (Helmut Boseck) 82k:22004 22A25 (22E65, 22E70, 58B25, 81D15, 81E99)

(with Stretch, C. T.) Characteristic classes for permutation representations. Mat. oc. Cambridge Philos. Soc. 90 (1981), no. 2, 265-272. (T. tom Dieck) 82h:55020 55R40 (57S17)

Segal, I. E. The complex-wave representation of the free boson field. Topics in functional analysis (essays dedicated to M. G. Krein on the occasion of his 70th birthday), pp. 321-343, Adoances in Math., Suppl. Studies, 3, Academic Press, New York, 1978. (Author's summary) 82d:81069 81E05 (46NO5, 47B25, 81D05)

BIEOS (46N05, 47B25, 81D05)

Decay processes and the quantization of nonunitarizable representations of causal ags. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat wim, 1979), pp. 326–329, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 81004)

81D99 (22D12)

(with Paneitz, S. M.) Quantization of wave equations and Hermitian structures in partial differential varieties. Proc. Nat. Acad. Sci. U.S.A. 77 (1980), no. 12, part 1, 6943–6947. (Authors' summary) 82g81040 81D25 (35L70, 58D25, 58F06, 81E05)

The phase space for the Yang-Mills equations. Differential geometric methods in hematical physics (Proc. Internat. Conf., Tech. Univ. Clausthal, Clausthal-Zellerfeld, mainematical physics (Froc. Internat. Conj., 1901. Onto Canadam, 1918), pp. 101–109, Lecture Notes in Phys., 139, Springer, Berlin, 1981. (From the introduction) 82k-81060 81E10

(with Jakobsen, Hans Plesner; Ørsted, B.; Paneitz, S. M.; Speh, Birgit) Covariant chronogeometry and extreme distances: elementary particles. *Proc. Nat. Acad. Sci. U.S.A.* 78 (1981), no. 9, part 1, 5261–5265. (Authors' summary) 82i:81150 81G20 (22E70, 83D05, 83F05)

al, Jack (with Dydak, Jerzy) Strong shape theory. Dissertations Mat.) 192 (1981), 39 pp. (Y. Kodama) 82j:54077 54F43 (55P55)

See also Shape theory and geometric topology, 82m:55003
gila, Fausto Lower bounds for a class of pseudodifferential operators. (Italian summary) Boll. Un. Mat. Ital. B (5) 18 (1981), no. 1, 231-248. (Toader Jucan) 82h:35104

(with Parenti, C.) Propagation and reflection of singularities for a class of evolution equations. Comm. Partial Differential Equations 6 (1981), no. 7, 741-782. (G. Albinus) 35S05 (58G17) 82|:35141

ege, G. See Szegő, Gábor

egel, Lee A. (with Bard, Jonathan L. B.; Ghozlan, Aline; Goldbeter, Albert; Hardt, na; Levitzki, Alexander; Liron, Nadav; Odell, Garrett M.; Parnas, Hanna; Perelson, Alan S.; Rapp, P. E.; Rubinow, Sol I.; Tolkovsky, Aviva M.; Wehrhahn, Christian; Yagil, Gad; Zeigler, Bernard P.) ★Mathematical models in molecular and cellular biology. Cambridge University Press, Cambridge-New York, 1980. x+757 pp. ISBN 0-521-22925-1 (John J. Tyson) 82c92001 92-01 (92A09)

erberg, Krister Applying modal logic. Studia Logica 39 (1980), no. 2-3, 275-295. (G. Mirkowska) 82b:03050 03B45 (68C01)

Segerer, G. (with Feilmeier, M.) Numerical stability in parallel evaluation of arithmetic expressions. Parallel computers—parallel mathematics (Munich, 1977), pp. 107-112, North-Holland, Amsterdam, 1977. (See 82k:68003) 68C05 (65G05)

egev, Reuven (with Epstein, Marcelo) Differentiable manifolds and the principle of virtual work in continuum mechanics. J. Math. Phys. 21 (1980), no. 5, 1243-1245. (J. E. Marsden) 824:73008 73B99 (49H05, 58D10, 58E30, 58G40)

re, Michael The role of experiment in Galileo's physics. Arch. Hist. Exact Sci. 23 (1980/81), no. 3, 227-252. (William R. Shea) 82:01034 01A45 eguchi, Yasuyuki (with Hamada, Minoru; Tada, Yukio) Shape determination problems of

structures by the inverse variational principle. II. Buckling and vibration probl JSME 23 (1980), no. 184, 1581-1588. (Authors' summary) 82m:73058 73K. mary) 82m:73058

ier, P. (with Arino, O.) Existence of oscillating solutions for certain differential equations with delay. Functional differential equations and approximation of fixed points (Proc. Summer School and Conf., Univ. Bonn, Bonn, 1978), pp. 46-64, Lecture Notes in Math., 730, Springer, Berlin, 1979. (Authors' introduction) 82m:34070 34K15

Segur, Harvey Ordinary differential equations of Painlevé-type and the inverse scattering transform. Mathematical methods and applications of scattering theory (Proc. Conf., Catholic Univ., Washington, D.C., 1979), pp. 255-259, Lecture Notes in Phys., 130,

 Springer, Berlin, 1980. (See 82k:81117)
 34A20 (35Q20)

 (with Ablowitz, Mark J.; Ramani, A.) A connection between nonlinear evolution equations and ordinary differential equations of P-type. I. J. Math. Phys. 21 (1980), no. 4, 715-721. (Helene Airault) 82i:35148a
 35Q20 (34C05, 58A15)

(with Ablowitz, Mark J.; Ramani, A.) A connection between no equations and ordinary differential equations of P-type. II. J. Math. Phys. 21 (1980), no. 5, 1006-1015. (Hélène Airault) 82i:35148b 35Q20 (58A15)

th Ablowitz, Mark J.) Long internal waves in fluids of great depth. Stud. Appl.

Math. 62 (1980), no. 3, 249-262. (Authors' summary) 82£76014 76825 (35020) gal, Sudarshan K. (with Cliff, Gerald H.) Groups which are normal in the unit groups of their group rings. Arch. Math. (Basel) 33 (1979/80), no. 6, 529-537. (From the introduction) 82k:20014 20C07 (20C05)

(with Cliff, Gerald H.) Group rings with units torsion over the center. Manuscripta Math. 33 (1980/81), no. 2, 145–158. (Donald S. Passman) 82a:16014 16A27 (20C07) olcino Milies, Francisco César) FC-elements in a group ring. Comm. Algebra 9 (1981), no. 12, 1285-1293. (M. M. Parmenter) 82i:16013 16A27 (20C07)

Sehgal, Surinder K. Projectors of Lie algebras. Comm. Algebra 7 (1979), no. 12, 1257-1267.

(Ralph K. Amayo) 82c:17006 17B30 (17B55)

(with Cliff, Gerald H.) On groups having the same character tables. Comm. Algebra 9 (1981), no. 6, 627-640. (Michael Klemm) 82f:20023 20C15 (with Bercov, Ronald D.) Equidistributed Frobenius semilinear permutation groups.

. Algebra 9 (1981), no. 6, 657-667. (Michael Klemm) 82f:20016 20B99 Sehgal, V. M. (with Husain, S. A.) A principle of uniform boundedness for set valued mappings. Ganita 29 (1978), 63-68. (R. Anantharaman) 82h:46016 46A99 (47A99) (with Husain, S. A.) A common fixed point theorem for a family of mappings.

Math. Japon. 26 (1981), no. 3, 287–290. (S. L. Singh) 82h:54076 54H25 (54E50)
Sehposjan, L. A. A generalization of a theorem of Littlewood. (Russian. Armenian and English summaries) Izu. Akad. Nauk Armjan. SSR Ser. Mat. 15 (1980), no. 5, 403–414, 417. (W. H. J. Fuchs) 82f:31001 31A05

Sehter, B. L. (with Tabidze, G. S.) Some boundary value problems for second-order difference equations. (Russian. Georgian and English summaries) Proceedings of the I. N. Vekua Institute of Applied Mathematics, 8 (Russian), pp. 50-67, 164, Tbilis. Gos. Univ.,
Tbilisi, 1980. (I. M. Sheffer) 82g:39004

On positive solutions of a nonlinear Sturm-Liouville problem. (Russian. Georgian

and English summaries) Soobst. Akad. Nauk Grazin. SSR 100 (1980), no. 2, 281-284. (Jan Bochenek) 82f:34021 34B15 (34B25) tman, V. B. Topological semantics of superintuitionistic logics. (Russian) Semiotics and thman, V. B. Topological semantics of superintuitionistic logics. (Russian) Semiotics and information science, No. 12 (Russian), pp. 62-67, Akad. Nauk SSSR, Vsesojuz. Inst. Naukn. i Tehn. Informacii, Moscow, 1979. (Jerzy Perzanowski) 82d:63040 03855
Topological models of propositional logics. (Russian) Semiotics and information science, No. 15 (Russian), pp. 74-98, Akad. Nauk SSSR, Vsesojuz. Inst. Naukn. i Tehn. Informacii, Moscow, 1980. (M. S. Burgin) 82d:603029 03845 (03855)
thman, V. V. The Riemann-Roch theorem and the Atiyah-Hirzebruch spectral sequence.

(Russian) Uspehi Mat. Nauk 35 (1980), no. 6(216), 179-180. (P. E. Newstead) 82e:14028 14F12 (18F25, 55T25)

Seibert, Peter (with Salzberg, Pablo M.) A unified theory of attraction in general system Internat. J. Gen. Systems 6 (1980/81), no. 3, 119-128. (G. R. Sell) 82b:58050 58F

Seibt, Peter Differential criteria on the permissibility of a blowing-up. J. Algebra 66 (1980), no. 2, 484-491. (W. Vogel) 82e:13004 13B10 (14B05)

Infinitesimal extensions of commutative algebras. J. Pure Appl. Algebra 16 (1980),

no. 2, 197-206. (G. Horrocks) 82c:14007 14B10

Seičuk, V. N. On the existence of a Fréchet derivative for an operator that is defined by a system of nonlinear singular integral equations. (Russian) Investigations in functional analysis and differential equations, pp. 93-100, 142, "Štiinca", Kishinev, 1981. (Johannes Elschner) 82m:45012 45G05 (58C20)

(with Zolotarevskii, V. A.) The collocation method of solving singular integral equations defined on a Ljapunov contour of integration. (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 1, 20–23. (V. D. Didenko) 82m:45023 45L05 (65R20)

Seidel, Heidrun The trace of a one-dimensional Markov process with Lévy measure. Math.

Seidel, Tiedrum Ine trace of a one-dimensional markov process with Levy Biedsurf. Math.
 Nachr. 97 (1980), 232–245. (F. B. Knight) 324-60134 60125 (60160)
 Seidel, J. J. (with Goethals, J.-M.) Spherical designs. Relations between combinatorics and other parts of mathematics (Proc. Sympos. Pure Math., Ohio State Univ., Columbus, Ohio, 1978), pp. 255–272, Proc. Sympos. Pure Math., XXXIV, Amer. Math. Soc., Procidence, R.I., 1979. (A. E. Brouwer) 822-65014 05B30 (51F25, 51M20)
 (with Goethals, J.-M.) The football. Nieuw Arch. Wisk. (3) 29 (1981), no. 1, 50–58.

(Peter Kleinschmidt) 82j:52010 52A15 (52A25)

en, Esther (with Wu, Ching Jung) On construction of three mutually orthogonal Latin squares by the method of sum composition. Essays in probability and statistics, pp. 57-64, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 82;05031 05B15 (62K10)

On the number of nonisomorphic designs in a repeated measurement experiment. Combinatorial mathematics, optimal designs and their applications (Proc. Sympos. Combin. Math. and Optimal Design, Colorado State Univ., Fort Collins, Colo., 1978). Ann. Discrete Math. 6 (1980), 293-300. (M. L. Chandak) 82a:62126 62K99 (05B05) (with Laycock, P. J.) On a problem of repeated measurement design with treatment additivity. Ann. Statist. 8 (1980), no. 6, 1284-1292. (A. K. Nigam) 82a:62110 62K05

denberg, A. On the functions invariant under the action of an algebraic group on an algebraic variety. (Italian summary) Rend. Sem. Mat. Fis. Milano 49 (1979), 69-77 (1981). (V. L. Popov) 82e:14059 14L30 (14D25, 15A72, 20G10) (with Casey, J.) The ritual origin of the balance. Arch. Hist. Exact Sci. 23

(1980/81), no. 3, 179-226. (M. P. Closs) 82j:01008 01A10 m, Thomas I. Regularity of optimal boundary controls for parabolic equations. Analysis and optimization of systems (Proc. Fourth Internat. Conf., Versailles, 1980), pp. 536-550, Lecture Notes in Control and Information Sci., 28, Springer, Berlin, 1980. (M. Biroli) 82e:49009 49A22

The asymptotic growth of solutions of $-\Delta u = \lambda f(u)$ for large λ . Indiana Univ. Math. 35J65 (35B40)

J. 30 (1981), no. 2, 305-311. (Jack Carr) 82j:35066 35J65 dov, Ju. M. See Methods of statistical mechanics, 82j:82004

eler, Werner Zur Translationstransitivität in affinen Hjelmslevebenen. Geometry und

differential geometry (Proc. Conf., Univ. Haifa, Haifa, 1979), pp. 167-173, Lecture Notes in Math., 792, Springer, Berlin, 1980. (Günter Törner) 82h:51015
 Die Quasitranslationen desarguesscher affiner Hjelmslev-Ebenen. Math. Z. 177

51C05 (1981), no. 2, 181-186. (Günter Törner) 82i:51012

- erstad, Atle The macroproduction function uniquely determines the capacity distribution of the micro units. Econom. Lett. 7 (1981), no. 3, 211-214. (Rubin Saposnik) 82m:90029
- Seiferas, Joel I. (with Paul, Wolfgang J.; Simon, Janos) An information-theoretic approach to time bounds for on-line computation. J. Comput. System Sci. 23 (1981), no. 2, 108-126. (Authors' summary) 82m:68089 68C25
- Selfert, Benedict G. Equivalence et quasi-équivalence pour les extensions fibrées et abstraites de groupes. (English summary) [Equivalence and quasiequivalence for fibred and abstract group extensions] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 1,
- 9-11. (Author's summary) 82m:20003 20B99
 Seifert, Burkhardt Explicit formulae of exact tests in mixed balanced ANOVA-models. metrical J. 23 (1981), no. 6, 535-550. (Author's summary) 82k:62143 62J10
- Seifert, George On certain solutions of an integro-differential equation. Applied nonline analysis (Proc. Third Internat. Conf., Univ. Texas, Arlington, Tex., 1978), pp. 373-380, Academic Press, New York, 1979. (G. C. Wake (Zbl 448:45008)) 82m:45014 45105
- Seifert, Herbert (with Threlfall, William)

 Seifert and Threlfall: a textbook of topology. Translated from the German edition of 1934 by Michael A. Goldman. With a preface by Joan S. Birman. With "Topology of 3-dimensional fibered spaces" by Seifert. Translated from the German by Wolfgang Heil. Pure and Applied Mathematics, 89. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London-Toronto, Ont., 1980. xvi+437 pp. ISBN 0-12-634850-2 (Ross Geoghegan) 82b:55001 55-02 (57N12)
- Seiford, Lawrence M. (with Cook, Wade D.; Saipe, Alan L.) Production runs for multipl products: the full-capacity heuristic. J. Oper. Res. Soc. 31 (1980), no. 5, 405-412. (Józef Grabowski) 82m:90088 90B35 (90B30)
- Seller, Erhard Quantized gauge fields: results and problems. Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 228-232, Lecture Notes in Phys., 116, Springer, Berlin, 1980. (Author's introduction) 82g:81072
- Some remarks on the fermion determinants in ga (1980), no. 10, 2412-2415. (Author's summary) 82h:81072 81E10 (47A70)
 Seiler, R. (with Combes, J. M.) Spectral properties of atomic and molecular systems.
- m dynamics of molecules (Proc. NATO Adv. Study Inst., Univ. Cambridge, Cambridge, 1979), pp. 435-482, NATO Adv. Study Inst. Ser., Ser. B: Physics, 57, Plens New York, 1980. (M. Combescure) 82k:81078 81F10 (35P05, 47F05, 81G50)
 - (with Hogreve, H.; Schrader, Robert) On dia- and paramagnetic properties of Yang-Mills potentials. Quantum fields-algebras, processes (Proc. Sympos., Univ. Bielefeld, Bielefeld, 1978), pp. 355-360, Springer, Vienna, 1980. (Authors' summary) 81E99
 - (with Hoffmann-Ostenhof, Maria) Cusp conditions for eigenfunctions of n-electron systems. Phys. Rev. A (3) 23 (1981), no. 1, 21-23. (Evans M. Harrell) 82b:81023 81C10 (35J10, 35P20, 47A70)
 - (with Avron, Joseph E.) Coincident anharmonic oscillators. Phys. Rev. D (3) 23 (1981), no. 6, 1316-1320. (Authors' summary) 82d:81016 81C05 (47A55, 81C12)
- (1981), no. 6, 1316—1320. (Autnors summary) Sazes1016 81CUS (4/AS), 81CL2) Seinfeld, John H. (with Ohmatsu, Shigeru) A unified approach to discrete-time distributed parameter estimation by the least-squares method. Internat. J. Systems Sci. 12 (1981),
 - no. 6, 665-686. (Authors' summary) 82i:93073 93E10
 (with Costanza, Vicente) A differentiable trajectory approximation to turbulent diffusion. Phys. Fluids 24 (1981), no. 10, 1769-1773. (Authors' summary) 82h:76035 76R99 (82A50)
- nnan, O. K. Duality and subadditive functions in integer programming. (Russian) Èkonom. i Mat. Metody 16 (1980), no. 4, 808-810. (O. Pokorná) 82a:90098 90C10 no, Masaru On vanishing contact Bochner curvature tensor. Hokkaido Math. J. 9
- (1980), no. 2, 258–267. (James R. Wason) 82e:53031 53C25 Some considerations on various curvature tensors. *Hokkaido Math. J.* 10 (1981), no. 1, 13–26. (Lieven Vanhecke) 82g:53031 53B35 (53B05)
- Seitz, Gary M. Chevalley groups as standard subgroups. I. Illinois J. Math. 23 (1979), no. 1,
 - 36-57. (S. A. Syskin (Zbl 395:20006)) 82j:20038a 20D05 Sac-37, (S. A. Syskin (201393,20000)) 62;20038 Chevalley groups as standard subgroups. II, III. Illinois J. Math. 23 (1979), no. 4, 516-553, 554-578. (S. A. Syskin (Zbl 417:20017)) 82;20038b 20D05
 - Standard subgroups in finite groups. Finite simple groups, II (Proc. Sympos., Un Durham, Durham, 1978), pp. 41-62, Academic Press, London, 1980. (See 82h:20021)
- Properties of the known simple groups. The Santa Cruz Conference on Finite Group (Univ. California, Santa Cruz, Calif., 1979), pp. 231-237, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (From the text) 82e:20020 20D05 (20D06) The root groups of a maximal torus. The Santa Cruz Conference on Finite Group
- (Univ. California, Santa Cruz, Calif., 1979), pp. 239-241, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (Editors) 82h:20022 20D06 (20G40) Some standard groups. J. Algebra 70 (1981), no. 1, 299-302. (Gerard M. Enright)
- 82g:20037 20D05 (20D08)

 anina, Milan Algebren auf Graphen. (German) Contributions to graph theory and its applications (Internat. Colloq., Oberhof, 1977) (German), pp. 239-245, Tech. Hochschule
- Ilmenau, Ilmenau, 1977. (A. Pultr) State5091 05C99 (18C15)
 (with Vetchý, Vladimir) Regularization of the power of a graph. (Slovak and Russian summaries) Acta Math. Univ. Comenian. 39 (1980), 61-66. (R. C. Entringer) 82g:05079
- Seke, Bobo Sur les structures transversalement affines des feuilletages de codimension un. (English summary) Ann. Inst. Fourier (Grenoble) 30 (1980), no. 1, ix, 1-29. (Elmar Vogt) 82b-57023 57R30 (58A10, 58F18)
- Sēkefal'vi-Nady, B. See Sz.-Nagy, Bėla Sekerž-Zen'kovič, S. Ja. A uniqueness theorem and an explicit presentation of the solution of the Cauchy problem for an equation of internal waves. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 2, 320–323. (Dan Socolescu) 824:35098 35Q20 (76V05) i, Shigeko (with Kobuchi, Youichi) On DIL schemes simulated by DOL schemes. J.
- Seki, Shigeko (with Kobuchi, Youichi) On DIL schemes sim Comput. System Sci. 21 (1980), no. 1, 30-45. (Matti Linna) 82f:68082

- Sekiguchi, Jirō Eigenspaces of the Laplace-Beltrami operator on a hyperboloid. Nag Math. J. 79 (1980), 151-185. (Tom H. Koornwinder) 82g:22010 22E30 (43A 22F30 (43A85
 - (with Naruki, Isao) A modification of Cayley's family of cubic surfaces and
 - birational action of W(E6) over it. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 3, 122-125. (I. Dolgachev) 82j:14032a 14J25 (14E07, 14J10)
 - (with Shimizu, Yasuhiro) Simple singularities and infinite Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 1, 42-46. (Wim H. Hesselink) 82g:17007 17B20 (14J17)
- Sekiguchi, Katsusuke The group of units of the integral group ring of a metacyclic group. Osaka J. Mash. 18 (1981), no. 3, 755-765. (G. Karpilovsky) 82k:20011 20C05 Sekiguchi, Koji (with Kanesaka, Kiyomi) Representation of Witt vectors by formal power series and its applications. Tokyo J. Math. 2 (1979), no. 2, 349-370. (Helmut Koch) 82m:12015 12F10 (12B25, 13K05)
- Sekiguchi, Mamoru (with Tazaki, Eiichiroh; Amagasa, Michio) Heuristic structure synthesis in a class of multiobjective network systems using fuzzy finite state system. (Japanese. English summary) Systems and Control 24 (1980), no. 12, 799-806. (Authors'
- summary) 82k:90117 90C35 (90C31)
 Sekiguchi, Takeshi Weighted norm inequalities on the martingale theory. Math. Rep. Toyama Univ. 3 (1980), 37–100. (Roger L. Jones) 82c:60087 60G44 (60G46)
- Sekiguchi, Tsutomu On the fields of rationality for curves and for abelian varieties. Fac. Sci. Engrg. Chuo Univ. 23 (1980), 35-41. (Thomas Zink) 82i:14027
 - The coincidence of fields of moduli for nonhyperelliptic curves and for their Jacobian varieties. Nagoya Math. J. 82 (1981), 57-82. (Thomas Zink) 82h:14020 14H40 (10D20, 14K15)
- ekiguti, Tosiyuki The mechanics of the Greeks and its genesis. (Japanese. German mary) Bull. Fac. Ed. Utsunomiya Univ. Sect. 2 No. 29 (1979), 13-23. (Joong Fang) 82f:01009 01A20
- Sekistov, V. N. (with Armand, N. A.) Application of the nonlinear Dyson equation for the investigation of shortwave propagation in a Gaussian turbulent medium. (Russian) Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 5, 555-569 (Russian); translated as iophys. and Quantum Electronics 23 (1980), no. 5, 373-385. (Authors' summary) 78A40
- Sekizawa, Masami Umbilics of conformally flat submanifolds in Euclidean space. Töhoku Math. J. (2) 32 (1980), no. 1, 99-109. (R. L. Bishop) 82b:53082 53C42
- (with Goebel, Kazimierz; Stachura, A.) Uniform convexity of the hyperbolic metric and fixed points of holomorphic mappings in the Hilbert ball. Nonlinear Anal. 4 (1980), no. 5, 1011-1021. (K. T. Hahn) 82f:32039 32H20 (47H10)
- ieru, G. V. (with Dem'janov, Ju. A.; Igošin, A. I.; Kireev, V. T.; Pinskii, V. L.) ★Одиомерные нестационарные течения реального газа. (Russian) [One-dimensional transient flows of a real gas] Формирование течений с учетом вызкости, теплопроводности, диффузии и химических реакций. [Formation of flows with
- account taken of viscosity, heat conduction, diffusion and chemical reactions]. With English and French summaries. "Stiinca", Kishinev, 1980, 188 pp. (Authors' summary) 76-02 (76N15)
- berg, Sigmund Viggo Brun in memoriam. (Norwegian. I (1979), 3-9, 48. (Editors) 82f:01142 01A70 (10-03) moriam. (Norwegian. English summary) Normat No. 1
- Selden, Larry (with Donaldson, John B.) A note on the recoverability and unique changing tastes. Econom. Lett. 7 (1981), no. 2, 105-112. (Authors' summary) 82m:90005 90A06 (58E17, 90A10)
- Seldin, Jonathan P. Progress report on generalized functionality. Ann. Math. Logic 17 (1979), no. 1-2, 29-59. (B. Lercher) 82a:03017 03B40
 - Curry's program. To H. B. Curry: essays on combinatory logic, lambda calculus and nalism, pp. 3-33, Academic Press, London, 1980. (R. Hindley) 82j:03013
- Selehov, A. M. A class of three-webs. (Russian) Differential geometry (Russian), pp. 130-137, 141, Kalinin. Gos. Univ., Kalinin, 1977. (Author's summary) 82e:53034
 - Local algebras of a cyclical three-web. (Russian) Kaliningrad. Gos. Univ
- Differencial'naja Geom. Mnogoobraz. Figur No. 11 (1980), 115-122, 128. (M. A. Akivis) 53A60
- Three-webs with a partially symmetric curvature tensor. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 1, 210-219, 231. (Vladislav Goldberg) 82k:53032
- See also Differential geometry, 82c:53001 and Webs and quasigroups, 82k:53003 Selepin, L. A. (with Gordiec, В. F.; Osipov, A. I.) ★Кыметические процессы в газах и молекулярные лаверы. (Russian) [Kinetic processes in gases and molecular lasers] "Nauka", Moscow, 1980. 512 pp. (K. Wodkiewicz) 82c8:2048 82A40 (81 K05)
- (with Karasev, V. P.) On the theory of generalized coherent states of SU, gro (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 1, 54-63. (A. U. Klimyk) 82k:81026 81C40 (14K25, 22E46, 32M15, 81D30)
- Selepov, V. Ju. (with Bazalii, B. V.) Variational methods in a mixed problem of thermal equilibrium with a free boundary. (Russian) Mat. Fiz. No. 27 (1980), 62-74, 121. (Claudia Simionescu) 82b:35046 35J20 (49A22)
- lest, A. V. (with Barabanenkov, Ju. N.; Ozrin, V. D.) On the kinetic theory of moderately dense gas. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 1, 80-92. (K. Kumar) 82h:82044 82A40
- leznev, L. I. (with Slobodkina, F. A.) On the stability of compression shock in streams of spontaneously condensing vapor. Prikl. Mat. Meh. 42 (1978), no. 4, 689-694 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 4, 733-739 (1979). (Authors' summary) 76L05 (76N99)
- Seleznev, O. V. Approximation of periodic Gaussian processes by trigonometric polynomials. (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 1, 35-38. (Ju. M. Ryžov) 82a:60054 60G17 (42A10) zznev, V. A. The Riemann boundary value problem in classes of Jordan bow
- (Russian) Metric questions of the theory of functions (Russian), pp. 125–132, 162, "Naukova Dumka", Kiev, 1980. (A. P. Soldatov) 82b:30052 30E25 (45E05)
- Selezn'ova, F. G. (with Burikin, O. Ja.) Mixed problems for some equations in a nnian space that are well-posed in the sense of I. G. Petrovskii. (Russian) Mat.

- Iridge, J. L. (with Pomerance, Carl; Wagstaff, Samuel S., Jr.) The pseu 25-10". Math. Comp. 35 (1980), no. 151, 1003-1026. (Authors' summary) 10A40 (10-04, 10A25)
- de, James F. Asymptotic behavior of solutions to single loop positive feedbac stems. J. Differential Equations 38 (1980), no. 1, 80-103. (V. M. Popov) 82a:34038 34C10 (58F12, 92A09)
 - Asymptotic behavior of solutions to multiple loop positive feedback systems. SIAM Math. Anal. 12 (1981), no. 5, 669-678. (Uwe an der Heiden) 82k:34035 34C05 (58F10, 92A05)
- Selick, Paul A spectral sequence concerning the double suspension. *Invent. Math.* 64 (1981), no. 1, 15-24. (J. F. Adams) 82j:55015 55Q40

 A decomposition of \(\pi_a \)(S^{2p+1}; \(Z/pZ \)). Topology 20 (1981), no. 2, 175-177. (Joseph
 - Neisendorfer) 82c:55017
 - 5017 55Q40 oller, D., 82a:55010 See also Husem
- Seliger, Su
- Susanne See Fuchs-Seliger, Susanne
 smas H. (with Plebañski, Jerzy F.) Partial isometries and quotient structures an. Th in Hilbert spaces. Rep. Math. Phys. 17 (1980), no. 3, 437-458. (C. S. Sharma) 82j:47060
 - (with Moshinsky, M.) On the structure of phase space. J. Math. Phys. 22 (1981), no. 7, 1338-1344. (William H. Klink) 82i:70013 70G35 (20H99, 30C35, 58F05)
 - (with Moshinsky, M.) Canonical transformations relating the oscillator and Coulomb blems and their relevance for collective motions. J. Math. Phys. 22 (1981), no. 8,
 - 1526-1535. (Kurt Bernardo Wolf) 82k:81098 81H10 (81G30)
 (with Hecht, K. T.; Reske, E. J.; Zahn, W.) Spectroscopic amplitudes for complex cluster systems. Nuclear Ph 82b:81135 81G30 (35P25) Nuclear Phys. A 356 (1981), no. 1, 146-222. (Authors' sun
- See also Group theory and its applications in physics. 82k:81001 im, M. S. A nonlinear loaded Hilbert problem. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1978, no. 1, 100–104. (S. Burýšek) 82i:30062 30E25 (45G05)
 - The homogeneous Riemann problem on a nonsmooth open curve. (Russian) arbaidžan. Gos. Univ. Učen. Zap. 1979, no. 5, 12–22. (Zbigniew Binderman) 82e:30060 n problem on a nonsn
 - 30E25 (45G05)
- ne nonhomogeneous Riemann problem on a nonsmooth open curve. (Russian) idžan. Gos. Univ. Učen. Zap. 1979, no. 5, 92-105. (Zbigniew Binderman) 30E25 (45E05)
- Selim, S. M. (with Haselgrove, Jenifer) A comparison of bounds for the chromatic numbe of a graph. Comput. Math. Appl. 7 (1981), no. 3, 259-260. (Paul A. Catlin) 82f:05041 05C15 (05C35)
- nger, V. (with Karacsony, J.) Dispersion relation for waves in relativistic electron beam-plasma system. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 4, 363-381. (From the text) 824:76104 76Y05 (76X05)
- w, B. I. (with Gavrilov, G. P.; Liskovec, V. A.; Permjakov, P. P.) Some tendencies in the theory of enumeration (supplement-survey). (Russian) Enumeration problems combinatorial analysis (Russian), pp. 336-362, "Mir", Moscow, 1979. (See 82b:05018) 05A15 (01A65, 05-02)
- Selivanov, V. L. Index sets of computable classes of finite sets. (Russian) Algorit ata (Russian), pp. 95-99, Kazan. Gos. Univ., Kazan, 1978. (R. A. Di Paola) 1977 03D25 (03D30, 68C30)
- Seljandin, B. D. (with Poljudov, A. N.; Sigov, Ju. S.) A three-dimensional kinetic plasma model in a problem of evolution of a Langmuir wave of large amplitude. (Russian) Dokl.

 Akad. Nauk SSSR 246 (1979), no. 1, 58-62. (From the text) 82g:82046 82A45
- ugin, A. A. (with Kaipov, V. H.) Construction of models of control objects in terms of fuzzy set theory. (Russian) Optimization and adaptive control in large-scale systems (Russian), pp. 96-103, 110, "Ilim", Frunze, 1980. (Authors' summary) 82c:90008 90A06 (03E72)
- Ike, W. (with Kinzel, Wolfgang; Wu, F. Y.) A Potts model with infinitely degenerate ground state. J. Phys. A 14 (1981), no. 10, L399-L404. (Authors' summary) 82;82028 82A25 (82A68)
- Sel'kov, E. E. The oscillatory basis of cell energy metabolism. Pattern formation by dynamic systems and pattern recognition (Proc. Internat. Sympos. Synerget.,
- Garmisch-Partenkirchen, 1979), pp. 166-174, Springer Ser. Synergetics, 5, Springer, Berlin, 1979. (See 82k:00028) 92A09 (92A40)
- Berlin, 1979. (See 82a:00028) 92A09 (92A40)
 Selkovič, V. M. Multiplications of distributions generated by Wightman functions, and an algebra of hyperdistributions. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 2, 80-84. (Bl. P. Damyanov) 82m:46044 46F10 (81E05)
 (with Kakičev, V. A.) Riemann's problem for a p-cone in Vladimirov algebras.
 (Russian) Mat. Zametki 27 (1980), no. 6, 899-911, 989. (S. G. Samko) 82h:32010
 - 32A40 (30E25)
- elkow, Stanley M. (with Garfinkel, Robert S.) On some conjectures of Gould on the parities of the binomial coefficients. Fibonacci Quart. 19 (1981), no. 1, 61-63. (E. A. Enneking) 82j:05006 05A10 (10A40)
- (with Hughes, Charles E.) The finite power property for context-free languages. Theoret. Comput. Sci. 15 (1981), no. 1, 111-114. (From the introduction) 82e:68078
- Sell, George R. Bifurcation of higher-dimensional tori. Arch. Rational Mech. Anal. 69
 - (1979), no. 3, 199–230. (A. Vanderbauwhede) 82c:58048 58F14 (34C30) (with Sacker, Robert J.) The spectrum of an invariant submanifold. J. Differential Equations 38 (1980), no. 2, 135–160. (Richard C. Swanson) 82h:58040 58F15 (34C30) A characterization of finite-dimensional translation invariant spaces. Linear and Multilinear Algebra 10 (1981), no. 1, 53-57. (Kevin Clancey) 82e:47054 47D10 (15A60, 47A15)

- A remark on an example of R. A. Johnson. Proc. Amer. Math. Soc. 82 (1981), no. 2, 206-208. (M. K. Grammatikopoulos) 82i:34044b 34C28 (54H20) Selhars, Wilfrid See Schlick, Moritz, 82b:0021b Selhari, F. Quantum correlations and separability. Lett. Nuovo Cimento (2) 27 (1980), no. 1, 1-3. (From the text) 82d:81012 81B05
 - ers, Peter H. The theory and computation of evolutionary distances: pattern nition. J. Algorithms 1 (1980), no. 4, 359-373. (Author's summer of the control o

- Seimer, Ernst S. On the postage stamp problem with three stamp denominations. Math. Scand. 47 (1980), no. 1, 29-71. (P. K. Subramanian) 82d:10046 10F20 (10F30, 90C10)
- Selten, Reinhard Coalition probabilities in a noncooperative model of three-person quota game bargáining. Decision in small groups (Workshop, Jungholz, 1977) (German), pp. 90–106, Math. Systems in Econom., 45, Hain, Königstein/Ts., 1979. (See 82e:90130) 90D12 (90A07)
- See also Decisions in small groups, 82e:90130 Šeluhin, V. V. Periodic flows of a viscous gas. (Russian) Dinamika Splošn. Sredy No. 42 Dinamika Neodnorod. Židkosti (1979), 80-102, 129. (Author's summary) 82e:76046 76N15 (35L99, 86A35)
 - Existence of periodic solutions of the generalized Burgers system. Prikl. Mat. Meh.
 - LIASSERICE OI PERIODIC SOLUCIONS OI the generalized Burgers system. Prikl. Mat. Meh. 43 (1979), no. 6, 992-997 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 6, 1073-1079 (1981). (Alberto Valli) 82i:35015 35B10 (35Q20, 76N10)
 Bounded, almost-periodic solutions of a viscous gas equation. (Russian) Dinamika Splošn. Sredy No. 44 Dinamika Neodnorodn. Židkosti (1980), 147-163, 177. (Author's summary) 82m:35006 35B15 (76N15)
- adeni, Zbigniew Some Saks-space dualities in harmonic analysis on commutative semigroups. Special topics of applied mathematics (Proc. Sem., Ges. Math. Datenverarb., n, 1979), pp. 71-87, North-Holland, Amsterdam, 1980. (A. T.-M. Lau) 82h:43007 43A60 (46E99)
- See also Biography: Stark, Marceli, 82g:01080
- al, P. (with Courtois, P.-J.) An algorithm for the optimization of nonbifurcated flows in computer communication networks. *Performance Evaluation* 1 (1981), no. 2, 139–152. (Authors' summary) 82m:90069 90B10 (68C99)
- natovič, V. I. (with Zmievskaja, G. I.; Pjarnpuu, A. A.) Application of Monte Carlo methods to the study of the states of a gas mixture with internal degrees of freedom. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 2, 511-516, 528. (I. N. Molčanov) 65C05 (76T05)
- a, Ichirô A note on enumerating combinations in lexicographical order. J. Inform. 68C05 (05A05, 05A15) Process. 4 (1981), no. 1, 35-37. (Author's summary) 82f:68037 On the numbers of permutations which are obtained using a stack with constrained depth, and their generating functions. (Japanese) Sūgaku 33 (1981), no. 1, 79-80.
- (Samuel S. Wagstaff, Jr.) 82k:05012 05A15 (05A05)

 aber, J. J. (with Freedman, A. R.) Densities and summability. Pacific J. Math. 95 (1981), no. 2, 293–305. (T. Šalát) 82m:10081 10L10 (40C05)
- čik, A. V. Computational complexity of maximization of supermodular functions. (Russian) Methods of solution of problems of nonsmooth optimization and stochastic programming (Russian), pp. 8-12, 34, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiec. 1979. (Author's summary) 82g:68049 68C25
- nenjuk, E. P. (with Stasišin, V. M.) Mathematization of scientific knowledge and computer science. Applied aspects. (Russian) Naučn.-Tehn. Informacija (VINITI) Ser. 2 Informacionnye Processy i Sistemy 1980, no. 4, 1-8, 32. (A. A. Mullin) 82e:00042 00A69 (68-02, 68G20)
- enoff, G. (with Matsumoto, Hideki; Umezawa, Hiroomi) A perturbative look at the dynamics of extended systems in quantum field theory. J. Math. Phys. 22 (1981), no. 10, 2208–2222. (Authors' summary) 82m:81066 81E99 (81D05)
- nenov, A. L. An interpretation of free algebras in free groups. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 6, 1329–1332. (K. Drbohlav) 82b:08011 08B20 (03D35, 20F10)
- v, A. V. The separation principle in the Bayesian identification problem. (Rus Dokl. Akad. Nauk SSSR 256 (1981), no. 3, 539-542. (B. I. Anan'ev) 82f:93080
- Semenov, B. N. (with Nazarov, S. A.) The connection between stress factors for a plane problem of classical and couple-stress elasticity theory. (Russian) Studies in elasticity and lasticity, No. 13 (Russian), pp. 148-154, 313, Leningrad. Univ., Leningrad, 1980. (L. A.
- Ivanov) 82g:73013 73C40 (35J05) nenov, E. M. (with Braverman, M. Š.) Characteristic properties of ℓ_p spaces. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 2, 270–272. (M. Z. Berkolaiko) 82b:46032 46E30 (46B25)
- nenov, I. G. An algorithm for ordering tasks in a conveyor system on the criterion of the minimum passage time and with a fixed order of carrying them out on all machines (Russian) Automation of the control of industrial plants (Russian), pp. 85-98, 104-105, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (Author's summary) 82f:90051
- w, Ju. A. (with Poliv'janii, V. O.) On the theory of generalized diffusion processes (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1981, no. 6, 20 pp. (Publisher's description) 82m:60070 60H10 (35J15, 60J60)
- enov, S. G. (with Fomin, V. N.) Linearity of optimal control of a linear discrete system with steady noise. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vpp. 4, 59-65, 117. (M. M. Konstantinov) 82c:93024 93E20 (49A60)
- enov, S. K. (with Barancev, R. G.) Classical scattering on a lattice of unbound atoms with an arbitrary boundary. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 3, 120-122, 132. (Gheorghe Nenciu) 82d:81143 81F99
- nov, V. A. (with Smirnov, A. I.; Fedorov, Ju. A.) Stability of dynamical systems under periodic unsteady parametric excitation. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 459 (1980), 34-39, 131. (Authors' summary) 82c:70030
- nenov, V. I. Necessary conditions in extremal problems for spatial quasiconformal mappings. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 5, 70-77, 190. (P. Caraman) 82d:30019 30C60
- On sufficient conditions for extremal quasiconformal mappings in space. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 3, 222–224, 240. (Matti Vuorinen) 82h:30014 30C60 30C60
- nenov, V. N. (with Jacobo, V. A.) An application of path integrals. (Russian) Complex control systems (Russian), pp. 64–72, 96, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev. 1979. (Authors' summary) 82c:93019 93E05 (60H99, 78A55)
- Study of the solution of the gas-dynamic Tricomi problem for the Lavrent'ev-Bicadze equation. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 4, 36-41, 116. (A. P. Soldatov) 82e:76047 76N15
 - Asymptotics of Fourier coefficients of Tricomi's gas dynamic problem for the

- Lavrent'ev-Bicadze equation. (Russian. English summary) Vestnik Leningrad. Univ. Mat.
- Meh. Astronom. 1981, cyp. 1, 87-90, 122. (Author's summary) 82j:76063 76N15
 Asymptotic behavior of an integral arising in the Tricomi problem. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, cyp. 2, 120-121, 128. summary) Vestnik Leningrad. Univ. Mat. Meh. Astron (Author's summary) 82h:35074 35M05 (41A60)
- nov, V. P. The method of isotropic tetrads and centrally symmetric gravitational fields. Russian) Problemy Teor. Gravitacii i Element. Častic No. 11 (1980), 40-46. (J. D. Zund) 82i-83022 83C20 (83C15)
- Analogue of the Birkhoff theorem. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1981, no. 2, 62-65. (Author's summary) 82d:83008 83C05
- ova, T. A. Determination of the characteristics of a queueing network with restricted input flow. (Russian. Estonian and English summaries) Eesti NSV Tead. Akad. Toimetised Fülis.-Mat. 29 (1980), no. 3, 323-326, 347. (M. A. Fainberg) 82a:60144
- nenor-Tjan-Šanskii, M. A. (with Reiman, A. G.) Algebras of flows and nonlinear partial differential equations. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 6, 1310–1314. (Virgil Obădeanu) 82e:58050
- (with Reiman, A. G.) Reduction of Hamiltonian systems, affine Lie algebras and Lax equations. II. Invent. Math. 63 (1981), no. 3, 423-432. (P. A. Kučment) 82k:58049
- rato, Roberto An iteration method for a nonlinear initial value problem arising from the kinetic theory of vehicular traffic. Transport Theory Statist. Phys. 9 (1980), no. 2-3, 83-93. (Author's summary) 82g:90048a 90B20 (82A99)
- Global solutions for a nonlinear initial value problem arising from the kinetic theory of vehicular traffic: existence, uniqueness and continuity with respect to initial data. Transport Theory Statist. Phys. 9 (1980), no. 2-3, 95-114. (Author's summary) 82g:90048b
- džiev, Hristo (with Nedelčev, Hristo) Diagonal Padé approximants for a discontinuous function given by its Fourier series. (Bulgarian. Russian and English summaries) Ploodio. Univ. Naučn. Trud. 15 (1977), no. 1, 247-261 (1979). (Authors'
- summary) 82h:41021 41A21 (42A16) nerdžieva, R. I. On a boundary value problem for a degenerate hyperbolic equation. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 10, 1321-1324. (V. V. Kovrižkin) 35L80
- esenko, M. P. (with Tihonov, Ju. L.) Modeling of periodically arriving tasks in a shared system. (Russian) Methods and practice of construction of data processing systems (Russian), pp. 61-68, 98-99, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev. 1979. (Authors' summary) 82a:90073 90B35 (68B20)
 - (with Ramazanov, S. K.) Identification and parameter estimation in complex dynamic systems. Automatika 1979, no. 6, 42-53, 95 (Russian. English sum translated as Soviet Automat. Control 12 (1979), no. 6, 33-43. (Y. Cherruault) 82c:93025
- netkov, L. A Screens of graduated formations. (Russian) Sixth All-Union Symposium on Group Theory (Čerkassy, 1978) (Russian), pp. 37-50, 219, "Naukova Dunka", Kiev,
- 1980. (Gerhard Pazderski) 82h:20026 20D10 Screens of the product of formations. (Russian. English summary) Dokl. Akad. Nan
 - BSSR 25 (1981), no. 8, 677-680, 764. (B. Hartley) 82k:20043 20D10
 On & radicals of finite groups. (Russian. English summary) Dokl. Akad. Nauk BSSR
- 25 (1981), no. 10, 869–872, 956. (Author's summary) 82m:20022 20D10
 nin, F. Note sur les réseaux de Tissot. (Turkish summary) İstanbul Üniv. Fen Fak.

 Mecm. Ser. A 41 (1976), 53–56 (1981). (Vladislav Goldberg) 82c:53005 53A05
- ninara, G. (with Hall, Philip) Nonlinear oscillations of nonspherical cavitation bubbles in acoustic fields. J. Fluid Mech. 101 (1980), no. 2, 423-444. (Authors' summary) 76B10 (76O05)
- mirot, M. S. (with Alzenberg, N. N.) Convolution of multivalent discrete signals in an arbitrary basis. (Russian) Digital processing of signals and its applications, pp. 3-12, 219, "Nauka", Moscow, 1981. (Authors' summary) 82j:94005 94A11
- emjakina, L. M. On the question of substantiating the averaging method for a type of
- differential equations with deviating argument. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 1, 138-142. (D. Bainov) 82c:34086 34K15 (34C29)
 Šemjakina, T. K. Construction of solutions of a third-order nonlinear equation that has
- given properties at infinity. (Russian) Differencial nye Uravnenija 17 (1981), no. 6, 1041-1049, 1148. (\$. Schwabik, 82h:34008 34A25 (30B50) (with Jablonskii, A. I.) On the absence of nonholomorphic solutions in the neighborhood of a fixed singular point of some classes of systems of two equations.
- ssian) Differencial'nye Uravnenija 17 (1981), no. 9, 1713-1716, 1728. (Shlom Strelitz) 82k:34009 34A20
- mko, N. N. Some forms of nonabelian groups with a prescribed system of invariant infinite groups. (Russian) Constructive description of groups with properties prescribed on their subgroups (Russian), pp. 107–117, 147, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (Richard E. Phillips) 82h:20037 20E15
 - Some forms of nonabelian groups with a prescribed system of invariant infinite abelian subgroups. (Russian) Ukrain. Mat. Z. 33 (1981), no. 2, 270-273. (Ju. I. Merzliakov) 82h:20038 20E15 (20F22)
- Merzjakov) Sanza008 201:15 (2012.2)
 mnnes, Stephen (with Haimo, Franklin Tepper) Some complete antinormal subgroups of infinite symmetric groups. Algebra, Carbondale 1980 (Proc. Conf., Southern Illinois Univ., Carbondale, Ill., 1980), pp. 262–273, Lecture Notes in Math., 848, Springer, Berlin, 1981. (D. F. Holt) 821:20015 20835 (54D99)
 nuller, Ulrike (with Weiss, Richard M.) On Fischer's characterization of Σ₄ and Σ₅.
- Arch. Math. (Basel) 36 (1981), no. 2, 120-124. (Gareth A. Jones) 82k:20010 (05C25, 20D99)
- (100-22).

 ★Алгоритмы выполнения арифметических операций над комплексными числами в декартовой системе координат. (Russian) [Algorithms for carrying out arithmetic operations over complex numbers in the Cartesian coordinate carrying out ariumetic operations over complex numbers in the carriesian coordinate system [Inequative 80 [Preprint 80], 22. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kieo, 1980. 54 pp. (Wolfgang Feitscher) 82h:68052 68C05 (94C30) nuratov, F. A. (with Maksimovič, N. G.; Matvilčuk, Ja. N.) Application of the theory of matrix graphs to the formation of a model of an electrical circuit with multipoles.
- (Russian, English summary) Elektronnoe Modelirovanie 1981, no. 1, 27–32, 109. (Authors' summary) 821:94019 94C05

- isin, S. A. (with Gerasimov, B. P.) Calculation on a stationary Euler grid of the flow of bodies of changing form. (Russian) Differencial'nye Uravnenija 17 (1981), no. 7, 1214–1221, 1342. (Authors' summary) 82k:76005 76A60 (65P05, 76D99)
- Sen', A. H. The axiomatic approach to the theory of algorithms and relative computability. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1980, no. 2, 27-29, 102. (R. A. Di Paola) 82b:03087 03D75 (03D20, 68C30)
- Sen, A. K. (with Ahmed, N. U.) Control of synchronous orbit using Lyapunov stability theory. IEEE Trans. Aerospace Electron. Systems 17 (1981), no. 1, 48-53. (Authors' summary) 82h:49060 49E20
- Sen, Amitabha On the existence of neutrino "zero-modes" in vacuum spacetimes. J. Math. Phys. 22 (1981), no. 8, 1781–1786. (F. A. E. Pirani) 82;83032 83C47
- Sen, D. (with Talukdar, B.; Sen, M.) Quantum tachyons in Schwarzschild space-time. Math. Phys. 22 (1981), no. 2, 377-379. (B. K. Datta) 82i:83038 83C47 (65L1
- Sen, Dilip Kumar On weak operator topologies. Ranchi Univ. Math. J. 10 (1979), 19-24.
 - (From the text) 82m:47032 47D30
 On adjoint of an operator on reflexive Banach spaces. Mat. Vesnik 4(17)(32) (1980), no. 3, 369-372. (From the text) 82h:47003 47A05
- On Hermitian operators on Banach spaces. Indian J. Pure Appl. Math. 12 (1981), no. 10, 1219-1223. (V. Istrățescu) 82k:47039 47B20
 Sen, Kanwar (with Taneja, Sushma) Indices of returns, crossings and positive steps. Bull.
- Malaysian Math. Soc. (2) 3 (1980), no. 2, 111-120. (N. H. Bingham) 82e:60109 Sen, M. (with Talukdar, B.; Sen, D.) Quantum tachyons in Schwarzschild space-time. J. Math. Phys. 22 (1981), no. 2, 377-379. (B. K. Datta) 82i:83038 83C47 (65L15,
- 83F05) Sen, M. K. (with Madison, Bernard L.; Mukherjee, T. K.) Periodic properties of groupbound semigroups. Semigroup Forum 22 (1981), no. 3, 225-234. (M. Friedberg)
- 82g:20091 20M10 Sen, Pradip Kumar Flow of heat in composite cylindrical regions in presence of contact
- resistance and its effects on the temperature distributions. *Indian J. Math.* 18 (1976), no. 2, 105-112. (Author's summary) 82d:80018 80A20 Sen, Pranab Kumar (with Ghosh, Malay) Asymptotic theory of sequential tests based on
- linear functions of order statistics. Essays in probability and statistics, pp. 485-499, Shinko Tsusho, Tokyo, 1976. (From the summary) 82b:62101 62L10 (62G30) Invariance principles for linear rank statistics revisited. Sankhyā Ser. A 40 (1978),
 - no. 3, 215-236. (Jana Jurečková) 82h:60060 60F17 (62G10) Rank analysis of covariance under progressive censoring, Sankhyā Ser. A 41 (1979),
 - no. 3-4, 147-169. (James N. Adichie) 821c62090 62G10 (62E20, 62I10)
 Nonparametric simultaneous inference for some MANOVA models. variance, pp. 673-702, Handbook of Statistics, 1, North-Holland, Amsterdam, 1980. (See 62G10 (62H15, 62J10)
 - Limit theorems for an extended coupon collector's problem and for successive sampling with varying probabilities. Calcutta Statist. Assoc. Bull. 29 (1980),
 - no. 115-116, 113-132 (1981). (Lars Holst) 82g:60041 60F05 (60C05, 62D05) The Cox regression model, invariance principles for some induced quanti and some repeated significance tests. Ann. Statist. 9 (1981), no. 1, 109-121. (M. D.
 - Burke) 82e:62075 62G99 (60F17) (with So, Ying Chiu) Repeated significance tests based on likelihood ratio statistics.
 - Comm. Statist. A -Theory Methods 10 (1981), no. 21, 2149-2176. (D. Siegmund) 82m:62185 62L10
 - Weak convergence of an iterated renewal process. J. Appl. Probab. 18 (1981), no. 1,
- 291-296. (P. E. Ney) 82a:60035 60F05 (60K05)
 Sen, Prodip (with Germani, Alfredo) White noise solutions for a class of distributed feedback systems with multiplicative noise. Ricerche Automat. 10 (1979), no. 1, 38-65 (1980). (R. S. Lipcer) 82j:60119 60H99 (93E03)
 - On the choice of input for observability in bilinear systems. IEEE Trans. Au
- Control 26 (1981), no. 2, 451-454. (Author's summary) 82e:93020 93B07
 Sen, R. N. Glueing broken symmetries together. Differential geometrical methods in mathematical physics (Proc. Conf., Aix-en-Provence/Salamanca, 1979), pp. 359-365.
 - Lecture Notes in Math., 836, Springer, Berlin, 1980. (Editors) 82c:81066 81D20
 Group representations on fibre spaces. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 248-250, Ann. Israel Phys. Soc., 3,
 - Hilger, Bristol, 1980. (See 82h:81004) 22E70 (81C40) The domain of definition of bundle representations. J. Math. Phys. 22 (1981), no. 2, 55R15
- 290-292. (Adrian C. Albu) 82g:55017 Continuous cohomology and p-adic Galois representations. Invent. Math. 62 (1980/81), no. 1, 89-116. (Ernst-Wilhelm Zink) 82e:12018 12B20 (14K99, 14L05) On explicit reciprocity laws. II. J. Reine Angew. Math. 323 (1981), 68-87. (Helmut ch) 82f:12024 12B25
- Koch) 82f:12024 a, Siddhartha Geometrical determination of the sign of the Casimir force in two spatial dimensions. Phys. Rev. D (3) 24 (1981), no. 4, 869-872. (Author's summary) 82h:81113
- našor, S. I. Exact three-dimensional solutions of equations describing plastic flow of anisotropic and inhomogeneous media. (Russian) Dinamika Sploin. Sredy No. 43 Mat. Problemy Meh. (1979), 98–107, 186. (Z. Mróz) 82br.73027 73E99 (35K22, 73C30)
- Invariant solutions of a three-dimensional problem of ideal plasticity. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 3, 159-163. (Petr Procházka) 82e:73040 (35A30, 35J65)
- atore, G. (with Pastore, G.; Tosi, M. P.) Short-range correlations in multicomponent plasmas. Phys. Lett. A 84 (1981), no. 7, 369-370. (Authors' summary) 82k:82832
- nator, V. V. Several estimates of the rate of convergence in the multidimensional central limit theorem. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 4, 809-812. (S. H. Siraždinov) 82h:60047 60F05
 - Some uniform estimates of the convergence rate in the multidimensional central limit theorem. (Russian. English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 4, 757-770. (M. M. Leonenko) 82h:60022 60F05

 Some lower bounds for the rate of convergence in the central limit theorem in Hilbert
 - pace. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 6, 1318-1322. (Rastislav Potocký) 82e:60011 60B12

- Tenkov, I. K. Constitutive equations of the theory of simple media with constraints of differential type. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1990, no. 7, 60–64. (A. Radu) 82x-7302 "73B05"
 Extremal principles of the theory of small thermoviscoelastic deformations superposed on fully established finite deformations. Prikl. Meh. 16 (1980), no. 7, 26–34.

 - ed as Societ Appl. Mech. 16 (1980), no. 7, 574-581 (1981). (Author's ry) 82e:73087 73U05
- dov, Blagovest Information science and other sciences. (Bulgarian) Fiz.-Mat. Spis. B"Igar. Akad. Nauk. 21(54) (1978), no. 1, 41-49. (Editors) 82f:00019 00A69 (01A73, 68D99, 94A15)
 - (with Andreev, Andrei St.; Popov, V. A.) Jackson-type theorems for the best one-sided approximations by trigonometric polynomials and splines. (Russian) Mat. Zametki 26 (1979), no. 5, 791-804, 816. (Authors' summary) 826:42001 42A10 (41A15)
 - (with Mills, T. M.) An estimate for approximation with Fejer's interpolation ynomial. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 11, 1447–1449. (P. Vèrtesi) 41003 41A05 (41A10)
- sechal, Marjorie A simple characterization of the subgroups of space groups. Acta Cryst. Sect. A 36 (1980), no. 6, 845-850. (Michael Klemm) 82e:20059 20H15

 The genesis of growth twins. Kristallografija 25 (1980), no. 5, 908-915 (Russian);
 - as Soviet Phys. Cryst. 25 (1980), no. 5, 520-524 (1981). (Author's summary) 82A60 (51F15)
- or, R. (with Magnen, J.) Expa ion and summability methods in constructive field theory. Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 217–223, Lecture Notes in Phys., 116, Springer, Berlin, 1980. (Editors) 82b:81061 81E10
- tests, E. (with Kang, Kathy M.) Path analysis: an exposition. Developments in statistics, Vol. 3, pp. 217-246, Academic Press, New York, 1980. (Klaus Hinkelmann) 82b:62080 62105
 - iting the stationary distribution for infinite Markov chains. Linear Algebra
 - Appl. 34 (1980), 259-267. (Richard Isaac) 82a:60103 60J10 (65U05)

 Another look at independence of hitting place and time for the simple random walk. astic Process. Appl. 10 (1980), no. 1, 101-104. (I. Vincze) 82f:60158
- Seng, You Gen See Shen, You Gen evelt Sengers, J. M. H. See Levelt Seng ers. J. M. H.
- gers, J. V. (with Levelt Sengers, J. M. H.) How close is "close to the critical point"? Perspectives in statistical physics, pp. 239–271, Stud. Statist. Mech., IX, North-Holland, Amsterdam, 1981. (See 82h:82001) 82A25 agapta, Bhaskar Control limit policies for early detection of failure. European J. Oper. Res. 7 (1981), no. 3, 257–264. (Author's summary) 82i-90045 90B25
- pta, Jati K. Stochastic goal programming with estimated parameters. Z. ationalökonom. 39 (1979), no. 3-4, 225–243. (From the introduction) 82i:90057
- - Stochastic programming: a selective survey of recent econ
- Stochastic programming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 525-536, Academic Press, London, 1980. (Author's summary) 82a:90108 90C15
- Minimax solutions in stochastic programming. Cybernet. Systems 11 (1980), no. 1-2, 90C15 1-19. (Ju. M. Ermol'ev) 82e:90067
- Linear allocation rules under uncertainty. Internat. J. Systems Sci. 11 (1980), no. 12, 1459-1480. (Author's summary) 82g:90005 90A05
- Constrained nonzero-sum games with partially controllable strategies. J. Optim Theory Appl. 31 (1980), no. 3, 361-371. (Author's summary) 82c:90102 90D15 e also Fox, Karl August, 82d:90043a
- ta, Manimay Monotonicity, independence of irrelevant alternatives and
- strategy-proofness of social decision functions. *Rev. Econom. Stud.* 47 (1980), no. 2, 393–407. (From the introduction) 824:90007 90A06 (90A08)
- (with Pattanaik, Prasanta K.) Restricted preferences and strategy-proofness of a class of group decision functions. Rev. Econom. Stud. 47 (1980), no. 5, 965–973. (Donald E. Campbell) 82k:90025 90A08
- ngupta, Prabodh Chandra See Gupta, Radha Charan, 82f:01108
- pea, Pran Ranjan (with Acharya, Debipada) Lamb's plane problem in icropolar-elastic medium under influence of temperature. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Tech. 27 (1979), no. 8-9, 749-757 (1980). (K. N. Srivastava) 73B25 (73U05) 82=73003
- 13620 (13003)
 ggapta, S. Effect of rotation on a heated horizontal layer of dissociating fluid. Proc. m Nat. Sci. Acad. Part A 43 (1977), no. 3, 208-219. (Author's summary) 82d:76040 76E15 (76U05, 80A30, 80A32)
- pta, S. On the construction of noninvariant balanced sampling designs. Calcutta Statist. Assoc. Bull. 28 (1979), no. 109-112, 109-124. (C. H. Kapadia) 82g:62023
- On the admissibility of the symmetrized Des Raj estimator for PPSWOR samples of size two. Calcutta Statist. Assoc. Bull. 29 (1980), no. 113-114, 35-44. (C. H. Kapadia) 62020 62D05 (62C15)
- On the efficiency of the interpenetrating subsampling procedure. Calcutta Statist. Assoc. Bull. 29 (1980), no. 115-116, 173-177 (1981). (David Bellhouse) 82g:62024
- agupta, S. S. (with Siu, W. W. C.; Lind, N. C.) A linear programming formulation of the problem of moments. (German and Russian summaries) Z. Angew. Math. Mech. 59 (1979), no. 10, 533-537. (J. H. B. Kemperman) 824:60032 60E15 (44A60, 65D07. 60E15 (44A60, 65D07,
- gupta, Sa bra (with Hansen, Eldon) Bounding solutions of systems of equations ng interval analysis. BIT 21 (1981), no. 2, 203-211. (Authors' sum mary) 82h:65036
- pta, Subrata (with Lee, S. S.; Tuann, S. Y.; Lee, C. R.) Application of three-dimensional, free-surface model to shallow tidal waters. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 359-367, IMACS, New Brunswick, N.J., 1979.
- (Authors' summary) 82c:76015 76151 (5505), 86A05)

 superts, Uday K. (with Gerlach, Ulrich H.) Homogeneous collapsing star: tensor and vector harmonics for matter and field asymmetries. Phys. Rev. D (3) 18 (1978), no. 6, 1773–1784. (Authors' summary) 82c:85009 85A40

- (with Gerlach, Ulrich H.) Gauge-invariant perturbations on most general spherically symmetric space-times. Phys. Rev. D (3) 19 (1979), no. 8, 2268-2272. (Authors' summary) 82c:83010 83CO5 (83C25, 85A05) nilov, A. S. Projective classification of two-parameter families of k-dimensional planes of multidimensional projective spaces. (Russian) Differential geometry (Russian) pp. 95-103, 141, Kalinin. Gos. Univ., Kalinin, 1977. (K. Radziszewski) 82j:53021 53A25
- Senin, Y. E. (with Mickevič, N. V.) Nonvacuum cosmologies with toroidal topology of space-sections. Acta Phys. Polon. B 12 (1981), no. 6, 541-547. (Authors' summary) 82;83071 83F05
 Senitzky, I. R. Classical statistics inherent in pure quantum states. Phys. Rev. Lett. 47 (1981), no. 21, 1503-1506. (F. R. Halpern) 82m81007 81B05
- kienė, Elvyra (with Žilinskas, Antanas) Estimation of Wiener stochastic field parameter from observations at random dependent points. Kibernetika (Kiev) 1979, no. 6, 107-109
 - Itom observations at fairborn dependent points. Reterrains (1887) (1887); translated as Cybernetics 15 (1979), no. 6, 893–896 (1980). (I. M. Stancu-Minasian) 82e:62149 62M10 (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of Mathematical expectation of a Gaussian random (with Mockus, Jonas) Estimate of Mathematical expectation of the Mockus (with Mockus, Jonas) Estimate of Mathematical expectation of the Mockus (with Mockus, Jonas) Estimate of Mathematical expectation of the Mockus (with Mockus, Jonas) Estimate of Mathematical expectation of the Mockus (with Mockus, Jonas) Estimate of Mathematical expectation of the Mockus (with Mockus, Jonas) Estimate of Mathematical expectation of the Mockus (with Mockus, Jona (with Mockus, Jonas) Estimate of mathematical expectation of a Gaussian random field from observations at dependent random points. (Russian. Lithuanian and English summaries) Teor. Optimal. Relenii—Trudy Sem. Processy Optimal. Upravlenija VI Sekcija No. 5 (1979), 27–38, 116. (M. E. Thompson) 82e-62138 62M05 mme, K. D. (with Bucy, R. S.) Nonlinear filtering algorithms for parallel and pipeline machines. Parallel computers—parallel mathematics (Munich, 1977), pp. 93–97, North-Holland, Amsterdam, 1971. (See 82a:68003) 68C05 (94A05)
- nickii, V. L. Nonuniform rotation of a cylinder in a viscous fluid. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 3, 66-69. (Vladimir Kerchman) 82a:76026 76D05
- no, Manabu (with Iwamoto, Kazutoshi) On a model chemical system showing competitive phenomena. J. Chem. Phys. 74 (1981), no. 6, 3376-3380. (Authors'
 - competute pnenomena. J. Chem. Phys. 74 (1961), no. 0, 3576–3500. (Authors summary) 82d:89030 80A30 (with Iwamoto, Kazutoshi) On a model ecosystem showing competitive phenomer J. Chem. Phys. 74 (1981), no. 12, 6713–6717. (Howard B. Stauffer) 82j:92059 92A 92A17 (58F14, 92A15)
- tance, W. A. Occurrences of consecutive odd powerful numbers. Amer. Math. Monthly 88 (1981), no. 4, 272-274. (Paul Hartung) 82d:10016 10A25
- s, Dennis Stonian differentiation and representation of vector functions and measures. Proceedings of the Conference on Integration, Topology, and Geometry in Linear Spaces (Univ. North Carolina, Chapel Hill, N.C., 1979), pp. 241–269, Contemp. Math., 2, Amer. Math. Soc., Providence, R.I., 1980. (William H. Graves) 82k:46067 46G10 (28B05)
- Stonian integration of vector functions. Measure theory and its applications (Proc. Conf., Northern Illinois Univ., De Kalb, Ill., 1980), pp. 123-135, Northern Illinois Univ.,
- DeKalb, Ill., 1981. (See 82g:28002) 46G10 (28B05)
 ntis, Rémi Discretized feedback for differential games. Analyse non convexe (Proc. Colloq., Pau, 1977). Bull. Soc. Math. France Mém. No. 60 (1979), 153-159. (Tamer Başar) 82c:90106 90D25
 - (with Janin, R.) Existence of an optimal feedback control in a control problem. Nonlinear Anal. 5 (1981), no. 1, 27-45. (Kimio Kanai) 82a:34078 34H05 (49B10)
- Seo, Fumiko (with Sakawa, Masatoshi) Interactive multiobjective decisionmaking for large-scale systems and its application to environmental systems. *IEEE Trans. Systems Man Cybernet.* **10** (1980), no. 12, 796–806. (From the text) **82d:90121** 90C31 (92A20)
- See, Tae Kun (with Russell, William R.) Ordering uncertain prospects: the multivariate utility functions case. Rev. Econom. Stud. 45 (1978), no. 3, 605-610. (Authors' introduction) 82m:90026 90A10
 - (with Russell, William R.) Diversification theorems for subsets of risk averters. Rev. Econom. Stud. 46 (1979), no. 3, 555-559. (Authors' introduction) 82f:90016
- ehrnoori, K. (with Carey, Graham F.) Numerical integration of semidiscrete evolution systems. Comput. Methods Appl. Mech. Engrg. 27 (1981), no. 1, 45-61. (Authors' summary) 82h:65071 65M60 (65L05)
- eleva, R. P. Critical frequencies of canonical systems, invariant with respect to time reversal, with periodic coefficients. (Russian) Izo. Vysš. Učebn. Zaved. Matematika 1980, no. 9, 56-64. (W. S. Loud) 82b:34043 34C11
- Sepilov, M. A. Methods for solving fractional mathematical programming problems.
- Kibernetika (Kiev) 1980, no. 1, iii, 93-98, 151 (Russian); translated as Cybernetics 16 (1980), no. 1, 104-111. (Author's introduction) 82c:90062 90C11
- tis, A. (with Bentkus, R.) Large deviations for the number of crossings of a constant level by a p-mixing stationary sequence. (Russian. Lithuanian and English summaries) Litovsk. Mat. Sb. 20 (1980), no. 4, 15-20, 208. (G. Niculescu) 82e:60060 60G10
- ueira, F. M. (with Oliveira, J. S.; Ferreira, Arturo V.) Étude de l'équation de Boltzmann du transport de neutrons. I. Portugal. Math. 36 (1977), no. 3-4, 175-189 (1980). (Paul F. Zweifel) 824:82098 82A70 (45K05)
- Séquin, G. (with Shiva, S. G. S.; Allard, P. E.) A class of composite codes. IEEE Trans. Inform. Theory 27 (1981), no. 2, 260-262. 82i:94027 94B15
- Šer, A. P. Solution of the mathematical programming problem with a linear objective function and fuzzy constraints. Automat. i Telemeh. 1980, no. 7, 137-143 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 7, part 2, 997-1002 (1981). (Author's summary) 82j:90044 90C05

 Some properties of systems of linearly distorted Walsh functions. (Russian)
 - Autometrija 1980, no. 5, 116-119, 126. (E. A. Trachtenberg) 82h:42034 (94A11)
- Seraji, H. Output control in linear systems: a transfer-function approach. Internat. J. Control 33 (1981), no. 4, 649-676. (Author's summary) 824:93027 93C05
- Serapioni, Raul On quasilinear equations of hyperbolic type. (Italian summary) Boll. Un. Mat. Ital. C (5) 18 (1981), no. 1, 241-257. (Tomás Dominguez Benavides) 82j:34070 34G20 (35L99, 47D05)
- rban-Tofan, Doina Spaces with vector-valued norm. (Romanian. English summary) Bul. Univ. Braşov Ser. C 21 (1979), 147–150. (Csaba Némethi) 82j:46002 46A15 (46B99) Spaces of vector sequences. (Romanian. English summary) Bul. Univ. Braşov Ser. C 21 (1979), 151-156. (Csaba Némethi) 82j:46010 46A45
- The representation of certain (v)-bounded operators. (Romanian. French summary)

 Stud. Cerc. Mat. 32 (1980), no. 4, 451-455. (N. Dinculeanu) 82h:28021 28D99

Serbin, Steven M. (with Dougalis, Vassilios A.) Two-step high-order accurate full discretizations of second-order hyperbolic equations. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., m, Pa., 1979), pp. 214-220, IMACS, New Brunswick, N.J., 1979. (Authors' 82b:65080 65M05 summary) 82h:65080

On the construction and analysis of approximations of arbitrarily high order for proportionally-damped second-order systems. Comput. Math. Appl. 6 (1980), no. 2, 251-263. (H. Brunner) 82j:65061 65L99 (with Baker, Garth A.; Dougalis, Vassilios A.) An approximation theorem for

cond-order evolution equations. Numer. Math. 35 (1980), no. 2, 127-142. (V. G. Kolomiec) 82b:34078 34G10 (65J10, 65L05)

(with Blalock, Sybil A.) An algorithm for computing the matrix cosine. SIAM J. Sci. Statist. Comput. 1 (1980), no. 2, 198-204. (Cs. J. Hegedûs) 82b:65031 65F30 (65L05)

(with Dougalis, Vassilios A.) On the efficiency of some fully discrete Galerkin methods for second-order hyperbolic equations. Comput. Math. Appl. 7 (1981), no. 3, 261-279. (Authors' summary) 82e:65106 65N30

201-29. (Authors summary) accession of Sisson. Distriction of functional analysis in approximation theory (Russian), pp. 123-128, 162-163, Kalinin. Gos. Unio., Kalinin, 1979. (W. W. Breckner) 82g-52003 52A01 reconek, Shiftel Finite Cartan matrices and Lie algebras of classical type. J. Algebra 66 (1980), no. 2, 594-599. (Bernard Kolman) 82j:17017 17B50

djuckaja, L. F. The convergence of a nonstationary iterative method for solving operator equations in a semiordered Banach space. (Russian) Mathematical analysis and probability theory (Russian), pp. 161–164, 221, "Naukova Dumka", Kiev, 1978. (Author's summary) 821:47076 47H17 (65J15)

rdjukov, A. I. The problem of finding a Hamilton cycle (contour) in the presence of exclusions. (Russian) Upravljaemye Sistemy No. 19 (1979), 57-64, 79-80. (T. R. S. Walsh) 82c:05068 05C45

djukova, S. I. On the attainability of minimal order of error in the integration of hyperbolic equations by the finite difference method in a uniform metric. (Russi Dokl. Akad. Nauk SSSR 255 (1980), no. 6, 1325-1328. (A. A. Fonarev) 82i:65067

Study of the asymptotic stability of a difference scheme with boundary conditions depending on the step of the grid. (Russian) Mat. Zametki 27 (1980), no. 3, 481-491, 495. (I. P. Gavriljuk) 82ac65067 65M10

dobol'skii, V. I. The moments of a discriminant function and classification with a large number of parameters. (Russian. Lithuanian and English summaries) Statist. Probl -Trudy Sem. Processy Optimal. Upravlenija V Sekcija No. 38 (1979), 27-51. (Jerzy Jaroń) 82f:62112 62H30

Discriminant analysis with a large number of variables. (Russian) Dokl. Akad. Nauk

SSSR 254 (1980), no. 1, 39-44. (Šarūnas Raudys) 82e:62089 62H30
Serebrjakov, V. A. (with Birjukov, A. N.; Kuročkin, V. M.) Global attributes and their use in determining programming languages. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 5, 1284-1293, 1359. (Authors' summary) 82c:68009 68B10
See also Semantics of programming languages, 82d:68051
Serebrjakova, I. V. Transformation of variable deviation of an argument into a constant.

(Russian) Differential equations with deviating argument (Russian), pp. 80-85, Univ. Družby Narodov im. Patrisa Lumumby, Moscow, 1979. (M. I. Kamenskii) 82i:34078

rečenko, A. A. (with Maleev, A. B.; Taraščanskii, M. T.) Families of probability measures that admit consistent estimates. (Russian) Probability distributions in infinite-dimensional spaces (Russian), pp. 125-134, 178, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (G. I. Ivčenko) 82a:62053 62F12

reda, V. I. (with Anisimov, V. V.; Voina, O. A.) Choice of optimal checking times for a semi-Markov system with failures. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 6, 79-82. (From the summary) 82i:62135 62N05

regin, V. N. (with Veretennikov, V. G.) On the investigation of oscillations of quasilines systems with almost-periodic coefficients. Prikl. Mat. Meh. 43 (1979), no. 6, 980-991 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 6, 1060-1072 (1981). (M. K. Grammatikopoulos) 82g:34045 34C15 remeta, M. M. A conjecture of Erdős and Reddy and the rational approximation of Mittag-Leffler type functions. (Russian summary) Anal. Math. 6 (1980), no. 1, 51-56.

(A. Magnus) 82e:41022 41A20 (30E10)

reserskii, I. A. (with Antonec, M. A.) Weyl quantization on compact abelian groups and quantum mechanics of almost-periodic systems. (Russian. English summary) Teores.

Mat. Fiz. 48 (1981), no. 1, 49-59. (A. Verona) 82j:58052 58F06 (81D05)

retov, V. G. Extremal quasiconformal mappings with a given boundary homeomorphism.

(Russian) Metric questions of the theory of functions (Russian), pp. 140-146, 163,

"Naukova Dumka", Kiev, 1980. (L. A. Aksent'ev) 82b:30020 30C60

Serežkin, V. N. (with Zalesskii, A. E.) Finite linear groups generated by reflection (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 6, 1279-1307, 38. (V. D. Mazurov) 82i:20060 20H15

Subgroups of symplectic groups that are rich in transvections. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 3, 10-16, 139. (A. A. Bondarenko) 82j:10643 10C30 (20G30)

*Approximation theorems of mathematical statistics. Wiley Series in Probability and Mathematical Statistics. John Wiley & Sons, Inc., New York, 1980. xiv+371 pp. ISBN 0-471-02403-1 (Lionel Weiss) 82a:62003 62-01 (62E20)

(with Cheng, P. E.) Asymptotic mean integrated squared errors of som metric density estimators. IEEE Trans. Inform. Theory 27 (1981), no. 2,

239-242. (Authors' summary) 82i:62059 62G05 (with Cheng, K. F.) On estimation of a class of efficacy-related parameters. Scand. Actuar. J. 1981, no. 2, 83-92. (Paul Deheuvels) 82k:62072

fozo, Richard Optimal control of random walks, birth and death processes, and queues Adv. in Appl. Probab. 13 (1981), no. 1, 61-83. (Shaler Stidham, Jr.) 824:60187

regeenko, I. V. See Numerical methods, 82:65002
regeer, A. V. Uniqueness of the values of a wave field reconstructed by the inverse
diffraction method. Akust. Ž. 26 (1980), no. 6, 900-904 (Russian); translated as Societ

Phys. Acoust. 26 (1980), no. 6, 507-509 (1981). (Author's summary) 82i:73015

Sergeer, I. N. Sharp upper bounds of mobility of the Ljapunov exponents of a system of differential equations and the behavior of the exponents under perturbations approaching zero at infinity. (Russian) Differencial nye Uravnenija 16 (1980), no. 3, 438-448, 572. (C. 34D05

Propert, V. M. On the structure of a topos on categories of topos-valued functors. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1980, no. 4, 38–42, 99–100. (A. Preller) 82a:18003 18B25

reger, V. S. On periodic solutions of the Euler-Poisson equations. *Prikl. Mat. Meh.* 43 (1979), no. 2, 262–266 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 2, 282–286 (1980). (Author's summary) 82k:70006 70E20 (34C25, 58F22) See also Wittenburg, Jens, 82c:70003

Sergeičuk, V. V. Representations of simple involutive quivers. (Russian) Representation and quadratic forms (Russian), pp. 127-148, 156, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1979. (Sheila Brenner) 82m:16030 16A64 (15A63)

a, Î. V. (with Artemenko, V. Î.) A method for solving linear program roblems with Boolean variables. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 4, 72–75, 101. (Authors' summary) 82k90073

See also Computational aspects in applied program packages, 82l:90057

Sergienko, L. S. On the Dirichlet problem for degenerate elliptic equations. (Russian)

Application of the methods of functional analysis to problems of mathematical physics and numerical analysis (Russian), pp. 121–123, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mal., Novosibirsk, 1979. (From the text) 82a:35048 35J70

rgienko, V. I. Some properties of quasinormal subgroups of finite groups. (Russian)
Subgroup structure of finite groups (Gomel', 1977-80), pp. 149-152, 231, "Nauka i
Tehnika", Minsk, 1981. (N. D. Podufalov) 82k:20044 20D10

An algorithm for calculating products in corepresentations of finite groups. (Russian) Subgroup structure of finite groups (Gomel', 1977-80), pp. 152-155, 231, "Nauka i Tehnika", Minsk, 1981. (Editors) 82k:20045 20D10 (20-04)

Complements in finite groups. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 3, 200-203, 284. (Author's summary) 82g:20049 20D40 rgysels, R. (with Sergysels-Lamy, A.) Le pendule avec gyrostat: un système intégrable?

[The pendulum and gyrostat: an integrable system?] Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. II (Prague, 1978), pp. 609-614, Academia, Prague, 1979. (See 82k:70002b) 70E15

Sergysels-Lamy, A. (with Sergysels, R.) Le pendule avec gyrostat: un système intégrable? [The pendulum and gyrostat: an integrable system?] Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. II (Prague, 1978), pp. 609-614, Academia, Prague, 1979. (See 82k:70002b) 70E15

ries, Caroline Foliations of polynomial growth are hyperfinite. Israel J. Math. 34 (1979), no. 3, 245-258 (1980). (Adam Fieldsteel) 821:28019 28D10 (58F11)
The Poincaré flow of a foliation. Amer. J. Math. 102 (1980), no. 1, 93-128. (S. G.

Dani) 82f:58072 58F18 (28D10, 46L55, 58F11, 58F25)

On coding geodesics with continued fractions. Ergodic theory (Sem., Les Plans-sur-Bex, 1980) (French), pp. 67–76, Monograph. Enseign. Math., 29, Univ. Genève, Geneva, 1981. (Mark E. Sheingorn) 82h:30052 30F35 (10K10, 28D99, 58F17)

Symbolic dynamics for geodesic flows. Acta Math. 146 (1981), no. 1-2, 103-128.

Symbotic dynamics of geoticas frows. Acta main. 140 (1981), no. 1-2, 103-120. (Michael Handel) 82f:58071 58F17 (28D05, 58F11)
Serikbaev, A. U. A nonlinear integral equation of the first kind in an inverse problem of potential theory. (Russian) Boundary value problems for equations of mathematical physics (Russian), pp. 95-99, 169, "Fan", Tashkent, 1980. (N. A. Sidorov) 82m:45013 45G10
Serin' Allu Lo (with Antonevič, A. B.) On the spectrum of weighted shift operators in spaces of differentiable functions. (Russian) Funkcional. Anal. i Priloten. 15 (1981),

no. 3, 82. (From the text) 82k:47045 47B38

(with Antonevič, A. B.) Weighted shift operators in spaces of differentiable

functions. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 3, 39-43, 140. (N. K. Karapetjanc) 82k:47046 47B38

Serkuziev, M. The analytic nonbendability of surfaces fastened along a curve on the surface relative to a point and a plane. (Russian) Differential geometry of manifolds (Russian), pp. 23-33, 59, Talkent. Gos. Ped. Inst., Tashkent, 1980. (V. Cruceanu) 82h:53006 53A05 (53C45, 57N05)

(with Mihallovs'kil, V. I.) Infinitesimal bending of first-order surfaces of revolution of positive Gaussian curvature subject to conical sleevelike constraints. (Russian) Differential geometry of manifolds (Russian), pp. 34-45, 59-60, Taikent. Gos. Ped. Inst., Tashkent, 1980. (A. V. Pogorelov) 82j:53103 53C45 (76L05)

n, D. I. On some types of singular integral equations occurring in applications. Prikl. Mat. Meh. 43 (1979), no. 3, 519-530 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 3, 559-570 (1980). (K. N. Srivastava) 82i:45003 45E99 (31A25, 73C35)

One particular Dirichlet problem for a doubly connected region whose boundaries are extremely close together in a narrow zone. Izv. Akad. Nauk SSSR Meh. Tverd. Tela 15 (1980), no. 3, 76-87 (Russian); translated as Mech. Solids 15 (1980), no. 3, 72-83. (From the introduction) 821:73010 73C02 (35J20, 73C03)

nge, Michel Étude numérique des bifurcations et de la stabilité des solutions des équations de Grad-Shafranov. Computing methods in applied sciences and engineering (Proc. Fourth Internat. Sympos., Versailles, 1979), pp. 93–110, North-Holland, Amsterdam, 1980. (Hans Kaper) 82c:35008 35B32 (58E07, 76W05)

mer, Pavol (with Mathon, Rudolf A.) Least-squares methods for mixed-type equations SIAM J. Numer. Anal. 18 (1981), no. 4, 705-723. (Ian Gladwell) 82k:65070 65N3

az Serna, J. M. See Sanz Serna, J. M.

Serov, A. N. (with Demin, V. K.) Construction of estimational distributions for a priori disciplines for servicing a finite number of orders. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1978, no. 2, 88-91, 221 (Russian); translated as Engrg. Cybernetics 16 (1978), no. 2, 65-68 (1979). (Authors' summary) 82a:60139 60K25 (90B22)

Serovaiskii, S. Ja. (with Luk'janov, A. T.) The solution of nonlinear optimization problems by means of variational inequalities. (Russian) Izv. Akad. Nauk Kazah. SSR Ser.

Fiz.-Mat. 1981, no. 3, 74-77, 93-94. (J. Kačur) 82m:49014 49A29
Serpico, Maria Ezia Fano varieties of dimensions n>4 and of index r>n-1. (Italian) Rend. Sem. Mat. Univ. Padova 62 (1980), 295-308. (Knud Lønsted) 82a:14016

va, Plena Invariants and hypoellipticity for a class of pseudodifferential operators. (Italian. English summary) Ann. Unio. Ferrara Sez. VII (N.S.) 26 (1980), 81–90 (1981). (Maria Mascarello Rodino) 22:35043 35H05 (35S05)

(Mana Mascareino Rodino) & Alexings, Alan; Ayala, Francisco J.) Boundary-layer model for the population dynamics of single species. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 3, part 2, 1972–1975. (Authors' summary) & 22.92028 92A15 (58F12).
72.875. Relations d'ordre entre formes quadratiques en compacité par compensation.
(English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 17, 785–787.

(Author's summary) 82e:49025 49A50 Condition de Legendre-Hadamard; espaces de matrices de rang $\neq 1$. (English summary) [Legendre-Hadamard condition; linear spaces of matrices with rank $\neq 1$] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 1, 23–26. (Author's summary) 82k:49013 49A27

re, Jean-Pierre *Local fields. Translated from the French by Marvin Jay Greenberg. Graduate Texts in Mathematics, 67. Springer-Verlag, New York-Heidelberg, 1979. viii + 241 pp. ISBN 0-387-90424-7 (Editors) 82e:12016 12Bxx

Arithmetic groups. Homological group theory (Proc. Sympos., Durham, 197 pp. 105–136, London Math. Soc. Lecture Note Ser., 36, Cambridge Univ. Press, Cambridge, 1979. (Gopal Prasad) 82b:22021 22E40 (20G99, 22E41)

Points rationnels des courbes modulaires $X_0(N)$ [d'après Barry Mazur]. Sé

Bourbaki, 30e année (1977/78), Exp. No. 511, pp. 89-100, Lecture Notes in Math., 710, Springer, Berlin, 1979, (Reinhard Bolling) 82e:14049 14K07 (10D12, 14G25)

*Trees. Translated from the French by John Stillwell. Springer-Verlag, Berlin-New York, 1980, ix+142 pp. ISBN 3-540-10103-9 (Editors) 82e:20083 20H10 (05C05, 22E50)

See also Wal idt, Michel, 82k:10041

rin, James (with McLeod, Kevin) Uniqueness of solutions of semilinear Poisson equations. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 11, part 1, 6592-6595. (Authors' mary) 82k:35029 35J05 (58E07, 81G25, 82A25)

retink, A. I. (with Jakovleva, N. S.) Application of two-centered functions of a clearly discrete spectrum in an adiabatic representation of the three-body problem. (Russian) Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 1, 113-126, 254. (Authors' summary) 824:70017

stnèv, A. N. (with Laptev, B. L.; Husnutdinov, R. Š.; Šaldukov, K. M.) Boris Mihallovič Gagaev (1897–1975). (Russian) Mathematical analysis (Russian), pp. 5-14, Kazan. Gos. Univ., Kazan, 1978. (Editors) 82g:01061 01A70

(with Trunov, N. V.) On the general theory of integration with respect to a weight in algebras of operators. I. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1978, no. 7(194), 79-88. (József Szücs) 82a:46079a 46L50

(with Trunov, N. V.) On the general theory of integration with respect to a weight in algebras of operators. II. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1978, no. 12, 88–98. (József Szücs) 82a:46679b 46L50

66-36, 1002ct 32023) 822ct00/39 461-30 (with Lugovaja, G. D.) The Gleason theorem for unbounded measures. (Russian) 1zv. Vysš. Učebn. Zaved. Matematika 1980, no. 12, 30-32. (H. H. McFaden) 82tc28020 28C99 (46G10)

ertel, Murat R. (with Van der Bellen, Alexander) On the routewise application of choice.

J. Econom. Theory 22 (1980), no. 3, 423-438. (Dennis J. Packard) 82h:90010 90A06 (90A08)

(Assemble Subtraction of "anomalous" double-scattering and unitarity relation for the "truly three-body" scattering. (Italian and Russian summaries). Nuovo Cimento B (11) 65 (1981), no. 1, 57-78. (Author's summary) 82m81074
 81F15
 81F15

Flux integrals for Sommerfeld's half-plane problem. *Phys. Rev. A* (3) **24** (1981), no. 2, 793-800. (Author's summary) **82g:78022** 78A45

m: Probability Theory and Mati ašidze, T. L. See All-Union Colloqu Statistics, 82i:600

Servedio, Frank J. The GL(V)-module structure of S'(S'(V)), symmetric tensors of degree t on symmetric tensors of degree r on V. Comm. Algebra 8 (1980), no. 15, 1387-1401. (José M. Aroca) 82f:15021 15A72 (14D25, 14L30)

fischer-Servi, Gisèle See Fischer-Servi, Gisèle

Servi, Leslie D. Electrical networks and resource allocation algorithms. IEEE Trans. Systems Man Cybernet. 10 (1980), no. 12, 841-848. (Author's summary) 82a:90051 90B05 (90C20, 94C05)

(with Ho, Yu Chi) Recursive estimation in the presence of uniformly distributed measurement noise. IEEE Trans. Automat. Control 26 (1981), no. 2, 563-565. (Authors' summary) 82e:93102 93E10

vois, F. J. See Petrova, S. S., 82c:01030

elja, B. (with Usan, Janez; Vojvodić, Gradimir D.) Generalized ordering and partitions Mat. Vesnik 3(16)(31) (1979), no. 2, 241-247. (Derek C. J. Burgess) 82j:06010

adri, C. S. (with Oda, Tadao) Compactifications of the generalized Jacobian variety.

Frans. Amer. Math. Soc. 253 (1979), 1-90. (O. V. Švarcman) 82e:14054 14K36

hadri, M. S. (with Fritzsch, G.) The time evolution of sequential enzyme reactions: a on approach. J. Theoret. Biol. 93 (1981), no. 1, 197-205. (Authors' singular perturb 92A09 (80A30) mary) 82m:92036

admiraty admiratory admiratory analysis of wave propagation problems in onlinear rods. (Polish and Russian summaries) Arch. Mech. (Arch. Mech. Stos.) 32 (1980), no. 6, 933-945 (1981). (Authors' summary) 82j:73021 73D35 (73K12)

dri, Venkita (with Lakatos-Lindenberg, Katja; Shuler, Kurt E.; West, Bruce J.) Equal-time second-order moments of a harmonic oscillator with stochastic frequency and ving force. J. Statist. Phys. 23 (1980), no. 6, 755-765. (S. K. Srinivasan) 82i:70028 70L05 (60H10, 82A05)

(with Lakatos-Lindenberg, Katja) Dissipative contributions of internal multiplicative ise. I. Mechanical oscillator. *Phys. A* 109 (1981), no. 3, 483–499. (Authors' summary) 82k:82025 82A35 (58G40, 70L05)

han, C. R. (with Achary, K. K.; Tikekar, V. G.) A simple proof of a basic result on uniqueness of solution in linear programming. Internat. J. Math. Ed. Sci. Tech. 11 (1980), no. 4, 591-593. (A. G. Azpeitia) 82h:90075 90C05 (with Tikekar, V. G.) Algorithms for integer fractional programming. J. Indian Inst. Sci. 62 (1980), no. 2, 9-16. (Authors' introduction) 82h:90082 90C11

(with Achary, K. K.) A branch and bound algorithm for a transportation type problem with piecewise linear convex objective function. (German and Russian

ries) Z. Angew. Math. Mech. 60 (1980), no. 8, 303-307. (Authors' su 90C08 (90B20)

(with Achary, K. K.) A time minimising transportation problem with quantity endent time. European J. Oper. Res. 7 (1981), no. 3, 290-298. (Authors' summary) 82h:90044 90B10 (90B35, 90C08)

Some generalisations of the time-minimising assignment problem. J. Oper. Res. Soc. 32 (1981), no. 6, 489-494. (Author's summary) 82g:90062 90B35

ško, M. A. (with Mastjanica, V. S.) Approxir nate solution of singular integral equations by the degenerate kernel method. (Russian) Differencial nye Uravnenija 16 (1980), no. 12, 2255–2267, 2303. (V. V. Ivanov) 82d:45018 45L10 (45E05)

(with Mastjanica, V. S.) A solution of a two-dimensional singular integral equation of the first kind. (Russian. English summary) Dokl. Akad. Nauk BSSR 24 (1980), no. 9, 773-776, 859. (V. B. Dybin) 82e:45009 45E05 (45L05, 65R20)

Inversion of a multidimensional integral of Cauchy type. (Russian. English summary)

Dokl. Akad. Nauk BSSR 24 (1980), no. 10, 888-891, 957. (Martin Costabel) 82a:45007 45E05 (44A15, 44A30)

(with Jakimenko, T. S.) The convergence of a quadrature process for a singular

tegral with power-logarithmic singularity. (Russian) Izv. Vyst. Učebn. Zaved.

fatematika 1980, no. 1, 82-84. (Gheorghe Coman) 824:65032 65D32

Two-dimensional singular integral equations of the first kind with Cauchy kernels. (Russian) Differencial'nye Uravnenija 17 (1981), no. 8, 1518-1521, 1536. (A. P. Soldatov)

45E05 (65R20) Sesma, Javier (with Cruz, Andrés) Modulus and phase of the reduced logarithmic derivative of the cylindrical Bessel function. Math. Comp. 35 (1980), no. 152, 1317–1324.

(H. E. Fettis) 82k:33010 33A40 (65H05)
essa, Andrea A. (with Abelson, Harold) ★Turtle geometry. The computer as a medium for exploring mathematics. MIT Press Series in Artificial Intelligence. MIT Press,

abridge, Mass.-London, 1981. xx+477 pp. ISBN 0-262-01063-1 (J. Kahmann and

Wolfgang Boehm) 82;00001 00A05 (51-04, 68199, 83-04, 92-04) estakov, A. A. (with Lapkina, R. B.) Asymptotic properties of solutions of a nonautonomous difference system. (Russian) Some questions of the quality. differential equations and theory of the control of motion, pp. 131-134, 168, Mordov. Gos. Univ., Saransk, 1980. (See 82m:34004) 39A10 (with Malyševa, I. A.) Convergence of solutions in nonautonomous differential

systems. (Russian) Differencial'nye Uravnenija 16 (1980), no. 3, 424-432, 572. (A. I. Perov) 82b:34060 34D05

341.05 (with Erugin, N. P.; Demin, V. G.; Veretennikov, V. G.; Muhametzjanov, I. A.; Muharljamov, R. G.) Abdel'hak Safiullovič Galiullin (on the occasion of his sixtieth birthday). (Russian) Differencial'nye Uravnenija 16 (1980), no. 5, 950-954. (Editors) 01A70

(with Merenkov, Ju. N.) Localization of the cluster set of a solution with a bounded interval of definition. (Russian) Differencial nye Uravnenija 17 (1981), no. 8, 1515–1517, 1536. (V. M. Popov) 82k:34062 34D20

See also Erugin, N. P.; et al., 82g:01049

Sestakov, E. A. One method of solving the problem of decomposition of discrete automata. Avtomat. i Vyčisl. Tehn. (Riga) 1979, no. 5, 7-15, 91 (Russian); translated as Automat. Control Comput. Sci. 13 (1979), no. 5, 6-14. (Author's summary) 82i:68040 68D37 takov, I. P. Irreducible representations of alternative algebras. (Russian) Mat. Zametki

26 (1979), no. 5, 673-686, 813. (H. Pflugfelder) 82j:17025 17D05

(with Bahturin, Ju. A.; Slin'ko, A. M.) Nonassociative rings. (Russian) Algebra. Topology. Genometry, Vol. 18 (Russian), pp. 3–72, 214, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. (Harry F. Smith) 82h:17002 17–02

Sestakov, V. I. The operations of eversion and inversion of complex physical quantities. (Russian) Vestnik Moskov. Univ. Ser. III Fiz. Astronom. 20 (1979), no. 6, 47-55, 119. (S. Drobot) 82c:00016 00A69

esternina, Z. N. (with Poljahov, N. N.) On the convergence of discrete vortices. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1979, no. 2, 75-81, 120. (Simona Popp) 82b:76010 76B05 (65P05)

(with Poljahov, N. N.) Stationary flow around a rectangular wing with variable circulation along the span. (Russian. English summary) Vestnik Leningrad. Unio. Mat. Meh. Astronom. 1980, vyp. 3, 85–92, 131. (N. D. Kopačevskii) 82i:76005 76B05

stopal, N. M. (with Lenjuk, M. P.) Stressed state of a viscoelastic one-dimensional half ce. (Ukrainian. English and Russian summaries) Visnik Kiiv. Univ. Ser. Mat. Meh.

No. 21 (1979), 67-73, 163. (Authors' summary) 82m:73008 73C25 (73F99) topal, O. Ja. (with Konjašenko, E. A.; Šestopal, V. O.) Solution of an axially symmetric Navier-Stokes problem for an incompressible fluid by the Galerkin method. (Russian) Čisl. Metody Meh. Splošn. Sredy 10 (1979), no. 2 Mat. Modelirovanie, 140-151. (From the text) 82d:65075 65N30 (76D05)

stopal, V. O. (with Sestopal, O. Ja.; Konjašenko, E. A.) Solution of an axially symmetric Navier-Stokes problem for an incompressible fluid by the Galerkin method. (Russian) Čisl. Metody Meh. Splošn. Sredy 10 (1979), no. 2 Mat. Modelirovanie, 140-151. (From the text) 824:65075 65N30 (76D05)

w, Ju. V. Properties of the spectrum of a class of nonselfadjoint bounds problems for sets of Helmholtz equations. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 5, 1108-1111. (P. A. Mišnaevskii) 821:35063 35J05 (35P99)

Sestopalov, V. P. (with Vinogradov, S. S.; Tučkin, Ju. A.) On the theory of wave on unclosed screens of spherical form. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 6, 1346-1350. (K. Wodkiewicz) 82h:78020 78A45

ov, E. G. (with Kosterin, A. V.) Boundary value problems of nonlin filtration. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 3, 548-551. (H. Marcinkowska) 82h:76037 76S05

Seth, Bhoj Raj Generalized measures for large deformations. Nonlinear dynamics of elastic

bodies, pp. 193-209, CISM Courses and Lectures, 227, Springer, Vienna, 1978. (See 73G05

See also Srinivasan, S. K.; et al., 82f:01145 and Arya, Shashi Prabha, 82m:01052 Seth, V. (with Tewari, K.) Classical near-rings of left and right quotients. Progr. Math. (Allahabad) 12 (1978), no. 1-2, 115-123. (G. Betsch) 82e:16035 16A76

Sethi. Ravi Circular expressions: elimination of static environments. Automata, languages

and programming (Akko, 1981), pp. 378–392, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (See 82:68903) 68F20 (with Downey, Peter; Leong, Benton) Computing sequences with addition chains SIAM J. Comput. 10 (1981), no. 3, 638–646. (Authors' summary) 82ic68964 68C2

Sethi, Suresh P. (with Thompson, Gerald L.) Simple models in stochastic production planning. Applied stochastic control in econometrics and management science, pp. 295-304, Contrib. Econom. Anal., 130, North-Holland, Amsterdam, 1980. (Authors' introduction) 90B30

(with Bourguignon, Françoise) Dynamic optimal pricing and (possibly) advertising in the face of various kinds of potential entrants. J. Econom. Dynamics Control 3 (1981), no. 2, 119–140. (Authors' summary) 82e:90026 90A16

(with Lehoczky, John P.) A comparison of the 1tô and Stratonovich formulations of problems in finance. J. Econom. Dynamics Control 3 (1981), no. 4, 343–356. (Bojan Popogo) 874-00008 90A09 (58G32, 60H10) Popović) 82k:90028

(with Dantzig, G. B.) Linear optimal control problems and generalized linear programs. J. Oper. Res. Soc. 32 (1981), no. 6, 467-476. (P. Rutkauskas) 82g:49033 49D35 (90C05)

(with Chand, Suresh) Multiple finite production rate dynamic lot size inventory models. Oper. Res. 29 (1981), no. 5, 931–944. (Authors' summary) 82i:90033 90B05 (with Derzko, N. A.) Optimal exploration and consumption of a natural

resource—deterministic case. Optimal Control Appl. Methods 2 (1981), no. 1, 1-21. (Authors' summary) 82b:90038 90A30

(with Lee, S. C.) Optimal advertising for the Nerlove-Arrow model under a replenishable budget. Optimal Control Appl. Methods 2 (1981), no. 2, 165-173. (From the introduction) 82f:90054 90B99

Sethna, P. R. Bifurcation theory and averaging in mechanical systems. New approaches to nonlinear problems in dynamics (Proc. Conf., Pacific Grove, Calif., 1979), pp. 392-404, SIAM, Philadelphia, Pa., 1980. (R. K. Rathy) 82h:58036 58F14 (34C15, 70K30)

On integral manifolds for autonomous systems with slowly modulated motions. (French and German summaries) Internat. J. Non-Linear Mech. 15 (1980), no. 4-5, 401-405. (P. J. Holmes) 82c:34047 34C25 (34C15, 58F14)

(with Orey, Steven) Some asymptotic results for a class of stochastic systems with parametric excitations. (French and German summaries) Internat. J. Non-Linear Mech. 15 (1980), no. 6, 431-441. (Authors' summary) 821:93083 93E15 (34F05, 60H10)

suraman, J. (with Hollander, M.; Proschan, Frank) Decreasing in transposition property of overlapping sums, and applications. J. Multivariate Anal. 11 (1981), no. 1, 50-57. (I. Olkin) 82e:62030 62E10 (62N05)

30-37. (I. Omin) oggonator ozario (sarvo) tondij, Jean Sur la G-structure définie par n-p champs de vecteurs partout linéairement indépendants. *Mathematica (Cluj)* **21(44)** (1979), no. 1, 83-100. (K. Radziszewski) 53C10 (20H15) 82b:53038

Sett, Jayasri (with Das, Jyoti) On the separation property of symmetric ordinary fourth-order differential expressions. Proc. Roy. Soc. Edinburgh Sect. A 86 (1980), no. 3-4, 255-259. (William N. Everitt) 82b:34018 34B05 (34B20, 47E05)
Sette, Antonio-Mario Fraïssé and Robinson's forcing. Z. Math. Logik Grundlag. Math. 27

(1981), no. 3, 225-231. (A. M. W. Glass) 82i:03039 03C25

valdin, V. T. A problem of extremal interpolation. (Russian) Mat. Zametki 29 (1981), no. 4, 603-622, 634. (R. Smarzewski) 82g:41004 41A05

Sevast'janov, В. А. (with Čistjakov, V. Р.; Zubkov, А. М.) ★Сборинк задач по теории вероятностей. (Russian) [A collection of problems in probability theory] "Nauka", Mascow, 1980. 224 pp. (Editors) 82c:60003 60-01

A scheme of dependent assignments. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1981, no. 2, 37-41, 99. (M. A. Fedotkin) 82k:60052 60F05

vast'janov, E. A. The rate of rational approximation of functions and their differentiability. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 6, 1410-1416, 1439. (V. V. Vavilov) 82e:41023 41A20 (26A24)

On multidimensional variations of functions. (Russian) Dokl. Akad. Nauk SSSR 258

(1981), no. 1, 34-37. (Maciej Sablik) 82m:26013 26B05 (26B30)
 Uniform approximation of functions by Fourier sums. (Russian) Mat. Sb. (N.S.)
 114(156) (1981), no. 4, 583-610, 655. (I. Szalay) 82k:42002 42A10

Sevast'janov, S. V. Approximate solution of some problems of scheduling theory. (Russian)

Diskret. Analiz No. 32 Metody Diskret. Analiza v Sinteze Upravl. Sistem (1978), 66-75,
96-97 (New Condense) 200-2009 90B35 96-97. (Józef Grabowski) 82m:90093

evčenko, Ju. I. Generalized normalization of a tangentially framed surface. (Russian) Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur No. 11 (1980), 107-114, 128. (H. Kil'p) 82k:53023 53A20

★Анатолий Дмитриевич Коваленко. (Russian) [Anatolii Dmitrievič čenko, Ju. M. Kovalenko] "Naukova Dumka", Kiev, 1980. 42 pp. (1 plate). (Publisher's description) 01A70 82h:01066

včenko, V. I. On the spectrum of nonselfadjoint elliptic systems with singular coefficients. (Russian) Mat. Fiz. No. 28 (1980), 108-111, 124. (Author's summary) 82j:35111 35P05 (35J40)

See also Nonlinear and turbulent processes in physics, 82c:82002 Seveenko, V. N. (with Potemkina, A. V.) Construction of regular cutoffs in convex integer programming. (Russian) Ekonom. i Mat. Metody 17 (1981), no. 2, 390–394. (R. Şerban) 82:90066 90C10

Sevcik, K. C. (with Mitrani, I.) The distribution of queuing network states at input and output instants. J. Assoc. Comput. Mach. 28 (1981), no. 2, 358-371. (Authors' summary) 82d:68031 68C15 (60K25)

Ševčík, V. V. Invariant subspaces of a linear operator in a pair of Banach spaces. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 99 (1980), no. 1, 25-27. (E. Gerlach) 82c:47007 47A15

Functional equations with shift in spaces of analytic functions in a half-plane. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 1, 51-53. (V. B. Smirnova) 82e:47043 47B38

Ševcova, V. M. (with Berman, V. S.) A model system of two reaction-diffusion equations. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 3, 521-524. (P. C. Fife) 82g:35051 35K55 (80A20)

Ševčuk, E. A. (with Gaïdys, Ja. Ju.; Boïcun, S. A.) A sufficient condition for pasting together a semistrip. (Russian) Vestnik L'vov. Politehn. Inst. No. 141 Differencial'nye

Uraonenija i th Priložen. (1980), 103-105, 127. (Authors' summary) 82a:30008 30C30 Ševčuk, I. A. (with Korniičuk, M. P.; Nikol'skii, S. M.) Vladislav Kirillovič Dzjadyk (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 34 (1979), no. 4(208), 231-237. (Editors) 82h:01060 01A70
relo, V. M. (with Vareh, N. V.; Grical, A. G.) Investigation of oscillation properties of

solutions of systems of differential and differential-difference equations (survey). (Russian) An investigation of differential and differential-difference equations (Russian), pp. 157-183, 192, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (A. Halanay) 82j:34075 34K15 (34C10)

Severi, Francesco See Symposia Mathematica, 82e:14005
Severin, V. P. (with Pikur, E. A.) Minimization of integral quadratic quality estimates for linear automatic control systems. (Russian) Mathematical methods in cybernetics (Russian), pp. 8-13, 82, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Authors' summary) 82c:49023 49D30

Severne, G. (with Luwel, M.) Dynamical theory of collisionless relaxation. Astrophys. and Space Sci. 72 (1980), no. 2, 293-313. (V. Protopopescu) 82a:85004

Ševljakov, A. Ju. Clark's formula for two-parameter Wiener processes. (Russian) Theory of random processes, No. 7 (Russian), pp. 114–118, 132, "Naukova Dumka", Kieo, 1979. (N. M. Zinčenko) 82d-60158 60J65 (60G60, 60H05)

Stochastic integral equations. (Russian. English summary) Dokl. Akad. Na Ukrain. SSR Ser. A No. 1 (1980), 26-29, 93. (A. B. Buche) 82f:60146 60H20

Itô's formula for an extended stochastic integral. (Russian. English summary) Teor. jatnost. i Mat. Statist. 22 (1980), 146-158, 166. (I. Cuculescu) 82g:60075

well, Geoffrey L. Quantum theory of irreversible processes. Mathematical problems in the eory of irreversible processes (Naples, 1978), pp. 1-15, Lab. Cibernet. CNR, Naples, 1978. (See 82j:82003) 82A35 (46L60)

Stability, equilibrium and metastability. Mathematical problems in the quantum theory of irreversible processes (Naples, 1978), pp. 195-204, Lab. Cibernet. CNR, Naples, 1978. (See 82j:82003) 82A15 (82A67)

Relativity of temperature and the Hawking effect. Phys. Lett. A 79 (1980), no. 1, 23-24. (Author's summary) 82a:83042 83C99 (81E05) (with Narnhofer, Heide) Vlasov hydrodynamics of a quantum mechanical model.

Comm. Math. Phys. 79 (1981), no. 1, 9-24. (Authors' summary) 82i:82021 82A15

Sexana, P. K. See Saxena, P. K.

IF, Brian R. (with Mortell, Michael P.) A finite-rate theory of quadratic resonance in a closed tube. J. Fhiid Mech. 112 (1981), 411-431. (Authors' summary) 82m:76056 76Q05 (76L05)

Seymour, P. D. The matroids representable over GF(3). (French summary) Problèm combinatoires et théorie des graphes (Colloq. Internat. CNRS, Univ. Orsay, Orsay, 1976), pp. 381-383, Colloques Internat. CNRS, 260, CNRS, Paris, 1978. (Author's summary) 821:05051 05B35

On Tutte's characterization of graphic matroids. Combinatorics 79 (Proc. Colloq., Univ. Montréal, Montreal, Que., 1979), Part I. Ann. Discrete Math. 8 (1980), 83-90. (W. 05B35 (05C40) T. Tutte) 82a:05041

Disjoint paths in graphs. Discrete Math. 29 (1980), no. 3, 293-309. (Author's nmary) 82b:05091 05C38

Decomposition of regular matroids. J. Combin. Theory Ser. B 28 (1980), no. 3, 305-359. (Thomas Brylawski) 82]:05046 05B35 (05C50)

Recognizing graphic matroids. Combinatorica 1 (1981), no. 1, 75-78. (R.

Balakrishnan) 82e:05053 05B35 (05C99, 68C25)

Matroids and multicommodity flows. European J. Combin. 2 (1981), no. 3, 257-290. (András Frank) 82m:05030 05B35 (05C38)

Nowhere-zero 6-flows. J. Combin. Theory Ser. B 30 (1981), no. 2, 130-135. (François Jaeger) 82j:05079 05C38 (05C20, 90B10)

(with Okamura, Haruko) Multicommodity flows in planar graphs. Theory Ser. B 31 (1981), no. 1, 75–81. (James R. Evans) 82j:90033 90B10 (05C10.

Even circuits in planar graphs. J. Combin. Theory Ser. B 31 (1981), no. 3, 327-338. uno D'Amore) 82m:05061 05C38 (05C10, 05C70)
On odd cuts and plane multicommodity flows. Proc. London Math. Soc. (3) 42 (Bruno D'Amore) 82m:05061

(1981), no. 1, 178-192. (Richard D. Ringeisen) 82g:05080 05C99 (90B10)

ymour, Robert (with Snaith, Victor) A J-homomorphism associated with a space of empty varieties (addenda and corrigenda to two papers on the J-homomorphism). Algebraic topology, Waterloo, 1978 (Proc. Conf., Univ. Waterloo, Waterloo, Ont., 1978), pp. 643-652, Lecture Notes in Math., 741, Springer, Berlin, 1979. (Stanley Kochman) 82b:55018 55R65

Some remarks on fibrations of monoids and their classifying spaces. Mathematika 27 (1980), no. 2, 197-212 (1981). (R. M. Vogt) 82j:55022 55R35

Seynou, Aboubakary Sur la compatibilité temporelle d'une tribu et d'une filtration discrète. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 205-208, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Louis Blake) 822:60064 60G05 (60G40)

Seze, L. (with Bidaux, R.) Exact solution of the 2D "brickwork" Ising model with second neighbour interactions in the horizontal direction. (French summary) J. Physique 42 (1981), no. 3, 371-379. (Authors' summary) 82j:82070

Sezer, Mesut E. (with Siljak, Dragoslav D.) On decentralized stabilization and structure of linear large scale systems. Automatica—J. IFAC 17 (1981), no. 4, 641-644. (Authors' summary) 82h:93055 93D15

(with Siljak, Dragoslav D.) On structural decomposition and stabilization of large-scale control systems. IEEE Trans. Automat. Control 26 (1981), no. 2, 439-444. (Authors' summary) 82d-93008 93A15 (05C20)
(with Hüseyin, Özay) Comments on decentralized state feedback stabilization.

IEEE Trans. Automat. Control 26 (1981), no. 2, 547-549. (Authors' summary) 82e:93086

93D15 (with Siljak, Dragoslav D.) Robustness of suboptimal control: gain and phase

margin. IEEE Trans. Automai. Control 26 (1981), no. 4, part 1, 907-911. (Authors' summary) 82k:49051 49E25 (with Pichai, V.; Šiljak, Dragoslav D.) Vulnerability of dynamic systems. Internat.

J. Control 34 (1981), no. 6, 1049-1060. (Authors' summary) 82m:93010 (05C20, 93B07)

- tein, E. (with van Nieuwenhuizen, Peter) New ghost-free gravity Lagrangians with propagating torsion. Phys. Rev. D (3) 21 (1980), no. 12, 3269-3280. (Authors' sums 22:23061 83D05
- as, Y. G. (with Ntouyas, S. K.) A boundary value problem for nth order functional differential equations. Nonlinear Anal. 5 (1981), no. 3, 325-336. (Bhagat Singh)

rza, L. L. See Cavalli-Sforza, L. L.

- nro, Andrea A recycling of the statistical principle of maximum information. Rend. Istit.

 Mat. Univ. Trieste 11 (1979), no. 1-2, 1-8 (1980). (I. Vajda) 82e:62005 62A15

 buev, M. S. Banach algebras of functions that have identical asymptotic behavior at
- heer, M. S. Banach algebras of functions that have identical asymptotic behavior at infinity. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 3, 179–187, 238. (J. Benkö) 82m:46058 46J20 (44A10)
- Zhen A theorem on lacunary interpolation by splines. (Chinese) Acta Math. Appl. Sinica 2 (1979), no. 1, 1-5. (From the text) 82g:65011 65D07 (41A15)

- Sinica 2 (1979), no. 1, 1-2. (From the cost)
 el-Sharrawi, A. H. See El-Sharrawi, A. H.
 emara-Shabaik, Hosam E. See Emara-Shabeik, Hosam E.
 Shaban, S. A. On the discrete Poisson-inverse Gaussian distribution. (French summ
 Biometrical J. 23 (1981), no. 3, 297-303. (Author's summary) 82:62031 62E15
 On the estimation of the ratio of means and other characteristics of two log no.
 - nary) 82m:62067 variates. Biometrical J. 23 (1981), no. 4, 357-369. (Author's summ 62F10
 - ion of the Poisson-inverse Gaussian distribution. Comm. Statist. -Theory Methods 10 (1981), no. 14, 1389-1399. (Author's summary) 82h:62035 62F20

ov, V. L.

, V. L. See Šablov, V. L. skii, O. N. See Šablovskii, O. N.

- motorsail, G. N. See Sadorsail, G. N. Cockmann, Richard H. (with Schoenfelder, John R.; Hogue, Carol J.) Using a stochastic model to investigate time to absorption distributions. Oper. Res. 29 (1981), no. 3, 589-603. (Authors' summary) 82:59031 92A15 (60170, 62D05) and Graed (with Shult, Ernest E.) Near n-gons. The Santa Cruz Conference on Finite Groups (Unio. California, Santa Cruz, Calif., 1979), pp. 461-463, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R. I., 1980. (Editors) 82e:05046 05B25 a, N. Kh. See Šadrina, N. H.
- hadwick, William F. (with Pirani, Felix A. E.; Robinson, David Clyde) *Local jet bundle formulation of Backlund transformations. With applications to nonlinear evolution equations. Mathematical Physics Studies, I. D. Reidel Publishing Co., Dordrecht-Boston, Mass.-London, 1979. viii + 132 pp. ISBN 90-277-1036-8 (A. M. Vinogradov) 82g:58097 58G35 (35A30, 81C99)

The KdV prolongation algebra. J. Math. Phys. 21 (1980), no. 3, 454–461. (J. noller) 821:58007 58A20 (35A30, 35Q20, 58F07)

The Hamilton Cartan formalism for rth-order Lagrangians and the integrability of the KdV and modified KdV equations. Lett. Math. Phys. 5 (1981), no. 2, 137-141. (J. E. den) 82k:58051 58F07 (49C99, 70H99)

aler, Douglas Gradient vectorfields near degenerate singularities. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 410-417, Lecture Notes in Math., 819, Springer, Berlin, 1980. (Freddy Dumortier) 58F14

824:59055 38F14
afer, Glem Jeffrey's rule of conditioning. Philor. Sci. 48 (1981), no. 3, 337–362.
(Author's summary) 82k:62007 62A15 (62C10)
Constructive probability. Synthese 48 (1981), no. 1, 1–60. (Maurizio

Fattorosi-Barnaba) 82j:60006 60A05 (03B48, 62A15)

affer, Juliet Popper Control of directional errors with stagewise multiple test procedures. Ann. Statist. 8 (1980), no. 6, 1342-1347. (Willem Schaafsma) 82e:62039

- Shaffer, Wilson A. (with Long, Paul E., Jr.; Kemper, James E.) Physics, numerics, and forecasts of the National Weather Service's atmospheric boundary layer model. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Unio., Bethlehem, Pa., 1979), pp. 427–433, IMACS, New Brunswick,
- N.J., 1979. (Authors' summary) 82c.86002 86A10

 fiullah (with Lal, K. B.) On plane wave solutions of Einstein's field equations of general relativity containing zero-rest-mass scalar fields. (Italian summary) Istit. Lombar. Accad. Sci. Lett. Rend. A 113 (1979), 274–279 (1981). (Authors' summary) 82h:83018
- (with Lal, K. B.) On plane wave solutions of nonsymmetric field equations of unified theories of Einstein, Bonnor and Schrödinger. Ann. Mat. Pura Appl. (4) 126 (1980), 285–298 (1981). (Mineo Ikeda) 824:83656 83E10
- ntal A generalization of the formula for computing the inverse of a matrix. Amer. Math. Monthly 88 (1981), no. 8, 614-616. (Editors) 82j:15006 15A09
- ah, Jayant A complete moduli space for K3 surfaces of degree 2. Ann. of Math. (2) 112 (1980), no. 3, 485-510. (Miles Reid) 82j:14030 14J10 (14D25, 14J25)

Degenerations of K3 surfaces of degree 4. Trans. Amer. Math. Soc. 263 (1981), no. 2, 271-308. (Ulf Persson) 82g:14039 14J25 (14J10, 14J17)

- h, K. R. (with El-Shaarawi, A. H.) Interval estimation in models with distributed lags. Multivariate statistical analysis (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1979), pp. 191-197, North-Holland, Amsterdam, 1980. (Authors' summary) 82c:62051 62F25 (with Khatri, C. G.) On the unbiased estimation of fixed effects in a mixed model for growth curves. Comm. Statist. A.—Theory Methods 10 (1981), no. 4, 401–406. (Anant M. Kshirsagar) 82h:62105 (62F10) h, Manilal On some results involving H-functions. J. Math. Sci. 5 (1970), no. 2, 45–49 (1979). (C. L. Koul) 82g:33016 33A35 (33A65)

An integral transform pair for H-function. J. Math. Sci. 9 (1974), 47-52 (1976). (Author's summary) 82e-44002 44A20 (33A30)

A note on Kampé de Fériet functions. Math. Notae 28 (1980/81), 37-42. (N. C. 33A30 Jain) 82j:33006

h. S. M. See Shah, Swarunchand M.

- Shah, S. P. (with Sathe, Y. S.) On estimating P(X>Y) for the exponential distribution. m. Statist. A-Theory Methods 10 (1981), no. 1, 39-47. (Authors' summary) 82f:62060 62F10
- h, Shallesh (with Brereton, M. G.) A configurational phase transition induced by topological entanglements between long chain molecules. J. Phys. A 14 (1981), no. 3, L51-L54. (Authors' summary) 82;82052 82A43

Shah, Shantilal M. (with Gujarathi, C. C.) On a locally resistant BIB design of degree 1. Sankhyā Ser. B 39 (1978), no. 4, 406-408. (K. Vijayan) 82e:62119

(with Jani, P. N.) Integral expressions for the tail probabilities of the modified poseries distributions. Metron 37 (1979), no. 1-2, 75-79 (1980). (Authors' summary)

(with Kabe, D. G.) An upper bound for the nu set of blocks of certain PBIB designs. Biometrical J. 23 (1981), no. 1, 9-16. (Authors' summary) 82i-62115 62K10

(with Kabe, D. G.) Some constructions of semiregular group divisible designs.

metrical J. 23 (1981), no. 1, 17-20. (Bhagwandas) 82]:62060 62K99

(with Kabe, D. G.) On affine a-resolvability of a singular group divisible design.

etrical J. 23 (1981), no. 1, 109-112. (Authors' summary) 82i:62025

(with Gupta, R. P.) On the Bayesian estimation with changing failure rate metrical J. 23 (1981), no. 8, 737-739. (Authors' summary) 82m:62237 (62N05)

d) Functions with univalent derivatives and of irregular th. Indian J. Pure Appl. Math. 12 (1981), no. 6, 749–752. (Selden Trimble) 30C45 (30D15)

(with Fricke, Gerd H.; Roy, Ranjan) Bounded index, entire solutions of ordinary differential equations and summability methods. Internat. J. Math. Math. Sci. 4 (1981), no. 3, 417-434. (J. Rausen) 82i:30040 30D15 (34A20, 40D05)

h, Sudesh K. (with Srivastava, J. B.) Semilocal and semiregular group rings. Nederl.

- Akad. Wetensch. Indag. Math. 42 (1980), no. 3, 347-352. (Uno Kaljulaid) 82f:16024 16A51 (16A35)
- th, Swarupchand M. (with Trimble, S. Y.) Analytic functions with univalent derivatives dian J. Math. 20 (1978), no. 3, 265-299. (M. S. Robertson) 82a:30016 (30C55)

(with Fricke, Gerd H.) Note on a theorem on analytic functions with univalent derivatives. Indian J. Math. 21 (1979), no. 1, 57-61. (M. S. Robertson) 82b:30011

(with Buckholtz, J. D.) Absolute starlike and absolute convex functions. J. Analyse

Math. 38 (1980), 113-143. (Evelyn M. Silvia) 22b.30009 30C45 (with Rees, Charles Sparks; Stanojević, Časlav V.) ★Theory and applications of Fourier analysis. Monographs and Textbooks in Pure and Applied Math., 59. Marcel Dekker, Inc., New York, 1981. viii + 419 pp. ISBN 0-8247-6903-1 (Paul Nevai) 82a:42001

(with Buckholtz, J. D.) Analytic functions with constraints on coefficients

Nonlinear Anal. 5 (1981), no. 5, 553-564. (D. R. Wilken) 82g:30022 30C45 hidi, Freydoon On certain L-functions. Amer. J. Math. 103 (1981), no. 2, 297-355.

(Stephen Gelbart) 82:19030 10D15 (10D40, 22E45, 22E55) hshahani, Mehrdad (with Ross, Sheldon M.; Weiss, Gideon) On the duration of the problem of the points. J. Amer. Statist. Assoc. 75 (1980), no. 371, 663–666. (Z. W. Birnbaum) 25:2551. Birnbaum) 82a:62146 62N05

(with Diaconis, Persi) Generating a random permutation with random transpositions. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 2, 159–179. (Lars Holst)

82h:60024 60C05 (60J15)
hshahani, S. Periodic solutions of polynomial first order differential equations.
Nonlinear Anal. 5 (1981), no. 2, 157–165. (G. R. Sell) 82d:34052 34C25

Shaing, H. See Srinivasan, V. K., 82h:46067

- Shaked, Moshe (with Marshall, Albert W.) Multivariate shock models for distributions with increasing hazard rate average. Ann. Probab. 7 (1979), no. 2, 343–358. (Henry W. Block) 82d:62153 62N05 (60K10)
- On mixtures from exponential families. J. Roy. Statist. Soc. Ser. B 42 (1980), no. 2, 192-198. (Javad Behboodian) 82c:62028 62E15
- 192-198. (Javad Behboodian) 82:e62028 62E15
 ked, U. (with Bobrovsky, Ben-Zion) The asymptotic minimum variance estimate of
 stationary linear single output processes. IEEE Trans. Automat. Control 26 (1981), no. 2,
 498-504. (Authors' summary) 82:e93103 93E10
 (with Bistritz, Y.) Stable linear systems simplification via Padé approximations to
 Hurwitz polynomials. Trans. ASME Ser. G.J. Dynamic Systems Measurement Control
 103 (1981), no. 3, 279-284. (Authors' summary) 82h:93045 93C45 (93C05)

- aki, Ahiezer (with Arad, Zvi; Herzog, Marcel) On maximal subgroups with a nilpotent subgroup of index 2. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 201–203, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R. I., 1980. (Editors) 82f:20032 20D05
 - (with Arad, Zvi; Herzog, Marcel) On finite groups with almost nilpotent maximal oups. J. Algebra 65 (1980), no. 2, 445-452. (Bernd Baumann) 82h:20019 (20DIO)
- ban, Chehrzad (with Olver, Peter J.) A resolution of the Euler operator. I. Proc. Amer. Math. Soc. 69 (1978), no. 2, 223-229. (Alexander A. Pankov) 82i:13028 (49C10, 58F07)
 - A resolution of the Euler operator. II. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 3, 501-510. (Alexander A. Pankov) 82i:13029 13N05 (49C10, 58F07)

Shakirzyanov, M. M. See Šakirzjanov, M. M. Shaldyrvan, V. A. See Šaldyrvan, V. A.

- Shale, David Random functions of Poisson type. J. Funct. Anal. 33 (1979), no. 1, 1-35. (R. A. Minlos) 82e:60129 60J60 (60H05, 60J55)
- Shalen, Peter B. (with Kulkarni, Ravindra S.) A note on real cubic surfaces. Bull. Calcutta

 Math. Soc. 70 (1978), no. 6, 375–377. (R. Mandelbaum) 82d:57003 57NO5 (14G30, 14J99)
- (with Alperin, Roger C.) Linear groups of finite cohomological dimension. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 3, 339-341. (Editors) 82c:20087 20J05 (20H20)

Shalika, Joseph (with Jacquet, Hervé; Piatetski-Shapiro, Ilja Iosifovitch) Facteurs L et e du groupe linéaire. (English summary) C. R. Acad. Sci. Paris Sér. A-B 289 (1979), no. 2, A59-A61. (Stephen Gelbart) 82e:10038 10D40 (22E50)

(with Jacquet, Herve) On Euler products and the classification of automorphic representations. I. Amer. J. Math. 103 (1981), no. 3, 499–558. (Freydoon Shahidi) 82m:10050a 10D40 (12A67, 22E55)

(with Jacquet, Hervé) On Euler products and the classification of automorphic er. J. Math. 103 (1981), no. 4, 777-815. (Freydoon Shahidi) 82m:10050b 10D40 (12A67, 22E55)

(with Jacquet, Hervé; Piatetski-Shapiro, Ilja Iosifovitch) Relèvement cubique non normal. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 12, 567-571. (J. Tunnell) 82:10035 10D40

(with Jacquet, Hervé; Piatetski-Shapiro, Ilja Iosifovitch) Conducteur des

représentations génériques du groupe linéaire. (English summary) C. R. Acad. Sci. Paris Sèr. 1 Math. 292 (1981), no. 13, 611-616. (Authors' summary) 821:22015 22E50 (with Jacquet, Hervé; Piatetski-Shapiro, Ilja Iosifovitch) Facteurs L et e du groupe

linéaire: théorie archimédienne. (English summary) [L- and e-factors for the linear group: Archimedean theory] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 1, 13-18. (Authors' summary) 82i:22021 22E50 (10D40, 12B27)

Iltin, D. Continuous percolation in one dimension. J. Phys. A 14 (1981), no. 8, 1983–1991. (B. Derrida) 82m:82027 82A43

ljaho, Č. A. Comparison theorems for systems of ordinary differential equations. (Russian. Georgian and English summaries) Proceedings of the I. N. Vekua Institute of Applied Mathe atics, 8 (Russian), pp. 29-49, 164, Tbilis. Gos. Univ., Tbilisi, 1980. (L. Pintér) 82m:34030 34C10

On some comparison theorems for systems of differential equations of

Emden-Fowler type. (Russian. Georgian and English summaries) Soobbe. Akad. Nauk Gruzin. SSR 100 (1980), no. 1, 49-52. (L. Pintér) 82m:34031 34C10 Oscillatory and nonoscillatory nature of solutions of a two-dimensional system of

nonlinear differential equations. (Russian) Differencial new Uracnenija 17 (1981), no. 9, 1702–1705, 1727. (T. Čanturija) 82k:34037 34C10

On the oscillatory nature of solutions of some two-dimensional systems of

differential equations. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estesto. Nauk. 1981, no. 2, 19-22, 101. (Vincent Šoltės) 82k:34038 34C10 (34A34)

maly, A. (with Christensen, G. S.; El-Hawary, M. E.) Solution of ill-conditioned optimality conditions for control of turbo-alternators. Optimal Control Appl. Methods 2 (1981), no. 1, 81-87. (Authors' summary) 82a:49033 49D05

an, Paul Approximate maximum likelihood estimation of a step function spectral density. Analysing time series (Proc. Internat. Conf., Guernsey, 1979), pp. 327-337, North-Holland, Amsterdam, 1980. (P. S. Knopov) 82b:62124 62M15

nmash, Y. Truncation method of reduction: a viable alternative. *Electron. Lett.* 17 (1981), no. 2, 97–98. (Author's summary) 82a:93050 93D25 (93B20) amir, Adi (with Schroeppel, Richard) A $T \cdot S^2 = O(2^n)$ time/space tradeoff for certain

NP-complete problems. 20th Annual Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 328-336, IEEE, New York, 1979. (Authors' summary)

On the generation of cryptographically strong pseudorandom sequences. Automata, languages and programming (Akko, 1981), pp. 544–550, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (Author's summary) 82m:65007 65C10 (10K10, 68C05) (with Rivest, Ronald L.; Adleman, Leonard M.) Mental poker. The m Gardner, pp. 37-43, Wadsworth, Belmont, Calif., 1981. (See 82h:00003) (94B35)

ir, Joseph (with Nazarathy, Moshe) Wavelength variation in Fourier optics and holography described by operator algebra. Israel J. Tech. 18 (1980), no. 5, 224-231 (1981). (Authors' summary) 82i:78006 78A10 (78A55) (with Nazarathy, Moshe) Holography described by operator algebra. J. Opt. Soc.

Amer. 71 (1981), no. 5, 529-541. (Authors' summary) 82d:78006 78A10

mir, Shlomo Two new triangulations for homotopy fixed point algorithms with an nint, Shoomo Two new triangulations for indinotely reach points (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1979), pp. 25–56, Publ. Math. Res. Center Univ. Wisconsin, 43, Academic Press, New York, 1980. (B. T. Poljak) 82b:65049 65H10 (58C15, 90C30)

ne, Lawrence F. (with Bailey, Paul B.) Automatic solution of Sturm-Liouville eigenvalue problems. Codes for boundary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 274–279, Lecture Notes in Comput.

 (Proc. Conj., One. Holston, Holston, 1978, Spe. 82b:65074)
 (SLi)
 (Springer, Berlin, 1979, (See 82b:65074)
 (SLi)
 (SLi)
 (Computational methods in number of the processing mechanics (Proc. Second Internat. Conf., Univ. Texas, Austin, Tex., 1979), pp. 427-449, North-Holland, Amsterdam, 1980. (F. Odeh) 824:65057 65L05

Efficient use of implicit formulas with predictor-corrector error estimate. J. Comput. Appl. Math. 7 (1981), no. 1, 33-35. (David K. Kahaner) 82e:65081 651.05

m, Zun A class of inequalities. (Chinese) Knowledge Practice Math. 1981, no. 3, 12-18. (Chung Lie Wang) 82m:26023 26D15

no. 3-4, 252-262. (D. R. Grey) 82k:60031a 60E05 (60K05, 62E10)

Corrigenda: "Some refinements in distribution theory." Sankhyā Ser. A 41 (1979), no. 3-4, 252-262. (D. R. Grey) 82k:60031a 60E05 (60K05, 62E10)

Corrigenda: "Some refinements in distribution theory". Sankhyā Ser. A 42 (1980),

no. 1-2, 138. (D. R. Grey) 82k:60031b 60E05 (60K05, 62E10)

(with Biggins, J. D.) Some divisibility problems in branching processes. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 2, 321-330. (P. E. Ney) 82i:60137 60380

nkar, A. Udaya (with Lam, Simon S.) A derivation of response time distributions for a class feedback queueing system. Perform ance Evaluation 1 (1981), no. 1, 48-61. (L. R Goel) 826:60222 60K25 (60K20, 68C15)

nkar, Hari (with Bogda, Richard A.) Convolutions and growth numbers of analytic functions. Rocky Mountain J. Math. 10 (1980), no. 3, 475-483. (O. P. Juneja) 82a:30002 30B10 (30D15)

kar, P. N. On the evolution of disturbances at an inviscid interface. J. Fluid Mech. 108

(1981), 159-170. (Author's summary) 82j:76088 76V05 ankar, Rama (with Prasad, Mohan) On the nonuniform propagation of weak discontinuities in magnetogasdynamics. Arch. Rational Mech. Anal. 75 (1980/81), no. 2, 169-174. (From the summary) 821:76043 76W05 (35L67) nkar, Ramamunti Solvable models with self-triality in statistical mechanics and field

theory. Phys. Rev. Lett. 46 (1981), no. 6, 379-382. (Author's summary) 824:82023a 82A15 (81E10)

A model that acquires integrability and O(2N) invariance. Phys. Lett. B 102 (1981), no. 4, 257-262. (Author's summary) 82f:81052 81E10 (22E70, 58F07, 81G25) Simple derivation of the Baxter-model free energy. Phys. Rev. Lett. 47 (1981), no. 17,

1177-1180. (Author's summary) 82k:82055 82A68 (81F20) Errata: "Solv ble models with self-triality in statistical mechanics and field theory". Phys. Rev. Lett. 46 (1981), no. 10, 686. (Editors) 82&82023b 82A15 (81E10)

er, Hari On the generalized functions of slow growth. Jñānabha 7 (1977), 43-47. (J. N. Pandey) 82k-46048a 46F05
On the generalized functions of slow growth. II. Pure Appl. Math. Sci. 10 (1979), no. 1-2, 23-26. (J. N. Pandey) 82k-46048b 46F05

aker, Kripa Some probability distributions related to arrival and resupply of requisitions at the depot of a two-echelon inventory system. Internat. J. Systems Sci. 12 (1981), no. 2, 227-233. (Author's summary) 82m:90065 90B05

nkland, D. G. A numerically efficient procedure for the Theil-Van de Panne quadratic programming method. J. Optim. Theory Appl. 31 (1980), no. 1, 117-123. (Author's summary) 82a:90110 90C20 (65F10)

nks, Daniel (with Newman, Morris; Williams, H. C.) Simple groups of square order and an interesting sequence of primes. Acta Arith. 38 (1980/81), no. 2, 129-140. (Leo J. Alex) 82b:20022 20D05 (10A40)

Alex) 828:20022 20100 (10440)
(with Williams, H. C.) Gunderson's function in Fermat's last theorem. Math. Comp.
36 (1981), no. 153, 291–295. (Mohan Nair) 82g:10004 10–04 (10B15)
anks, J. G. General tachyon absorption by Kerr-Newman black holes: thermodynamic consequences. Gen. Relativity Gravitation 12 (1980), no. 12, 1029–1034 (1981). (Author's summary) 824:83050 83C99 (83C20)

65U05

Math. Student 45 (1977), no. 2, 63–73 (1979). (Lawrence Somer) 82a:10014 10A35 Arbitrary order circular functions: an extension of results of Glaisher and Lucas. J. Natur. Sci. Math. 19 (1979), no. 1, 71-76. (R. C. Varma) 82a:33002 33A10 (with Clarke, J. H.) Some constraints on Fermat's last theorem. Fibonacci Quart. 19

(1981), no. 4, 375-376. (Authors' introduction) 82m:10029 10B15 (01A55, 01A60) anon, Robert E. (with Donnelly, James H.) Analysis of computerized production queueing models. Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 369–382, ARO Rep. 80, 3, U. S. Army Res. Office, Research Triangle Park, N.C., 1980. (From the introduction)

mthikumar, Jeyaveerasingam George Analysis of the control of queues with shortest processing time service discipline. J. Oper. Res. Soc. Japan 23 (1980), no. 4, 341-352. (B. M. Kirstein) 82e:60159 60K25 (90B22) mar, Jeyaveerasi

apin, Steven Of gods and kings: natural philosophy and politics in the Leibniz-Clarke disputes. Isis 72 (1981), no. 262, 187-215. (Joong Fang) 82j:01085

apiro, A. (with Della, Riccia G.; De Santis, F.) Factor analysis and clustering. Second Conference on Information Sciences and Systems (Univ. Patras, Patras, 62H30 1979), Vol. I, pp. 465-469, Reidel, Dordrecht, 1980. (See 824:94002)

(with Zdrahal, Z.; Bratko, I.) Recognition of complex patterns using cellular arrays. Comput. J. 24 (1981), no. 3, 263-270. (Authors' summary) 82m:68133

iro, Alan E. Huygens' kinematic theory of light. Studies on Christiaan Huygens (Sympos., Amsterdam, 1979), pp. 200-220, Swets & Zeitlinger, Lisse, 1980. (See 82m:01036) 01A45

Newton and Huygens' explanation of the 22° halo. Special issue dedicated to Olaf Pedersen on his sixtieth birthday. Centaurus 24 (1980), 273-287. (Peeter Müürsepp) 01A45 (86-03)

apiro, E. I. See Šapiro, E. I.

phro, Eliezer V. (with Kim, H. Y.) On output feedback decoupling. IEEE Trans. Automat. Control 26 (1981), no. 3, 782-784. (Authors' summary) 82j:93022 93C35 (with Fredricks, D. A.; Rooney, R. H.; Barmish, B. Ross) Pole placement with output feedback. J. Guidance Control 4 (1981), no. 4, 441-442. (From the introduction) 93B55

See also Fahmy, Moustafa M.; et al., 82e:15012

apiro, George S. Balayage by Fourier transforms with sparse frequencies in compasabelian groups. Collog. Math. 44 (1981), no. 1, 151–157. (William M. Self) 82m:43012

piro, Harold N. A combinatorial problem in additive number theory. Number theory, Carbondale 1979 (Proc. Southern Illinois Conf., Southern Illinois Univ., Carbondale, Ill., 1979), pp. 265–282, Lecture Notes in Math., 751, Springer, Berlin, 1979. (M. Livingston) 10J99 (05A17)

(with Hausman, Miriam) On a family of almost cyclic finite groups.

Appl. Math. 33 (1980), no. 5, 635-649. (Leo J. Alex) 82b:20033 20D25

Shapiro, Harold S. On some Fourier and distribution-theoretic methods in approximation theory. Approximation theory, III (Proc. Conf., Unito. Texas, Austin, Tex., 1980), pp. 87-124, Academic Press, New York, 1980. (V. N. Pomerancev) 82g:41017 41A30 (35E99, 46F10)

piatetski-Shapiro, Ilja Iosifovitch See Piatetski-Shapiro, Ilja Iosifovitch Shapiro, Irwin I. Experimental tests of the general theory of relativity. Relativity, qu and cosmology in the development of the scientific thought of Albert Einstein, Vol. 1, 11, pp. 725-743, Johnson, New York, 1979. (See 82b:83002)

Experimental tests of the general theory of relativity. General relativity and voitation, Vol. 2, pp. 469-489, Plenum, New York, 1980. (Author's introduction) 83B05

Experimental challenges posed by the general theory of relativity. Some in the proportion (Einstein Centennial Sympos. Inst. Adv. Study, Princeton, N.J., 1979), pp. 115–136, Addison-Wesley, Reading, Mass., 1980. (See 824:83062) 83B05

ro, Jack M. Relations between the Milnor and Quillen K-theory Appl. Algebra 20 (1981), no. 1, 93-102. (Jean-Louis Loday) 82f:12016 12A62 (18F25)

piro, Jay (with Cheng, Charles Ching An) Cohomological dimension of an abelian monoid. Proc. Amer. Math. Soc. 80 (1980), no. 4, 547-551. (A. M. Pačkorija) 824:18018 18G20 (20M50)

piro, Joel H. Cauchy transforms and Beurling-Carleson-Hayman thin sets. Michigan Math. J. 27 (1980), no. 3, 339-351. (M. Hasumi) 82b:30039 30D50

piro, Linda G. (with Baron, Robert J.) *Data structures and their implementation. Van Nostrand Reinhold University Computer Science Series. Van Nostrand Reinhold Co., New York-London, 1980. x+469 pp. ISBN 0-442-20586-4 (From the preface) 82i:68001

piro, Louis W. (with Getu, Seyoum) Combinatorial view of the composition of functions. Ars Combin. 10 (1980), 131-145. (Henk van Tilborg) 826:05011

(with Getu, Seyoum) A natural proof of Abel's identity. Proceedings of the Eleventh (with Geta, Seyoum) A natural proof of Abel's identity. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. I. Congr. Numer. 28 (1980), 447-452. (J. W. Moon) 824:95955 05C05 (05A19)

A combinatorial proof of a Chebyshev polynomial identity. Discrete Math. 34 (1981), no. 2, 203-206. (Dominique Foata) 82j:05017 05A15 (33A65)

spiro, Maurice M. (with Silberberg, Rein) Neutrinos, supernovae, and related astrophysics. Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein, Vol. 1, II, pp. 745-781, Johnson, New York, 1979. (See 82b:83002)

- 85-05
- ro, Perry (with Miyao, Takahiro) Discrete choice and variable returns to scale. sternat. Econom. Rev. 22 (1981), no. 2, 257-273. (O. N. Bondareva) 82j:90092 90D35 (90A08)
- piro, R. M. The application of general net theory—a personal history. Net theory and applications (Proc. Adv. Course General Net Theory Processes Systems, Hamburg, 1979), 401-440, Lecture Notes in Comput. Sci., 84, Springer, Berlin, 1980. (Robert M. Baer) 494049 94C30 (68A05, 68D90)
- piro, S. H. Limited deviation estimators of the Poisson parameter. Metrika 27 (1980), no. 3, 203-211. (Lyle D. Broemeling) 82ec62054 62F15 (62C20) piro, Stephen D. Generalization of the Hough transform for curve detection in noisy digital images. Proceedings of the Fourth International Joint Conference on Pattern Recognition (Kyoto, 1978), pp. 710-714, IEEE, New York, 1979. (Giovanni Melzi)
- piro, Stemart On the notion of effectiveness. History and philosophy of logic, Vol. 1, pp. 209-230, Abacus, Tunbridge Wells, 1980. (A. A. Mullin) 82k:03008 03A05 (00A25)
- Understanding Church's thesis. J. Philos. Logic 10 (1981), no. 3, 353-365. (A. A. Mullin) 82j:03006 03A05 (03Dxx)
 upiro, V. D. See Šapiro, V. D.
 upiro, V. E. See Šapiro, V. E.

- Victor L. Upper semicontinuity and the Monge-Ampère differential inequal Univ. Math. J. 29 (1980), no. 3, 467-477. (M. H. Protter) 82f:35027 o, Victor L. Upper semi (35J60)
- N-functions and the weak comparison principle. J. Differential Equations 36 (1980), no. 2, 257-269. (Philip W. Schaefer) 82a:35068 35B05
 Shapirovskii, B. E. See Sapirovskii, B. E. Shar, Albert O. (with Copeland, Authur H., Jr.) Constructing loops from groups.

 Math. Monthly 88 (1981), no. 4, 283-285. (K. W. Weston) 82f:20099 20N05

- ural, Mohamed Adel Expansion theory for the elliptic motion of arbitrary eccentricity and semimajor axis. I. Analyses of the function $F^{(N,a)}(\theta,x_n,\xi_n)=\Pi_{i=1}^n(1-\xi_i\sin^{2N}\theta)^{x_i}$. Astrophys. and Space Sci. 74 (1981), no. 1, 211-234. (Author's summary) 82a:70007 70F15 (33A25)
- araf al-Din Muzaffär ibn Muhammed at-Tüsi See Räshed, Roshdi, 82m:01017
 aran, G. P. A note on q-fractional differentiation and basic hypergeometric transformations. Jñānabha 8 (1978), 57-59. (Author's introduction) 82h:33006
- 33A30 On summation and transformations of certain hypergeometric functions of three variables. Publ. Inst. Math. (Beograd) (N.S.) 27(41) (1980), 225-227. (J. L. Fields)
- 82i:33007 33A30 arda (Miss) A limited space correlated queueing problem with departures in batches of variable size. Cahiers Centre Etudes Rech. Opér. 23 (1981), no. 1, 87-96. (Jos H. A. de
- Smit) 82k:60201 60K25 urfuddin, A. (with Husain, S. Izhar) On almost paracontact manifolds. Aligarh Bull.

 Math. 7 (1977), 103-107 (1980), (Kouci Sekigawa) 82m:53036 53C15 (53C25) Math. 7 (1977), 103-107 (1980). (Kouei Sekigawa) 82m:53036
 - (with Deshmukh, Sharief; Husain, S. Izhar) Hypersurfaces of almost product ifolds. Tamkang J. Math. 10 (1979), no. 2, 169-181. (K. M. Egiazarjan) 82g:53057 53C40 (53C15)
 - (with Farzadi, G.) Almost paracontact manifold with an affine connexion. Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 13-17. (F. Brickell) 82e:5002 53C15 (with Deshmukh, Sharief; Husain, S. Izhar) On para-Sasakian manifolds. Indian J. Pure Appl. Math. 11 (1980), no. 7, 845-853. (Giuseppe Arca) 82g:53052 53C25
- rir, M. A strong-connectivity algorithm and its applications in data flow analysis Comput. Math. Appl. 7 (1981), no. 1, 67-72. (Author's summary) 82b:68058 (68C05) 68E10
- rkaway, N. G. See El-Sharkaway, N. G.
- Sharkowsky, A. N. See Šarkovs'kii, O. M.
- rma, Ambikeshwar (with Mohapatra, Ram Narayan) Convergence of discrete spline interpolants without mesh ratio restrictions. Indian J. Math. 20 (1978), no. 2, 161-171. (Philip W. Smith) 82:41013 41A15 (41A25)
 - (with Riemenschneider, S. D.; Smith, Philip W.) Lacunary trigonometric interpolation: convergence. Approximation theory. III (Proc. Conf., Unio. Texas, Austin, Tex., 1980), pp. 741–746, Academic Press, New York, 1980. (Jean Tzimbalario) 82b:42003
- (with Micchelli, Charles A.) Spline functions on the circle: cardinal L-splines revisited. Canad. J. Math. 32 (1980), no. 6, 1459-1473. (Jean Tzimbalario) 82b:41011 41A15
- (with Cavaretta, A. S., Jr.; Varga, R. S.) Interpolation in the roots of unity: an extension of a theorem of J. L. Walsh. Resultate Math. 3 (1980), no. 2, 155-191. (R. Vermes) 82j:30049 30E05 (30E10, 41A05)
- rma, Ashok K. (with Jaggi, D. S.) On fixed points of contractive maps. Math. Balkanica 6 (1976), 78–82 (1978). (Authors' summary) 82k:54072 54H25
 - (with Upadhyay, M. D.) Strictly complete spaces. Ganita 29 (1978), 151–173. (W. W. Comfort) 82;:54058 54E52 (54A20)
 - A note on fixed points in 2-metric spaces. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1580-1583. (Haimabati Chatterjee) 82h:54081 54H25
 - (with Narang, T. D.; Dass, Bal Kishan) A remark on a paper of W. V. Petryshyn and T. E. Williamson, Jr.: "Strong and weak convergence of the sequence of successive approximations for quasinonexpansive mappings" [J. Math. Anal. Appl. 43 (1973), 459–497; MR 48 #4854]. Math. Ed. (Siwan) 15 (1981), no. 1, A8. (Editors) 82i:47089

- Avinash (with Gupta, Manmohan) Connection between Yang-Mills configurations in Minkowski and Euclidean spaces. Phys. Rev. D (3) 22 (1980), no. 12, 3085-3087.
 (Authors' summary) 32d:81060 81E10 (53C80)
 Irma, Barwari Lal Novikov-Hirzebruch formula for topological manifolds. Indian J.
- Math. 20 (1978), no. 2, 107-115. (P. J. Kahn) 82j:57024 57R.20 (57N65, 57N75)

 17ma, Bhagirath Lal Atyah-Singer index theorem. Aligarh Bull. Math. 7 (1977), 91-102

 (1980). (From the text) 82g:58081 58G10 (35J99)

 A transformation of 4F₄(1) and 3F₂(1). Math. Student 45 (1977), no. 4, 74-76 (1979).
 - 33A30 (R. F. A. Abiodun) 82g:33006
 - (with Sharma, Rajendra Kumar) Reduction formulae for hypergeometric functions of two variables. Kyungpook Math. J. 20 (1980), no. 2, 251-259. (H. M. Srivastava) 824:33008 33A30
 - New generating functions for the Gegenbauer and the Hermite polynomials. Simon Stevin 54 (1980), no. 3-4, 129-134. (B. R. Bhonsle) 82g:33031 33A65 (with Solarin, A. R. T.) On the construction of Bol loops. An. Ştiinţ. Univ. "Al. I.
 - Cuza" Iași Secț. I a Mat. (N.S.) 27 (1981), no. 1, 13-17. (Ján Duplák) 82g:20111
 - (with Abiodun, R. F. A.) Generating functions for G-function. I, II. Kyungpook Math. J. 21 (1981), no. 1, 49-52, 53-56. (C. L. Koul) 82g:33010 33A35
- (with Johnson, K. W.) Constructions of weak inverse property loops. Rocky nuntain J. Math. 11 (1981), no. 1, 1-8. (Sheila Oates-Williams) 82e:20084
- arma, Bhu Dev (with Priya, Ved) Source coding theorem and its converse with side information. Inform. Sci. 17 (1979), no. 3, 169-176. (Authors' summary) 82m:94833
- (with Mohan, Man) Exact variance of an MLE of "useful" information. (French and Italian summaries) Statistica (Bologna) 39 (1979), no. 4, 633-645. (S. Guiașu) 82i:94011 94A17
- (with Wilson, R. G.) Perturbation method for relativistic energies of atoms. J. Phys. B 13 (1980), no. 17, 3285-3295. (M. Bundaru) 82e:81060 81G40 (81C12) (with Pian, J.) The variational principle for the scattering phase. Phys. Lett. A 76 (1980), no. 5-6, 365-366. (Peter Michor) 82c:58017 58E99 (46G99, 58C20, 81C99)
- (with Egele, U.) Some properties of the operator algebra generated by Hodge's star nd the exterior derivative. J. Math. Phys. 22 (1981), no. 8, 1519-1520. (Editors) 16A05 (58A14)
- a, Divakar An estimator of normal covariance matrix. Calcutta Statist. Assoc. Bull. 29 (1980), no. 115-116, 161-167 (1981). (V. Susarla) 82g:62080 62H12
- m, H. C. On the construction of some L_2 designs. Calcutta Statist. Assoc. Bull. 27 (1978), no. 105-108, 81-96 (1979). (Stratis Kounias) 82c:05035 05B30 (62K10)
- rma, J. K. (with Mehta, C. L.; Mukunda, N.; Sudarshan, E. C. G.) Representation and properties of para-Bose oscillator operators. II. Coherent states and the minimum uncertainty states. J. Math. Phys. 22 (1981), no. 1, 78-90. (F. R. Halpern) 82g:81043
- rma, J. P. Solutions of the equations of stellar envelopes for plane-symmetric configurations: an application to a stellar model. *Math. Student* 45 (1977), no. 4, 37–48 (1979). (From the introduction) 82i:85006 85A15
- Study of the internal structure of a planet in general relativity. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 2, 133-142. (Author's summary) 82c:83052 (86A99)
- (with Dwivedi, A. P.) Simultaneous triple integral equations involving G-functions of variables. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1600-1608. (C. L. Koul) 45F10 (33A35)
- (with Viswanathan, K.; Datta, S. K.) On the matched-asymptopic solution to the diffraction of a plane elastic wave by a semi-infinite stress-free boundary of finite width. Wave Motion 4 (1982), no. 1, 1-13. (Authors' summary) 82m:73023
- a, K. N. (with Sharma, R. C.) Magnetothermohaline convection through porous medium. Acta Phys. Acad. Sci. Hungar. 48 (1980), no. 2-3, 269-279. (Authors' sum 82b:76035 76E15 (76S05)
- a, Krishna Gopal (with Mishra, K. K.) On strong summability of ultraspherical series. J. Indian Acad. Math. 2 (1980), no. 1, 18-22. (R. K. Gupta) 82h:33013 33A45 (40F05, 42C10)
- Sharma, L. K. (with Raghuwanshi, S. S.) Three-body problem for general even power potential with applications. Proc. Indian Nat. Sci. Acad. Part A 44 (1978), no. 3, 177–185. (Authors' summary) 824:81128 81F10 (81H99)
- arma, M. L. Aryabhata's contribution to Indian astronomy. Proceedings of the Symposium on the 1500th Birth Anniversary of Aryabhata I (New Delhi, 1976). Indian J.
- Hist. Sci. 12 (1977), no. 2, 90-99. (A. I. Volodarskii) 82e:01022 01A32 1833. Sci. 12 (1971), no. 2, 90-99. (A. I. Yoodarskii) 2621022 (1972) no. 2, 90-99. (A. I. Yoodarskii) 2621022 (1972) no. 10A22 Indian astronomy at the time of Aryabhata. Proceedings of the Symposium on the 1500th Birth Anniversary of Aryabhata I (New Delhi, 1976). Indian J. Hist. Sci. 12 (1977), no. 2, 100-105. (A. I. Volodarskii) 82e:01023 01A32
- Irma, O. P. On self-reciprocal functions involving infinite series of Meijer's G-functions. J. Math. Sci. 9 (1974), 81-86 (1976). (J. L. Fields) 82j:44005 44A20 (33A35)
- Sharma, P. L. (with Hicks, Troy L.) Uniformities on separable metrizable spaces. Japon. 25 (1980), no. 6, 677-680. (Jacob Kofner) 82a:54055 54E15 (54H15)
- arma, R. C. Larmor radius and collisional effects on thermal-convective instability of a composite stellar atmosphere. (Turkish summary) İstanbul Üniv. Fen Fak. Mecm. Ser. A 41 (1976), 1-6 (1981). (Author's summary) 82e:85003 85A20
 - (with Sharma, K. N.) Magnetothermohaline convection through porous medium. Acta Phys. Acad. Sci. Hungar. 48 (1980), no. 2-3, 269-279. (Authors' summary) 76E15 (76S05)
- rma, Rajendra Kumar (with Sharma, Bhagirath Lal) Reduction formulae for hypergeometric functions of two variables. Kyungpook Math. J. 20 (1980), no. 2, 251–259. (H. M. Srivastava) 82d:33008 33A30 251-259. (H. M. Srivastava) 82d:33008
- rma, Ram Krishan Periodic orbits of the second kind in the restricted three-body problem when the more massive primary is an oblate spheroid. Astrophys. and Space Sci. 76 (1981), no. 1, 255-258. (Author's summary) 82e:70010 70F07
- rma, Ramesh (with Sinha, Bipin Behari) Infinitesimal variations of hypers Sasakian manifold. Progr. Math. (Allahabad) 13 (1979), no. 1-2, 23-30. (Y. Tashiro) 82b:53064 53C25 (53B25)
 - (with Sinha, Bipin Behari) Hypersurfaces in an almost paracontact manifold. Mat.

Vesnik 4(17)(32) (1980), no. 1, 105-112. (Kouei Sekigawa) 82h:53055 53C15 (53C40) Sharma, Rishi Ram (with Rai, Arisudan; Pandey, B. D.) On the global behaviour of sonic waves of arbitrary shape in gas flows with vibrational relaxation. Acad. Roy. Belg. Bull. 76N15 (35L67) Cl. Sci. (5) 66 (1980), no. 3, 256-264. (Tai Ping Liu) 82d:76066

arma, S. C. (with Gupta, Y. P.) Some results in Markov renewal processes. Metron 34 (1976), no. 1-2, 81-92 (1978). (Authors' summary) 82;:60167 60K15 (with Gupta, Y. P.) Distribution of transition frequencies and cumulative process

for Markov renewal processes over an arbitrary space. J. Indian Statist. Assoc. 16 (1978), 25-40. (From the introduction) 82i:62134 62M99 (60K05, 62E15)

rma, S. D. (with Lishk, Sajjan Singh) Role of pre-Aryabhata Jaina school of astronomy in the development of Siddhāntic astronomy. Proceedings of the Symposium on the 1500th Birth Anniversary of Aryabhata I (New Delhi, 1976). Indian J. Hist. Sci. 12 (1977), no. 2, 106-113. (R. C. Gupta) 82e:01021 01A32

(1971), no. 2, 100–115 (n. c. topa) and the state of the

arma, S. D. (with Singh, R. K.) Composition operators and several complex variables. Bull. Austral. Math. Soc. 23 (1981), no. 2, 237-247. (Warren R. Wogen) 82g:47023 47B37 (32A35, 47B38)

rma, S. K. (with Powers, S. R.: Somerford, D. J.) Investigation of domains of validity of approximation methods in forward light scattering from long cylinders. Optica Acta 28 (1981), no. 11, 1439-1446. (Authors' summary) 82m:78004 78A10

rrma, S. R. (with Chawla, M. M.) Intervals of periodicity and absolute stability of explicit Nyström methods for y''=f(x,y). BIT 21 (1981), no. 4, 455-464. (Authors' summary) 82m:65076 65L20

(with Chawla, M. M.) Families of fifth order Nyström methods for y''=f(x,y) and intervals of periodicity. (German summary) Computing 26 (1981), no. 3, 247–256. (Authors' summary) 821:65074 65L05

rma, Shashi (with Lal, Sunder) On K-proximity spaces. Indian J. Math. 19 (1977),
 no. 3, 125-131. (S. A. Naimpally) 82h:54040 54E05

rrma, Shobha Some reduction formulae. *Ganita* 30 (1979), no. 1-2, 59–67. (L. J. Slater) 821:33005 33A35

arma, Shri Deo An integral relation involving spheroidal functions and the H-function of several complex variables. Jñānabha 8 (1978), 25–31. (Author's summary) 82k:33013

(with Gupta, R. K.) On multiple integrals involving generalised H-function and spherical functions. Ganita 30 (1979), no. 1-2, 47-58. (From the introduction) 33A35

rma, Shyam S. On Hacking's fiducial theory of inference. (French summary) Canad. J.

Statist. 8 (1980), no. 2, 227-233 (1981). (Author's summary) 82h:62004 62A30 arma, T. N. (with Singh, Vimal) On the absolute stability of multivariable discrete-time nonlinear systems. IEEE Trans. Automat. Control 26 (1981), no. 2, 585-586. (Authors' summary) 82i:93051 93D05

arma, V. D. (with Shyam, Radhe) Propagation of discontinuities along bicharacteristics in the unsteady flow of a relaxing gas. Proc. Indian Acad. Sci. Sect. A Math. Sci. 89 (1980), no. 3, 183-192. (Tommaso Ruggeri) 82d:76067 76N15 (35L67, 76L05)

(with Shyam, Radhe) Nonequilibrium relaxing gas flow behind three-dimensional unsteady curved shock wave. Z. Naturforsch. A 35 (1980), no. 11, 1166-1170. (J. F. 76L05 (35L67, 53A05)

Weak discontinuities in a dissociating gas. (German summary) Acta Mech. 38 (1981), no. 3-4, 249–256. (A. P. Stone) 82c:76082 76N15 (35L67)

(with Menon, V. V.) Characteristic wave fronts in magnetohydrodynamics. J. Math. Anal. Appl. 81 (1981), no. 1, 189-203. (Authors' summary) 82f:76042 76W05

(with Shyam, Radhe; Menon, V. V.) Behaviour of finite amplitude waves in a radiating gas. (German and Russian summaries) Z. Angew. Math. Mech. 61 (1981), no. 9, (Authors' summary) 82m:85003 85A25 (76L05)

arp, David H. (with Bender, Carl M.; Cooper, Fred; Guralnik, G. S.; Mjolsness, Eric; Rose, Harvey A.) A novel approach to the solution of boundary-layer problems. Adv. in Appl. Math. 1 (1980), no. 1, 22-36. (John P. Coleman) 82c:65050 65L10

(with Goldin, Gerald A.; Menikoff, Ralph) Particle statistics from induced representations of a local current group. J. Math. Phys. 21 (1980), no. 4, 650-664. (Authors' summary) 82h:81064 81D15 (22D30) (Authors' summary) 82h:81064

(with Clark, T. E.; Menikoff, Ralph) Quantum mechanics on the half-line using path integrals. Phys. Rev. D (3) 22 (1980), no. 12, 3012-3016. (Steven M. Moore) 82b:81032 81C35 (58D30, 58G40)

(with Goldin, Gerald A.; Menikoff, Ralph) Induced representations of diffeomorphism groups described by cylindrical measures. Measure theory and its applications (Proc. Conf., Northern Illinois Univ., De Kalb, Ill., 1980), pp. 207–218, Northern Illinois Univ., DeKalb, Ill., 1981. (See 82g:28002) 28C20 (81D15)

(with Goldin, Gerald A.; Menikoff, Ralph) Representations of a local current algebra in nonsimply connected space and the Aharonov-Bohm effect. J. Math. Phys. 22 (1981), no. 8, 1664-1668. (G. R. Allcock) 82k:81036 81D15 (81E05)

(with Bender, Carl M.; Cooper, Fred; Guralnik, G. S.; Roskies, Ralph) Higher-order terms in the strong-coupling expansion for the renormalized effective potential. *Phys. Rev. D* (3) 24 (1981), *no.* 10, 2683–2692. (Authors' summary) 82k:81070

81E99 (81C12) rp, Nigel A. On embeddings of the Kerr geometry. (French summary) Canad. J. Phys. 59 (1981), no. 5, 688-692. (Author's summary) 82d:83018 83C15 (53C42)

Comparison of numerical methods for the integration of the black hole geodesic

nations. J. Comput. Phys. 41 (1981), no. 2, 295-308. (R. A. d'Inverno) 82i:83002 83-04 (34-04, 83C10)

Sharp, R. T. (with Patera, J.) Generating functions for SU(2) plethysms with fixed exchange symmetry. J. Math. Phys. 22 (1981), no. 2, 261-266. (Nigel B. Backhouse) 82k:81027 81C40 (22E46)

Sharp, R. Y. Cohen-Macaulay properties for balanced big Cohen-Macaulay modules. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 2, 229-238. (D. Kirby) 82h:13017 13H10 (13E05)

On the attached prime ideals of certain Artinian local cohomology modules. Proc. Edinburgh Math. Soc. (2) 24 (1981), no. 1, 9-14. (Gerd Faltings) 82k:13015 13D03 13D03 (13H99, 14B15)

rpe, M. J. Local times and singularities of continuous local martingales. Seminar on

Probability, XIV (Paris, 1978/1979) (French), pp. 76-101, Lecture Notes in Math., 784, Springer, Berlin, 1980. (H.-J. Engelbert) 82±660090 60G44 (60H05, 60155)
Some transformations of diffusions by time reversal. Ann. Probab. 8 (1980), no. 6, 1157-1162. (F. B. Knight) 82±66147 60160

(with Cinlar, E.; Jacod, Jean; Protter, Philip) Semimartingales and Markov processes. Z. Wahrsch. Verw. Gebiete 54 (1980), no. 2, 161-219. (A. N. Al-Hussaini)

60G44 (60J25)

(with Getoor, R. K.) Markov properties of a Markov process. Z. Wahrsch. Verw. Gebiete 55 (1981), no. 3, 313-330. (Rashid Ahmad) 82j:60130 60J25

On the structure of the Steinberg group St(A). J. Algebra 68 (1981), no. 2, 453-467. (From the introduction) 82k:20083 20H25 (57Q10)

Sharples, H. (with Randall, T. J.) A useful recurrence relation. Math. Gaz. 64 (1980), no. 430, 279-280. (Editors) 82c:15009 15A15 no. 430, 279-280. (Editors) 82c:15009

rpley, Robert (with Bennett, Colin) On an inequality for the sharp function Quantitative approximation (Proc. Internat. Sympos., Bonn, 1979), pp. 1-6, Academic Press, New York, 1980. (A. B. Aleksandrov) 82a:42017 42B25 (46E30)

Counterexamples for classical operators on Lorentz-Zygmund spaces. Stu-68 (1980), no. 2, 141-158. (Richard Bagby) 82e:42015 42B10 (46E30, 47B38) (with Bennett, Colin; DeVore, Ronald A.) Weak-L[∞] and BMO. Ann. of Math. (2) 113 (1981), no. 3, 601-611. (Richard Bagby) 82h:46047 46E30 (42B25, 46M35)

tnii, A. N. See Šatnii, A. N. Shavitt, Isaiah (with Redmon, Lynn T.) Quasidegenerate perturbation theories. A canonical

Van Vleck formalism and its relationship to other approaches. J. Chem. Phys. 73 (1980), no. 11, 5711–5717. (Authors' summary) 82g81016 81C12 (81G55)

Shaw, Alan C. (with Pohl, Ira) ★The nature of computation: an introduction to computer science. Computer Software Engineering Series. Computer Science Press, Rockville, Md., 1981. xii + 397 pp. ISBN 0-914894-12-9 (From the preface) 82j:68002 01A80, 03Dxx)

Shaw, D. V. (with Kahler, A. L.; Allard, R. W.) A multilocus estimator of mating system parameters in plant populations. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 2, part 2, 1298-1302. (Authors' summary) 82a:92022 92A10 (92A15)

Shaw, Gary A. Comments on: "Stability criterion for N-dimensional digital filters" [IEEE Trans. Automat. Control 18 (1973), no. 3, 284-286; MR 55 #14395] by J. H. Justice and J. L. Shanks. With a reply by Justice and Shanks. IEEE Trans. Automat. Control 25 (1980), no. 5, 1014-1015. (Author's summary) 82a:93052 93D99

Shaw, Gordon L. (with Roney, Kathleen J.) Analytic solution of a neural network theory based on an Ising spin system analogy. Phys. Lett. A 74 (1979), no. 1-2, 146-150. (E. Pessa) 82b:92022 92A09 (82A67)

(with Roney, Kathleen J.) Analytic study of assemblies of neurons in memory storage. Math. Biosci. 51 (1980), no. 1-2, 25-41. (Authors' summary) 824:92009

Shaw, Howard (with McKenna, P. J.) On the structure of the set of solutions to some nonlinear boundary-value problems. J. Differential Equations 35 (1980), no. 2, 183-199. 47H15 (35G30) (L. Cesari) 82d:47070

w, J. K. (with Hinton, Don B.) On Titchmarsh-Weyl M(λ)-functions for linear Hamiltonian systems. J. Differential Equations 40 (1981), no. 3, 316-342. (H. Hochstadt) 82h:34018 34B20

Shaw, R. P. (with Kaul, Raj K.; Müller, W. Cristoph) Torsional waves in an axially homogeneous bimetallic cylinder. Internat. J. Solids and Structures 17 (1981), no. 4, 379-394. (Authors' summary) 82d:73019 73D99 (73K20)

w, Robert (with Crutchfield, J.; Farmer, D.; Packard, N.; Jones, G.; Donnelly, R. J.) Power spectral analysis of a dynamical system. Phys. Lett. A 76 (1980), no. 1, 1-4. (J. S. Joel) 82e:58062 58F13 (76F99)

Strange attractors, chaotic behavior, and information flow. Z. Naturforsch. A 36 (1981), no. 1, 80-112. (H. B. Griffiths) 82k:58069 58F13 (34C40, 54H20, 82A77)

Shaw, Sen Yen See Hsiao, Shèng Yen Shawe-Taylor, John (with Pisanski, Tomaž) Search for minimal trivalent cycle permutation graphs with girth nine. Discrete Math. 36 (1981), no. 1, 113-115. (Norman Biggs) 05C35

wyer, B. L. R. (with Gawronski, Wolfgang; Trautner, Rolf) A Banach space version of Okada's theorem on summability of power series. Period. Math. Hungar. 11 (1980), no. 4, 271-279. (D. C. Russell) 82d:40005 40C05 (30B10, 40A05)

Shchedrin, A. I. See Ščedrin, A. I. Shcherbak, S. B. See Ščerbak, S. B.

rbina, A. A. See Ščerbina, A. A.

Shea, Daniel F. (with Wainger, Stephen) Growth problems for a class of entire functions via singular integral estimates. Illinois J. Math. 25 (1981), no. 1, 41-50. (W. H. J. Fuchs) 30D15 (30D35)

arer, James B. (with Kleitman, Daniel J.) Probabilities of independent choices being ordered. Stud. Appl. Math. 60 (1979), no. 3, 271-276. (Authors' summary) 82j:05004

A counterexample to a bin packing conjecture. SIAM J. Algebraic Discrete Methods 2 (1981), no. 3, 309-310. (R. L. Graham) 82m:68072 68C05 (52-04, 52A45) (with Chaiken, Seth; Kleitman, Daniel J.; Saks, Michael E.) Covering regions by

rectangles. SIAM J. Algebraic Discrete Methods 2 (1981), no. 4, 394-410. (Steven R. Lay) 52A45 (05B40, 52A10, 94C99)

(with Kleitman, Daniel J.) A monotonicity property of partial orders. Stud. Appl. Math. 65 (1981), no. 1, 81-83. (Authors' summary) 82f:06003 06A10 (05A20)

arer, Michael Bifurcation of axisymmetric buckled states of a thin spherical shell.

Nonlinear Anal. 4 (1980), no. 4, 699–713. (Marcelo Epstein) 82a:73022 73H05 (47H15, 58E07, 73L99)

Coincident bifurcation of equilibrium and periodic solutions of evolution equations

J. Math. Anal. Appl. 84 (1981), no. 1, 113-132. (Jürgen Scheurle) 82m:58019 58E0

(with Walton, I. C.) On bifurcation and symmetry in Bénard convection and Taylor vortices. Stud. Appl. Math. 65 (1981), no. 1, 85-93. (Authors' summary) 82m:76029 76E15 (58E07, 76R99)

The control of the c

ela, B. V. (with Ramamoorthy, P.) Optimal control via mathematical progra Guidance Control 4 (1981), no. 4, 443-444. (From the introduction) 82h:49020 Irin, H. M. (with Thaler, Richard) Interpreting α-rationality in hierarchical gar Econom. Lett. 5 (1980), no. 2, 109-113. (Andrew Postlewaite) 82g:90087 90

(90A07)

deh, N. M. (with Vanelli, J. C.) Signal parameter optimization for the impulsive noise channel. Second International Conference on Information Sciences and Systems (Unic. Patras, Patras, 1979), Vol. I, pp. 269–281, Reidel, Dordrecht, 1980. (Authors' summary) 94440

Sun-Sheng (with Tsao, Hung Sheng) Scalar quantum chromodynamics in two dimensions and the parton model. Nuclear Phys. B 141 (1978), no. 4, 445–466. (Authors' summary) 82:81139 81G05

rikh, A. R. (with Krori, K. D.; Mahanta, Lakshmi) A singularity-free solution for a static charged fluid sphere in Einstein-Cartan theory. (French summary) Canad. J. Phys. 59 (1981), no. 3, 425-427. (Authors' summary) 82b:83068 83E10 (83C55) ell. J. A geometric measure for the suboptimality of linear classification procedures.

trix Tensor Quart. 30 (1979/80), no. 4, 116-117. (Author's summary) 82b:62075a 62H30

A geometric measure for the suboptimality of linear classification procedures. II. Matrix Tensor Quart. 31 (1980/81), no. 1, 2-5. (Author's summary) 82b:62075b 62H30

ell-Small, T. Applications of the Hadamard product. Aspects of contemporary complex analysis (Proc. NATO Ado. Study Inst., Univ. Durham, Durham, 1979), pp. 515–523, Academic Press, London, 1980. (S. Ruscheweyh) 82g:30042 30C99

intuch, M. Oscillatory states in the oxidation of carbon monoxide on platinum. AIChE J. 27 (1981), no. 1, 20-25. (Author's conclusion) 82f:92058 92A40 (34C15, 58F13)

man, Boris Some remarks on approximation in $C(\Omega)$. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 829-836, Academic Press, New York, 1980. (P. D. Morris) 82g-41034 41A65

Unconditional convergence of abstract splines. J. Approx. Theory 30 (1980), no. 3,

237-246. (Franz-Jürgen Delvos) 82k:41008 41A15
The limits of abstract splines. Numer. Funct. Anal. Optim. 2 (1980), no. 5, 375-385.
(Karl Scherer) 82g:41035 41A65 (41A15, 47A50, 65J10)

ron On successors of singular cardinals. Logic Colloquium '78 (Mons, 1978), pp. 357-380, Stud. Logic Foundations Math., 97, North-Holland, Amsterdam, 1979. (Douglas Cenzer) 824:03079 03E10 (03E05, 03E35)

(with Fremlin, D. H.) On partitions of the real line. Israel J. Math. 32 (1979), no. 4, 299–304. (Alan D. Taylor) 82h:63096 03E35 (54A25, 54C50)

On uncountable abelian groups. Israel J. Math. 32 (1979), no. 4, 311-330. (Martin Huber) 82h:03054 20K20 (03C60, 03E35, 03E50)

olean algebras with few endomorphism ns. Proc. Amer. Math. Soc. 74 (1979), no. 1, 135-142. (D. Monk) 82i:06017 06E05 (03E35, 03G05) Remarks on Boolean algebras. Algebra Universalis 11 (1980), no. 1, 77-89. (P.

Štěpánek) 82k:06016 06E05 (03E35)

(with Cherlin, Gregory) Superstable fields and groups. Ann. Math. Logic 18 (1980), no. 3, 227-270. (Annalisa Marcja) 82c:03045 03C60 (03C45, 12L99)
Simple unstable theories. Ann. Math. Logic 19 (1980), no. 3, 177-203. (John

Rosenthal) 82g:03055 03C45 (03C50)

Whitehead groups may not be free, even assuming CH. II. Israel J. Math. 35 (1980), no. 4, 257–285. (Paul C. Eklof) 82h:03055 03E35 (03C60, 20K40)

A note on cardinal exponentiation. J. Symbolic Logic 45 (1980), no. 1, 56-66. (F. R. Drake) 82c:03070 03E10 (03E50, 04A30)

Independence results. J. Symbolic Logic 45 (1980), no. 3, 563-573. (W. Hodges) 03E40 (03C45, 03E35)

(with Hodges, Wilfrid) Infinite games and reduced products. Ann. Math. Logic 20 (1981), no. 1, 77-108. (S. R. Kogalovskii) 82f:03025 03C20 (03C75) (with Avraham, Uri) Martin's axiom does not imply that every two N₁-dense sets of

reals are isomorphic. Israel J. Math. 38 (1981), no. 1-2, 161-176. (Thomas J. Jech) 03E35 (03E50, 26A99)

stency of Ext(G, Z)=Q. Israel J. Math. 39 (1981), no. 1-2, 74-82. (Thomas J. Jech) 82k:03084 03E35 (03C60, 03E50, 18G15, 20K40)

(with Glass, A. M. W.; Gurevich, Yuri; Holland, W. Charles) Rigid homogeneous chains. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 1, 7-17. (U. Felgner) 06A05 (03C62, 03C65, 06F20)

On the number of nonisomorphic models of cardinality λ L_{ock}-equivalent to a fixed model. Notre Dame J. Formal Logic 22 (1981), no. 1, 5-10. (M. Makkai) 82k:03054

03C75 (03C35, 03C55) (with Laver, Richard) The 82-Souslin hypothesis. Trans. Amer. Math. Soc. 264

(1981), no. 2, 411–417. (F. R. Drake) 82e:03049 03E35
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition, 82e:90023
ell, Karl See Non-cooperative approaches to the theory of perfect competition approaches to the theory of the theory of the

(Henry S. Warren, Jr.) 82m:05004b 05A05 (26A03) (with Soni, Raj P.) Aperiodic words on three symbols. III. J. Reine Angew. Math. 330 (1982), 44-52. (Henry S. Warren, Jr.) 82m:05004c 05A05 (26A03) n, V. V. See Seluhin, V. V.

Shen, C. N. Method of solution for variational principle using bicubic Hermite polynomial. Transactions of the Twenty-seventh Conference of Army Mathematicians (West Point, N.Y., 1981), pp. 247-264, ARO Rep. 82, 1, U. S. Army Res. Office, Research Triangle Park, N.C., 1982. (See 82k:00010) 65M99

en, Chao Liang (with Effros, Edward G.) Dimension groups and finite difference tions. J. Operator Theory 2 (1979), no. 2, 215-231. (Jonathan M. Rosenberg) 46L05 (06F20, 22A05)

A note on the automorphism groups of simple dimension groups. Pacific J. Math. 89 (1980), no. 1, 199-207. (David Handelman) 824:46087 46L35

(with Effros, Edward G.) The geometry of finite rank dimension groups Math. 25 (1981), no. 1, 27-38. (Pierre de la Harpe) 82e:46077 46L05 (208 46L05 (20K20, 52A07) Shen, Cheng Wu (with Ye, Bi Quan; Feng, Zhen Xing; Li, Mao Xiang) A direct method of

decomposition by segments and pieces for the solution of large systems (sets) of linear equations and its coupling with the idea of substructures. (Chinese. English summary) Numer. Math. J. Chinese Univ. 2 (1980), no. 1, 1-6. (Authors' summary) 82i:65023

en, Jie Wu (with Zhou, Yu Mei; Qing, Cheng Rui) A new method for solving the free-boundary magnetic surface equation without conducting shells. (Chinese. English summary) Acta Phys. Sinica 29 (1980), no. 8, 1058–1062. (Authors' summary) 82h:76044 76W05 (65P05, 76A60, 82A45)

n, M. C. (with Keller, Joseph B.) Erratum: "Ray method for nonlinear wave propagation in a rotating fluid of variable depth" [Phys. Fluids 16 (1973), 1565-1572; MR 50 #9155]. Phys. Fluids 24 (1981), no. 4, 786. (Editors) 824:76087 76U05 (with Lin, K. C.; Shih, S. M.) Peristaltic transport of a fluid-particle mixture. SIAM J. Math. Anal. 12 (1981), no. 1, 49-59. (Authors' summary) 82b:76078

en, Qi Jun Faster algorithms of plane rotation. (Chinese) Numer. Math. J. Chinese Univ. 2 (1980), no. 1, 82-86. (Author's introduction) 82i:65027 65F30

n, S. C. See Shen, Xie Chang

Shen, S. F. (with van Dommelen, L. L.) The spontaneous generation of the singularity in a separating laminar boundary layer. J. Comput. Phys. 38 (1980), no. 2, 125–140. (William H. H. Banks) 82c:76043 76D15 (65M99)

m, S. M. (with Aitchison, John) Logistic-normal distributions: some properties and uses. Biometrika 67 (1980), no. 2, 261–272. (Authors' summary) 82k:62028 62E10

en, Shu Min (with Jiang, Li Shang; Wu, Mao Qing; Qin, Gan; Yan, Da Kang) Finite element methods for solving structures composed of plate-beams, with their error estimate. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 2, 154-171. (From the summary) 82f:73033 73K25

en, Wei Xi (with Li, Da Qian; Yu, Wen Ci) Second initial-boundary value problems for quasilinear hyperbolic-parabolic coupled systems. (Chinese. English summary) Chinese Ann. Math. 2 (1981), no. 1, 65–90. (Authors' summary) 82h:35073 35M05

Shen, Xie Chang (with Lou, Yuan Ren) The best approximation by rational functions in a domain of the complex plane. (Chinese) Acta Math. Sinica 20 (1977), no. 4, 301-303. (From the introduction) 82i:30054 30E10 (41A20)

(with Lou, Yuan Ren) Best approximation by rational functions in the space E_p (P>1). (Chinese. English summary) Beijing Daxue Xuebao No. 2 (1979), 1-18. (Authors' summary) 82f:36039 30E10

Shen, Yi Bing Geodesic correspondence among Einstein manifolds, and the Riem anifolds V(K). (Chinese) Acta Math. Sinica 24 (1981), no. 2, 217-228. (H. Wu) 82k:53066 53C22 (53C25)

Shen, You Gen Some exact solutions of Einstein's field equations with nonzero logical constant A. (Chinese. English summary) Nanjing Daxue Xuebao No. 2

(1980), 57-64. (Author's summary) 82b:83019 83C15

Shèng, Ch'ing Lai (with Das, Sunil R.; Ch'èn, Jèn) On a matrix approach to state identification and control of finite-state machines. J. Nat. Chiao Tung Univ. 8 (1980). 1-8. (Authors' summary) 82f:68057 68D15 (93B30)

eng, Gong On FitzGerald inequalities. J. London Math. Soc. (2) 24 (1981), no. 2, 227-242. (V. Linis) 82k:30021 30C50

nker, Scott J. (with Kadanoff, Leo P.) Band-to-band hopping in one-dimensional m J. Phys. A 14 (1981), no. 2, L23-L26. (D. R. J. Chillingworth) 82d:58048

enoi, Kishan (with Agrawal, Bhagwati P.) m-adic (polyadic) invariance and its applications. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 2, 207-213. (Authors' summary) 82d:94003 94A05 (93C45)

enoy, P. P. On coalition formation: a game-theoretical approach. Internat. J. Game Theory 8 (1979), no. 3, 133-164. (G. Duru) 82k:90017 90A07 (90D12)

nsa, M. J. Recursive least squares lattice algorithms—a geometrical approach. IEEE Trans. Automat. Control 26 (1981), no. 3, 695-702. (Author's summary) 82j:93046

epard, Roger N. Psychological relations and psychophysical scales: on the status of "direct" psychophysical measurement. J. Math. Psych. 24 (1981), no. 1, 21-57. (Author's summary) 82m:92092 92A27

phard, Geoffrey C. (with Grünbaum, Branko) Some comments on: "Juxtapositions' [Structural Topology 1979, no. 1, 59-72] by J. Baracs. Structural Topology 1979, no. 3. 52A45 (51M20) 58-61. (R. Bantegnie) 82k:52020b

(with Grünbaum, Branko) Satins and twills: an introduction to the geom fabrics. A mathematical investigation into patterns of weaving reveals subtle problems in combinatorics and geometry. Math. Mag. 53 (1980), no. 3, 139-161. (G. Ewald) 52A37 (05B99, 51M99)

(with Grünbaum, Branko) Some problems on plane tilings. The mathematical Gardner, pp. 167–196, Wadsworth, Belmont, Calif., 1981. (See 82b:00003)

(05B45) (with Grünbaum, Branko) Patterns on the 2-sphere. Mathematika 28 (1981), no. 1,
 1-35. (H. S. M. Coxeter) 82m:51025 51M20 (51F15, 52A45)

(with Grünbaum, Branko) A hierarchy of classification methods for patterns. Krist. 154 (1981), no. 3-4, 163-187. (Doris Schattschneider) 82j:05048 05B45 (51F15. 52A45, 82A60)

Shepherd, J. G. Cautious management of marine resources. Math. Biosci. 55 (1981).

no. 3-4, 179-187. (Author's summary) 82h:92034 92A15 (90A30, 92A17) epherd, J. J. The one-dimensional gas-lubricated slider bearing. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 1, 75-97. (W. D. Lakin) 82d:76068 76N99

epilov, M. A. See Sepilov, M. A. pp, L. A. (with Beneš, Václav E.; Witsenhausen, H. S.) Some solvable stochastic control problems. Analysis and optimisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 3-10, Academic Press, London, 1980. (D. M. Sudakov) 93E20 (90A16, 90A19)

The FKG inequality and some monotonicity properties of partial orders. SIAM J.

aic Discrete Methods 1 (1980), no. 3, 295-299. (Mauro Cerasoli) 82k:60023 60C05 (06A10, 60E15, 82A05)

(with Olkin, Ingram) Entropy of the sum of independent Bernoulli random variables and of the multinomial distribution. Contributions to probability, pp. 201-206, Academic Press, New York, 1981. (Yosef Rinott) 82g:60031 60E15

(with Harrison, J. Michael) On skew Brownian motion. Ann. Probab. 9 (1981), no. 2. 309-313. (J. Walsh) 82j:60144 60J60 (60H10, 60J65)

On the integral of the absolute value of the pinned Wiener process. Ann. Probab. 10 (1982), no. 1, 234-239. (D. Kannan) 82m:60100 60J65

rd, M. The six-twistor description of hadron resonances. Advances in twistor theory, pp. 198-208, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81G20

(with Hughston, L. P.) Baryon magnetic moments. Advances in twistor theory, pp. 215-220, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81G20 er, A. P. See Ser, A. P.

r, R. B. (with Ivanšić, I.) A complement theorem for continua in a manifold. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979). Topology Proc. 4 (1979), no. 2, 437–452 (1980). (Józef Krasinkiewicz) 82b:57008

(with Ivanšić, I.; Venema, Gerard A.) Complement theorems beyond the trivial range. Illinois J. Math. 25 (1981), no. 2, 209-220. (T. B. Rushing) 82i:57017 57N25

(57N30)

nif D. (with Shetty, C. M.) *Optimization with disjunctive constraints. Lecture Notes in Economics and Mathematical Systems, 181. Springer-Verlag, Berlin-New York, 1980, viii + 156 pp. ISBN 3-540-10228-0 (E. Ja. Gabovič) 82e:90068 90C10

(with Shetty, C. M.) Rectilinear distance location-allocation problem: a simplex based algorithm. Extremal methods and systems analysis (Internat. Sympos., Univ. Texas. Austin, Tex., 1971), pp. 442–464, Lecture Notes in Econom. and Math. Systems, 174, Springer, Berlin, 1980. (Robert F. Love) 82a:90151 90C30

(with Bazaraa, Mokhtar S.) On the choice of step size in subgradient optimization. European J. Oper. Res. 7 (1981), no. 4, 380-388. (Nobuo Sannomiya) 82k:49043 49D37 (90C30)

Expedients for solving some specially structured mixed-integer programs. Naval Res. Logist. Quart. 28 (1981), no. 3, 447-462. (C. B. Millham) 82k:90086

ercliff, J. A. Reflections of a new editor. 25th anniversary issue: editorial reflections on the development of fluid mechanics. J. Fluid Mech. 106 (1981), 349–356. (See 82g:76002) 76-03

el-Sherief, H. See El-Sherief, H.

Sherif, V. S. (with Smith, M. L.) Optimal maintenance models for systems subject to failure

—a review. Naval Res. Logist. Quart. 28 (1981), no. 1, 47–74. (Authors' summary)

82c:90045 90B25 (90–02)

Sherman, Andrew H. (with Eisenstat, Stanley C.; Schultz, Martin H.) Software for sparse Gaussian elimination with limited core storage. Sparse Matrix Procee (Sympos. Sparse Matrix Comput., Knoxville, Tenn., 1978), pp. 135-153, SIAM, Philadelphia, Pa., 1979. (lain S. Duff) 82i-65020 65F05

(with Eisenstat, Stanley C.; Schultz, Martin H.) Algorithms and data structures for sparse symmetric Gaussian elimination. SIAM J. Sci. Statist. Comput. 2 (1981), no. 2,

225-237. (Authors' summary) 821:65029 65F05 (65N20) erman, B. A free boundary problem arising in a kinematic wave model of channel flow with infiltration. Quart. Appl. Math. 39 (1981/82), no. 1, 87-96. (Author's summary) 82d:76086 76S05

erman, Clayton Cartan maps, clean rings, and unique factorization. J. Algebra 70 (1981), no. 1, 102-115. (Barry H. Dayton) 82h:13010 13D15 (14F15, 18F25)

Sherman, D. I. See Serman, D. I.

Sherman, Thomas L. Zeros of cross products of solutions for second-order equations. J. Math. Anal. Appl. 72 (1979), no. 2, 587-594. (From the introduction) 82j:34029 34C10

gton, D. Relaxation of a kinetic Ising chain with randomly signed exchange. Phys. Lett. A 77 (1980), no. 1, 49-50. (Author's summary) 82b:82087 82A67 (82A42)

erry, T. N. (with Sudarshan, E. C. G.; Gautam, S. R.) An approach to measurement in quantum mechanics. Particles and fields (Proc. Banff Summer Inst., Banff, Alta., 1977), pp. 289–304, Plenum, New York, 1978. (Authors' summary) 82h:81013 81B05

stakov, E. A. See Šestakov, E. A.

Shestopal, V. O. On relaxation processes based on diffusional mechanisms. Molecular Phys. 41 (1980), no. 3, 605-618. (Koichiro Matsuno) 82a:82027 82A35

eth, I. H. (with Acharyá, J. D.) A note on essentially invariant classes of operators.

Math. Japon. 25 (1980), no. 4, 421-422. (Glenn R. Luecke) 82a:47001 47A10

Shetty, C. M. (with Sherali, Hanif D.) ★Optimization with disjunctive constraints. Lecture Notes in Economics and Mathematical Systems, 181. Springer-Verlag, Berlin-New York, 90C10 1980. viii + 156 pp. ISBN 3-540-10228-0 (E. Ja. Gabovič) 82e:90068

(with Sherali, Hanif D.) Rectilinear distance location-allocation problem: a simplex based algorithm. Extremal methods and systems analysis (Internat. Sympos., Unio. Texas, Austin, Tex., 1977), pp. 442-464, Lecture Notes in Econom. and Math. Systems, 174, Springer, Berlin, 1980. (Robert F. Love) 82x:90151 90C30 su, S. S. (with Farn, K. J.) A sufficient condition for the existence of a stationary

1-optimal plan in compact action Markovian decision processes. Recent developments in Markov decision processes (Proc. Internat. Conf., Univ. Manchester, Manchester, 1978), pp. 111-126, Academic Press, London, 1980. (See 82k:90128) 90C40

nko, V. I. See Ševčenko, V. I.

Shi, Chang Chun An analogy between relativistic hydrodynamics and classical hydrodynamics. (Chinese. English summary) Acta Mech. Sinica (Beijing) 1981, no. 1, 21-30. (Author's summary) 82h:76047 76Y05

Sheng Ming Calculations of the Weyl group and the multiplicity of a weight. (Chinese English summary) Beijing Daxue Xuebao No. 2 (1980), 1-4. (Yang Hua) 82a:17007

Shi, Shu Zhong (with Simon, Jacques) Sur un espace intervenant en contrôle ponctuel. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 15, A693-A696. (L. Longdon) 82a:49012 49A27

Sur une classe d'espaces fonctionnels intervenant en contrôle optimal. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 16, A761-A764. (Author's summary) 82e:49014 49A27

Sur les problèmes de contrôle bon marché. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 12, A635-A638. (J. E. Rubio) 821:49004 49A22

Shi, Song Ling On limit cycles of plane quadratic systems. Sci. Sinica 24 (1981), no. 2, 153-159. (Richard C. Churchill) 82j:58101 58F21 (34C05)

Shi, Wei Gang (with Fan, Mao Qian; Xu, Da Mao) The equations of motion on S2 stream

surface and the method of their solution. (Chinese. English summary) Acta Mech. Sinica (Beijing) 1980, no. 1, 29-37. (H. K. Cheng) 82e:76048 76N15 Shi, Xian Liang Note on a problem of asymptotic expansion of oscillatory integrals. (Chinese) Numer. Math. J. Chinese Univ. 1 (1979), no. 1, 120-122. (From the text)

82g:41031 41A60 Approximation of plane curves by equidistant Archimedean spirals. (Chinese) Acta Appl. Sinica 3 (1980), no. 3, 255-261. (From the text) 82:41022

On approximation of continuous functions by de la Vallée Poussin means. (Chinese) Acta Math. Sinica 23 (1980), no. 6, 823-835. (Yung-Ming Chen) 82h:41035 (42A10)

On the summability of partial sums of Fourier series. (Chinese, English sun Math. Res. Exposition 1981, , First Issue, 1-6. (Yung-Ming Chen) 82f:42005

Shi, Ying Guang Best simultaneous L_p approximation. (Chinese: English summary) Chinese Ann. Math. 1 (1980), no. 2, 235-244. (Author's summary) 82e:41028 41A28 Simultaneous best rational approximation. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 3-4, 477-484. (Author's summary) 82e:41029 41A28 (41A20)

Best approximation having restricted ranges with nodes. (Chinese. English su Math. Numer. Sinica 2 (1980), no. 2, 124–132. (Author's summary) 82g:41028 41050 (with Xu, Xian Yu; Li, Jia; Xiong, Gui Jing) Some notes on E. W. Cheney's book Introduction to approximation theory [McGraw-Hill, New York, 1966; MR 36 *5568]. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 2, 189–191. (Authors' summary) 82g:41001 41-01

The characterizations of best approximation in the space $L(X, \Sigma, \mu)$. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 3, 197-202. (Bor-Luh Lin)

82g:41036 41A65 (46B25)

L approximation by generalized polynomials having bounded coefficients. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 4, 375-378. (Author's summary) 41A50

Minimization and best approximation. (Chinese. English summary) Chinese Ann Math. 2 (1981), no. 2, 225–231. (Author's summary) 82h:41036 41A50

a, Masaaki Marcinkiewicz-Zygmund theorem for multiorthon al series. Fac. Ed. Fukushima Univ. No. 28 (1978), 7-10. (F. Schipp) 82d:42027 42C15

tha, Masakazu Analytic mappings of a Riemann surface of finite type into a torus.

Math. Kyoto Univ. 20 (1980), no. 4, 591-623. (H. H. Martens) 82f:14025 14F (30F30, 32G20)

Degeneration of abelian integrals on an open Riemann surface to elliptic ones. J. Math. Kyoto Univ. 21 (1981), no. 1, 1-18. (H. H. Martens) 82e:14055

Shibata, Chōkō (with Shimada, Hideo) The g-hypercone of a Minkowski space. Tens (N.S.) 35 (1981), no. 1, 73–85. (H. Rund) 82m:53028 53B40

pata, Fumiaki Theory of nonlinear spin relaxation. J. Phys. Soc. Japan 49 (1980), no. 1, 15-24. (Francesco Guerra) 82d:82024 82A15 (81C20)

13-24. [Francesco Guerra] 848-84044 82A15 (81-20) (with Hashisume, Natsuki) Maxwell-Langevin equations and the Kubo formulae. Progr. Theoret. Phys. Suppl. No. 69 (1980), 55-68 (1981). (Authors' summary) 82j:82033

ata, Katsuyuki Remarque sur la cohomologie de l'algèbre de Lie des champs de vecteurs sur la sphère. (English summary) Bull. Soc. Math. France 108 (1980), no. 2, 117-136. (Toru Tsujishita) 82f:58088 58H10 (17B56)

ata, Kelichi Contributions by Professor Kinjirô Kunugui to the theory of analytic functions of a complex variable and related fields. Special issue in memory of the late Professor Kinjirô Kunugi [Kunugui]. Math. Japon. 23 (1978), no. 3 Special issue, 281-286. (Editors) 82g.01070 01A70 (30-03)

bata, Ritei An optimal autoregressive spectral estimate. Ann. Statist. 9 (1981), no. 2, 300-306. (Hideaki Sakai) 82f:62176 62M15

ata, Yoshihiro &-well posedness of mixed initial-boundary value problems with constant coefficients in a quarter space. J. Analyse Math. 37 (1980), 32-45. (L. Cattabriga) 35E20

&-well posedness of mixed initial-boundary value problems with constant coefficients in a quarter space. II. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 7, 318-320. (L. Cattabriga) 82h:35016 35E20

Lower bounds at infinity for solutions of differential equations with constant coefficients in unbounded domains. Singularities in boundary value problems (Proc. NATO Adv. Study Inst., Maratea, 1980), pp. 213-234, NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci., 65, Reidel, Dordrecht, 1981. (L. Cattabriga) 82k:35021 35E20

asa Approximation to the bifurcation solution locally minimizing potential. Mem. Fac. Sci. Kyushu Univ. Ser. A 33 (1979), no. 2, 335-341. (Author's introduction) 82h:35036 35165 (65N99)

Nonlinear eigenvalue problems associated with subdifferentials. Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 2, 283-290. (Norman Dancer) 82j:58030 (47H12, 49G05)

(27812, 47800) On the cobordism of compound knots. Math. Sem. Notes Kobe Univ. 8 (1980), no. 2, 331–337. (Ionathan A. Hillman) 82sc57006 57M25 buyas, Yhuji The spectrum of Sasakian manifolds. Kodai Math. J. 3 (1980), no. 2, 197–211. (Akira Ikeda) 82bc53063 53C25 (58G11, 58G25)

197-211. (Akira Ikeda) 82a:53063 53(25 (38G11, 28G25)
Shidfar, A. (with Jaswon, M. A.) On a differential equation of Bergman and Schiffer. With an appendix by S. D. Nigam and T. Amaranath. J. Math. Phys. Sci. 14 (1980), no. 3, 225-238. (G. Wildenhain) 82m:31010 31B30 (35C05, 73C03)
Shieh, Leang San (with Wei, Ying Ji) Synthesis of optimal block controllers for

multivariate control systems and its inverse optimal control problem. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 68–71, IEEE, New York, 1979.

(with Tajvari, A.) Analysis and synthesis of matrix transfer functions using the r block-state equations in block-tridiagonal forms. Proc. IEE-D 127 (1980), no. 1, 19-31. mary) 824:94061a 94C05

(with Tajvari, A.) Errata: "Analysis and synthesis of matrix transfer functions using mew block-state equations in block-tridiagonal forms". Proc. IEE-D 127 (1980), 4, 187. (Editors) 824-94061b 94C05

(with Tsay, Yih T.) State-space approach for self-tuning feedback control with pole gament. Proc. IEE-D 128 (1981), no. 3, 93-101. (Authors' summary) 82e:93087 93D15

ld, Richard T. On uniqueness for the traction boundary value problem of lin day, Vol. 5, pp. 467-473, Pergamon, Oxford, 1980. (J. N. elastostatics. Mechanics today, Vol. 5, pp. 4 Flavin) 82h:73008 73C15 (35Q20, 58G20)

(with Lee, Sang J.) Variational principles in finite elastostatics. (German summary) Z. Angew. Math. Phys. 31 (1980), no. 4, 437-453. (Cornelius O. Horgan) 82a:73021a

(with Lee, Sang J.) Applications of variational principles in finite elasticity. (German marry) Z. Angew. Math. Phys. 31 (1980), no. 4, 454-472. (Cornelius O. Horgan) 273021b 73G05 (49H05)

(with Choi, I.) Second-order effects in problems for a class of elastic materials. (German summary) Z. Angew. Math. Phys. 32 (1981), no. 4, 361-381. (From the introduction) 82m:73639 73G05

elds, M. W. Adequate path expressions Internat. Sympos., Evian, 1979), pp. 249–265, Lecture Notes in Comput. Sci., 70, Springer, Berlin, 1979. (Author's summary) 82h:68014 68B10 (68B20)

(with Lauer, P. E.; Cotronis, J. Y.) Formal behavioural specification of concurrent tems without globality assumptions. Formalization of programming concepts (Proc. systems without globality assumptions. Formalization of programming concepts (Proc. Internat. Colloq., Peñiscola, 1981), pp. 115–151, Lecture Notes in Comput. Sci., 107, Springer, Berlin, 1981. (From the introduction) 82h:68034 68B20 (68D90)

elds, Paul C. Almost block independence. Z. Wahrsch. Verw. Gebiete 49 (1979), no. 1, 119–123. (Author's summary) 82d:28016 28D05

Shier, Douglas R. (with Laskar, Renu) On chordal graphs. Proceedings of the Eleventh tern Conference on Combinatorics, Graph Theory and Comp Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 579-588. (Linda Lesniak-Foster) 82:05063 05C38 (05C99)

(with Witzgall, Christoph) Properties of labeling methods for determining shortest ath trees. J. Res. Nat. Bur. Standards 86 (1981), no. 3, 317-330. (Authors' summary) 82j:68067 68E10 (05C05, 05C35, 68C25) fman, M. A. See Šifman, M. A.

Shiga, Hironori One attempt to the K3 modular function. II. Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4) 8 (1981), no. 1, 157-182. (Werner Kleinert) 82k:32054 32G20 (32J25)

Aga, Kiyoshi A geometric characterization of open balls. Bull. Fac. Gen. Ed. Gifu Univ. No. 16 (1980), 137–139. (H. Wu) 82;53108 53C55 (32M05)

Shiga, Tokuzo (with Notohara, Morihiro) Convergence to genetically uniform state in stepping stone models of population genetics. J. Math. Biol. 10 (1980), no. 3, 281–294. 92A15 (60H10, 92A10)

An interacting system in population genetics. J. Math. Kyoto Univ. 20 (1980), no. 2, 213-242. (Anthony G. Pakes) 82e:92029a 92A10 (60J70)

(with Shimizu, Akinobu) Infinite-dimensional stochastic differential equations and J. Math. Kyoto Univ. 20 (1980), no. 3, 395-416. (Ju. L. Daleckii) 82i:60110 60H10 (60J60, 60K35, 82A05, 92A10)

An interacting system in population genetics. II. J. Math. Kyoto Univ. 20 (1980), no. 4, 723-733. (Anthony G. Pakes) 82e-92029b 92A10 (60170)
Diffusion processes in population genetics. J. Math. Kyoto Univ. 21 (1981), no. 1, 133-151. (Thomas G. Kurtz) 82i:60129 60J60 (35J70, 60J70, 92A10)

su, Junko (with Kogut, John B.; Pearson, Robert B.; Sinclair, D. K.) Z_N and N-state Potts lattice gauge theories: phase diagrams, first-order transitions, β functions, and 1/N expansions. Phys. Rev. D (3) 22 (1980), no. 10, 2447-2464. (Gheorghe Nenciu) 82A25 (82A67, 82A68)

(with Goldschmidt, Yadin Y.) Quantum Potts gauge-matter systems at finite temperature. Nuclear Phys. B 200 (1982), no. 1, FS 4, 149-210. (Authors' summary)

Shih, Chia C. (with Wongtawatnugool, C.; Wu, Shi Yu) Eigenvalue problem for an infinite tridiagonal matrix. J. Math. Phys. 22 (1981), no. 4, 633-636. (Authors' summary) 82e:15008 15A18 (15A57, 47A70, 82A42)

Eigenenergies of linear systems with periodic structures. Phys. Rev. B (3) 23 (1981),

no. 6, 2797-2809. (H. N. V. Temperley) 82d:82088 82A67

Shih, Hui Jan (with Thierrin, G.) Locally regular and locally finite languages. Tamkang J. Math. 10 (1979), no. 2, 253-262. (H. P. Edmundson) 82m:68125 68F05

Ordered catenation and regular free disjunctive languages. Inform. and Control 46 (1980), no. 3, 257-269. (Klaus Indermark) 82f:68063 68F05

Shih, L. Y. Soliton-like interaction governed by the generalized Korteweg-de Vries equation. Wave Motion 2 (1980), no. 3, 197-206. (K. K. Puri) 82e:76019 (35Q20) 76R25

Shih, Mou Hsiang Rouché's and related theorems for analytic functions of several complex variables. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 4, 527-533. (P. Agranovič) 32A25 (32H99)

Location of the zeros of continuously differentiable maps. Bull. London Math. Soc. 13 (1981), no. 3, 214-218. (P. T. Church) 82h:55003 55M20 (47H10, 55M25, 58C30) (with Yeh, Cheh Chih) Successive approximations in complex analysis. J. Math Anal. Appl. 81 (1981), no. 1, 182-188. (V. P. Havin) 82f:30040 30E10 (30D05)

A further generalization of the Ostrowski theorem in Banach spaces. Proc. Japa Acad. Ser. A Math. Sci. 57 (1981), no. 3, 168-170. (Sadayuki Yamamuro) 82j:58015 58C15 (47H15, 65J15, 90C48)

h, S. M. (with Shen, M. C.; Lin, K. C.) Peristaltic transport of a fluid-particle mixture. SIAM J. Math. Anal. 12 (1981), no. 1, 49-59. (Authors' summary) 82b:76078 (92A09)

ing See Shi, Shu Zho

Shih, Weishu (with Jessel, Maurice) Une remarque sur la théorie mathématique des absorbeurs actifs. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 21, A1033-A1035. (Mineo Ikeda) 82e:58095 58G20 (76Q05)

Une remarque sur le degré d'une application continue et les équations aux dérivées partielles avec condition intégrale. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 17, 825-828. (C. J. Atkin) 82j:58029 58C30 (35A05, 47F05,

Shih, Yen Ping (with Hwang, Chyi; Hwang, Ruey Yinn) A combined time and frequency domain method for model reduction of discrete systems. J. Franklin Inst. 311 (1981), no. 6, 391-402. (Authors' summary) 82e:93641 93B55

Shih, Ying Kuang See Shi, Ying Guang
Shikata, Yoshihiro On a lower bound of the numbers of minimal surfaces. Minimal submanifolds and geodesics (Proc. Japan-United States Sem., Tokyo, 1977), pp. 209-215, North-Holland, Amsterdam, 1979. (A. J. Tromba) 82b:58032 SEI2 (49F10, 53A10)

Shikishima, Kayoko Universal extension of a differential field of positive characteristic. (Japanese summary) Acta Human. Sci. Univ. Sangio Kyotien. Natur. Sci. Ser. No. 8 (1978), 32–41. (R. Cohn) 82j:12031 12H05

Ikrut, Dov Solutions of some stability problems in the theory of geometrically nonlinear shells. Israel J. Tech. 18 (1980), no. 1-2, 76-83 (1981). (Author's summary) 82j:58038 58E07 (73H99, 73L99)

man, S. V. See Sil'man, S. V.

Shiloach, Yossi (with Aspvall, Bengt) A polynomial time algorithm for solving systems of linear inequalities with two variables per inequality. 20th Annual Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 205–217, IEEE, New York, 1979. (See 82x68004) 68C25 (65F99, 68B10, 90B10, 90C05)

A polynomial solution to the undirected two paths problem. J. Assoc. Comput. Mach. 27 (1980), no. 3, 445-456. (H.-J. Voss) 82a:05061 05C38 (68C25, 68E10) SIAM J. Comput. 9

A multiterminal minimum cut algorithm for planar graphs. SIAM J. Cor. (1980), no. 2, 219–224. (E. Rodney Canfield) 82c:68027 68C25 (05C10, 05C35, 05C11)

(with Aspvall, Bengt) A polynomial time algorithm for solving systems of linear inequalities with two variables per inequality. SIAM J. Comput. 9 (1980), no. 4, 827-845. (Authors' summary) 82a:68052 68C05 (65F30, 68B10, 90C05)

(with Perl, Yehoshua) Efficient optimization of monotonic functions on trees. CAAP '81 (Proc. Sixth Collog., Genoa, 1981), pp. 332-339, Lecture Notes in Comput. Sci., 112, Springer, Berlin, 1981. (Authors' summary) 82h:68068 68C25 (68E10, 90C39) Another look at the degree constrained subgraph problem. Inform. Process. Lett. 12 (1981), no. 2, 89-92. (Charles H. C. Little) 82e:05109 05C70 (05C35)

(with Even, Shimon) An on-line edge-deletion problem. J. Assoc. Comput. Mach. 28 (1981), no. 1, 1-4. (Authors' summary) 82j:68058 68E10 (05C40) m, M. P. (with Kim, S. D.; Lee, Y. J.) Numerical experience from the computation of tidal waves by the finite element methods. (Korean. English summary) Ulsan Inst. Tech. Rep. 11 (1980), no. 2, 301-309. (Authors' summary) 82a:86001 86A05 (65N30).
na, Hirohiko Homogeneous Hessian manifolds. Ann. Inst. Fourier (Grenoble) 30 (1980),
no. 3, 91-128. (B. N. Kimel'fel'd) 82a:53054 53C30 (53C25)

no. 3, 91-128. (B. N. Kimel'fel'd) 82a:53054

na, Masasuke (with Kawakami, Masaaki; Kita, Yoshiyuki) Theory of invariance and its applications. III. Design of observers for nonlinear systems. (Japanese. English summary) Systems and Control 24 (1980), no. 9, Special Issue on Recent Sensors and Systems Techniques, 621-629. (Authors' summary) 82m:93016b 93B10 (58F40)

Theory of invariance and its applications. II. Canonical form. (Japanese. English nary) Systems and Control 24 (1980), no. 12, 816-824. (Author's summary)

93B10 (58F40)

mada, Hideo (with Shibata, Chōkō) The g-hypercone of a Minkowski space. Tensor (N.S.) 35 (1981), no. 1, 73–85. (H. Rund) 82m:53028 53B40

ara, Norio Stabilité locale de la première valeur propre du laplacien pour le problème de Dirichlet. (English summary) C. R. Acad. Sci. Paris Sèr. I Math. 292 (1981), no. 13, 617-619. (Author's summary) 82f:35144 35P15 (49G05)

Formulas for diffusion approximations of some gene frequency models. J. Math. Kyoto Univ. 21 (1981), no. 1, 19–45. (Thomas G. Kurtz) 82:60136 60170 (92A10) nano, Takashi On helices and multiple Wiener integrals of a Gaussian automorphism

Tôhoku Math. J. (2) 33 (1981), no. 1, 103-107. (Joseph Horowitz) 82h:60071 (60G10, 60H05)

nao, Eikoh (with Aiton, E. J.) Gorai Kinzö's study of Leibniz and the I ching hexagrams. Ann. of Sci. 38 (1981), no. 1, 71-92. (Eberhard Knobloch) 82i:01017 01A45 (01A25)

nbo, Masaru (with D'Ambrosio, Ubiratan; Krivošein, L. E.; Mangeron, Dumitru Ion) Méthode unitaire d'étude des différentes classes de problèmes "bien posés" concernant certains systèmes intégro-différentiels non linéaires aux opérateurs polyvibrants et aux autocontrôles dans les limites d'intégration. (Spanish summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 2, 283-295. (Sergiu Aizicovici) 82a:45017

aborski, Ehud Variational inequalities arising in the theory of two-dimensional potential flows. Nonlinear Anal. 5 (1981), no. 4, 433-444. (J. D. Logan) 82g:76012 76B99 (35O20, 49A29)

emura, Etsujiro (with Bondarenko, B. A.; Mangeron, Dumitru Ion; Santos, J. P. de Oliveira) Problèmes concernant certaines extensions des équations polyvibrantes, équations de Mangeron. (Romanian summary) Bul. Inst. Politehn. Iași Secț. I 26(30) (1980), no. 1-2, 9-12. (Authors' summary) 82b:35146 35Q99

(with Mori, Yasuchika) On a shift of eigenvalues of a matrix by using a solution of an algebraic Riccati equation. Internat. J. Control 32 (1980), no. 1, 73-80. (Valeriu 15A18 (93D15) Prepelită) 82b:15004

(with Kobayashi, Hisato) Note on a property of linear control systems. Internat. J.

Control 33 (1981), no. 6, 1171-1176. (Authors' summary) 82;-93020 93C05

Shimi, I. N. (with Crow, L. H.) Estimation using type I censoring for a class of life-time distributions. J. Statist. Plann. Inference 4 (1980), no. 1, 91-97. (Adhir K. Basu) 82a-62052 62F12 (62N05)

mizu, Akinobu (with Shiga, Tokuzo) Infinite-dimensional stochastic differential equations and their applications. J. Math. Kyoto Univ. 20 (1980), no. 3, 395-416. (Ju. L. Daleckii) 82i:60110 60H10 (60J60, 60K35, 82A05, 92A10)

mizu, Atsushi Remarks on theta series. Tsukuba J. Math. 4 (1980), no. 1, 15-19. (H. M. Farkas) 82a:14018 14K25 (33A25)

nizu, Hiroshi (with Aizawa, Yōji) An exact analysis of the sliding motion in contractile system: a simplified model of muscle system. Bull. Math. Biol. 41 (1979), no. 6, 813-828. (Authors' summary) 82k:92018 92A09 (73P05)

nizu, Kiyotaka (with Aiyoshi, Eitaro) Hierarchical multi-objective decision systems and r-decentralized systems for general resource allocation problem. Keio Engrg. Rep. 33 (1980/81), no. 2, 13-29. (Authors' summary) 82j:90027 90B05 (90C30, 90C31)

(with Aiyoshi, Eitaro) A new computational method for Stackelberg and min-max problems by use of a penalty method. IEEE Trans. Automat. Control 26 (1981), no. 2, 460-466. (Authors' summary) 82;90882 90D05 (90C30)
(with Aiyoshi, Eitaro) Hierarchical decentralized systems and its new solution by a

barrier method. IEEE Trans. Systems Man Cybernet. 11 (1981), no. 6, 444-449. (Authors' summary) 82k:90107 90C31

izu, Kunio (with Iwase, K.) Uniformly minimum variance unbiased estimation in lognormal and related distributions. Comm. Statist. A-Theory Methods 10 (1981), no. 11, 1127-1147. (Authors' summary) 82f:62062 62F10

mizu, Toru (with Wadati, Miki) A new integrable nonlinear evolution equation. Progr. Theoret. Phys. 63 (1980), no. 3, 808-820. (Authors' summary) 82g:35112 35Q20

(with Wadati, Miki; Ichikawa, Yoshi H.) Cusp soliton of a new integrable nonlinear evolution equation. Progr. Theoret. Phys. 64 (1980), no. 6, 1959-1967. (Authors' summary) 82e:35077 35Q20 (81CO5) summary) 82e:35077

nizu, Toshihiro (with Morioka, N.) Transition between turbulent and periodic states in the Lorenz model. Phys. Lett. A 66 (1978), no. 6, 447-449. (Authors' sur 58F13 (76F99, 86A10)

(with Morioka, N.) Transient behavior in periodic regions of the Lorenz model. Phys. Lett. A 69 (1978/79), no. 3, 148-150. (From the text) 82e:58069
 58F13 (86A10) (with Morioka, N.) On the bifurcation of a symmetric limit cycle to an asymmetric one in a simple model. Phys. Lett. A 76 (1980), no. 3-4, 201-204. (Joseph Ford) 58F13 (34C05)

Asymptotic form of a strange attractor. Phys. Lett. A 84 (1981), no. 3, 85-88. (P. J. mes) 82;58084 58F13 (70K50) Holmes) 82i:58084

nizu, Yasuhiro (with Sekiguchi, Jirō) Simple singularities and infinitesimally symmetric aces. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 1, 42-46. (Wim H. Hesselink) te:17007 17B20 (14J17)

a, Yasuhiro (with Goto, Shiro) On Rees algebras over Buchsbaum rings. J. Math. Kyoto Univ. 20 (1980), no. 4, 691-708. (P. Schenzel) 82c:13028 13H10 (14B15)

daira, Kazuo In memory of Ichirō Yamamoto. (Japanese) Sûgakushi Kenkyû No. 78 (1978), 86-88. (Editors) 82f:01143 01A70

On the Zatsu-shū kyūshō sanpō. (Japanese) Sûgakushi Kenkyû No. 85 (1980), 18-19. (S. Hitotumatu) 82k:01012 01A27

Works of Noribumi Okamoto. (Japanese) Sûgakushi Kenkyû No. 86 (1980), 31-41. (K. Masuda) 82j:01068 01A70

ura, Shun Entire solutions of a polynomial difference equation. J. Fac. Sci. Univ. Tokyo Sect. IA Math. 28 (1981), no. 2, 253-266. (I. N. Baker) 82j:30029

ner (with Cardoso Dias, Penha Maria) A critique of Jaynes' maximum entropy nony, Ab principle. Adv. in Appl. Math. 2 (1981), no. 2, 172-211. (Lawrence Sklar) 82f:82006 82A05

nura, Goro The periods of abelian varieties with complex multiplication and the special values of certain zeta functions. Abelian functions and transcendental numbers (Colloq., École Polytech., Palaiseau, 1979) (French). Mém. Soc. Math. France (N.S.) 1980, no. 2, 103-106. (A. I. Vinogradov) 82h:10041 10D24 (10D25, 14K22)

Corrections to: "The special values of the zeta functions associated with Hilbert modular forms" [Duke Math. J. 45 (1978), no. 3, 637-679; MR 80a:10043]. Duke Math. 10D20 J. 48 (1981), no. 3, 697. (Editors) 82j:10051

Shin, Joon Kook (with Kim, Jongsik; Kim, Jung Soo) Unsolvability of the Mizohata operator. Bull. Korean Math. Soc. 18 (1981), no. 1, 9-13. (Jorge Hounie) 82k:35003 35A07 (32F20, 35D05, 58G07)

nar, J. (with Farber, N.) Approximate solution of singularly perturbed nonlinear evasion games. J. Optim. Theory Appl. 32 (1980), no. 1, 39-73. (E. G. Al'breht) 82f:90112 90D25

ba. Yutaka (with Fukuchi, Mitsuru; Sakata, Makoto) Physical theory of measuring process. A critical review. Keio Engrg. Rep. 33 (1980/81), no. 1, 1-12. (Franklin E. Schroeck, Jr.) 82i:81015 81B99 (81D99)

brot, Marvin Water waves over periodic bottoms in three dimensions. J. Inst. Math. Appl. 25 (1980), no. 4, 367-385. (Tommaso Ruggeri) 82e:76016 76B15 (35O20) (with Kaniel, Shmuel) The Boltzmann equation. II. Some discrete velocity models

(French summary) J. Mécanique 19 (1980), no. 3, 581-593. (H. Wakita) 82c:76087 76P05 (45K05, 82A40) ng stream. Canad. Math. Bull. 24 (1981), no. 1, 3-12.

(Alberto Valli) 82i:35167 35R35 (76B15) (with Reeder, John) Three-dimensional, nonlinear wave interaction in water of constant depth. Nonlinear Anal. 5 (1981), no. 3, 303-323. (Alberto Valli) 82i:35168

35R35 (76B15) (with Hewgill, Denton E.; Reeder, John) Some exact solutions of the nonlinear problem of water waves. Pacific J. Math. 92 (1981), no. 1, 87-109. (Alberto Valli) 35R35 (76B15)

The solitary wave with surface tension. Quart. Appl. Math. 39 (1981/82), no. 2, 287-291. (K. K. Puri) 82i:76016 76B25 (35Q20)

(with Reeder, John) On Wilton ripples. I. Formal derivation of the ph Wave Motion 3 (1981), no. 2, 115-135. (E. G. Broadbent) 82e:76015

ndo, Yuji (with Sakawa, Yoshiyuki) On global convergence of an algorithm for optimal control. IEEE Trans. Automat. Control 25 (1980), no. 6, 1149-1153. (F. M. Kirillova) 49C20

ne, Eugene P. (with Wehrly, Thomas E.) Influence curves of estimators for directional data. Biometrika 68 (1981), no. 1, 334-335. (Authors' summary) 82f:62068 nese) Sûgakushi Kenkyû

noda, Sakae Origin of myriad system of numeration. I. (Japanes No. 86 (1980), 4-7. (Joong Fang) 82m:01013a 01A25 (01A27) Origin of myriad system of numeration. II. (Japanese) Sûgakushi Kenkyû No. 87 (1980), 8-14 (1981). (Joong Fang) 82m:01013b 01A25 (01A27)

noda, Shoji (with Sakuma, Hiroshi; Yasuda, Tomoshige) Seminatroids. 1979
International Symposium on Circuits and Systems (Tokyo, 1979), pp. 1004–1007, IEEE,
New York, 1979. (See 82e:94002) 94C30

On the characteristic polynomial of the adjacency matrix of the subdivision graph of graph. Discrete Appl. Math. 2 (1980), no. 4, 349-351. (A. J. Schwenk) 82d:05081

(with Kajitani, Yoji; Chen, Wai Kai) Directed trees and bases. Fourteenth Asilo Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 173-177, IEEE, New York, 1981. (See 82d:93001) 05C20 (05B35)

(with Kawamoto, Tatsuya) Central trees and critical sets. Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 183-187, IEEE, New York, 1981. (See 82d:93001) 05C05 (94C15)

nozaki, Nobuo Estimation of a multivariate normal mean with a class of quadratic loss functions. J. Amer. Statist. Assoc. 75 (1980), no. 372, 973-976. (Steven Arnold) 62F10 (62C15)

ntani, Takuro On liftings of holomorphic cusp forms. Automorphic forms, representa and L-functions (Proc. Sympos. Pure Math., Oregon State Univ., Corvallis, Ore., 1977),
Part 2, pp. 97–110, Proc. Sympos. Pure Math., XXXIII, Amer. Math. Soc., Providence, R.I., 1979. (Stephen Gelbart) 82e:10051 10D40 (22E50)

A proof of the classical Kronecker limit formula. Tokyo J. Math. 3 (1980), no. 2, 191-199. (Larry J. Goldstein) 82f:10038 10D25 (12A70)

A proof of the Burkholder theorem for martingale transforms. Proc. Amer. Math. Soc. 82 (1981), no. 2, 278-279. (Author's summary) 82c:60080 See also Gérardin, Paul. 82b:10036

Shin'ya, Hitoshi Irreducible Banach representations of locally compact groups of a certain J. Math. Kyoto Univ. 20 (1980), no. 2, 197-212. (G. L. Litvinov) 82c:22009 22D12 (22D30)

oda, Tetsuji Supersingular K3 surfaces. Algebraic geometry (Proc. Summer Meeting, Unio. Copenhagen, Copenhagen, 1978), pp. 564–591, Lecture Notes in Math., 732, Springer, Berlin, 1979. (Piotr Blass) 82c:14030 14J20 (14J25)

iode, Shogo (with Ishii, Hiroaki; Nose, Tovokazu; Nishida, Toshio) Perishable inventory management subject to stochastic leadtime. European J. Oper. Res. 8 (1981), no. 1, 76-85. (Authors' summary) 82k:90047 90B05

(with Ichimori, Tetsuo; Ishii, Hiroaki; Nishida, Toshio) Minimum spanning tree with normal variates as weights. (Japanese summary) J. Oper. Res. Soc. Japan 24 (1981), no. 1, 61-66. (Authors' introduction) 82f:90095 90C35

(with Ishii, Hiroaki; Nishida, Toshio) Chance constrained spanning tree problem. (Japanese summary) J. Oper. Res. Soc. Japan 24 (1981), no. 2, 147-158. (James R. Evans) 82i:90084 90C15 (05C05)

Shiohama, Katsuhiro (with Greene, R. E.) Convex functions on complete noncompact manifolds: topological structure. Invent. Math. 63 (1981), no. 1, 129-157. (Victor Bangert) 82e:53065 53C20

See also Nakagawa, Hisao, 82i:01057

Shiokawa, Iekata (with Kaneiwa, Ryuji) On the sum of digits of primes in imaginary quadratic fields. Tsukuba J. Math. 4 (1980), no. 1, 127-132. (Ernst Heppner) 82h:12002

On irrationality of the values of certain series. Seminar on Number Theory,

1980-1981 (Talence, 1980-1981), Exp. No. 30, 15 pp., Univ. Bordeaux I, Talence, 1981. 10F35

Correction to my paper: "Arithmetic properties of certain power series with algebraic coefficients" [Seminar on Number Theory, 1979-1980, Exp. No. 27, Univ. Bordeaux I, Talence, 1980]. Seminar on Number Theory, 1980-1981 (Talence, 1980-1981), Exp. No. 30A, 1 p., Univ. Bordeaux I, Talence, 1981. (See 82m:10006)

Shiota, Masahiro Sur la factorialité de l'anneau des fonctions lisses rationnelles. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 67-70. (Author's summary) 82b:14009 14E40 (13F15, 58C27)

(with Bochnak, Jacek; Kucharz, Wojciech) On equivalence of ideals of real global analytic functions and the 17th Hilbert problem. *Invent. Math.* **63** (1981), no. 3, 403-421. (Jean-Jacques Risler) **82**i:32020 32B05 (32C05)

Shippy, D. J. (with Rizzo, F. J.) The boundary integral equation method with application certain stress concentration problems in elasticity. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 4, 381-393. (Authors' summary) 82h:73016 73C45 (45L10, 73K30) (with Reddy, C. T.) Alternative integration formulae for triangular finite elements.

Internat. J. Numer. Methods Engrg. 17 (1981), no. 1, 133-139. (Authors' summary) 65D30 82a:65020

Shirafuji, Takeshi (with Hayashi, Kenji) Gravity from Poincaré gauge theory of the fundamental particles. I. General formulation. Progr. Theoret. Phys. 64 (1980), no. 3, 866-882. (P. K. Smrz) 82k:83041a 83D05 (81E10, 83C45)

(with Hayashi, Kenji) Gravity from Poincaré gauge theory of the fundamental rticles. II. Equations of motion for test bodies and various limits. Progr. Theoret. Phys. 64 (1980), no. 3, 883-896. (P. K. Smrz) 82k:83041c 83D05 (81E20, 83C45)

(with Hayashi, Kenii) Gravity from Poincaré gauge theory of the fundamental particles. III. Weak field approximation. Progr. Theoret. Phys. 64 (1980), no. 4, 1435–1452. (P. K. Smrz) 82k:83041e 83D05 (81E20, 83C45)

(with Hayashi, Kenji) Gravity from Poincaré gauge theory of the fundamental particles. IV. Mass and energy of particle spectrum. Progr. Theoret. Phys. 64 (1980). no. 6, 2222-2241. (P. K. Smrz) 82k:83041f 83D05 (81E20, 83C45)

(with Hayashi, Kenji) Gravity from Poincaré gauge theory of the fundamental particles. V. The extended Bach-Lanczos identity. Progr. Theoret. Phys. 65 (1981), no. 2,

S25-532. (P. K. Smrz) 82:e3041g 83005 (83C45) (with Hayashi, Kenji) Errata: "Gravity from Poincaré gauge theory of the fundamental particles. I. General formulation". Progr. Theoret. Phys. 65 (1981), no. 6, 2079. (P. K. Smrz) 82:e3041b 83D05 (81E10, 83C45) (with Hayashi, Kenji) Erratum: "Gravity from Poincaré gauge theory of the

fundamental particles. II. Equations of motion for test bodies and various limits". Progr. Theoret. Phys. 65 (1981), no. 6, 2079. (P. K. Smrz) 82k:83041d 83D05 (81E20, 83C45)

ahata, Shingo (with Araki, Takaharu) Rank tests for ordered alternatives in randomized blocks. J. Japan Statist. Soc. 11 (1981), no. 1, 27-42. (I. R. Savage) 82h:62124

rai, Susumu On Galois groups of class two extensions over the rational number field. Nagoya Math. J. 75 (1979), 121-131. (Yoshiomi Furuta) 821:12003 12A35 (12A60)
On the central ideal class group of cyclotomic fields. Nagoya Math. J. 75 (1979), 133-143. (Yoshiomi Furuta) 821:12004 12A35 (12A50)

- rains, Kenichi (with Kurata, Masahiro) A generalization of a theorem of Marotto. Proc. Japan Acad. Ser. A Math. Sci. 55 (1979), no. 8, 286–289. (M. I. Brin) 82m:58042 58F15 (34C35)
 - (with Kurata, Masahiro) A generalization of a theorem of Marotto. Nagoya Math. J. 82 (1981), 83-97. (Frederick R. Marotto) 82g:58061 58F13 (26B99) rakawa, Isao (with Tsukiyama, Shuji; Kub, Ernest S.) An algorithm for single-row
- routing with prescribed street congestions. IEEE Trans. Circuits and Systems 27 (1980), no. 9, 765-772. (Authors' summary) 82z-94132 94C99 (with Tsukiyama, Shuji; Ozaki, H.; Ariyoshi, Hiromu) An algorithm to enumerate all cutsets of a graph in linear time per cutset. J. Assoc. Comput. Mach. 27 (1980), no. 4, 619-632. (Authors' summary) 82z-68132 68E10 (68C25)
- hiro (with Yamamoto, Sumiyasu; Kuwada, Masahide) Characteristic polynomials of the information matrices of balanced fractional 2^m factornal designs of higher (2l+1) resolution. Essays in probability and statistics, pp. 73-94, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 82x63096 62K15

 Tokyo, 1976. (Authors' summary) 82x63096 62K15

 Taking a factorial designs of resolution IV derived from balanced arrays of strength four. J. Japan Statist. Soc. 9 (1979), no. 1, 19-27. (K. G. Russell) 82t.62146 62K15

 Taking a factorial designs of resolution IV derived from balanced arrays of strength four. J. Japan Statist. Soc. 9 (1979), no. 1, 19-27. (K. G. Russell) 82t.62146
- rall, Satish Inverse of the Laplacian on a plane domain with corners. J. Indian Mati Soc. (N.S.) 42 (1978), no. 1-4, 283-294 (1979). (Author's introduction) 82k:31003 31A05 (35J99, 47G05)
 - Generalized solution of a nonlinear elliptic boundary value problem of astrophysics. dian J. Pure Appl. Math. 12 (1981), no. 3, 393-399. (Author's summary) 821:85009 85A99 (35Q20)
- a et-Shirbeeny, El-Hosseiny See Taha El-Shirbeeny, El-Hosseiny rer, Hampton N. (with Dutton, John A.) The branching hierarchy of multiple solutions in a model of moist convection. J. Atmospheric Sci. 36 (1979), no. 9, 1705–1721. (R. K. 76E30 (35B32, 86A10) Jain) 82i:76044
 - Bifurcation and stability in a model of moist convection in a shearing environment. J. Atmospheric Sci. 37 (1980), no. 7, 1586-1602. (H. J. Weinitschke) 82k:86006 86A10 (58E07)
- rey, James Nonnegative matrices and nonnegativity constrained linear systems. Pure Appl. Math. Sci. 14 (1981), no. 1-2, 1-8. (Author's summary) 82j:90045 90C05 rev. Jan
- hirkov, D. V. See Širkov, D. V. hirley, Edward S. An unnoticed flaw in Barker and Achinstein's solution to Goodman's new riddle of induction. Philos. Sci. 48 (1981), no. 4, 611-617. (Editors) 82m:03031
- rley, John W. Thomas Harriot's lunar observations. Science and history, pp. 283-308, Studia Copernicana, XVI, Ossolineum, Wrocław, 1978. (See 82e:01003) Shirokov, Yu. M. See Širokov, Ju. M.
- Shiryaev, A. N. See Širjaev, A. N. Shiryayev, A. N. See Širjaev, A. N.
- Shisha, Oved (with Haber, Seymour) On the location of the intermediate point in Taylor's theorem. General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978), pp. 143-144, Birkhäuser, Basel, 1980. (M. Z. Berkolaiko) 821:26006 26A24
 - Area of a triangle and the product of its side lengths. General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978), pp. 465-466, Birkhäuser, Basel, 1980. (Ju. Burago) 82i:51033 51M25
 - (with Byrnes, J. S.) The order of magnitude of unbounded functions and their degree of approximation by piecewise interpolating polynomials. J. Approx. Theory 30 (1980), no. 1, 53-58. (Hans-Jürgen Albrand) 82&41002 41A05
 - no. 1, 35-38. (Hans-Jurgen Autorand) Base-14002 41A05
 (with Bacopoulos, Alexis) Absolute and relative approximation with a singularity. J.
 Approx. Theory 30 (1980), no. 2, 121-128. (G. D. Taylor) 82d-41021 41A28 (41A10)
 Tchebycheff systems and best partial bases. Pacific J. Math. 86 (1980), no. 2, 579-592. (Philip W. Smith) 82i-41034 41A50
 - (with Hasson, Maurice) Approximation by lacunary polynomials: a converse theorem. Approximation theory and applications (Proc. Workshop, Technion-Israel Inst.
 - Tech., Haifa, 1980), pp. 311-317, Academic Press, New York, 1981. (M. Tomić)
- (with Davis, Daniel) Simple proofs of the fundamental theorem of arithmetic. Math. Mag. 54 (1981), no. 1, 18. (From the text) 82h:10002 10A05
- (with Nair, Mohan) On some results of Erdős and Mirsky. J. London Math. Soc. (2) 22 (1980), no. 2, 197-203. (Stanley J. Benkoski) 82b:10060 10H25 (10A20)
 - On the number of square-full integers between successive squares. Mathematika 27 (1980), no. 2, 171-178 (1981). (E. Grosswald) 82i:10055 10H15
- e, Jan Shyong (with Niederreiter, Harald) Equidistribution of linear recurring quences in finite fields. II. Acta Arith. 38 (1980/81), no. 2, 197-207. (L. Kuipers) 10F40
- Shiva, S. G. S. (with Allard, P. E.; Séquin, G.) A class of composite codes. IEEE Trans. Inform. Theory 27 (1981), no. 2, 260-262. 82i:94027 94B15
 Shivaji, R. (with Brown, K. J.; Ibrahim, M. M. A.) S-shaped bifurcation curves. Nonlinear
- Anal. 5 (1981), no. 5, 475-486. (M. Shearer) 82h:35007 35B32 (35J65, 58E07)
- surthy, C. G. (with Kulkarni, V. N.) The radius of univalence and starlikeness of some classes of regular functions. J. Karnatak Univ. Sci. 23 (1978), 12–17. (Edward J. Moulis, Jr.) 82e:30014 30C45
- Shizgal, B. A Gaussian quadrature procedure for use in the solution of the Boltzmann equation and related problems. J. Comput. Phys. 41 (1981), no. 2, 309-328. (Author's summary) 82h:65021 65D32 (82A40)
- Shizuma, Ryoji (with Uno, Saeko) Poincaré's last geometric theorem. (Japanese. English summary) Sci. Rep. Tokyo Woman's Christian Univ. No. 48-52 (1979), 571-583 (1980). (A. Morimoto) 82j:54090 54H20 (01A60, 55M20, 58F10)
- drov, V. G. See Škodrov, V. G.
- Shlesinger, Michael F. (with Hughes, Barry D.) Analogs of renormalization group transformations in random processes. Phys. A 109 (1981), no. 3, 597-608. (Authors'
 - with Hughes, Barry D.; Montroll, Elliott W.) Random walks with self-similar clusters. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 6, part 1, 3287-3291. (Authors' summary) 82m:60096 60J65 (82A05)
- oscillator. Nuclear Phys. A 357 (1981), no. 1, 157–170. (N. D. Sengupta) \$2d:81041 81C20 (33A65, 42B10, 81G35)

- osman, S. B. See Ślosman, S. B. nidt, A. A. See Šmidt, A. A.
- muely, Zahava The tensor product of distributive lattices. Algebra Universalis 9 (1979), no. 3, 281-296. (R. S. Pierce) 822:06609 06D10 (06A15) neidman, V. A. See Šneidman, V. A.
- neier, Michael Path-length distances for quadtrees. Inform. Sci. 23 (1981), no. 1, 49-67. (Author's summary) 82a:68130 68E10
- r, Steven (with Harnad, John; Vinet, Luc) Invariance considerations and solutions of the SU(2) Yang-Mills equations in compactified Minkowski space. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 263-266, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81004) 81E10 (53C05)
 - (with Harnad, John; Vinet, Luc) Invariance conditions for gauge fields.

 Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 296–299, Lecture Notes in Phys., 116, Springer, Berlin, 1980. (N. J. Hitchin)
 - 81E99 (53C05) (with Harnad, John; Tafel, J.) Canonical connections on Riemannian s spaces and solutions to the Einstein-Yang-Mills equations. J. Math. Phys. 21 (1980), no. 8, 2236–2240. (Andrzej Trautman) 82j:53055 53C05 (81E10, 83C20)
 - (with Harnad, John; Vinet, Luc) Group actions on principal bundles and invariance conditions for gauge fields. J. Math. Phys. 21 (1980), no. 12, 2719–2724. (Daniel A. Akyeampong) 82c:53028 53C05 (55R10, 58F35, 81E10)
- (with Burns, Dan, Jr.) Projective connections in CR geometry. Man 33 (1980/81), no. 1, 1-26. (S. M. Webster) 82h:53030 53B35 (32F25) Shnol', E. E. See Šnol', È. È.
- Shoaf, James M. (with Meyer, Carl D., Jr.) Updating finite Markov chains by using techniques of group matrix inversion. J. Statist. Comput. Simulation 11 (1980), no. 3-4, 163-181. (Alan F. Karr) 82d:60122 60J10 (15A09)
 - (with Hartwig, Robert E.) Invariance, group inverses and parallel sums. ine Math. Pures Appl. 25 (1980), no. 1, 33-42. (Jean-Marie Goursaud) 82e:16007 16A30
- el Shobaky, Entisarat See El Shobaky, Entisarat
- emaker, Christine (with Rovinsky, Robert B.) Operations research: applications in agriculture. Operations research (Duluth, Minn., 1979), pp. 151–174, Proc. Sympos. Appl. Math., 25, Amer. Math. Soc., Providence, R.I., 1981. (Authors' summary) 82k:90071
- emaker, Nancy E. (with Ecker, J. G.) Multiple objective linear programming and the tradeoff-compromise set. Multiple criteria decision making theory and application (Proc. Third Conf., Hagen/Königswinter, 1979), pp. 60-73, Lecture Notes in Econom. and Math. Systems, 177, Springer, Berlin, 1980. (Roman Słowiński) 82c:90087 90C31 (90A10,
- (with Ecker, J. G.) Selecting subsets from the set of nondominated vectors in multiple objective linear programming. SIAM J. Control Optim. 19 (1981), no. 4, 505-515. (Authors' summary) 82;90070 90C31 (90C30)
- het, J. L. (with Bauer, Frances; Betancourt, O.; Garabedian, P.) Beta limits for Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 1, part 1, 1-3. (Authors' torsatrons.
- summary) 82a:76088 76W05 (65P05, 76E25)
 shoji, Takao (with Pasternack, Bernard) Fitting a Gompertz curve to adolescent standing Tokyo, 1976. (Authors' summary) 82b:62143 62P10 (62F10, 92A07, 92A10) (with Yamashita, Yuji; Tarumi, Tomoyuki) Generalization of Fisher's
 - z-transformation. J. Statist. Plann. Inference 5 (1981), no. 4, 347-354. (Authors' ary) 82m:62130 62H20
- Shōji, Gotō Estimation and adjustment of regression coefficients. A study of ridge estimation. (Japanese) J. Japan Statist. Soc. 6 (1976), no. 2, 39-61. 82a:62100 Shoji, Kunitaka On right self-injective regular semigroups. Proceedings of the 4th
- aguchi, 1980), pp. 80-85, Yamaguchi Symposium on Semigroups (Yamaguchi Univ., Yam Univ., Yamaguchi, 1980. (See 82f:20008) 20M 20M10
 - Injective hulls of certain right reductive semigroups as right S-systems. Mem. Fac. Sci. Shimane Univ. 14 (1980), 25-34. (John M. Howie) 82e:20082a
 - Right self-injective semigroups are absolutely closed. Mem. Fac. Sci. Shimane Univ. 14 (1980), 35-39. (John M. Howie) 82e:20082b 20M99
- oji, Nobuyoshi (with Maruoka, Akira; Kimura, Masayuki) Pattern decomposition for tessellation automata. *Theoret. Comput. Sci.* 14 (1981), no. 3, 211-226. (Authors' summary) 82f:68058 68D20
- ooh, A. (with Bernstein, B.) The stress clock function in viscoelasticity. J. Rheol. 24 (1980), no. 2, 189-211. (Editors) 82e:73042a 73F15 (with Bernstein, B.) Erratum: "The stress clock function in viscoelasticity". J.
- (with Boba, N.; Soeda, Takash; Sawaragi, Yoshikazu) An application of the Shoman, T. (with Baba, N.; Soeda, Takash; Sawaragi, Yoshikazu) An application of the

- stochastic automaton to the investment game. Internat. J. Systems Sci. 11 (1980), no. 12, 1447-1457. (From the introduction) 82c:90096 90D10 (68D25, 68D27)
- nesova, V. K. See Somesova, V. K. on, Kwang Ho On the Cesàro sequence spaces. (Korean summary) Ulsan Inst. Tech. Rep. 11 (1980), no. 2, 297–299. (M. S. Rangachari) 82c:46011 46A45
- 11 (1900), no. 2, 297-299. (M. S. Rangachan) 842-96011 403-404
 Mahwiler, Ron Dilations of reproducing kernels. Probability theory on vector spaces, II
 (Proc. Second Internat. Conf., Blażejewko, 1979), pp. 259-268, Lecture Notes in Math.,
 - 828, Springer, Berlin, 1980. (Boris Pavlov) 82k-47013 47A20
 On age-dependent branching processes with immigration. Comput. Math. Appl. 6 (1980), no. 3, 289–296. (P. Jagers) 82c:60152 60J80 (92A15)
- Shorack, Galen R. Some law of the iterated logarithm type results for the empirical proces Austral. J. Statist. 22 (1980), no. 1, 50-59. (Endre Csaki) 82a:60041 60F15 (62G30) ore, Graham M. Symmetry restoration and the background field method in gauge
- ories. Ann. Physics 137 (1981), no. 2, 262-305. (George Leibbrandt) 82m:81058 81E10 (58E05, 81E15) ore, John E. Minimum cross-entropy spectral analysis. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 2, 230-237. (Author's summary) 82d:94030
- ore, Richard A. Some constructions in α-recursion theory. Recursion theory: its generalisation and applications (Proc. Logic Colloq., Univ. Leeds, Leeds, 1979),

pp. 158-170, London Math. Soc. Lecture Note Ser., 45, Cambridge Univ. Press, Cambridge, 1980. (Gabriel Lolli) 82e:03043 03D60

(with Nerode, Anil) Second order logic and first order theories of reducibility orderings. The Kleene Symposium (Proc. Sympos., Univ. Wisconsin, Madison, Wis., 1978), pp. 181-200, Stud. Logic Foundations Math., 101, North-Holland, Amsterdam, 03D30 (03B15, 03D35, 03F35) 1980. (Barry Cooper) 82g:03078

The degrees of unsolvability: global results. Logic Year 1979-80 (Proc. Seminars and Conf. Math. Logic, Univ. Connecticut, Storrs, Conn., 1979/80), pp. 283-301, Lecture Notes in Math., 859, Springer, Berlin, 1981. (C. G. Jockusch, Jr.) 82k:03065 03D30 (with Harrington, Leo) Definable degrees and automorphisms of n. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 1, 97-100. (Barry Cooper) 82g:03077 03D30

Shore, Terence R. On an inequality of van der Corput and Beth. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 56-57 (1981). (Peter Bullen) 82i:26012 26D15

Trees, Thomas S. (with Hardy, Bonnie R.) Arithmetical semigroup rings. Canad. J. Math. 32 (1980), no. 6, 1361–1371. (Chin-Pi Lu) 824:13019 13F20 (13F05)

(with Stewart, C. L.) On divisors of Fermat, Fibonacci, Lucas and Lehmer numbers. II. J. London Math. Soc. (2) 23 (1981), no. 1, 17-23. (András Sárközi) 10A40

cks, A. F. The class of additively decomposable inequality measures. Econometrica 48 (1980), no. 3, 613-625. (Peter H. Farquhar) 82g:90015 90A08

pukry, H. (with Debney, G. C.) Twisting-type-N space-times possess a nonnull Maxwell field. Lett. Nuovo Cimento (2) 30 (1981), no. 15, 477-480. (Brian O. J. Tupper) 83C20 (83C50)

ralter, R. E. Perturbation of maximal accretive operators with right angle. Portugal. Math. 36 (1977), no. 2, 79-82 (1980), (K. K. Oberai) 82a:47035 47B44

Singular nonlinear evolution equations. Rocky Mountain J. Math. 10 (1980), no. 3, 34G20 (34A60, 47H05, 49A50)

499-507. (A. Pazy) 82c:34077 Shpilewski, E. K. See Špilevskii, E. K.

Shraiman, Boris (with Wayne, C. Eugene; Martin, Paul C.) Scaling theory for noisy period-doubling transitions to chaos. Phys. Rev. Lett. 46 (1981), no. 14, 935-939. (Authors' summary) 82g:70051 70L05 (58F13, 70K05, 82A05) Shramchenko, B. L. See Šramčenko, B. L.

Shreider, Yu. A. See Šreider, Ju. A. Shreve, Steven E. A note on optimal switching between two activities. Naval Res. Logist. Quart. 28 (1981), no. 1, 185-190. (Author's summary) 82b:90120 90C39 (90A11) Reflected Brownian motion in the "bang-bang" control of Brownian drift. SIAM J.

Control Optim. 19 (1981), no. 4, 469-478. (Author's summary) 82g:93055 Shrikhande, Mohan On an inequality satisfied by the parameters of partially balanced incomplete block designs. *Utilitas Math.* 18 (1980), 91-96. (Pavel Tomasta) 82c:05020

rikhande, S. S. (with Bose, R. C.) Baer subdesigns of symmetric balanced incomplete block designs. Essays in probability and statistics, pp. 1-16, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 82b:05023 05B05 (62K10)

Shrira, V. I. See Šrira, V. I.

Shrivastava, S. K. Stability theorems for multidimensional linear systems with variable parameters. Trans. ASME Ser. E.J. Appl. Mech. 48 (1981), no. 1, 174-176. (Author's mary) 82g:93034 93D05 (34D20)

Shrout, Patrick E. (with Levin, Bruce) On extending Bock's model of logistic regression in the analysis of categorical data. Comm. Statist. A—Theory Methods 10 (1981), no. 2, 125-147. (Authors' summary) 82c:62044 62F10

Shteinberg, V. I. See Steinberg, V. I.

Shtern, Yu. M. See Stern, Ju. M.

ub, Michael (with Fathi, Albert) Some dynamics of pseudo-Anosov diffeomorphisms. Travaux de Thurston sur les surfaces, pp. 181-207, Asiérisque, 66-67, Soc. Math. France, Paris, 1979. (See 82m:57003) 58F11 (57N05, 57N37, 58F17)

(with Ruelle, David) Stable manifolds for maps. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 383–392, Lecture Notes in Math., 819, Springer, Berlin, 1980. (M. C. Irwin) 82e:58055 58F10 (58F11) (with Franks, John) The existence of Morse-Smale diffeomorphisms. Topology 20 (1981), no. 3, 273–290. (S. Ju. Piljugin) 821:58049 58F09 (34C35)

ubik, Martin Oskar Morgenstern: mentor and friend. Internat. J. Game Theory 7 (1978), no. 3-4, 131-135. (Editors) 82c:01054 01A70

(with Dubey, Pradeep; Mas-Colell, Andreu) Efficiency properties of strategic market games: an axiomatic approach. Noncooperative approaches to the theory of perfect competition. J. Econom. Theory 22 (1980), no. 2, 339–362. (See 82e:90023) 90A14 (90D10)

(with Dubey, Pradeep) A strategic market game with price and quantity strategies. Z. Nationalökonom. 40 (1980), no. 1-2, 25-34. (From the introduction) 82c:90020 90A14 (90D10)

(with Dubey, Pradeep) Information conditions, communication and general equilibrium. Math. Oper. Res. 6 (1981), no. 2, 186-189. (Authors' summary) 82m:90170

(with Weber, Robert James) Systems defense games: Colonel Blotto, command and control. Naval Res. Logist. Quart. 28 (1981), no. 2, 281-287. (Authors' summary) 82f:90103 90D05

in, Gregory R. Sharp discontinuity tracking applied to explosion problems.

Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 39-60, ARO Rep. 80, 3, U. S. Army Res. Office, Research Triangle Park, N.C., 1980. (Author's summary) 82a:65070 65M25 (76L05) (with Kellogg, R. Bruce; Stephens, A. B.) Uniqueness and the cell Reynolds number SIAM J. Numer. Anal. 17 (1980), no. 6, 733-739. (C. Wayne Mastin) 82c:76047 76D30 (65L10, 92A09)

idze, N. I. See Šubitidze, N. I.

Shucker, David S. Stochastic mechanics of systems with zero potential. J. Funct. Anal. 38 (1980), no. 2, 146-155. (From the text) 82g:81021 81C20

Measurement in stochastic mechanics. J. Math. Phys. 22 (1981), no. 3, 491-494. (N. D. Sengupta) 82k:81012 81B05 (81C20) khman, I. G. See Šuhman, I. G.

Shukla, D. P. Generalized Angelescu polynomial. Mat. Vesnik 3(16)(31) (1979), no. 2,

223-232. (S. Masood) 82e:33015 33A70

Certain transformations of generalised hypergeometric series. Indian J. Pure Appl. Math. 12 (1981), no. 8, 994-1000. (J. L. Fields) 82j:33012 33A35 kla, Kripa Shankar The Pañca-siddhāntikā of Varāhamihira. II. Ganita 28 (1977),

99-116. (A. K. Bag) 82m:01020 01A32

ukla, P. K. (with Bujarbarua, S.; Yu, M. Y.) Near-Alfvénic upper-hybrid envelope solitons. Phys. Lett. A 73 (1979), no. 2, 111-114. (K. K. Puri) 82e:76072 76W05 On Hilbert functions of graded modules. Math. Nachr. 96 (1980), 301-309. (P.

Schenzel) 82i:13025 13H15 (with Yu, M. Y.; Spatschek, K. H.) Alfvén wave excitation of the magnetostatic mode. Phys. Fluids 24 (1981), no. 10, 1799–1801. (Authors' summary) 82j:76101 76X05

Shukla, P. L. Effect of Hall current on the hydromagnetic annular flow subjected to a nonsymmetric magnetic field. J. Indian Acad. Math. 2 (1980), no. 1, 36-42. (E. G.

Broadbent) 82h:76068 76W05 (35J40)
Unsteady viscous channel flow induced by prescribed injection. Rev. Roumain Math. Pures Appl. 26 (1981), no. 7, 1043-1052. (Author's introduction) 82j:76038 76D99

ukla, Prabodh (with Singh, Surjit) Classical and quantum spherical models of spin-glasses: a complete treatment of statistics and dynamics. Phys. Rev. B (3) 23 (1981),

no. 9, 4661-4666. (Authors' summary) 82f:82045 82A42 (82A57)

Shukla, S. K. (with Sridharan, M. R.; Mohanty, S. P.) Stability of strongly regular graphs. Bull. Austral. Math. Soc. 23 (1981), no. 1, 139-142. (J. J. Seidel) 82m:05053

Shukurov, A. M. See Šukurov, A. M. ruiz Shulcloper, José See Ruiz Shulcloper, Jo

Shul'deshov, G. A. See Šul'dešov, G. A.

Shuler, Kurt E. (with Lakatos-Lindenberg, Katja; Seshadri, Venkita; West, Bruce J.) Equal-time second-order moments of a harmonic oscillator with stochastic frequency and driving force. J. Statist. Phys. 23 (1980), no. 6, 755-765. (S. K. Srinivasan) 82i:70028 70L05 (60H10, 82A05)

(with Hanggi, Peter; Oppenheim, Irwin) On the relations between Markovian master equations and stochastic differential equations. *Phys. A* **107** (1981), *no.* 1, 143–157. (S. K. Srinivasan) **82m:60066** 60H10 (60J60, 82A05, 93E03)

Shull, C. S. F. Mean interpolation of entire functions. J. Approx. Theory 30 (1980), no. 1, 41-52. (R. Vermes) 82h:30041 30E10 (30D10)

Shul'man, Z. P. See Sul'man, Z. P.
Shult, Ernest E. (with Shad, Saeed) Near n-gons. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 461-463, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R. I., 1980. (Editors) 82e:05046 05B25
 (with Yanushka, Arthur) Near n-gons and line systems. Geom. Dedicata 9 (1980), no. 1, 1-72. (D. W. Erbach) 82b:51018 51E30 (05B99)

(with Hall, Jonathan I.) Locally cotriangular graphs. Finite geometries and designs (Proc. Conf., Chelwood Gate, 1980), pp. 128–133, London Math. Soc. Lecture Note Ser., 49, Cambridge Univ. Press, Cambridge, 1981. (Brian Alspach) 82j:05091 05C75

Permutation groups with few fixed points. Geometry—von Staudt's point of view (Proc. NATO Adv. Study Inst., Bad Windsheim, 1980), pp. 275-311, NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci., 70, Reidel, Dordrecht, 1981. (P. J. Lorimer) 82j:20011 20B20 (05B25, 51E15)

dtz, Frederic W. Dual maps of Jordan homomorphisms and *-homomorphisms between C*-algebras. Pacific J. Math. 93 (1981), no. 2, 435-441. (E. Størmer) 82g:46101 461.05

Shumovsky, A. S. See Šumovskii, A. S. Shvachka, A. B. See Švačka, A. B.

Shvartsman, M. I. See Švarcman, M. I. Shvartsman, V. F. See Švarcman, V. F.

Shvedov, A. M. See Švedov, A. M.

Shwartz, G. (with Gutman, Shaul) A root-clustering theorem. IEEE Trans. Auto. Control 26 (1981), no. 4, part 1, 940. (Authors' summary) 82m:15014

Shwartz, Moshe Spherical random field model. Phys. Lett. A 76 (1980), no. 5-6, 408-410. 82A42 (82A67) (Author's summary) 82b:82054

Shyam, Radhe (with Sharma, V. D.) Propagation of discontinuities along bicharacteristics in the unsteady flow of a relaxing gas. Proc. Indian Acad. Sci. Sect. A Math. Sci. 89 (1980), no. 3, 183-192. (Tommaso Ruggeri) 824:76067 76N15 (35L67, 76L05) 76N15 (35L67, 76L05)

(with Sharma, V. D.) Nonequilibrium relaxing gas flow behind three-dimensional unsteady curved shock wave. Z. Naturforsch. A 35 (1980), no. 11, 1166–1170. (J. F. Clarke) 82c:76075 76L05 (35L67, 53A05)

(with Sharma, V. D.; Menon, V. V.) Behaviour of finite amplitude waves in a radiating gas. (German and Russian summaries) Z. Angew. Math. Mech. 61 (1981), no. 9, 443–448. (Authors' summary) 82m:85003 85A25 (76L05)

dar, R. K. (with Rajasethupathy, K. S.) Formal power series for L-systems. J. Combin. Inform. System Sci. 5 (1980), no. 2, 91-103. (Authors' summary) 82a:68153 68F05

Shyr, H. J. See Shih, Hui Jan

rikas, P. D. (with Jannussis, A. D.; Papaloucas, L. C.) Eigenfunctions and eigenvalues of the q-differential operators. Hadronic J. 3 (1979/80), no. 6, 1622-1632. (R. C. Gilbert) 82g:81029 81C99 (34B25, 47B38, 47E05)

Sibani, Paolo (with Pedersen, J. Boiden) A perturbation solution of the Smoluchowski equation in the weak potential region. J. Chem. Phys. 74 (1981), no. 12, 6934-6942. (Authors' summary) 82h:82054 82A70

lius, Patrick Converging objects. Proceedings of the Conference on Convergence Structures (Cameron Univ., Lawton, Okla., 1980), pp. 139-158, Cameron Univ., Lawton, Okla., 1980. (From the summary) 82b:54013 54A20

Sibgatullin, G. H. (with Israfilov, R. H.) Asymptotic behavior of solutions of a second-order differential equation with retarded argument. (Russian) Kuihyšev. Gos. Ped. Inst. Noučn. Trudy 232 (1979), Differencial. Uravnenija i Mat. Fiz. No. 1, 32-37. (Pavol Marulšiak)

Sibirskii, K. S. Unitary invariants of differential systems. (Russian) Algebraic invariants of dynamic systems. Mat. Issled. No. 55 (1980), 71-77, 150. (C. S. Coleman) 82m:34015

(with Daniljuk, V. I.) Syzygies between centroaffine invariants of a quadratic differential system. (Russian) Differencial nye Uraonenija 17 (1981), no. 2, 210–219, 387. (Juri Bogdanov) 82f:34005 34A20 (12H05, 53A55)

- See also All-Union Conference: Qualitative Theory of Differential Equations, 82¢34002 and Boundary value problems for partial differential equations, 82¢35007 irskii, V. K. q-weight of a graph. (Russian) Izv. Akad. Nauk Moldav. SSR Fiz.-Tehn. Mat. Nauk 1900, no. 1, 15–19, 92. (Slobodan Simic) 82x05000 05 (05C30)
- bley, David A. (with Harris, Morton E.) Generalizations of certain fundamental results on ite groups. Proc. Amer. Math. Soc. 81 (1981), no. 4, 654–656. (Norman Blackburn)
- ver, L. M. (with Sibner, R. J.) A sub-elliptic estimate for a class of invariantly defined elliptic systems. Pacific J. Math. 94 (1981), no. 2, 417-421. (A. P. Stone) 82j:58115 58G99 (35J99, 76N15)
- er, R. J. (with Sibner, L. M.) A sub-elliptic estimate for a class of invariantly defined elliptic systems. Pacific J. Math. 94 (1981), no. 2, 417-421. (A. P. Stone) 82j:58115 58G99 (35J99, 76N15)
- ony, Nessim (with Wong, Pit Mann) Some results on global analytic sets. Séminaire Pierre Lelong-Henri Skoda (Analyse), Années 1978/79 (French), pp. 221-237, Lecture Notes in Math., 822, Springer, Berlin, 1980. (V. V. Moržakov) 82k:32017 32C25

Un exemple de domaine pseudoconvexe régulier où l'équation $\bar{\partial}u = f$ n'admet pas de ation bornée pour f bornée. Invent. Math. 62 (1980/81), no. 2, 235-242. (Harold P. Boas) 82c:32020 32F20 (35N15)

(with Wong, Pit Mann) Some remarks on the Casorati-Weierstrass theorem. Ann. Polon. Math. 39 (1981), 165-174. (Marcus Wright) 82k:32015 32A22 (32H30) (with Fornaess, John Erik) Increasing sequences of complex manifolds. Ma 255 (1981), no. 3, 351–360. (Akio Kodama) 82g:32027 32H15 (32H20)

akaev, Š. M. (with Gurgov, Ė. Ju.) Dynamical stability of elastic plates with a pliable inclusion. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 4, 15-18. (Z. Kączkowski) 926-73055 73K12 (73H05)

Sibul, Leon H. Optimum detection and estimation in stochastic transmission media. Applied stochastic processes (Proc. Conf., Univ. Georgia, Athens, Ga., 1978), pp. 247-267, demic Press, New York, 1980. (A. A. Pervozvanskii) 82a:93058

(with Adomian, George) Symmetrized solutions for nonlinear stochastic differential actions. Internat. J. Math. Math. Sci. 4 (1981), no. 3, 529-542. (Z. Schuss) 82h:60111 60H10 (60H20)

nya, Massaki A comparison of discrete distributions. Recent developments in statistical inference and data analysis (Proc. Internat. Conf., Inst. Statist. Math., Tokyo, 1979), pp. 255-258, North-Holland, Amsterdam, 1980. (J. K. Ord) 82c:62024 62E10

ya, Yasutaka (with Gérard, R.) Étude de certains systèmes de Pfaff avec singularités. Equations différentielles et systèmes de Pfaff dans le champ complexe (Sem., Inst. Rech. Math. Avancée, Strasbourg, 1975), pp. 131–288, Lecture Notes in Math., 712, Springer, Berlin, 1979. (V. A. Golubeva) 82m:34008a 34A20 (32A99, 34E05, 58A17)

Convergence of formal power series solutions of a system of nonlinear differential equations at an irregular singular point. Geometrical approaches to differential equations (Proc. Fourth Scheveningen Conf., Scheveningen, 1979), pp. 135-142, Lecture Notes in Math., 810, Springer, Berlin, 1980. (P. W. Bates) 82c:34011 34A25 (34A34)

(with Sperber, Steven) Some new results on power-series solutions of algebraic differential equations. Singular perturbations and asymptotics (Proc. Adv. Sem., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1980), pp. 379–404, Publ. Math. Res. Center Univ. Wisconsin, 45, Academic Press, New York, 1980. (W. Wasow) 824:34072

A linear Pfaffian system at an irregular singularity. Tõhoku Math. J. (2) 32 (1980), no. 2, 209–215. (V. A. Golubeva) 82h:13019 13N05 (32A9, 34C05, 58A17) (with Sperber, Steven) Arithmetic properties of power series solutions of algebraic

differential equations. Ann. of Math. (2) 113 (1981), no. 1, 111-157. (Alan Adolphson) 82i:12022 12B40 (12H25, 34A34)

A theorem concerning uniform simplification at a transition point and the problem of resonance. SIAM J. Math. Anal. 12 (1981), no. 5, 653-668. (W. Wasow) 82m:34060 34E20 (30E15, 34A20)

See also Ramis, Jean-Pierre, 82m:34008b

n, V. N. (with Madatov, G. L.; Gorbuncov, V. V.; Mažara, G. N.; Komarov, V. G.; Alpatov, A. P.; Horošilov, V. S.; Jaščenko, V. F.) ★Прикладные методы

исследования управляемых механических систем. (Russian) [Applied methods of investigation of mechanical control systems] "Naukova Dumka", Kiev, 1980. 192 pp. (Jerzy Jaroń) 82h:93028 93B35 (70K99, 70Q05, 93A15)

hier, J. Group-universal unary varieties. Algebra Universalis 11 (1980), no. 1, 12-21. (Tomáš Kepka) 82a:08006 08B99 (08A60)

(with Adams, M. E.) Cover set lattices. Canad. J. Math. 32 (1980), no. 5,

1177-1205. (Ralph Freese) 82g:06010 06B99

(with Adams, M. E.) Subfunctors of full embeddings of algebraic categories. Algebra Universalis 12 (1981), no. 3, 271-278. (Horst Reichel) 82k:08009

(with Adams, M. E.; Pigozzi, D.) Endomorphisms of direct unions of bounded lattices. Arch. Math. (Basel) 36 (1981), no. 3, 221-229. (T. S. Blyth) 82f:20097 20M30 (05C99, 06B99)

(with Adams, M. E.) Lattices with unique complementation. Pacifi (1981), no. 1, 1-13. (R. P. Dilworth) 82f:06007 06B05 (06B20, 06C15)

Siciak, Józef (with Lojasiewicz, Stanisław) On holomorphic extendibility of functions on eneric real analytic submanifolds. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 2, 217-220. (E. J. Akutowicz) 82a:32016 32D99 (32F25)

A modified edge of the wedge theorem. Zeszyty Nauk. Uniw. Jagiellon. Prace Mat.

No. 22 (1981), 15-17. (Eric Bedford) 82k:32040 32D15 (81E05)

Sickel, Winfried (with Runst, Thomas) On strong summability of

Jacobi-Fourier-expansions and smoothness properties of functions. Math. Nachr. 99 (1980), 77-85. (L. Leindler) 82k:42016 42C10 (46E99)

Siddall, T. H., III (with Flurry, R. L., Jr.) On the group of the independent-particle Hamiltonian operator. Molecular Phys. 36 (1978), no. 5, 1309-1320. (Authors' summary)

dappa, B. (with Crane, L. J.; Siddappa, Sarvamangala) The axisymmetric boundary layer of a compressible fluid on a long thin cylinder. J. Karnatak Univ. Sci. 23 (1978), 1–8. (W. O. Criminale, Jr.) 82x76055a
 76N05

(with Crane, L. J.; Siddappa, Sarvamangala) The axisymmetric boundary layer of an incompressible fluid on a long thin cylinder with swirl. J. Karnatak Univ. Sci. 23 (1978), 9-11. (W. O. Criminale, Jr.) 82a:76055b 76D10

(with Hiremath, Prakash S.) Rivlin-Ericksen fluid flow past a stretching plate with suction. Kyungpook Math. J. 20 (1980), no. 2, 267-272. (Authors' introduction) 82k:76003 76A10

dappa, Sarvamangala (with Crane, L. J.; Siddappa, B.) The axisymmetric boundary layer of a compressible fluid on a long thin cylinder. J. Karnatak Univ. Sci. 23 (1978), 1–8. (W. O. Criminale, Jr.) 82a:76055a
 76N05

(with Crane, L. J.; Siddappa, B.) The axisymmetric boundary layer of an ompressible fluid on a long thin cylinder with swirl. J. Karnatak Univ. Sci. 23 (1978), 9-11. (W. O. Criminale, Jr.) 82a:76055b

76D10 qi, A. H. (with Esfahanizadeh, J.) On quasi-2-normed spaces. II. Indian J. Math. 19

(1977), no. 2, 79-85. (R. C. James) 82i:46024 46B20 (46A15) digi, Rafat Nabi Generalized absolute continuity of a function of Wiener's class. Bull. Austral. Math. Soc. 22 (1980), no. 2, 253-258. (S. Izumi) 82f:42006 A note on a theorem of Fejér. Rend. Circ. Mat. Palermo (2) 29 (1980), no. 1, 17-22. (S. M. Shah) 82d:42007 42A50 (40C05)

Siddiqui, A. (with Prasad, Y. N.; Singh, Awadhesh Kumar) Integrals involving spheroidal wave functions. Indian J. Pure Appl. Math. 12 (1981), no. 11, 1336-1342. (R. C. Varma) 82k:33014 33A35 (33A55)

Siddiqui, Z. U. (with Ahmad, Z. U.; Sitaramachandra Rao, R.; Murty, G. Sri Rama Chandra) The number of M-void divisors of an integer. Indian J. Pure Appl. Math. 11 (1980), no. 6, 749-757. (G. J. Rieger) 82g:10010 10A20 (10H25)

nko, M. I. (with Burlačenko, V. P.) A generalization of the Wendroff inequality. (Russian) Questions of the theory of the approximation of functions (Russian), pp. 14-21, 193, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (A. Lupaş) 82g:26021 26D10

Šidfar, В. Ja. * Иби Спиа. (Russian) [Ibn Sinā] Писатели и Ученые Востока. [Writers and Scientists of the East]. "Nauka", Moscow, 1981. 184 pp. (Table of contents) 82g:01010 01A30

Sidhu, S. S. On thermodynamic proofs of mathematical results. Phys. Lett. A 76 (1980),

no. 2, 107-108. (Author's summary) 82b:89004 80A10 (26D20)
Sidi, Avram A new method for deriving Pade approximants for some hypergeometric functions. J. Comput. Appl. Math. 7 (1981), no. 1, 37-40. (Author's summary) 82d:65021 65D20 (33A30)

Numerical quadrature rules for some infinite range integrals. Math. Comp. 38 (1982), no. 157, 127-142. (Author's summary) 82m:65022

Sidi, J. (with Bochi, S.; Brossier, G.; Celeux, Gilles; Charles, Christian; Chifflet, R.; Darcos, J.; Diday, E.; Diebolt, J.; Fevre, P.; Govaert, G.; Hanani, O.; Jacquet, D.; Lechevallier, Yves; Lemaire, Jacques; Lemoine, Y.; Molliere, J. L.; Morisset, G.; Ok-Sakun, Y.; Rousseau, P.; Sankoff, D.; Schroeder, A.; Taleng, F.) ★Optimisation en classification automatique. Tome 1, 2. (French) [Optimization in automatic classification. Vol. 1, 2] Institut National de Recherche en Informatique et en Auto (INRIA), Rocquencourt, 1980. vii+896 pp. ISBN 2-7261-0219-0 (A. Aiello) 82k:62116 62H30 (92A05)

Sidibé, R. Martingales locales à accroissements indépendants. Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 132-137, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Maurizio Pratelli) 82e:60080 60G44

Sidlichovský, M. On the two triaxial rigid body problem. (Russian summary) Bull. Astronom. Inst. Czechoslovakia 31 (1980), no. 4, 240-253. (Author's summary) 82d:70026

The elimination of the short periodic perturbations in the problem of two finite bodies. (Russian summary) Bull. Astronom. Inst. Czechoslovakia 32 (1981), no. 3, 159–167. (Gh. Silas) 82k:70008 70F05 (58F30)

Šidlovskii, A. B. Arithmetic properties of polynomials of values of E-functions connected with algebraic equations in a field of rational functions. (Russian) Acta Arith. 37 (1980), 405-426. (S. V. Kotov) 82f:10046 10F35

Estimate of a measure of mutual transcendence of values of E-functions connected by arbitrary algebraic equations over C(z). (Russian) Uspehi Mat. Nauk 35 (1980), no. 2(212), 227-228. (Valeriu Şt. Udrescu) 82e:10064 10F35 (34A30) Estimates of polynomials from values of E-functions. (Russian) Mat. Sb. (N.S.)

10F37 (33A35) 115(157) (1981), no. 1, 3-39, 159. (John H. Loxton) 82k:10044

Šidlovskii, V. P. (with Turčak, L. I.) On the equations of motion of a stratified liquid. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 2, 317-321. 82a:76087

Sidney, Jeffrey B. The two-machine maximum flow time problem with series parallel precedence relations. Oper. Res. 27 (1979), no. 4, 782-791. (Author's summary)

A decomposition algorithm for sequencing with general precedence constraints.

Math. Oper. Res. 6 (1981), no. 2, 190-204. (Author's summary) 821::90068 90B35

Sidney, S. J. Quotients of C(X) by uniform algebras. Rocky Mountain J. Math. 11 (1981), no. 1, 31-37. (E. L. Stout) 82d:46074 46J10 (46E25)

Sidonskii, O. B. (with Dubovik, O. A.) A group of matrices and Legendre kernels. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 2, 29–33. (Wayne J. Holman, III) 82;22010 22E45 (33A75, 43A90)

Sidorčuk, A. D. (with Protasov, I. V.) On varieties of topological algebraic systems. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 6, 1314–1318. (Ivan Chajda) 08B99 (22A30)

(with Protasov, I. V.) A local theorem for ordered topological groups. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 8, 83-86. (Authors' summary) 82i:06024 06F15 (06F30)

Sidorenko, A. F. The number of admissible linear orderings of a partially ordered set as a function of its incomparability graph. (Russian) Mat. Zametki 29 (1981), no. 1, 75-82, 155. (I. E. Strazdinš) 82e:05116 05C99 (05A05, 05A15, 06A10, 90B10)

(with Hisamutdinov, A. I.) Calculation by Monte Carlo methods of derivatives of linear flow functionals with respect to the parameters of surface. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 3, 787-790, 814. (Authors' summary) 82h:82055

- Sidorenko, N. V. (with Zigulev, V. N.; Tumin, A. M.) Generation of waves of instability in a boundary layer by external turbulence. (Russian) *Ž. Prikl. Meh. i Tehn. Fiz.* 1980, no. 6, 43–49, 138. (Authors' summary) 82h:76024 76E99 (76F99)
- Sidorov, E. A. Conditions for uniform Poisson stability of cylindrical systems. (Russian) Uspehi Mat. Nauk 34 (1979), no. 6(210), 184-188. (J. Benkö) 82h:54058 54H20
- ov, I. M. (with Radaševič, Ju. B.) Statistical method of estimating the value of the optimum in approximate solution of linear integer programming problems. Automat. i Vyčisl. Tehn. (Riga) 1979, no. 6, 37-43, 91 (Russian); translated as Automat. Control Comput. Sci. 13 (1979), no. 6, 33-38. (Authors' summary) 82j:90053 90C10
- lorov, N. A. (with Trenogin, V. A.) Regularization of linear controls on the basis of perturbation theory. (Russian) Differencial nye Urannenija 16 (1980), no. 11, 2039-2049, 2110. (V. G. Romanov) 82a:47011 47A50 (49D20, 65J10)
 - Branching of solutions of nonlinear equations with a potential branching equation. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 6, 1322-1326. (Ulrich Kosel) 58E07 (47H15)
- arov, N. V. Distribution of the normalized total spin in the Sarbach-Schneider model. (Russian) Uspehi Mat. Nauk 35 (1980), no. 4(214), 211-212. (E. E. Tareeva) 82b:82020
- Distribution of components of the total spin in the vector-spherical model. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1980, no. 4, 17-21, 98-99. (R. A. Minlos) 82c:82025 82A15 (10J99, 82A67)
- rov, O. P. Calculation of flow with variable specific heat around a profile. Izv. Vysš. Učebn. Zaved. Aviacion. Tehn. 23 (1980), no. 2, 77-82 (Russian); translated as Soviet Aeronaut. 23 (1980), no. 2, 62-68. (Author's summary) 82d:76063 76N10
- orova, G. A. (with Bendrikov, G. A.) Nonlinear systems that are stable in the Hurwitz sector. (Russian) Vestnik Moskov. Univ. Ser. III Fiz. Astronom. 22 (1981), no. 2, 44-49, 96. (A. Corduneanu) 82g:34074 34D25 (34D10)
- va, V. K. (with Levitan, Ju. L.; Moiseenko, B. D.; Priimak, V. G.; Roždestvenskii, B. L.) Methods of numerical modeling of turbulent flow of a fluid in a channel. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 3, 737-747, 812. (Authors' summary) 82h:76026 76F99 (65P05, 76A60)
- Šidov, L. I. Finite groups with a normalizer condition. (Russian) Sibirsk. Mat. Ž. 21 (1980), 20D05 no. 6, 141-145, 222. (A. V. Borovik) 82b:20023
- Siebenman, Laurent Amorces de la chirurgie en dimension quatre: un S³×R exotique [d'après Andrew H. Casson et Michael H. Freedman]. Séminaire Bourbaki (1978/79), No. 536, pp. 183-207, Lecture Notes in Math., 770, Springer, Berlin, 1980. (Laurence R. Taylor) 82b:57026 57R65
- Sieber, Hehmut Die Berechnung von π nach Legendre—ein Verfahren für Taschenrechner mit Verallgemeinerungen. Praxis Math. 22 (1980), no. 12, 357-364. (Wolfgang Boehm) 82c:51005 51-01 (01A55, 51-04, 51N99)
- Sieber, Norbert (with Sebastian, Hans-Jürgen) *Spezielle Funktionen. (German) [Special functions] Second edition. Mathematik für Ingenieure, Naturwissenschaftler, Ökonomen und sonstige Anwendungsorientierte Berufe [Mathematics for Engineers, Natural Scientists, Economists and other Application-Oriented Occupations), 12. Verlag Harri Deutsch, Thun, 1980. 136 pp. ISBN 3-87144-428-6 (From the introduction) 82k:33001
- bert, Eberhard A stability theorem for statistical experiments. Metrika 27 (1980), no. 3, 195-202. (Dieter Mussmann) 82a:62014 62B15
 - Fourier analysis and limit theorems for convolution semigroups on a locally compact Adv. in Math. 39 (1981), no. 2, 111-154. (Christian Berg) 82h:60023 (43A30)
 - Supports of holomorphic convolution semigroups and densities of symmetric convolution semigroups on a locally compact group. Arch. Math. (Basel) 36 (1981),
 - convolution senigroups on a locally convolution senigroups and generalized telegraph equations.

 (with Janssen, Arnold) Convolution semigroups and generalized telegraph equations. Math. Z. 177 (1981), no. 4, 519-532. (Mark Pinsky) 82m:35105 60J99)
 - Diffuse and discrete measures semigroups of probability measures on topological groups. (French summary) Rend. Mat. (7) 1 (1981), no. 2, 219-236. (Wilfried Hazod) 82m:60015 60B15 (28C10, 43A05)
- Siebert, Hartmut (with Kimura, Noriaki) Über die rationalen Nullstellen der von
 - men der natürlichen Zahlen definierten Polynome. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 7, 354-356. (W. J. LeVeque) 82e:10013 10A20
- Siedentop, Heinz K. H. On the relation between the Hellmann energy functional and the ground state energy of an N-fermion system. Z. Phys. A 302 (1981), no. 3, 213-218. (Author's summary) 82m:81015 81C05 (81H99)
- dersleben, J. Structural questions with GERT-networks. (German summary) Z. Oper. Res. Ser. A-B 25 (1981), no. 3, A79-A89. (Author's summary) 82g:90063
- Siegberg, Hans Willi Brouwer degree: history and numerical computation. Numerical solution of highly nonlinear problems (Sympos. Fixed Point Algorithms and
 - Complementarily Problems, Univ. Southampton, Southampton, 1979), pp. 389–411, North-Holland, Amsterdam, 1980. (Eugene Allgower) 82:01639 01A60 (55M2 01A60 (55M25. 65H05, 90C30)
 - Some historical remarks concerning degree theory. Amer. Math. Monthly 88 (1981), no. 2, 125-139. (D. E. Sanderson) 82e:55001 55-03 (01A55, 01A60, 55M25)
- Siegel, David Height estimates for capillary surfaces. Pacific J. Math. 88 (1980), no. 2, 471-515. (D. E. Edmunds) 82h:35037 35J65
- Siegel, G. (with Rossberg, H.-J.; Jesiak, Bernd) Continuation of distribution functions. tions to probability, pp. 29-48, Academic Press, New York, 1981. (T. Kawata) 82h:60030 60E05 (60E07)
- Siegel, Howard Jay Partitioning permutation networks: the underlying theory. Proceedings of the 1979 International Conference on Parallel Processing (Bellaire, Mich., 1979), pp. 175-184, IEEE, New York, 1979. (Author's summary) 82d:94081 94C10 (68A05)
- Siegel, Howard P. Computational techniques for the Arnowitt-Deser-Misner formalism. Phys. Rev. D (3) 23 (1981), no. 12, 2828-2834. (Author's summary) 82h:83052a
 - Evolving dust shells. *Phys. Rev. D* (3) **23** (1981), *no.* 12, 2835–2849. (Author's summary) **82h:83052b** 83C99

- Siegel, Jerrold Čech extensions and localization of homotopy functors. Fund. (1980), no. 3, 159-170. (Timothy Porter) 82b:18002 18A40 (55P65) (with Aubin, Jean-Pierre) Fixed points and stationary points of dissipative Fund. Math. 108

 - multivalued maps. Proc. Amer. Math. Soc. 78 (1980), no. 3, 391–398. (Authors introduction) 82a:54081 54H25 (54C60, 90D30)
 - (with Calder, Allan) On the width of homotopies. Topology 19 (1980), no. 3, 209-220. (Harold Hastings) 82c:55013 55P99 (57R99)
- rgel, Warren (with Gates, S. James, Jr.) Understanding constraints in superspace formulations of supergravity. Nuclear Phys. B 163 (1980), no. 4, 519-545. (W. Cox) 82c:83068 83E99 (58A05)
 - (with Gates, S. James, Jr.) (\frac{3}{2}, 1) superfield of O(2) supergravity. Nuclear Phys. B 164 (1980), no. 3, 484-494. (W. Cox) 824:83061 83E99 (81G20) (with Grisaru, Marc; Roček, Martin) Superloops 3, beta 0: a calculation in N=4
- Mills theory. Nuclear Phys. B 183 (1981), no. 1-2, 141-156. (Authors' summary) 82i:81145 81G20 (81E99)
- (with Deser, S.; Townsend, Paul) Higher rank representations of lower spin. ar Phys. B 184 (1981), no. 2, 333-350. (Håkan Snellman) 82m:81048 (53C05, 81E20, 81G20)
- Siegfried, P. (with de la Harpe, P.) Singularites de Klein. Enseign. Math. (2) 25 (1979), no. 3-4, 207-256 (1980). (Alan H. Durfee) 82e:32010 32B30 (14B05)
- nn, William L. (with Friedlander, Susan) Internal waves in the ocean stratified with variable buoyancy frequency. An. Acad. Brasil. Ciênc. 53 (1981), no. 2, 213-221. (Authors' introduction) 82m:76067 76V05 (35Q20, 76U05) (Authors' introduction) 82m:76067
- egrist, Kyle Random evolution processes with feedback. Trans. Amer. Math. Soc. 265 (1981), no. 2, 375–392. (I. Cuculescu) 82g:60094 60J25
- Sieklucki, Karol (with Engelking, Ryszard) *Geometria i topologia. Cześć II. (Polish) [Geometry and topology. Part II] Topologia. [Topology] Biblioteka Matematyczna [Mathematics Library], 54. Państwowe Wydawnictwo Naukowe (PWN), Warsaw, 1980. 388 pp. ISBN 83-01-01371-0 (W. Kuperberg) 82i:54001 54-01 (55-01)
- nn, Jörg (with Wrightson, Graham) Paramodulated connection graphs. Acta Inform. 13 (1980), no. 1, 67-86. (M. M. Richter) 82b:03036 03B35 (68G15)
- Sielken, R. L., Jr. (with Baker, T. C., Jr.) Estimation of a distribution function by extrapolating upper and lower bounds. Comm. Statist. B—Simulation Comput. 10 (1981), no. 1, 77-93. (Authors' summary) 82c:62054 62G05
- mons, Johannes Normal subgroups of triply transitive permutation groups of degree divisible by 3. Math. Z. 174 (1980), no. 2, 95–103. (R. A. Bailey) 82b:20005 20B20
- dski, Allan J. Framed links for Peiffer identities. Math. Z. 175 (1980), no. 2, 125-137. (Johannes Huebschmann) 82i:57002 57M20 (20F05)
- Sierksma, Gerard Convexity on unions of sets. Compositio Math. 42 (1980/81), no. 3,
- 391-400. (Robert E. Jamison) 82h:52004 52A01 rociński, Andrzej On fixed precision estimation of the maximal value of a random
- variable. Demonstratio Math. 13 (1980), no. 4, 995-1003. (Rasul A. Khan) 824:62128
- rpińska, Anna K-completeness and its application to radicals of semigroup rings Demonstratio Math. 13 (1980), no. 3, 641-645. (B. J. Gardner) 82c:16009 (20M25)
- ma, Dirk Singularities of functions on boundaries, corners, etc. Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 125, 119-127. (Andrew du Plessis) 82m:58011 58C27
- Siewert, C. E. (with Mullikin, T. W.) Radiative transfer in inhomogeneous atmospheres. New frontiers in transport theory (Tucson, Ariz., 1979). Ann. Nuclear Energy 7 (1980),
 - no. 4-5, 205-211. (L. F. Oster) 82j:85007 85A25 (45F15)
 On computing eigenvalues in radiative transfer. J. Math. Phys. 21 (1980), no. 9, 2468-2470. (V. B. Dybin) 82c:85003 85A25 (45L05)
 - (with Garcia, R. D. M.; Grandjean, P.) A concise and accurate solution for Poiscuille flow in a plane channel. J. Math. Phys. 21 (1980), no. 12, 2760–2763. (Carlo Cercignani) 82c:82114 82A70 (76P05)
 - (with Kelley, C. T.) An analytical solution to a matrix Riemann-Hilbert problem. (German summary) Z. Angew. Math. Phys. 31 (1980), no. 3, 344-351. (N. K.
 - Karapetjanc) 82d:30046 30E25 (with Devaux, C.) The F_N method for radiative transfer problems without azimuthal
 - symmetry. (German summary) Z. Angew. Math. Phys. 31 (1980), no. 5, 592-604. (Masamichi Matsumoto) 82d:85009 85A25 (65D99, 82A70) On the equation of transfer relevant to the scattering of polarized light. Astrophys. J.
 - 245 (1981), no. 3, part 1, 1080-1086. (L. F. Oster) 82g:85008 85A25 (45L05) (with Thomas, J. R., Jr.) Strong evaporation into a half space. (German summary) Z. Angew. Math. Phys. 32 (1981), no. 4, 421-433. (A. D. Solomon) 82k:76055 76P03
- (82A25) Sifakis, J. (with André, C.; Girault, C.; Diaz, M.) Survey of French research and applications based on Petri nets. Net theory and applications (Proc. Adv. Course General Net Theory Processes Systems, Hamburg, 1979), pp. 321-345, Lecture Notes in Comput.
- Sci., 84, Springer, Berlin, 1980. (Jan Grabowski) 82b:68047 68D90 Šifman, M. A. (with Vainštein, A. I.; Zaharov, V. I.; Novikov, V. A.) Asymptotic freedom in quantum mechanics. Jadernaja Fiz. 32 (1980), no. 6, 1622-1635 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 6, 840-847 (1981). (Authors' summary)
- 82m:81016 81C05 (81G05) Siforov, V. I. (with Dobrušin, R. L.; Samoilenko, Stanislav I.; Cybakov, B. S.; Bojarinov, I. M.; Gel'fand, S. I.; Košelev, V. N.; Štar'kov, Ju. M.) The theory of information transmission and its applications. (Russian) Cybernetics—in the service of Comm Vol. 9: Control and information (Russian), pp. 28-57, "Energija", Moscow, 1978. (J. S. Joel) 82e:94001 94-02 (01A65, 94A15)
- Sigal, I. H. (with Korbut, A. A.; Finkel'Stein, Ju. Ju.) The effectiveness of combinatorial methods in discrete programming. (Russian) Current state of the theory of operations research (Russian), pp. 283-310, "Nauka", Moscow, 1979. (See 82f:90002) 90C10
- Sigal, I. M. Mathematical questions of quantum mechanics of many-body systems. Mathematical methods and applications of scattering theory (Proc. Conf., Catholic Univ., Washington, D.C., 1979), pp. 149–158, Lecture Notes in Phys., 130, Springer, Berlin, 1980. (See 82h:81117) 35P25 (47A40, 81F05) (See 82h:81117)
- Sigalov, V. S. The problem of factorization of formulas of an algebra of finite predicates. (Russian) Questions of the application of computers in the development and investigation of

- technical systems (Russian), pp. 25-36, 55-56, Preprint 80, 42, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev. 1980. (See 82g-68007) 68F10 (68D40) pnov, I. S. A multidimensional analogue of Gram-Charlier and Edgeworth-Cramér expansions. (Russian) Problems of stability of stochastic models (Proc. Fourth All-Union Sem., Palanga, 1979) (Russian), pp. 116-121, 124, "Vsesojuz. Nauč.-Issled. Inst. Sistem. Issled.", Moscow, 1980. (G. I. Ivčenko) 82es60043 60F05 (62E99) pnon, Timothy M. (with Trivedi, Kishor S.) Optimal design of linear storage hierarchies. J. Assoc. Comput. Mach. 28 (1981), no. 2, 270-288. (Authors' summary) 82d:68015
- 68B15
- d, Karl (with Schuster, Peter; Wolff, Robert) Dynam nical systems under constant organization. III. Cooperative and competitive behavior of hypercycles. J. Differential Equations 32 (1979), no. 3, 357-368. (C. P. Bruter) 82b:34035b 34C05 (58F12, 80A30,
 - ster, Peter; Wolff, Robert) Mass action kinetics of self-replication in flow reactors. J. Math. Anal. Appl. 78 (1980), no. 1, 88-112. (J. P. Kernevez) 82c:92012 92A09 (35R10, 80A30, 92A17)
 - (with Hofbauer, Josef; Schuster, Peter; Wolff, Robert) Dynamical system constant organization. II. Homogeneous growth functions of degree p = 2. SIAM J. Appl. Math. 38 (1980), no. 2, 282-304. (C. P. Bruter) 82b:34035a 34C05 (58F12, 80A30,
 - (with Schuster, Peter; Hofbauer, Josef; Wolff, Robert) Self-regulation of behaviour in animal societies. I. Symmetric contests. Biol. Cybernet. 40 (1981), no. 1, 1-8. (Peter D. Taylor) 82e:92039a 92A15 (90D40)
 - (with Schuster, Peter; Hofbauer, Josef; Wolff, Robert) Self-regulation of behavior in animal societies. II. Games between two populations without self-interaction. Biol. Cybernet. 40 (1981), no. 1, 9-15. (Peter D. Taylor) 82e:92039b 92A15 (90D40)
 - (with Schuster, Peter; Hofbauer, Josef; Gottlieb, Ramon; Merz, Philip)
 Self-regulation of behaviour in animal societies. III. Games between two populations with self-interaction. Biol. Cybernet. 40 (1981), no. 1, 17-25. (Peter D. Taylor) 82e:92039c
 - (with Hofbauer, Josef; Schuster, Peter) Competition and cooperation in catalytic self-replication. J. Math. Biol. 11 (1981), no. 2, 155-168. (John J. Tyson) 82h:92062 92A40 (34C05, 80A30)
- und, V. Structure of parallel transformation and execution. Parallel
- computers—parallel mathematics (Munich, 1977), pp. 87-90, North-Holland, Amsterdam, 1977. (See 82k:68003) 68B20
- Sigov, Ju. S. (with Poljudov, A. N.; Seljandin, B. D.) A three-dimensional kinetic plasma model in a problem of evolution of a Langmuir wave of large amplitude. (Russian) Dokl. Akad. Nauk SSSR 246 (1979), no. 1, 58-62. (From the text) 82g:82046 82A45 (35020, 82-04)
- reev, G. S. (with Rivkind, V. Ja.) On the method of successive approximations for a problem on the motion of a drop with account taken of the thermocapillary effect. (Russian) Metody Vyčisl. No. 12 (1981), 158-174, 234. (Authors' summary) 82k:76030 76D99 (65P05, 76A99)
- rist, François (with Lemaire, Jean-Michel) Sur les invariants d'homotopie rationnelle liés à la L. S. catégorie. Comment. Math. Helv. 56 (1981), no. 1, 103-122. (J. Stasheff) 55P50 (55P62)
- Signation (S1702)

 Sih, Andrew Stability and prey behavioural responses to predator density. J. Animal Ecology 48 (1979), no. 1, 79–89. (Alan Hastings) 82e-92040 92A15 (34K20)

 Sijakki, Djordje Linear groups in particles and gravity. Group theoretical methods in physics (Proc. Eighth Internat. Collog., Kiryat Anaxim, 1979), pp. 35–56, Ann. Israel Phys. Soc., 31590 (2020), 816(20). 3, Hilger, Bristol, 1980. (Author's summary) 82i:83073 83E99 (22E70 81G20)
 - (with Ne'eman, Yuval) Minimal and centered graded spin-extensions of the SL(3, R) ora. J. Math. Phys. 21 (1980), no. 6, 1312-1317. (Wayne J. Holman, III) 82h:17011 17B70 (22E65, 81C40)
 - (with Ne'eman, Yuval) Correction to: "Gravitational interaction of hadrons and leptons: linear (multiplicity-free) bandor and nonlinear spinor unitary irreducible
 - representations of SL (4, R)" [Proc. Nat. Acad. Sci. U.S.A. 76 (1979), no. 2, 561-564; MR 80d:81149]. Proc. Nat. Acad. Sci. U.S.A. 77 (1980), no. 4, part 2, 2353. (Editors) 82j:81076 81M05 (22E45)
- Šik, František Complements of congruences in an Ω-group. (Czech summary) Časopis Pěst. Mat. 106 (1981), no. 2, 197-205, 210. (Manfred Armbrust) 82g:08004 08A30 (06A23) Joins of congruences in Ω-groups. (Czech summary) With a loose Russian summary. Časopis Pěst. Mat. 106 (1981), no. 3, 299-310, 317. (Evelyn Nelson) 82k:08003
- 08A30 A characterization of polarities whose lattice of polars is Boolean. With a loose Russian summary. Czechoslovak Math. J. 31(106) (1981), no. 1, 98-102. (E. T. Schmidt) 06E99 (04A05) 82e:06013
- dar, J. C. Eclipses of the Sun and Moon according to Jaina astronomy. Proceedings of the Symposium on the 1500th Birth Anniversary of Aryabhata I (New Delhi, 1976).
- Indian J. Hist. Sci. 12 (1977), no. 2, 127-136. (R. C. Gupta) 82e:01024 01A32 dar, Kripasindhu On quasitransitive semigroup action. Semigroup Forum 20 (1980), dar, Kripasindhu On quasitransitive semigroup action. Semigroup no. 3, 269-280. (Bernard L. Madison) 82e:20115 20M35 (22A15)
- Šikić, Z. A note on sum-eliminator. (Serbo-Croatian summary) Glas. Mat. Ser. III 15(35) (1980), no. 2, 249–250. (Jane E. Kister) 82d:03091 03F15
- Sikin, E. V. (with Poznjak, E. G.) Green's formula for domains with rectifiable boun (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 1, 42-44. (Jan Bochenek) 82c:26015
 - Isometric embedding of two-dimensional manifolds of negative curvature by the Darboux method. (Russian) Mat. Zametki 27 (1980), no. 5, 779-794, 831. (J. Szenthe) 53C42 (53A05)
 - (with Poznjak, E. G.) Isometric imbeddings of the domains of the Lobačevskii plane in Euclidean space. (Russian. English summary) Collection of articles on geometry, II. Trudy Tbiliss. Mat. Inst. Razmadze Akad. Nauk Gruzin. SSR 64 (1980), 82-93. (M. L. 53C42
- Sikkema, P. C. Voronovskaya-type formulae for convolution operators approximating with great speed. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 837-840, Academic Press, New York, 1980. (V. V. Žuk) 82e:41034 41A36
 - (with van der Meer, P. J. C.; Roos, Maria) Determination of the exact degree of local approximation by some linear positive operators involving the modulus of

- continuity of the pth derivative. Nederl. Akad. Wetensch. Indag. Math. 43 (1981), no. 1, 117-128. (A. K. Varma) 82g:41024 41A36
- Siklos, S. T. C. Field equations for spatially homog
 - (1980), no. 1, 19–21. (Author's summary) 82a:83013 83C20 (53B50, 83F05) Some Einstein spaces and their global properties. J. Phys. A 14 (1981), no. 2, 395–409. (J. R. Vanstone) 82a:83023 83C20 (53C25, 83C40)
- ora, A. (with Kocięcki, M.) Numerical evaluation of roots of quasipolyn Functional differential systems and related topics (Proc. First Internat. Conf., Błażejewko, 1979), pp. 306-316, Higher College Engrg., Zielona Góra, 1980. (Andrzej W. Olbrot) 65H05 (93B55)
- Sikora, D. (with Jankiewicz, C.) Field momentum, inertial momentum and gravitational momentum of a system of bodies in the post-Newtonian approximation. (Russian. English summary) Acta Phys. Polon. B 11 (1980), no. 10, 717–728. (Authors' summary) 82:e8026 83C25
- Sikora, Jan (with Stabrowski, Marek) Some problems of numerical analysis of electromagnetic field distribution in an electric motor with composite motion. (Polish. English, French, German and Russian summaries) Rozprawy Elektrotech. 26 (1980), 78A55 (65N30) no. 2, 307-320. (Authors' summary) 82b:78030
- Sikorav, Jean-Claude Formes différentielles fermées non singulières sur le tore de dimension n. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 17, 829-832. (Felice Ronga) 82k:58004 58A10 (57R52)
- Sikorski, Roman ★Rachunek rôżniczkowy i calkowy. (Polish) [Differential and integral calculus] Funkcje wielu zmiennych. [Functions of several variables] Fifth edition. Biblioteka Matematyczna [Mathematics Library], 28. Państwowe Wydawnictwo Nauko (PWN), Warsaw, 1980. 563 pp. ISBN 83-01-02135-7 (Editors) 82a:26002
- (with Buraczewski, A.) Analytic formulae for determinant systems in Banach sp Studia Math. 67 (1980), no. 1, 85-101. (S. N. Kračkovskii) 82b:47014 47A53 (47B10)
- Silberberg, Rein (with Shapiro, Maurice M.) Neutrinos, supernovae, and related astrophysics. Relativity, qu anta, and cosmology in the development of the scientific thought of Albert Einstein, Vol. 1, 11, pp. 745-781, Johnson, New York, 1979. (See 82b:83002) 85-05
- berger, Allan J. Special representations of reductive p-adic groups are not integrable Ann. of Math. (2) 111 (1980), no. 3, 571-587. (Joe Repka) 82k:22015 22E50 (22E35)
- Silberger, D. M. Universal terms of complexity three. Algebra Universals 11 (1980), no. 3, 393–395 (1981). (Author's summary) 82b:08006 08A50 (03D05, 04A05)
 - How many unbordered words? Comment. Math. Prace Mat. 22 (1980), no. 1, 143–145. (Heinrich Seidel) 821:20098 20M35 (05A15, 20M05)

 B*A** is universal iff point universal. Algebra Universalis 12 (1981), no. 3, 335–342.
- (B. M. Schein) 82h:20082 20M15 (05B30)

 bermann, Bernd (with Prössdorf, Siegfried) Projektionsverfahren zur Lösung von Systemen singulärer Gleichungen vom nicht normalen Typ. Rev. Roumaine Math. Pures Appl. 22 (1977), no. 7, 965-991. (From the introduction) 82k:47019 47A50 (45F15)
 - (with Rost, Karla) Das Reduktionsverfahren für eine Klasse ausgearteter Integrodifferenzengleichungen. Wiss. Z. Tech. Hochsch. Karl-Marx-Stadt 20 (1978), no. 6, 689-691. (Authors' summary) 82i:45013 45L05 no. 6, 689-691. (Authors' summary) 82i:45013
 - Some remarks on the asymptotic behavior of Toeplitz determinants. Applicable Anal. 11 (1980/81), no. 3, 185-197. (Nicholas P. Jewell) 82j:47048 47B35 (15A15, 30H05) (with Böttcher, Albrecht) Notes on the asymptotic behavior of block Toeplitz matrices and determinants. Math. Nachr. 98 (1980), 183-210. (L. Rodman) 82j:47042 47B35 (15A15)
- Sileiko, A. V. (with Kočney, V. F.: Nefedkina, G. F.) On the question of information value. I. (Russian. English summary) Elektronnoe Modelirovanie 1981, no. 4, 3-8, 109. (Authors' summary) 82h:94015 94A17
- Silhavi, M. On measures, convex cones, and foundations of thermodynamics. I. Systems with vector-valued actions. Czechoslovak J. Phys. B 30 (1980), no. 8, 841-861. (R. R. Huilgol) 82k:80001a 80A05 (46N05)
 - On measures, convex cones, and foundations of thermodynamics. II. Thermodynamic systems. Czechoslovak J. Phys. B 30 (1980), no. 9, 961-991. (R. R. Huilgol) 82k:80001b 80A05 (46N05)
- Silin, A. P. On a boundary value problem with a shift on the open Riemann surfaces with an edge. (Russian. English summary) Dokl. Akad. Nauk BSSR 24 (1980), no. 12, 1067–1069, 1147. (Ju. L. Rodin) 82c:30065 30E25 (30F99)
 Silin, D. B. On variation and Riemann integrability of optimal control in linear systems.
- (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 3, 548-550. (Stanisław Walczak) 82g:49016 49B10 (49B36)
 - (with Varga, Z.) Pareto optimality in vector spaces. (Russian) Vestnik Moskov. Ser. XV Vyčisl. Mat. Kibernet. 1981, no. 4, 28-31, 55. (Françoise Berquier) 82m:49012 49A27 (90D25)
- slav D. *Large-scale dynamic systems. Stability and structure.
- North-Holland Series in System Science and Engineering, 3. North-Holland Publishing Co., New York-Amsterdam, 1979. xvi+416 pp. ISBN 0-444-00246-4 (Peter J. Moylan) 93A15 (34D20, 90A16, 92A05)
 - (with Ikeda, Masao) Lotka-Volterra equations: stability, decomposition, and
- aggregation. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 593-601, IEEE, New York, 1979. (T. G. Hallam) 92A15
- (with Ikeda, Masao) Decentralized stabilization of large scale systems with time delay. Large Scale Systems 1 (1980), no. 4, 273-279. 82k:93007 93A15 (93D15)
- (with Sezer, Mesut E.) On decentralized stabilization and structure of linear large scale systems. Automatica-J. IFAC 17 (1981), no. 4, 641-644. (Authors' summary) 82h:93055 93D15
- (with Sezer, Mesut E.) On structural decomposition and stabilization of large-scale control systems. IEEE Trans. Automat. Control 26 (1981), no. 2, 439-444. (Authors' summary) 82d:93008 93A15 (05C20)
- (with Sezer, Mesut E.) Robustness of suboptimal control: gain and phase margin. IEEE Trans. Automat. Control 26 (1981), no. 4, part 1, 907-911. (Authors' summary) 82k:49051 49F25
- (with Ikeda, Masao) Generalized decompositions of dynamic systems and vector yapunov functions. IEEE Trans. Automat. Control 26 (1981), no. 5, 1118-1125. (J. Kato) 82k:34059 34D20

(with Pichai, V.; Sezer, Mesut E.) Vulnerability of dynamic systems. Intern Control 34 (1981), no. 6, 1049-1060. (Authors' summary) 82m:93010 93B05 (05C20,

Silk, Joseph (with Barrow, John D.) The growth of anisotropic structures in a Friedmann Astrophys. J. 250 (1981), no. 2, part 1, 432-449. (R. C. Roeder) 82m:83058 83F05 (85A30)

Silli, Carlo Extraordinary waves of discontinuity in a wire resistant to bending and torsion. (Italian. English summary) Atti Sem. Mat. Fis. Univ. Modena 29 (1980), no. 1, 25–33. (Tommaso Ruggeri) 82k:73029 73D99

n, S. V. (with Al'ber, Ja. I.) On stochastic approximation methods. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 2, 265-269. (V. Dupač) 82e:62129 62L20

(with Malinov, V. A.) Adaptive estimation of the trend of parameters of complex systems. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 1, 38-45, 219 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 1, 32-39 (1981). (Authors' summary)

translated as Engrg. Systems (22k;39363) 93E10 (62M20, 94A05)
Sil'nikov, L. P. See Strange attractors, 82f:58065
Silo, V. P. Elliptic equations and boundary control. (Russian) Methods in operations research and reliability theory in systems of analysis (Russian), pp. 76–80, 102, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Author's summary) 82a:93076 93E20

Šilov, G. Е. ★Дифференцирование функций: приложения к анализу. (Russian) [Differentiation of functions: applications to analysis.] Основы современного анализа. [Foundations of modern analysis] Jaroslav. Gos. Univ., Yaroslavi', 1979. 88 pp. (G. 58C15 (26B10) Marinescu) 82i:58016

★Дифферентирование функций: высиме производные и вариационное исчисление. (Russian) [Differentiation of functions: higher derivatives and calculus of variations] Основы современного анализа. [Foundations of modern analysis] With preiko. Jaroslav. Gos. Univ., Yaroslavl', 1980. 84 pp. (Bl. Sendov) supplements by P. P. Zab 82j:26010 26B05 (49-01)

See also Gorin, E. A., 82a:46047 Šilovaja, G. I. See Dulac, H., 82k:34031

Silva, Alessandro Some properties of positive line bundles on 1-convex analytic spa Rend. Sem. Mat. Univ. Padova 63 (1980), 61-68. (Gary A. Harris) 82b:32046

(with Hoggatt, Verner E., Jr.) Generalized Fibonacci numbers. Quart. 18 (1980), no. 4, 290-300. (Calvin T. Long) 82e:10018 10A35 (10L05) Silva, Antonio M. (with Melkanoff, Michel A.) A method for helping discover the

dependencies of a relation. Advances in data base theory, Vol. 1 (Proc. Workshop,

Toulouse, 1979), pp. 115-133, Plenum, New York, 1981. (See 82a:68040) 68B15 de Silva, Basil M. The quotient of certain stable random variables. Sankhyā Ser. B 40 (1978/79), no. 3-4, 279-281. (Author's summary) 82f:60048 60E07 (62E10) (with Griffiths, R. C.) A test of independence for bivariate symmetric stable distributions. Austral. J. Statist. 22 (1980), no. 2, 172-177. (R. Ponnapalli) 82a:62063 62G10 (62H15)

reira da Silva, Clóvis See Pereira da Silva, Clóvis

Silva, M. Simplification des réseaux de Petri par élimination de places implicites. (English and German summaries) [Simplification of Petri nets by elimination of implicit places] Digital Process. 6 (1980), no. 4, 245-256. (Author's summary) 82m:68108

baldoni Silva, M. Welleda See Baldoni Silva, M. Welleda neves da Silva, R. See Neves da Silva, R.

lle, Mervyn J. (with Heathcote, C. R.) Minimum mean squared estimation of location and scale parameters under misspecification of the model. Biometrika 68 (1981), no. 2, 501-514. (Rudolph J. Beran) 82m:62075 62F12

On the existence of maximum likelihood estimators for the binomial response

J. Roy. Statist. Soc. Ser. B 43 (1981), no. 3, 310-313. (Author's summary)

82k-62138 62J05 Silveira, V. L. R. (with Fleming, H.; Lyra, J. L.; Prado, C. P. C.) Spontaneous breakdown of symmetry in cosmological models. Lett. Nuovo Cimento (2) 27 (1980), no. 9, 261-264. (From the introduction) 82c:83072 83F05 (81D20)

Silvela, Luis Genetic changes with generations of artificial selection. Genetics 95 (1980), no. 3, 769-782. (Ivar Heuch) 82e:92030 92A10

Silver, Edward A. Comments on: "The safety stock syndrome" [J. Oper. Res. Soc. 31 (1980), no. 9, 833-837; MR 81h:90055] by Ralph D. Snyder. With a reply by Snyder. J. Oper. Res. Soc. 32 (1981), no. 9, 837-839. 82h:90040 90B05

Operations research in inventory management: a review and critique. Oper. Res. 29 (1981), no. 4, 628-645. (Author's summary) 82h:90041 90B05

Silverman, B. W. (with Brown, Timothy Carlisle) Rates of Poisson convergence for U-statistics. J. Appl. Probab. 16 (1979), no. 2, 428-432. (W. Hoeffding) 82j:60050

Some asymptotic properties of the probabilistic teacher. IEEE Trans. Inform. Theory 26 (1980), no. 2, 246-249. (Tomáš Havránek) 82b:62037 62F15

(with Titterington, D. M.) Minimum covering ellipses. SIAM J. Sci. Statist Comput. 1 (1980), no. 4, 401-409. (R. Pfaffenberger) 82g:51025 90C99) 51M10 (62J99.

Using kernel density estimates to investigate multimodality. J. Roy. Statist. Soc. Ser.

B 43 (1981), no. 1, 97-99. (Yves Lepage) 821:62075 62605
(with Lotwick, H. W.) Convergence of spatial birth-and-death processes. Math.
Proc. Cambridge Philos. Soc. 90 (1981), no. 1, 155-165. (Klaus Fleischmann) 82h:60159 60J80 (60G55, 92A15)

(with Brown, Thomas Craig; Milne, R. K.) A class of two-type point processes. Z. Wahrsch. Verw. Gebiete 58 (1981), no. 3, 299-308. (Brian D. Ripley) 82k:60114

Silverman, Joseph H. Lower bound for the canonical height on elliptic curves. Duke Math. J. 48 (1981), no. 3, 633-648. (Michel Waldschmidt) 82k:14043 14K07 (10F37.

ard M. (with Jonckheere, Edmond A.) Spectral theory of the Silverman, Leo linear-quadratic optimal control problem: a new algorithm for spectral computations IEEE Trans. Automat. Control 25 (1980), no. 5, 880-888. (Authors' summary) 821:93047 93C55 (49G20)

(with Van Dooren, Paul M.) A system theoretic interpretation for GCD extraction.

IEEE Trans. Automat. Control 26 (1981), no. 6, 1273-1276. (Authors' summary) 93C05 (15A23) 82m-93050

(with Ernre, E.) The equation $XR + QY = \Phi$: a characterization of solutions. SIAM J. Control Optim. 19 (1981), no. 1, 33-38. (A. Lee) 82c:15016 15A24 (93B05) (with Jonckheere, Edmond A.) Spectral theory of the linear-quadratic optima control problem: analytic factorization of rational matrix-valued functions. SIA Control Optim. 19 (1981), no. 2, 262–281. (R. Saeks) 82g:49004 49A10 (47B35) ons. SIAM J.

Silverstein, Jack W. Describing the behavior of eigenvectors of random matrices us sequences of measures on orthogonal groups. SIAM J. Math. Anal. 12 (1981), no. 2, 274-281. (Bradley W. Dickinson) 82::15026 15A52 (60B15, 92A20)

Iverstone, Harris J. (with Moats, Richard K.) Practical recursive solution of degenerate Rayleigh-Schrödinger perturbation theory and application to high-order calculations of the Zeeman effect in hydrogen. Phys. Rev. A (3) 23 (1981), no. 4, 1645-1654. (Authors' summary) 82e:81012 81C12 (81G45)

Silvert, William (with Smith, William R.) The response of ecosystems to external perturbations Math. Biosci. 55 (1981), no. 3-4, 279-306. (Authors' summary) 82h:92035

92A15 (34K15, 39A10)

Silvester, P. P. The fundamental equations of electric and magnetic fields. Finite elements in electrical and magnetic field problems, pp. 33-48, Wiley, Chichester, 1980. (I. Kay) 82b:78009 78A25 (35A40)

estre, Joaquim Continua of Hahn-unsatisfactory equilibria: some examples. Econom. Lett. 5 (1980), no. 3, 201-208. (Winston T. Lin) 82d:90032 90A14

Silvestri, Jacopo See Arnold, Philip M., 82e:01026 Silvestrov, D. S. (with Kaplan, E. I.) Theorems of the type of the invariance principle for semi-Markov processes with an arbitrary state space. (Russian) Analytical methods of probability theory (Russian), pp. 121-125, 154, "Naukova Dumka", Kiev, 1979. (Gh. Oprişan) 824:60178 60K15 (60F17)

(with Dorogovcev, A. Ja.; Skorohod, A. V.; Jadrenko, M. I.) *Teopus

Beportmocrefi. (Russian) [Theory of probability] Coopures sanav. [A collection of problems] Translated from the Ukrainian. "Višča Škola", Kiev., 1980. 432 pp. (Publisher's description) 82a:60001 60-01 (00A07)

★Полумарковские процессы с дискретным множеством состояний. (Russian) [Semi-Markov processes with a discrete state space] Библиотека Инженера по Надежности. [Library for the Engineer in Reliability] Основы расчета

функциональных и надежностных характеристик стохастических систем. [Principles of the calculation of functional and reliability characteristics of stochastic systems] "Sovet. Radio", Moscow, 1980. 272 pp. (Gh. Oprişan) 82k:60181 60K15 (60K25)

Synchronized regenerative processes and explicit estimates for the rate of convergence in ergodic theorems. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 11, 22-25. (Asha Seth Kapadia) 824:60170

Mean hitting times for semi-Markov processes, and queueing networks. (Russian German and English summaries) Elektron. Informationsverarb. Kybernet. 16 (1980), no. 8-9, 399-415. (Author's summary) 821:60196 60K15 (60-04, 60K20)

Explicit estimates in ergodic theorems for regenerative processes. (Russian. German and English summaries) Elektron. Informationsverarb. Kybernet. 16 (1980), no. 8-9, 461-463. (Author's summary) 821:60191 60K05

(with Kaplan, E. I.) General limit theorems for sums of controlled random variables with an arbitrary phase space for the controlling sequence. (Russian. Lithuanian and English summaries) Litousk. Mat. Sb. 20 (1980), no. 4, 61-72, 209. (S. H. Siraždinov) 82h:60041 60F05 (60J10)

Remarks on the strong law of large numbers for processes of accumulation. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 22 (1980), 118–130, 165. (Såndor Csörgő) 82a:60129 60K05 (60F15)

(with Banah, D.) Uniform mean ergodic theorems for accumulation processes (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 2, 36–38, 97. (Authors' summary) 821:66073 60F99 (60J55)

Sil'vestrov, V. V. (with Cibrikova, L. I.) Calculation of the genus and the Weierstrass points of a fundamental polygon of a functional group. (Russian) Izv. Vysi. Učebn. Zaved. Matematika 1979, no. 12, 51-56. (G. M. Ljan) 82f:10026 10D05 (30F35)

(with Cibrikova, L. I.) Construction of an automorphic analogue of the Cauchy kernel for a class of properly discontinuous groups. (Russian) Trust Sem. Kraev Zadačam No. 16 (1979), 202-217, 245-246. (G. M. Ljan) 82k:30066 30F35 (10D20) Silvey, Anne See Malinvaud, E., 82m:62244

nuel David (with Titterington, D. M.; Torsney, B.) An algorithm for optimal designs on a finite design space. Optimal design theory. Comm. Statist. A—Theory Methods 7 (1978), no. 14, 1379–1389. (See 82g:62106) 62K05

★Optimal design. An introduction to the theory for parameter estimation Monographs on Applied Probability and Statistics. Chapman & Hall, London-New York, 1980. viii + 86 pp. ISBN 0-412-22910-2 (Friedrich Pukelsheim) 82d:62123 62K05 (with Ford, I.) A sequentially constructed design for estimating a nonlinear nametric function. Biometrika 67 (1980), no. 2, 381–388. (Authors' summary) arametric function 82k:62155 62L05

Silvia, Manuel T. (with Weglein, Arthur B.) Method for obtaining a nearfield inverse scattering solution to the acoustic wave equation. J. Acoust. Soc. Amer. 69 (1981), no. 2, 478-482. (Authors' summary) 82d:76081 76005

Sima, V. On the real Schur form in linear control system design. (French and German summaries) Rev. Roumaine Sci. Tech. Sér. Électrotech. Énergét. 25 (1980), no. 4,

625-632, x. (Author's summary) 82g:93022 93B99

An efficient Schur method to solve the stabilizing problem. IEEE Trans. Aus. Control 26 (1981), no. 3, 724-725. (From the introduction) 82j:93032 93D15 (with Varga, A.) Numerically stable algorithm for transfer function matrix

evaluation. Internat. J. Control 33 (1981), no. 6, 1123-1133. (From the introduction)

ada, Hidesuke (with Kokubu, Nobuhide) Arabic science. II. Teaching systems of Muslims and philosophies of Muslim education. (Japanese. English summary) Rep. Univ. Electro-Comm. 29 (1978/79), no. 2, 251-260. (Editors) 824:01009 01A30

ader, Christian G. (with Leinfelder, Herbert) Schrödinger operators with singular magnetic vector potentials. Math. Z. 176 (1981), no. 1, 1–19. (E. Müller-Pfeiffer) 824:35073 35P05 (47F05, 81C10)

w, S. N. (with Hohlova, E. K.) Construction of linear functionals for systems with aftereffect. (Russian) Ural. Gos. Univ. Mat. Zap. 12 (1979), no. 1, 148-153, 159. (D. ova) 82e:34075

Egumova) 82e:34075 34K05 hary, M. A. (with Alshaboury, S.) On G-transforms. Math. Student 45 (1977), no. 4, 1-6 (1979). (K. C. Gupta) 82h:33006 33A35 (44A20)

o (with Hammer, Peter L.) Quasim onotone Boolean functions and bistellar graphs. Combinatorics 79 (Proc. Colloq., Univ. Montreal, Montreal, Que., 1979), Part II.

Ann. Discrete Math. 9 (1980), 107-119. (G. Berman) 824:05090 05C99 (05C70,

(with Petreschi, Rossella) A switching algorithm for the solution of quadratic Boolean equations. Inform. Process. Lett. 11 (1980), no. 4-5, 193–198. (From the introduction) 82e:68044a 68C25 (03G05, 90C20, 94C10)

(with Petreschi, Rossella) Erratum: "A switching algorithm for the solution of adratic Boolean equations". Inform. Process. Lett. 12 (1981), no. 2, 109. (Editors) 68C25 (03G05, 90C20, 94C10)

ic, D. M. Sur la répartition des zéros d'une classe de polynômes. [On zero distribution in a polynomial class] Publ. Inst. Math. (Beograd) (N.S.) 28(42) (1980), 187-194. (M. Marden) 82mc30011 30C15

lan K. (with Cvetković, Dragoš) Graph equations. Contributions theory and its applications (Internat. Colloq., Oberhof, 1977) (German), pp. 40-56, Tech. Hochschule Ilmenau, Ilmenau, 1977. (Authors' summary) 82h:05110 05C99
Graphs which are existence constructions of the control

Graphs which are switching equivalent to their complementary line graphs. I. Publ. Inst. Math. (Beograd) (N.S.) 27(41) (1980), 229–235. (M. Aigner) 82m:05077 05C75 (with Cvetkovic, Dragos; Doob, Michael) Generalized line graphs. J. Graph Theory 5 (1981), no. 4, 385-399. (D. Sotteau) 82k:05091 05C99

idélier, G. (with Mitov, D.; Grigorova, L.) An approach to the autoparallel submanifolds of a linearly connected manifold. C. R. Acad. Bulgare Sci. 33 (1980), no. 6, 751-752. (P. G. Walczak) 82e:53062 53C40 (53C05)

puyên Si Minh See Nguyên Si Minh minoff, Robert Modeling of the vertebrate visual system. I. Wiring diagram of the cone retina. J. Theoret. Biol. 86 (1980), no. 4, 673-708. (Author's summary) 82j:92032 92A09 (92A27)

Modeling of the vertebrate visual system. II. Application to the turtle cone retina. J. Theoret. Biol. 87 (1980), no. 2, 307-347. (Author's summary) 82j:92033

Modeling of the vertebrate visual system. III. Topological analysis of the cone J. Theoret. Biol. 91 (1981), no. 3, 437-476. (Author's summary) 82j:92034 92A05 (92A27)

sseu, Claudia Lidia On a control problem in the theory of whirls. (Romania mary) Bul. Univ. Braşov Ser. C 20 (1978), 125-132. (Henry Berestycki) 82d:49005 49A22 (35R30, 76C05)

On a mathematical model in the population dynamics. Second Internation Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. 111, pp. 497-504, Reidel, Dordrecht, 1980. (Author's summary) 82f:92038 92A15

(with Cohen, Gérard) An approximation to rate distortion. Publ. Centre Rech.

Math. Pures (1) No. 15 (1980), 17-21. (Ram Autar) 82k:94012 94A34 iniaal, Constantin Oscillations de certains systèmes différentiels impliquées par l'existence des solutions bornées. I. An. Ştiinţ. Univ. "Al. I. Cuza" lazi Secţ. I a Mat. (N.S.) 26 (1980), no. 2, 319–326. (T. Yoshizawa) 82e:34043 34C27 nis, Aron (with Lequain, Yves) Projective modules over $R[X_1, \dots, X_n]$, R a Prüfer

domain. J. Pure Appl. Algebra 18 (1980), no. 2, 165-171. (J. W. Brewer) 82e:13010 13C10 (13B25)

(with Vasconcelos, Wolmer V.) The syzygies of the conormal module.

Math. 103 (1981), no. 2, 203-224. Jürgen Herzog) 82::13016 13C15 (13D25) (with Andrade, José F.; Vasconcelos, Wolmer V.) On the grade of some ideals. Manuscripta Math. 34 (1981), no. 2-3, 241-254. (Jürgen Herzog) 82j:13015 (13C05)

(with Vasconcelos, Wolmer V.) On the dimension and integrality of symmetric algebras. Math. Z. 177 (1981), no. 3, 341-358. (Jürgen Herzog) 82i:13017 13C15 (13D25)

(with Andrade, José F.) A complex that resolves the ideal of minors having n-1columns in common. Proc. Amer. Math. Soc. 81 (1981), no. 2, 217-219. (Luchezar L. Avramov) 82c:13020 13D25 (14M12)

ikin, G. N. (with Ahutin, V. M.; Gurfinkel', V. S.; Gusel'nikov, V. I.; Emel'janov, V. N.; Kogan, A. B.; Levenko, B. A.; Litineckii, I. B.) Current problems in bionics. (Russian) Cybernetics-in the service of Communism, Vol. 9: Control and information (Russian), pp. 176-211, "Energija", Moscow, 1978. (J. S. Joel) 82e:92001 (68Gixx)

kins, T. E. Finite elements for initial value problems in dynamics. Transactions of the Twenty-seventh Conference of Army Mathematicians (West Point, N.Y., 1981), pp. 365-380, ARO Rep. 82, 1, U. S. Army Res. Office, Research Triangle Park, N.C.,

73K25 1982. (See 82k:00010) m, Günter (with Gonska, Heinz H.) *Algebraische Strukturen. (German) [Algebraic

structures] Mathematik für die Lehrerausbildung. [Mathematics for teachers' education] B. G. Teubner, Stuttgart, 1980. 208 pp. ISBN 3-519-02706-2 (B. Artmann) 82c:00004

ands, James G. Six different stress functions for membranes of revolution. Mechanics today, Vol. 5, pp. 475-482, Pergamon, Oxford, 1980. (Cornelius O. Horgan) 82a:73034

(with Nicholson, J. W.) On Sanders' energy-release rate integral and conservation laws in finite elastostatics. Arch. Rational Mech. Anal. 76 (1981), no. 1, 1-8. (Authors' summary) 82k:73035 73G05 (73M05)

(with Duva, J.) Thickness effects are minor in the energy-release rate integral for bent plates containing elliptic holes or cracks. Trans. ASME Ser. E. J. Appl. Mech. 48 (1981), no. 2, 320–326. (From the summary) 82i:73047 73M05

s, Gustavus J. Cryptology: the mathematics of secure com Intelligencer 1 (1978/79), no. 4, 233–246. (J. S. Joel) 82e:94063 94B99 (01A65) Minimal Hamilton-laceable graphs. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 893-900. (W. G. Brown) 05C45 (05C35)

See also Brillhart, John, 82e:94064a and Brillhart, John, 82e:94064b

 H. E. (with Merrifield, R. E.) Generalized molecular duplexes. Chem. Phys. Lett. 1980), no. 2, 348-353. (Brian G. Wybourne) 82d:81171 81G55 (05C99) 74 (1980), no. 2, 348-353. (Brian G. Wybourne) 82d:81171 (with Merrifield, R. E.) Enumeration of structure-sensitive graph

calculations. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 3, part 1, 1329-1332. (Authors' summary) 824:05068 05C30 (05C99)

mons, Harry Spaces with Boolean assemblies. Colloq. Math. 43 (1980), no. 1, 23-39 (1981). (H. A. Priestley) 82h:06010 06D20 (18B30, 54F99)

Reticulated rings. J. Algebra 66 (1980), no. 1, 169–192. (Daniel D. Anderson) 13A99 (06D99) 82d:13005

s, John A. (with O'Leary, Dianne Prost) A bidiagonalization-regularization procedure for large scale discretizations of ill-posed problems. SIAM J. Sci. Statist.

Comput. 2 (1981), no. 4, 474-489. (Authors' summary) 82k:65020 65F99 (45L10,

(with Eatwell, G. P.; Willis, J. R.) A new representation for the dynamic Green's tensor of an elastic half-space or layered medium. Wave Motion 4 (1982), no. 1, 53-73. (Authors' summary) 82m:73020 73D25

ns, L. M., Jr. (with Gutschick, Vincent P.; Nieto, Michael Martin) Coherent states for the "isotonic oscillator". Phys. Lett. A 76 (1980), no. 1, 15-18. (Authors' summary) 826-81011 81C05

(with Nieto, Michael Martin; Gutschick, Vincent P.) Coherent states for general potentials. VI. Conclusions about the classical motion and the WKB approximation. Phys. Rev. D (3) 23 (1981), no. 4, 927-933. (Authors' summary) 82h:81074c

(with Bender, Carl M.; Mead, Lawrence R.) Strong-coupling expansion for the ground-state energy in the |x|^a potential. *Phys. Rev. D* (3) **24** (1981), *no.* 10, 2674–2682. (Authors' summary) **82k:81069** 81E99 (81C12, 81E25)

(with Bender, Carl M.; Cooper, Fred; Kenway, Richard) Continuum regulation of the strong-coupling expansion for quantum field theory. Phys. Rev. D (3) 24 (1981), no. 10, 2693-2705. (Authors' summary) 82k:81071 81E99 (81C12)

s, D. J. Geometric quantisation for singular Lagrangians. Differential geometrical methods in mathematical physics (Proc. Conf., Aix-en-Provence/Salamanca, 1979) pp. 401-405, Lecture Notes in Math., 836, Springer, Berlin, 1980. (Demeter Krupka) 58F06 (81D99)

Simó, Carlos (with Llibre, Jaume) Some homoclinic phenomena in the three-body problem. J. Differential Equations 37 (1980), no. 3, 444-465. (Richard McGehee) 82i:70013 70F07 (58F05, 58F14)

Some experiments with planar maps: strange attractors, stable zones and the role of invariant manifolds. Nonlinear problems of analysis in geometry and mechanics (Proc. Sympos., Univ. Paul Sabatier, Toulouse, 1979), pp. 176–183, Res. Notes in Math., 46, Pitman, Boston, Mass., 1981. (D. L. Rod) 82g:58048 58F12 (58–04, 70K05)

ões-Pereira, J. M. S. (with Bermond, J.-C.; Zamfirescu, Christina M.) On non-Hamiltonian homogeneously traceable digraphs. *Math. Japon.* **24** (1979/80), *no.* 4, 423–426. (Authors' summary) **82d:05063** 05C20 (05C38, 05C45)

Erdős-Hajnal well-orderings and n-degenerate graphs. Abh. Math. Sem. Univ. Hamburg 50 (1980), 101-107. (D. R. Lick) 82h:05112 05C99

nokin', P. L. Invariance of some extrinsic geometric characteristics of surfaces in the case of infinitesimal bendings. (Ukrainian. English and Russian summaries) Vīsnik Kiīv. Univ. Ser. Mat. Meh. No. 20 (1978), 108-113, 166. (A. V. Pogorelov) 82e:53093 53C45

chaliub-Simon, Alice See Chaliub-Simon, Alice on, Anne-Marie Groupes symétriques et groupes simples infinis. Bull. Soc. Math. Belg. Sér. B 31 (1979), no. 1, 21-37. (B. H. Neumann) 82c:20006 20B07 (20E32)

Simon, Barry (with Avron, Joseph E.) A counterexample to the paramagnetic conjecture. Phys. Lett. A 75 (1979/80), no. 1-2, 41-42. (Authors' summary) 82b:82003

(with Klaus, Martin) Coupling constant thresholds in nonrelativistic quantum mechanics. I. Short-range two-body case. Ann. Physics 130 (1980), no. 2, 251–281. (K. Veselić) 82h:81028a 81C10 (35P99, 47F05)

The classical limit of quantum partition functions. Comm. Math. Phys. 71 (1980), no. 3, 247-276. (Dietrich A. Uhlenbrock) 82e:81009 81C05 (22E70, 58F06)

Correlation inequalities and the decay of correlations in ferromagnets. Comm. Math. Phys. 77 (1980), no. 2, 111-126. (Francesco Guerra) 82e:82004 82A05 (82A25)

(with Klaus, Martin) Coupling constant thresholds in nonrelativistic quantum mechanics. II. Two-cluster thresholds in N-body systems. Comm. Math. Phys. 78 (1980/81), no. 2, 153–168. (K. Veselić) 82h:81028b 81C10 (35P99, 47F05)

(with Harrell, E.) The mathematical theory of resonances whose widths are exponentially small. Duke Math. J. 47 (1980), no. 4, 845-902 (J. B. McLeod) 82e:81007

(with Aizenman, Michael) A comparison of plane rotor and Ising models. Lett. A 76 (1980), no. 3-4, 281-282. (Authors' summary) 82b:82001 82A05 (82A25) (with Avron, Joseph E.) The asymptotics of the gap in the Mathieu equation. Ann. Physics 134 (1981), no. 1, 76-84. (H. Hochstadt) 82h:34030 34B30 (34B25, 81C05)

Large time behavior of the L^p norm of Schrödinger semigroups. J. Funct. Anal. 40 (1981), no. 1, 66-83. (P. A. Mišnaevskii) 82i:81027 81C05 (35P99) Spectrum and continuum eigenfunctions of Schrödinger operators. J. Funct. Anal. 42

(1981), no. 3, 347-355. (Evangelos Ifantis) 82h:35079 35P05 (47F05) (with Morgan, John D., III) The calculation of molecular resonances by complex J. Phys. B 14 (1981), no. 5, L167-L171. (Authors' summary) 82d:81172

81G55 (47A55, 81F05) (with Avron, Joseph E.) Almost periodic Hill's equation and the rings of Saturn.

Phys. Rev. Lett. 46 (1981), no. 17, 1166-1168. (Authors' summary) 824:58038

Convergence in trace ideals. Proc. Amer. Math. Soc. 83 (1981), no. 1, 39-43. (M. Demuth) 82h:47042 47D25 (47B10)

non, Burton (with Disney, Ralph L.; McNickle, Donald C.) The M/G/1 queue with instantaneous Bernoulli feedback. Naval Res. Logist. Quart. 27 (1980), no. 4, 635-644. (M. M. Siddiqui) 82h:60180 60K25 (90B22) (M. M. Siddiqui) 82h:60180 60K25 (90B22) non, F. (with Lippe, Wolfram-Manfred) Zur Elimination von Prozedurschachtelu

(English summary) Computing 23 (1979), no. 2, 119-138. (Authors' summary) 82f:68017 68B10

- ion, H. (with Bachem, A.) A product positioning model with costs and prices. Europ J. Oper. Res. 7 (1981), no. 4, 362-370. (Authors' summary) 82h:90008 90A06 (90A30,
 - (with Parlett, B. N.; Stringer, L. M.) On estimating the largest eigenvalue with the Lanczos algorithm. Math. Comp. 38 (1982), no. 157, 153-165. (Authors' summary) 65F15
- m, Jacques (with Shi, Shu Zhong) Sur un espace intervenant en contrôle ponctuel. nary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 15, A693-A696. (L. Longdon) 82a:49012 49A27
- (with Flato, Moshé) On a linearization program of nonlinear field equations. Phys. Lett. B 94 (1980), no. 4, 518-522. (Authors' summary) 82c:81068
- non, Janos (with Ja' Ja', Joseph) Parallel algorithms in graph theory: planarity testing (preliminary version). Mathematical foundations of computer science, 1980 (Proc. Ninth Sympos., Rydzyna, 1980), pp. 305–319, Lecture Notes in Comput. Sci., 88, Springer, Berlin, 1980. (Authors' summary) 82b:68057 68E10 (05C99)
 - Division in idealized unit cost RAMs. Special issue dedicated to Michael Machtey. Comput. System Sci. 22 (1981), no. 3, 421–441. (Author's summary) 82i:68030
- 68C25 (03D10, 03D15, 68C40)
 (with Paul, Wolfgang J.; Seiferas, Joel I.) An information-theoretic approach to time bounds for on-line computation. J. Comput. System Sci. 23 (1981), no. 2, 108-126.
- (Authors' summary) 82m:68089 68C25
 On tape-bounded probabilistic Turing machine acceptors. Theoret. Comput. Sci. 16 (1981), no. 1, 75-91. (Author's summary) 82i:68032 68C40 (03D10)
- non, Jonathan Wirtinger approximations and the knot groups of F^n in S^{n+2} . Pacific J. Math. 90 (1980), no. 1, 177–190. (D. E. Cohen) 82b:57001 57M05 (57Q45)
- Simon, L. (with Osmont, Daniel) Un algorithme d'itération sur le sous-espace pour le calcul des modes propres des "systèmes gyroscopiques". (English summary) Translated as Rech. Aérospat. (English) 1981, no. 3, 57-62. Rech. Aérospat. 1981, no. 3, 197-202.
- (Authors' summary) 82h:73058 73K12 (65N30)

 non, Leon Regularity of capillary surfaces over domains with corners. Pacific J. Math. 88 (1980), no. 2, 363-377. (F. J. Almgren, Jr.) 82d:49043 49H05 (35R35, 49F99, 58E12)
 - (with Schoen, Richard) Regularity of stable minimal hypersurfaces. Comm. Pure Appl. Math. 34 (1981), no. 6, 741-797. (F. J. Almgren, Jr.) 82k:49054 49F22 (53C42,
- non, Petr Divergent sequences in compact Hausdorff spaces. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 1087–1094, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (A. Šostak) 82f:54010 54A35 (54A25)
 - (with Balcar, Bohuslav; Vojtàš, Peter) Refinement and properties and extending of filters. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 11-12, 535-540 (1981). (Authors' summary) 82h:06019 06E05 (03G05, 04A20, 54A20, 54D40, 54H10)
 - A compact Fréchet space whose square is not Fréchet. Comment. Math. Carolin. 21 (1980), no. 4, 749-753. (J. E. Vaughan) 82a:54038 54D30 (04A20)
 - (with Balcar, Bohuslav; Pelant, Jan) The space of ultrafilters on N covered by owhere dense sets. Fund. Math. 110 (1980), no. 1, 11-24. (Andrzej Szymański) 82c:54003 54A25 (03E35, 03E50)
 - Čech-Stone compactification. (Czech) Pokroky Mat. Fyz. Astronom. 25 (1980), no. 6, 301-306. (Jacob Kofner) 82j:54041 54D35
 Two theorems of M. G. Tkačenko. (Russian) International Topology Conference
 - (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 220-221. (Aleksander Błaszczyk) 82e:54008 54A25
 - (with Balcar, Bohuslav; Vojtáš, Peter) Refinement properties and extensions of filters in Boolean algebras. Trans. Amer. Math. Soc. 267 (1981), no. 1, 265-283. (Sabine Koppelberg) 82k:06014 06E05 (03E05, 03E35)
- s W. See Putnam, Hilary, 82f:00013
- Simon, Udo Estimates for eigenvalues of the Laplacian on compact Riemannian manifolds. Spectral theory of differential operators (Birmingham, Ala., 1981), pp. 371–374, North-Holland Math. Studies, 55, North-Holland, Amsterdam, 1981. (See 82k:34002) 58G25 (35P99)
 - See also Global differential geometry and global analysis, 82i:53001
- m, W. (with Beig, R.) The stationary gravitational field near spatial infinity. Gen. Relativity Gravitation 12 (1980), no. 12, 1003-1013 (1981). (Richard Hansen) 82c:83028 83C30 (83C05)
- (with Beig, R.) On the multipole expansion for stationary space-times. Proc. Rov. Soc. London Ser. A 376 (1981), no. 1765, 333-341. (Basilis C. Xanthopoulos) 82f:83031
- oncini, L. (with Friedman, A. D.) Concurrent diagnosis in parallel systems. Proceedings of the 1979 International Conference on Parallel Processing (Bellaire, Mich., 1979), pp. 279–286, IEEE, New York, 1979. (A. T. Amin) 82e;94074 94C15 (68B20, 68J10)
- e, J. N. A characterization of hereditarily locally connected unicoherent continua (Serbo-Croatian summary) Glas. Mat. Ser. III 15(35) (1980), no. 1, 203-207. (G. R. Gordh, Jr.) 82a:54062 54F20 (54F50)
- Simonenko, I. B. (with Kozak, A. V.) Invertibility of convolution operators in large domains. (Russian) Linear operators. Mat. Issled. No. 54 (1980), 56–66, 166. (V. D. Didenko) 82b:47035 47B38 (47G05)
- On the relation between local factorizability and the local Noethericity property. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 98 (1980), no. 2, 281-283. (N. K. Karapetjane) 82f:45004 45E05 (30E99, 47G05)
- no. 2, 261–263. (N. A. Karapeijanc) 822450004 45E03 (30E99, 47005) (with Vekua, N. P.; Litvinčuk, G. S.; Nikoľskii, S. M.; Rogožin, V. S.; Samko, S. G.; Hvedelidze, B. V.; Čerskii, Ju. I.) Fedor Dmitrievič Gahov. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 193–194. (Editors) 82c:01056 01A70
- 1000 A. (with Marmo, G.; Saletan, E. J.; Zaccara, F.) Liouville dynamics and Poisson brackets. J. Math. Phys. 22 (1981), no. 4, 835-842. (E. C. G. Sudarshan) 82g:58031 58F05 (70G99)
- a transformations of the projective plane. (Dutch) Nieuw Tijdschr. Wisk. 68 (1980/81), no. 4, 188-201. (A. Evyatar (Gutwirth)) 82i:14003 14-01
- onjan, K. H. (with Melikjan, A. O.) A two-level system in a field of two intense waves. an) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 8, 23-25. (Authors' summary) 824-81184 81K05

- (with Melikjan, A. O.) Limiting transition $T \rightarrow \infty$ in the Hill method for quasi-energetic states. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 1, 76-79. (Authors' summary) 82h:81044 81C99
- au, E. Transfert de rayonnement dans les atmosphères étendues. Bull. Soc. Roy. Sci. Liège 49 (1980), no. 9-10, 281-303. (L. F. Oster) 82g:85009 85A25 (45L05)
- nonov, A. A. Measures with maximal entropy for piecewise monotone transformations of an interval. (Russian) Uspehi Mat. Nauk 35 (1980), no. 5(215), 243-244. (B. Kamiński)
- SEC:28026 28D20

 sonov, Ju. A. Multidimensional stable relativistic solitons. Jadernaja Fiz. 30 (1979), no 1457-1472 (Russian); translated as Soviet J. Nuclear Phys. 30 (1979), no. 5, 755-762 (1980). (Author's summary) 82a:81057 81G99 (35Q20, 58F07)
- (with Drohm, J. K.; Kok, L. P.; Tjon, J. A.; Veselov, A. I.) Collision and rotation of solitons in three space-time dimensions. Phys. Lett. B 101 (1981), no. 3, 204-208. (Authors' summary) 824:81097 81E99
- onov, M. I. The development of the idea of well-posedness of boundary value problems of mathematical physics. (Russian) Istor.-Mat. Issled. No. 25 (1980), 129-155, 378. (L. Reizinš) 82h:01039 01A60 (35-03)
- Reizips) 82:001039 U1A60 (35-03) nonony, Ju. A. See Simonov, Ju. A. See Simonov, Ju. A. See Simonov, Ju. A. See Simonov, Ju. A. See Simonov, Ju. A. See Simonov, Ju. A. See Simonov, Ju. A. See Simonov, Ju. A. See Simonov, Ju. See, I Mat. Meh. 1980, no. 6, 39-43, 117. (E. P. Gilbo) 82:e62088 62F35 nonovits, Andriss A note on: "Marx in the light of modern economic theory"
- [Econometrica 42 (1974), 611-632; MR 56 #2256] by M. Morishima. Econo
- (1978), no. 5, 1239-1241. (Anjan Mukherji) 82k:90046 90A16 nonovits, M. (with Erdős, Paul) On the chromatic number of geometric graphs. Ars Combin. 9 (1980), 229-246. (László Lovász) 82c:05048 05C15 (05C99)
- (with Duffus, Dwight; Rival, Ivan) Spanning retracts of a partially ordered set. Discrete Math. 32 (1980), no. 1, 1-7. (Derek C. J. Burgess) 82c:06005 06A10
- ns, F. H. (with Overdijk, D. A.; Thiemann, J. G. F.) A comment on unions of rings. Nederl. Akad. Wetensch. Indag. Math. 41 (1979), no. 4, 439-441. (V. Ficker) 82e:28001 28A05 (04A99)
- s, Jack (with Donnelly, Robert A.) Complex coordinate rotation of the electron propagator. J. Chem. Phys. 73 (1980), no. 6, 2858-2866. (Jean Michel Combes) 81G50 (35P05, 65P05, 81F10)
- s, Stuart On the entropy variation during the passage to radiative equilibrium. Phys. Lett. A 73 (1979), no. 2, 81-83. (Author's summary) 82b:80005 80A10
- nonsen, W. Correction to: "On the solution of a maximum-likelihood equation of the negative binomial distribution" [Scand. Actuar. J. 1976, no. 4, 220-231; MR 55 #1586]. Scand. Actuar. J. 1980, no. 1, 41-42. (B. K. Ghosh) 82b:62033 62F10
 - Correction to: "On the solution of a maximum-likelihood equation of the negative binomial distribution" [Scand. Actuar. J. 1976, no. 4, 220-231; MR 55 #1586]. Scand. Actuar. J. 1980, no. 4, 227-228. (Editors) 82a:62051 62F10
- nženkov, S. D. Description of the conjugate space to the space of functions that are holomorphic in the domain of a special type. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 2, 218-221, 239. (N. I. Skiba) 82e:46037 46E10 (32E25)
- ovici, Dan A. Polylocal languages. Begriffsschrift-Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 449-457, Friedrich-Schiller-Univ., Jena, 1979. (M. Kunze) 82g:68077 68F05 (03D05)
- Context-sensitive languages and Ackermann's function. Found. Control Engrg. 5
- (1980), no. 2, 91-103. (Akira Nakamura) \$2c:68052 68F05 (03D05)
 Computing of graphs of relations using generative grammars. (French summary)
 RAIRO Inform. Théor. 14 (1980), no. 3, 279-299. (David B. Benson) \$2d:68048 68F05 (03D05)
- on, John A. Foundations of metrology. J. Res. Nat. Bur. Standards 86 (1981), no. 3, 281-292. (Author's summary) 821:00020 00A69
 spson, Judy M. (with McGilchrist, Clyde A.) Growth-variable distribution and
- Math. Biosci. 50 (1980), no. 3-4, 159-162. (Authors' summary) 82m:92014 92A07 (62P10)
- Proceedings of the Native of two-dimensional finite element mesh generation. Proceedings of the Ninth Manitoba Conference on Numerical Mathematics and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 49–124, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (A. Louis) 82:e66079 65N30
 - ional mesh verification algorithm. SIAM J. Sci. Statist. Comput. 2 (1981), no. 4, 455-473. (Author's summary) 82k:65073 65N50
- pson, Stephen G. The hierarchy based on the jump operator. The Kleene Symposium (Proc. Sympos., Univ. Wisconsin, Madison, Wis., 1978), pp. 267-276, Stud. Logic ons Math., 101, North-Holland, Amsterdam, 1980. (Cristian Calude) 82a:03044
- (with Hrbáček, Karel) On Kleene degrees of analytic sets. The Kleene Symposium (Proc. Sympos., Univ. Wisconsin, Madison, Wis., 1978), pp. 347–352, Stud. Logic Foundations Math., 101, North-Holland, Amsterdam, 1980. (A. Nerode) 824:0361 03E15 (03D30, 03E35)
- ss, Charles C. How to construct a baby monster. Finite simple groups, II (Proc. Sympos., Unio. Durham, Durham, 1978), pp. 339–345, Academic Press, London, 1980. (See 20D08 82h:20021)
- ss, S. E. (with McMath, John S.; Hallum, C. R.) A comparison of various derivatives for matrix-valued functions. Comput. Math. Appl. 6 (1980), no. 2, 161-166. (Authors'
- summary) 82±65043 65F99 (15A09, 26E99)
 (with McMath, John S.) Mean value theorems for a matrix valued derivative. Lin ad Multilinear Algebra 9 (1980/81), no. 4, 255-261. (Jean H. Bevis) 82j:65025 65F99 (15A45, 26A24)
- sia, Ja. (with Petrenko, V. P.) A class of entire curves. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 2, 92-95. (A. N. Kanatnikov) 82c:32003 32A22 (32H30)
- son, Daniel (with Drozdowski, Grzegorz) Quivers of pure semisimple type. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 1, 33-40. (Bodo Pareigis) 16A64
- (with Dowbor, P.; Ringel, Claus Michael) Hereditary Artinian rings of finite representation type. Representation theory, II (Proc. Second Internat. Conf., Carleton Unio., Ottawa, Ont., 1979), pp. 232-241, Lecture Notes in Math., 832, Springer, Berlin, 1980. (From the text) 82i:16029 16A64

Right pure semisimple hereditary rings. Representation theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 573–578, Lecture Notes in Math., 832, Springer, Berlin, 1980. (From the text) 82c:16020 16A40

, 1980. (From the text) **82c:16020** 16A40 nple Grothendieck categories. II. Fund. Math. **110** (1980), no. 2, 107-116. (Wolfgang Grölz) 82i:18010 18E15

orrigendum: "Pure semisimple categories and rings of finite representation type" [J. ca 48 (1977), no. 2, 290-296; MR 57 #380]. J. Algebra 67 (1980), no. 1, 254-256. Corrigendo

Algebra 49 (1977), no. 2, 250-250, onk 57 a 350/3 3. Algebra 07 (150/3), no. 1, (Chr. U. Jensen) 824:16028 16A64 (18E10)

Partial Coxeter functors and right pure semisimple hereditary rings. J. Algebra 71 (1981), no. 1, 195-218. (Idun Reiten) 82ac:16031 16A64 (16A46)

numich, Thomas M. (with Karplus, W. J.) Application of pattern recognition method to modeling of systems with distributed parameters. (Russian) Avtomat. i Vyčisl. Tehnika (Minsk) No. 9 (1979), 11-19. (W. Greblicki) 82a:68174 68G10

nunek, Vhadimir Employed and unemployed resources in a general equilibrium model of the economy. Proceedings of the Second International Conference on Mathematical Modelling (St. Louis, Mo., 1979), Vol. 1, 11, pp. 1205–1212, Univ. Missouri-Rolla, Rolla,

Mo., 1980. (Author's summary) 82g-90024 90A14

Sin, Kwai Sang (with Goodwin, Graham C.) Effect of model, system and controller order on adaptive control. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 202-206, IEEE, New York, 1979. (Authors') nary) 82x:93035 93C40

(with Goodwin, Graham C.) Adaptive control of non IEEE Trans. Automat. Control 26 (1981), no. 2, 478-483. (Authors' summary) 82e:93066

(with Goodwin, Graham C.; Johnson, C. Richard, Jr.) Global convergence for adaptive one-step-ahead optimal controllers based on input matching. *IEEE Trans. Automat. Control* 26 (1981), no. 6, 1269–1273. (Authors' summary) 82m:93060 93C40

Sinā, Abū 'Alī al-Husayn ibn 'Abdallāh See Ibn Sinā, Abū 'Alī al-Husayn ibn 'Abdallāh atī, J. J. (with Chen, Y. C.; Wu, Shi Yu) Excitation spectra of disordered systems. I. General theory. Phys. Status Solidi (B) 104 (1981), no. 2, 441-452. (S. K. Srinivasan)

ECHERAL BLOGS.

82,A57 (82A42)

ni, Ja. G. ★Teophia фasoniax nepexonon. (Russian) [Theory of phase transitions]

Crpornic pesynataria. [Rigorous results] "Nauka", Moscow, 1980. 208 pp. (Hermann Rost) 82m.82020

82A25 (60G60, 60K35)

(with Vul, E. B.) A structurally stable mechanism of appearance of invariant specific sets. Multicomponent random systems, pp. 595-606, Advances in Probabilial Related Topics, 6, Dekker, New York, 1980. (Radu Nicolae Gologan) 821:59064 hyperbolic sets. Multicomy 58F13 (65L07, 86A10)

(with Bunimovič, L. A.) Markov partitions for dispersed billiards. Comm. Math. Phys. 78 (1980/81), no. 2, 247-280. (Peter Walters) 82e:58059 58F11 (82A05)

(with Bunimovič, L. A.) Statistical properties of Lorentz gas with periodic configuration of scatterers. Comm. Math. Phys. 78 (1980/81), no. 4, 479-497. (Sheldon

82A05 (58F11, 58F13, 60F17, 60K35) (with Vul, E. B.) Discovery of closed orbits of dynamical systems with the use of

computers. J. Statist. Phys. 23 (1980), no. 1, 27-47. (Radu Nicolae Gologan) 82f:58062 58F13 (34C35, 65L07, 76F99, 86A10)

ns, 82a:60004; Krylov, N. S., 82e:82001 and See also Multicom ent random syste Strange attractors, 82f:58065

aiskii, E. S. On numerical realization of the function of the hereditary operator. Prikl. Mat. Meh. 42 (1978), no. 6, 1115–1122 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 6, 1115–1122 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 6, 1223–1231 (1980). (Author's summary) 82j:73029 73E99 anoight, Oktay 1- and 2-topology of reaction networks. J. Math. Phys. 22 (1981), no. 7, 1504–1512. (W.-K. Chen) 82h:92063 92A40 (0SC10)

ny, Leon Kelvin's destabilizing effect of small damping. Seminar on Numerical Analysis and its Applications to Continuum Physics (Rio de Janeiro, 1980), pp. 19-27, Soc. Brasil.

Mat., Rio de Janeiro, 1980. (C. Olech) 82g-34067 34D10

ay, Leon R. (with Reiss, Edward L.) Perturbed panel flutter: a simple model. AIAA J.

19 (1981), no. 11, 1476–1483. (Authors' summary) 82i:73027 73J10

ir, Annette A constructive method of approximating the Riemann mapping function. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 841-846, Academic Press, New York, 1980. (D. Gaier) 82d:30011 30C30

On development of the Riemann mapping theorem and related results. *Math. Sci.* 6 (1981), no. 1, 27–34. (Bertram Ross) 82k:30001 30–03 (01A60, 01A99)

clair, D. K. (with Kogut, John B.; Pearson, Robert B.; Shigemitsu, Junko) Z_N and N-state Potts lattice gauge theories: phase diagrams, first-order transitions, β functions, and 1/N expansions. Phys. Rev. D (3) 22 (1980), no. 10, 2447–2464. (Gheorghe Nenciu) 82A25 (82A67, 82A68)

(with Kogut, John B.) Analyticity of the off-axis string tension and the restoration of rotational symmetry in lattice systems. Phys. Rev. D (3) 24 (1981), no. 6, 1610–1616. (Authors' summary) 821:81104 81E25 (82A25)

(Authors Summary) Sensitive of a bi-material wedge. J. Elasticity 11 (1981), no. 3, 317–327. (Authors' summary) 82h:73015 73C45

ec, Richard F. (with Erisman, Albert M.; Yip, Elizabeth L. ; Epton, Michael A.) Analysis of descriptor systems using numerical algorithms. IEEE Trans. Auton. Control 26 (1981), no. 1, 139-147. (Authors' summary) 82c:65048 65L05 (93B30) (with Yip, Elizabeth L.) Solvability, controllability, and observability of conti

descriptor systems. IEEE Trans. Automat. Control 26 (1981), no. 3, 702-707. (Authors' summary) 82k:93018 93B05

delar, Jan Algorithmical complexity of some statistical decision processes. I, II. Kybernetika (Prague) 16 (1980), no. 4, 345-356, 357-376. (Ernst-Erich Doberkat) 82::68028 68C25 (62C12, 90A05)

lelář, Karel In memoriam Academician Bohumil Bydžovský. (Czech) Časopis Pěst. Mat.

105 (1980), no. 3, 325-328. (Editors) 82:01144 01A70

ne, Robert C. On invariant probabilities for random rotations. A collection of invited papers on ergodic theory. Irrael J. Math. 33 (1979), no. 3-4, 384–388 (1980). (K. Jacobs) 82::28020 28D05 (28Clin)

(with Roehrig, Stephen F.) The structure of ω-limit sets of nonexpansive maps. Proc. Amer. Math. Soc. 81 (1981), no. 3, 398-400. (Dan Tiba) 82f:47068 47H09

estrari, Eugenio A nonlinear functional renewal equation. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 10-15 (1980). (D. R. Grey) 82k:45002 45D05 (92A15)

Asymptotic behaviour of solutions of a nonlinear model of population dynam (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 3-4, 186-190 (1980). (O. Diekmann) 82k:35060 35K55 (92A15)

(with Vernole, Paola) Retarded functional parabolic equations in interpolatis spaces. Nonlinear Anal. 3 (1979), no. 5, 583-593. (Curtis C. Travis) 82a:35094

Sing, S. N. See Singh, Surya Narain
Singal, M. K. Award for distinguished service to Professor Ram Behari. Bull. Math. Assoc. India 10 (1978), no. 1-4, 1-4 (1 plate). (Editors) 82m:01067

(with Arya, Shashi Prabha) The closure-preserving sum theorem. Indian J. Math. 20

(1978), no. 3, 301–314. (O. Frink) 82:54042 54D20 (54E5) (with Arya, Shashi Prabha) Weak topology sum theorems. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 1095–1109, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (Ying Ming Liu) 82e:54033 54D99 (54B99) (with Jain, S. C.) Separation axioms weaker than pairwise Hausdorff.

(Serbo-Croatian summary) Glas. Mat. Ser. III 16(36) (1981), no. 1, 121-129. (William Lindgren) 82k:54050 54E55

Singal, R. P. Some transformations of hypergeometric series. J. Math. Sci. 5 (1970), no. 2, 42-44 (1979). (L. J. Slater) 82g:33007 33A30 42-44 (1979). (L. J. Slater) 82g:33007

A Watson sum for the double hypergeometric series. Ganita 30 (1979), no. 1-2, 68-72 (L. J. Slater) 82f:33002 33A30

Singaraju, B. K. (with Baum, Carl E.) The singularity and eigenmode expansion methods with application to equivalent circuits and related topics. Acoustic, electromagnetic and wave scattering-focus on the T-matrix approach (Proc. Internat. Sympos., Ohio State Univ., Columbus, Ohio, 1979), pp. 431-452, Pergamon, Oxford, 1980. (See

Singare, S. M. (with Pachpatte, B. G.) On certain discrete inequalities of the Wendroff type. Indian J. Pure Appl. Math. 11 (1980), no. 6, 727-736. (B. Crstici) 82f:26019

Singare, V. M. (with Pachpatte, B. G.) On certain partial integro-differential inequalities and their applications. Chinese 82e:45012 45K05 (26D10) Chinese J. Math. 8 (1980), no. 2, 113-124. (E. F. Beckenbach)

(with Pachpatte, B. G.) Lower bounds on some integral inequalities in n independent Indian J. Pure Appl. Math. 12 (1981), no. 3, 318-331. (Paul R. Beesack) 82e:26016 26D10 (39C05)

Singatullin, R. S. (with Zaharov, A. V.) Infinitesimal bicollineation in pseudo-Riemannian spaces \overline{V}_4 and V_4 , and approximate mapping of world lines. (Russian) Studies in the geometry of imbedded manifolds and projective geometry (Russian), pp. 91-97, Leningrad. Gos. Ped. Inst., Leningrad, 1979. (Andrzej Trautman) 82b:83012 83C10 (53B30)

(with Kuzeev, R. R.) Electric field of a dipole in spaces of positive curvature (Russian) Gravitacija i Teor. Otnositel'nosti No. 16 (1980), 95-98. (V. V. Sokolov) 78A30

Inverse problems of the general relativistic mechanics of test bodies and their plications to general relativity. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 10, 25-29. (Author's summary) 82d:83010 83C10

Construction of Riemann space-time metrics according to given properties of motion of test particles. (Russian) Problemy Teor. Gravitacii i Element. Castic No. 11 (1980), 66-69. (J. D. Zund) 82e:83010 83C10 (83C05)

Singer, Burton (with Spilerman, Seymour) Fitting stochastic models to longitudinal survey data—some examples in the social sciences. (French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 3. With discussion. Bull. Inst. Internat. Statist. 47 (1977), no. 3, 283-300, 315-321. (Authors'

nary) 82m:92082 92A20 M. See Symposium: Chern, Differential Geometry, 82c:58002

Singer, Ivan (with Nürnberger, Günther) Uniqueness of best approximations in spaces of continuous functions. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 687-692, Academic Press, New York, 1980. (A. Kroó) 82d:41037 (41A15, 41A50)

A characterization of constant-time linear control systems satisfying the Pontryagin im principle. J. Optim. Theory Appl. 32 (1980), no. 3, 379-384. (L. D. Berkovitz) 49B27 (93C25)

(with Deutsch, Frank; Nürnberger, Günther) Weak Chebyshev subspaces and alternation. Pacific J. Math. 89 (1980), no. 1, 9-31. (Author's review (G.N.)) 82c:41026

★Bases in Banach spaces. II. Editura Academiei Republicii Socialiste România. Bucharest; Springer-Verlag, Berlin-New York, 1981. viii + 880 pp. ISBN 3-540-10394-5 (Y. Benyamini) 82k:46024 46B15 (46-02)

Singer, Josef See Liming, Roy Aaron, 82g:68095
Singer, Michael F. (with Schecter, Stephen) Singular points of planar vector fields. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 393-409, Lecture Notes in Math., 819, Springer, Berlin, 1980. (Freddy Dumortier) 82d:58054 58F14

(with Schecter, Stephen) Separatrices at singular points of planar vector fields. Acta Math. 145 (1980), no. 1-2, 47-78. (Freddy Dumortier) 82e:58075 58F14 (34C20)

(with Schecter, Stephen) Planar polynomial foliations. Proc. Amer. Math. Soc. 79 (1980), no. 4, 649-656. (Michael J. Field) 82j:58096a 58F18 (57R30) solutions of nth order homogeneous linear differential equ

J. Math. 103 (1981), no. 4, 661-682. (K. Okugawa) 82i:12028 12H05 (03B25, 34A35, (with Schecter, Stephen) Addendum to: "Planar polynomial foliations". Proc. Amer.

Math. Soc. 83 (1981), no. 1, 220. (Michael J. Field) 82j:58096b 58F18 (57R30) Singer, William M. A new chain complex for the homology of the Steenrod algebra. Math.

Proc. Cambridge Philos. Soc. 90 (1981), no. 2, 279-292. (S. Cormack) 82k:55018 55510

Singh, A. Quaternionic form of the electromagnetic-current equations with magnetic monopoles. Lett. Nuovo Cimento (2) 31 (1981), no. 5, 145-148. (From the text) 82i:78010 78A25 (81E99)

Singh, A. K. See Singh, Awadhesh Kumar

Singh, A. P. (with Tripathi, L. M.) A study of double Fourier series by Nörlund nability. Nederl. Akad. Wetensch. Indag. Math. 43 (1981), no. 1, 139-143. (Tikam Singh) 82g:42012 42B05 (40G05)

Singh, Ajit Iqbal (with Kumar, Ajay) Spectral synthesis in products and quotients of hypergroups. Pacific J. Math. 94 (1981), no. 1, 177-192. (K. A. Ross) 82h:43005 43A45 (22A10)

ngh, Anand P. (with Barker, George Phillip) On differential polynomials. Con Math. Univ. St. Paul. 29 (1980), no. 2, 183-191. (S. M. Shah) 82j:30038 30D3

ngh, Anita (with Pillai, K. C. S.) On the exact nonnull distribution of Wilks' Lyc criterion and power studies. Ann. Inst. Statist. Math. 33 (1981), no. 1, 45-55. (Minoru Siotani) 62H10

ngh, Arbind Kumar (with Singh, U. P.) Finsler spaces admitting recurrent neo-pseudo projective tensor fields. Indian J. Pure Appl. Math. 12 (1981), no. 10, 1201-1207. (Hiroshi Yasuda) 82m:53029 53B40

ngh, Awadhesh Kumar (with Lal, Shiva Narain) Invariant points of generalised ps, Anderson runnal (win Lai, Shiva Narain) invariant points of generalised nonexpansive mappings in 2-metric spaces. *Indian J. Math.* **20** (1978), no. 1, 71–76. (Schie Park) **82b:54061** 54H25 hie Park) 82b:54061 54H25 (with Lal, Shiva Narain) Absolute Nörlund summability of Fourier integrals. Indian

J. Math. 21 (1979), no. 2, 121–127. (S. M. Mazhar) 82d-42005 42A28 (40G05, 42A38)
On Einstein-Kaehlerian conharmonic recurrent spaces. Indian J. Pure Appl. Math.
10 (1979), no. 4, 486–492. (Author's summary) 82i:53036 53B35

(with Singh, U. P.) On Kählerian conharmonic* recurrent and symmetric spaces. Progr. Math. (Allahabad) 13 (1979), no. 1-2, 9-15. (Raymond Couty) 82d:53021

(with Siddiqui, A.; Prasad, Y. N.) Integrals involving spheroidal wave functions. Indian J. Pure Appl. Math. 12 (1981), no. 11, 1336-1342. (R. C. Varma) 82k:33014 33A35 (33A55)

Singh, Baldau (with Pande, H. D.) Bianchi identities and the projectively flat special Kawaguchi space. (Turkish summary) İstanbul Üniv. Fen Fak. Mecm. Ser. A 41 (1976), 77-86 (1981). (M. Yoshida) 82f:53039 53B40

gh, Balwant Formal invariance of local characteristic functions. Seminar D.

Eisenbud/B. Singh/W. Vogel, Vol. 1, pp. 44-59, Teubner-Texte zur Math., 29, Teubner, Leipzig, 1980. (José M. Aroca) 82g:14008 14B05 (13H15)

On two theorems on normal flatness. Seminar D. Eisenbud/B. Singh/W. Vogel, Vol. 1, pp. 108-112, Teubner-Texte zur Math., 29, Teubner, Leipzig, 1980. (José M. Aroca)

See also Seminar: Eisenbud, D.-Singh, B.-Vogel, W., 82b:14001

Singh, Bhagat (with Kusano, Takaši) On asymptotic limits of nonoscillations in functional equations with retarded arguments. Hiroshima Math. J. 10 (1980), no. 3, 557-565. (V. Staikos) 82a:34088

Nonoscillation of forced Lienard type functional equations. J. Indian Acad. Math. 2

(1980), no. 2, 85–90. (Curtis C. Travis) 82a:34089 34K15
Initially and eventually dominating nonoscillatory solutions in integro-differential difference equations. J. Math. Anal. Appl. 78 (1980), no. 2, 640-647. (H. A. DeKleine) 82c:45016 45105 (34K15)

Oscillation in second order functional equations with deviating arguments. Internat. J. Math. Math. Sci. 4 (1981), no. 1, 137-146. (H. C. Howard) 82i:34089 See also Sztaba, Urszula, 82f:34094

Singh, Brij M. (with Moodie, T. Bryant; Haddow, J. B.) Torsion by an annular disk of an infinite cylinder embedded in an elastic half-space. Utilitas Math. 18 (1980), 97-113. (Roger D. Low) 82b:73011 73C35

See also Dhaliwal, Ranjit S., 82a:45013 and Williams, W. E., 82g:45014
Singh, Chanan (with Dhillon, B. S.) *Engineering reliability. New techniques and

applications. Wiley Series on Systems Engineering and Analysis. A Wiley Interse Publication. John Wiley & Sons, Inc., New York, 1981. xix + 339 pp. ISBN 0-471-05014-8 (From the preface) 82f-90043 90B25 (62N05)

(with Gupta, R. P.) Distributions of the ratio of two ranges of samples from nonnormal populations. Comm. Statist. B-Simulation Comput. 10 (1981), no. 6, 629-637. (Authors' summary) 82k:62041 62E15

ngh, Chanchal Optimality conditions in fractional programming. J. Optim. Theory Appl.

33 (1981), no. 2, 287–294. (A. Göpfert) 82e:90105 90C32

Singh, D. (with Srivastava, A. K.) A sampling procedure with inclusion probabilities proportional to size. Biometrika 68 (1981), no. 3, 732–734. (Authors' summary)

Singh, Devi Unsteady flow of a viscous homogeneous incompressible fluid through the annular space between two porous concentric circular cylinders. Ganita 30 (1979), no. 1-2, 95-107. (Author's introduction) 82i:76087 76S05

Application of E-operator to evaluate an infinite double integral. J. Math. Sci. 9

(1974), 29-36 (1976). (From the introduction) 82e:33008 33A35
Singh, G. (with Sinha, Bipin Behari) Finsler space with recurrent neo-pseudoprojective curvature tensor. Indian J. Pure Appl. Math. 12 (1981), no. 9, 1063-1068. (B. D. Dwivedi) 82j:53048 53B40

Singh, Harinder Thermal stresses in an infinite cylinder. Indian J. Pure Appl. Math. 12 (1981), no. 3, 405-418. (B. A. Boley) 82d:73011 73C25 (80A20)

weet (with Garg, Kumkum) Inversion of a 2D continued fraction. Internat. J. Control 34 (1981), no. 1, 191-196. (Authors' summary) 82i:93019 93B15 (40A15)

der (with Buche, A. B.) On the differential and integral equations associated with the modified exponential-cosine operator function. Indian J. Pure Appl. Math. 11 (1980), no. 3, 354-367. (J. A. Goldstein) 82i:47077a 47D99

(with Buche, A. B.) On the generation theorems for the modified exponential-cosine operator. Indian J. Pure Appl. Math. 11 (1980), no. 3, 368-383. (J. A. Goldstein) 82i:47077b 47D99

(with Chander, Ramesh) On the measurability and continuity properties of the cosine operator. Indian J. Pure Appl. Math. 12 (1981), no. 1, 81-83. (Authors' summary) 477099

ngh, Hukum (with Dubey, Ram Suranjan Dhar) Hypersurfaces of recurrent Finsler spaces. Indian J. Pure Appl. Math. 11 (1980), no. 9, 1125-1129. (H. D. Pande) 82e:53044 53B40

Singh, I. J. (with John, V. B.; Goswami, G. K.) Perfect fluid models of anisotropic iverse. Indian J. Pure Appl. Math. 12 (1981), no. 6, 786-797. (Authors' summary) 821:83056 83C55 (83F05)

gh, Jagbir Minimum variance unbiased estimation of probability densities. Austral. J. Statist. 22 (1980), no. 3, 328–331. (Author's summary) 82d:62003 62-01

Singh, Jokhan (with Pandey, M.) Estimation of variance of a normal population. Com Statist. A—Theory Methods 10 (1981), no. 18, 1879-1884. (Authors' summary) 82i:62018

Singh, K. D. (with Agnihotri, R. K.) On almost (ε₁, ε₂)-contact metric manifolds with semisymmetric metric connections. Demonstratio Math. 13 (1980), no. 2, 369-381. (Franco Tricerri) 82b:53035 53C05 (53C15)

(with Singh, Rakeshwar) Remarks on some $f(3, \epsilon)$ -structure manifolds. Demi

Math. 14 (1981), no. 1, 221-226. (Stere Ianus) 82h:53054 53C15
gh, K. L. A remark on a paper: "Extensions of fixed point theorems of Rhoades and Ciric" [Proc. Amer. Math. Soc. 64 (1977), no. 2, 283-286; MR 56 #3819] by T. K. Pal and M. Maiti. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 4, 407-409. (From the text) 82i:54082 54H25

Singh, K. N. (with Lal, Shiva Narain) Allied integral and absolute functional Nörlund method of summability. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1617-1625. (S. M. Mazhar) 82f:42010 42A38 (40G05, 42A28)

(with Lal, Shiva Narain) On the absolute summability of weighted Fourier series by Nörlund means. Indian J. Pure Appl. Math. 12 (1981), no. 3, 350-361. (N. Kishore)

82m:42008 42A28 (40G05) Singh, K. P. (with Abdussattar) Some cylindrically symmetric electrovac universes. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 6, 465-469 (1978). (Authors' summary) 821-83043 83C50

gh, Kamar J. Improved accuracy of finite element solution by a new reduced integration method. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 67-73, IMACS, New 65N30 Brunswick, N.J., 1977. (See 82a:65004)

ngh, Kesar (with Babu, Gutti Jogesh) On probabilities of moderate deviations for dependent processes. Sankhyā Ser. A 40 (1978), no. 1, 28-37. (S. Csörgő (Zbl

413:60019)) 82i:60047 60F10

(with Babu, Gutti Jogesh) Probabilities of moderate deviations for some stationary strong-mixing processes. Sankhyā Ser. A 40 (1978), no. 1, 38-43. (S. Csörgő (Zbl 413:60020)) 82k:60056 60F10 (60G10)

Representations of quantile processes with nonuniform bounds. Sankhyā Ser. A 41 (1979), no. 3-4, 271-277. (M. D. Burke) 82g:62074 62G30 (60F15)

s. Austral. J. Statist. 22 A note on sample quantile processes of finite population (1980), no. 3, 358-363. (Author's summary) 82f:62029 62D05

Large deviation probabilities for certain dependent processes. J. Multipariate Anal. 11 (1981), no. 3, 354-367. (Hira L. Koul) 82i:62072 62G20 (60F10, 62H15)

Singh, Kuldip A basis of a (G, \u03c4) space and the derivation of some known results. Bull. Calcutta Math. Soc. 71 (1979), no. 5, 331-336. (From the introduction) \$2\u03c4s:20013a 20C20 (15A72)

Decomposition of the (G, σ) space as a tensor product. Bull. Calcutta Math. Soc. 72 (1980), no. 1, 11-14. (From the introduction) 82h:20013b 20C20 (15A72)

(with Arkin, Joseph) A new type magic Latin 3-cube of order ten. Fibonacci Quart. 19 (1981), no. 1, 76-82. (From the text) 82d:05032 05B15

Singh, L. P. S. Covariant propagators for massive arbitrary-spin fields. Phys. Rev. D (3) 23 (1981), no. 10, 2236-2242. (Author's summary) 82h:81072 81D25 (81F05)

Singh, Lallu The general proof of Fermat's last theorem. J. Indian Acad. Math. 2 (1980), no. 1, 43-50. (Itaru Yamaguchi) 82b:10018 10B15

Singh, M. C. Group theoretic analysis of similarity transformations with applications to the nonhomogeneous and nonlinear problems of wave propagation. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 339-341, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81004) 35A30 (35C99)

(with Seshadri, R.) Similarity analysis of wave propagation problems in nonlinear rods. (Polish and Russian summaries) Arch. Mech. (Arch. Mech. Stos.) 32 (1980), no. 6, 933-945 (1981). (Authors' summary) 82j:73021 73D35 (73K12)

Singh, M. Nayan (with Ray, Barada Kinkar) On an extension of a theorem of M. Furi and A. Vignoli. Math. Sem. Notes Kobe Univ. 9 (1981), no. 1, 191-194. (Kok Keong Tan) 54H25

Singh, Madan G. (with Mahmoud, Magdi S.; Hassan, Mohammed F.) A new hierarchical approach to the joint problem of systems identification and optimization. Large Scale Systems 1 (1980), no. 3, 159-166. (Authors' summary) 82i:49023 49C20 (93B30)

(with Hassan, Mohammed F.) Decentralised controller with online interaction trajectory improvement. Proc. IEE-D 127 (1980), no. 3, 142-148. (Authors' summary)

(with Hassan, Mohammed F.; Titli, A.; Hurteau, R.) Stability, stabilisation and performance of multilevel controllers under structural perturbations. I. Cutting the links between coordinator and subsystems. Proc. IEE-D 127 (1980), no. 5, 207-213. (Authors' 49C20 (49E25, 93D99)

(with Hassan, Mohammed F.) Stability, stabilisation and performance of multilevel controllers under structural perturbations. II. Stabilisation under any structural

perturbation. Proc. IEE-D 127 (1980), no. 5, 214-219. (Authors' summary) 82h:49039b 49C20 (49E25, 93D99)

(with Chemouil, P.: Katebi, M. R.: Sastry, D.) Maximum a posteriori parameter estimation in large-scale systems. Automatica-J. IFAC 17 (1981), no. 6, 845-851. (Authors' summary) 82m:93082 93E10

See also Moog, C., 82h:90139b Singh, Mahabir (with Maggu, Parkash Lal; Das, Ghanshiam; Singhal, M. L.) On $3 \times n$ sequencing problem involving equivalent-job for a job-block with transportation-times of jobs. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 12 (1981), no. 2, 271–279. (Authors' summary) 82h:90065 90B35

Singh, Manohar (with Malik, S. K.) Nonlinear dispersive waves on the surface of a self-gravitating fluid layer. Astrophys. and Space Sci. 76 (1981), no. 1, 3-12. (Authors' summary) 824:76013 76B15 (35Q20)

with Malik, S. K.) Second harmonic resonance in a self-gravitating fluid column. J. wh. Anal. Appl. 83 (1981), no. 1, 1-10. (Authors' summary) 82i:76009 76B15 (85A30)

Singh, Murari (with Purl, P. D.; Nigam, A. K.; Gupta, R. A.) A note on balan row-and-column designs. Sankhyū Ser. B 41 (1979), no. 1-2, 124-127. (Authors' summary) 821:62144 62K10

(with Dey, A.) Some series of efficiency balanced designs. Austral. J. Statist. 22

(1980), no. 3, 364-367. (M. L. Chandak) 82m:62172 62K10

h, N. (with Singh, R. P.) Conditions implying unitici (1981), no. 2, 200-204. (Takayuki Furuta) 82d:47032 iticity. It in J. Pure Appl. Math. 12 47B15 (47A20)

h, Nam Prasad (with Anandani, P.) Integration of generalized H-function of two variables with respect to parameters. II. J. Natur. Sci. Math. 18 (1978), no. 2, 33-42. (C. L. Parihar) 82c:33009 33A35

A class of integral transforms in two variables. Jāānabha 8 (1978), 103-113. 44A20 (33A30) (Author's introduction) 82j:44006

(with Anandani, P.) Some inequalities for H-function. Math. Notae 27 (1979/80), 35-40. (C. L. Parihar) 82e:33006 33A35

A new class of integrals involving the associated Legendre function and the

tion of several variables. II. Con ent. Math. Univ. St. Paul. 29 (1980), no. 2, 115-121. (Author's summary) 82k:33015 33A35

Some finite series. Recurrence relations and identities for the H-function of two ables. Math. Notae 28 (1980/81), 43-51. (S. D. Bajpai) 82i:33007 33A35

Double series for the H-function of two variables. I. (Hindi. English summary)

Vijnana Parishad Amsandhan Patrika 23 (1980), no. 4, 319-322. (C. L. Koul) 82d:33012

h, Naunihal (with Ali, M. A.) An alternative estimator in inverse linear regression. J. Statist. Comput. Simulation 14 (1981/82), no. 1, 1-15. (Authors' summary) 82m:62141

ngh, O. P. (with Rathore, R. K. S.) Determination of certain asymptotic constants related with the post-Widder inversion of Laplace transform. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 155-160. (V. P. Mainra) 82g:41018 41A35 (44A10)

(with Pandey, Ram Nakshatra) Some properties and expansions of the polynomial $\{M_{n,n}(x,y)\}$. (Turkish summary) Istanbul Tek. Üniv. Bül. 33 (1980), no. 1, 1–13. (R. C. Varma) 824:33022 33A65

(with Pandey, Ram Nakshatra) Generalized polynomial set $\{M_{\alpha_3n}(x,y)\}$. Bull. Inst. Math. Acad. Sinica 9 (1981), no. 1, 75-92. (C. L. Parihar) 82g:33032 (with Rathore, R. K. S.) Limits of certain iterates of Post-Widder operato Monatsh. Math. 91 (1981), no. 2, 131-138. (Mourad E. H. Ismail) 82h:41030 41A

ugh, Om P. On the conformal areal spaces of the submetric class. IV. The conformal connection parameters. Kyungpook Math. J. 18 (1978), no. 2, 295-299. (A. Kawaguchi)

ngh, Padam (with Srivastava, A. K.) Sampling schemes providing unbiased reg

ga, r and with Pandey, B. N.) On estimation of common scale in exponential physical Parkaskar (with Pandey, B. N.) On estimation of common scale in exponential st. Assoc. Bull. 28 (1979), no. 109-112, 151-155. (I. A. Calcutta Stat 62F11 Melamed) 82h:62034

ngh, Peetam A note on the solution of two-dimensional Volterra integral equation by m J. Math. 18 (1976), no. 1, 61-64. (From the text) 82d:45002 (41A15, 45L05)

Singh, Prem (with Singh, Prithvipal) Integral representation of functions in certain classes of univalent functions. *Indian J. Pure Appl. Math.* 12 (1981), no. 4, 459–471. (Evelyn M. Silvia) 82i:30020 30C45 (30E20)

(with Tygel, Martin) On some univalent functions in the unit disc. Indian J. Pure Appl. Math. 12 (1981), no. 4, 513-520. (D. R. Wilken) 82k:30024 30C55 (30C45)

ngh, Prithvipal (with Singh, Prem) Integral representation of functions in certain class of univalent functions. Indian J. Pure Appl. Math. 12 (1981), no. 4, 459-471. (Evelyn M. Silvia) 82i:30020 30C45 (30E20)

gh, Punyatma (with Bhattacharya, D. K.) A new variational technique to free convection boundary layer flow and heat transfer. Acta Phys. Acad. Sci. Hungar. 48 (1980), no. 1, 85-92. (Editors) 82a:76072 76R10 (49H05, 80A20)

(with Srivastava, K. K.; Verma, R. L.) Thermodynamic method to two-dimer stagnation flow and heat transfer. Czechoslovak J. Phys. B 31 (1981), no. 1, 32-40. (B. 76D10 (80A20) Vuianović) 82e:76024

ngh, R. B. Recurrence relations for the generalized polynomial set. Indian J. Pure Appl. Math. 12 (1981), no. 5, 614-620. (S. Masood) 82e:33016 33A70

Singh, R. K. (with Gupta, D. K.; Kumar, Ashok) Compact and Hilbert-Schmidt sition operators on weighted sequence spaces. Acta Sci. Math. (Szeged) 43 (1981), 2, 117–122. (Michael J. Hoffman) 82h:47027 47B37 (47B05, 47B10) no. 1-2, 117-122. (Michael J. Hoffman) 82h:47027

(with Sharma, S. D.) Composition operators and several complex variables Austral. Math. Soc. 23 (1981), no. 2, 237–247. (Warren R. Wogen) 82g:47023

Singh, R. Karan (with Ray, S. K.) Product cum difference method of estimation using two auxiliary variables. Bio 82m:62021 62D05 netrical J. 23 (1981), no. 6, 563-571. (Authors' summary)

(with Ray, S. K.) A product-type estimator in double sampling. Biometrical J. 23

(with Ray, S. K.) rt process. (1981), no. 7, 721–724. (Authors' summary) 82m:62019 62LUS gh, R. P. (with Singh, N.) Conditions implying uniticity. Indian J. Pure Appl. Math. 12

ggh, R. S. See Singh, Ram Sharan ngh, Radhey S. Estimations of regression curves when the conditional density of the predictor variable is in scale exponential family. Multivariate statistical analysis (Proc.

Conf., Dalhousie Univ., Halifax, N.S., 1979), pp. 199-205, North-Holland, Amsterdam, 1980. (Gilbert Walter) 82g:62063 62G05 (62J02) On the exact asymptotic behavior of estimators of a density and its derivatives. Ann. Statist. 9 (1981), no. 2, 453-456. (Lionel Weiss) 824:62077 62G05

Singh, Rakeshwar (with Singh, K. D.) Remarks on some f(3, e)-structure manifolds Demonstratio Math. 14 (1981), no. 1, 221-226. (Stere lanus) 82h:53054 53C15

Singh, Ram (with Singh, Sunder) On a subclass of α-spiral-like functio ns. Indian J. Pure Appl. Math. 11 (1980), no. 2, 160-164. (Ved Parkash Gupta) 82a:30017 30C45

(with Singh, Sunder) On new subclasses of close-to-convex functions. Indian J. Pure Appl. Math. 12 (1981), no. 6, 743-748. (Edward J. Moulis, Jr.) 82m:30018 30C45 (with Singh, Sunder) Subordination by univalent functions. Proc. Amer. Math. Soc. 82 (1981), no. 1, 39-47. (D. R. Wilken) 82f:30019 30C55 Singh, Ram-Nandan P. (with Johnson, Timothy L.) A functional expansion approach to the

solution of nonlinear feedback problems. *IEEE Trans. Automat. Control* **26** (1981), no. 2, 598–600. (Authors' summary) **82e:49044** 49C15

Singh, Ram Sharan Asymptotic normality of nonparametric estimators of derivatives of average of µ-densities. SIAM J. Appl. Math. 39 (1980), no. 3, 431-439. (Author's ary) 82b:62044 62G05 (62E20)

Sullimary) Gazzone Gozzon (Gzzzon) (Gzzzon Gazzon) (Gzzon Gazz

gh, S. L. A note on the convergence of sequence of iterates. II. J. Natur. Sci. Math. 17 (1977), no. 2, 15–17. (Editors) 82d:47063 47H10

On fixed and common fixed points of mappings. Punjab Univ. J. Math. (Lahore) 10/11 (1977/78), 23–32. (I. A. Rus) 82e:54058 54H25

On a fixed point theorem of Goebel, Kirk and Shimi. Punjab Univ. J. Math. (Lahore) 10/11 (1977/78), 59-63. (V. Lakshmikantham) 82d:47064 Some results on fixed points in a chainable metric space. J. Natur. Sci. Math. 18 (1978), no. 1, 41-44. (S. Swaminathan) 82j:54103 54H25

An approximation to fixed points of extended generalized nonexpansive mappings. J. Natur. Sci. Math. 18 (1978), no. 2, 1-6. (Chi-Song Wong) 82f:54080 54H25

Some common fixed point theorems in L-spaces. Math. Sem. Notes Kobe Univ. 7 (1979), no. 1, 91-97. (From the text) 82j:54104 54H25

(with Singh, Sankatha P.) A fixed point theorem. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1584–1586. (Silvio Massa) 821:54081 54H25

A fixed point theorem in a 2-metric space. Math. Ed. (Siwan) 14 (1980), no. 3, A53-A54. (Editors) 82h:54082 54H25

nique fixed point theorem in a 2-metric space. Math. Ed. (Siwan) 14 (1980), no 4 74-77 (Sehie Park) 82c:54043 54H25

(with Tivari, B. M. L.; Gupta, Vijay Kumar) Common fixed points of com mappings in 2-metric spaces and an application. *Math. Nachr.* **95** (1980), 293–297. (I. A. Rus) **82a-54091** 54H25

Rus) 82a:54091 (with Pant, R. P.) A common fixed point theorem in a space with two metrics. Pure Appl. Math. Sci. 14 (1981), no. 1-2, 35-37. (Silvio Massa) 82e:54059

Singh, S. N. See Singh, Surya Narain
Singh, S. P. See Singh, Sankatha P.
Singh, S. S. Some properties of H-projective recurrent Kählerian spaces. (Russian) 120. Vysš. Učebn. Zaved. Matematika 1980, no. 6, 62-65. (W. Wrona) 82d:53020 On the theory of recursive Kähler spaces. (Russian) Izv. Vysš. Učebn. Zaved.

Matematika 1980, no. 11, 67-69. (M. C. Chaki) 82g:53032 53B35 th, Sahib The universal side divisors in some integral domains. *Math. Stud.* 10. 4, 58-61 (1979). (K. S. Williams) 82b:12002 12A05 (13G05)

Singh, Sahjendra N. A modified algorithm for invertibility in nonlinear systems. IEEE Trans. Automat. Control 26 (1981), no. 2, 595-598. (Author's summary) 82d:93031 93C10

Generalised decoupled-control synthesis for invertible nonlinear systems. Proc. IEE-D 128 (1981), no. 4, 157-161. (Author's summary) 82f:93025 93B50

Singh, Sankatha P. (with Sahney, B. N.) On best simultaneous approximation. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 783-789, Academic Press, New York, 1980. (Jean Tzimbalario) 82b:41021 41A28 (41A50)

(with Singh, S. L.) A fixed point theorem. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1584-1586. (Silvio Massa) 82f:54081 54H25

(with Khan, Mohd. Saeed) Some fixed point theorems for densifying mappings. Kyungpook Math. J. 20 (1980), no. 1, 105-110. (From the introduction) 82a:54087

Singh, Sukhjit Toroidal decompositions of S³ and a family of 3-dimensional ANR's (AR's). Fund, Math. 112 (1981), no. 1, 69-79. (John J. Walsh) 82g:54029 54C55 (55M15)

ler (with Singh, Ram) On a subclass of α-spiral-like functions. Indian J. Pure Appl. Math. 11 (1980), no. 2, 160-164. (Ved Parkash Gupta) 82a:30017 (with Singh, Ram) On new subclasses of close-to-convex functions. Indian J. Pure Appl. Math. 12 (1981), no. 6, 743-748. (Edward J. Moulis, Jr.) 82m:30018 (with Singh, Ram) Subordination by univalent functions. Proc. Amer. Math. Soc. 82

(1981), no. 1, 39–47. (D. R. Wilken) 82f:30019 30C55

ngh, Surjeet Dual continuous modules over Dedekind domains. (Arabic summary) J. Univ. Kuwait Sci. 7 (1980), 1-10. (George Szeto) 82c:13011 13C05 (13F05, 16A53) (with Mohamed, Saad) Decomposition of σ-injective modules. Comm. Algebra 9 (1981), no. 6, 601-611. (S. A. Paramhans) 82h:16017 16A52 (18E40)

Singh, Surjit (with Shukla, Prabodh) Classical and quantum spherical models of spin-glasses: a complete treatment of statistics and dynamics. Phys. Rev. B (3) 23 (1981), no. 9, 4661-4666. (Authors' summary) 82f:82045 82A42 (82A57)

Singh, Surya Narain (with Rai, P. N.) Certain properties of a set of generalized mials. Bull. Calcutta Math. Soc. 71 (1979), no. 1, 55-59. (C. M. Joshi) 82i:33020

(with Srivastava, A. N.) On orthogonal polynomials related to the ultraspherical polynomials. Indian J. Pure Appl. Math. 11 (1980), no. 7, 870-873. (B. R. Bhonsle)

33A65 (with Hussain, M. A.) Operational formulae for orthogonal polynomials related to

Hermite polynomials. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 25(73) (1981), no. 2, 153-156. (M. Mikolás) 82m:33008 33A65 (34B30)

Singh, Tikam A note on $|\bar{N}_{p_0}|$ summability factors for infinite series. J. Math. Sci. 12(13) (1977/78), 25–28 (1981). (Hubert Tietz) 82h:40002 40D15

Singh, Triloki Cylindrical wave solutions of a scalar-tensor theory of gravitation in a Lyra manifold. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 4, 285–289 (1978). (Author's summary) 82d:83053 83D05

Cylindrical wave solutions of Einstein-Maxwell field equations in presence of zero-rest-mass scalar fields. Progr. Math. (Allahabad) 12 (1978), no. 1-2, 27-31. (Michael P. Ryan, Jr.) 82i:83044 83C50 (53B50)

(with Rai, L. N.) On stationary axially symmetric Einstein-Maxwell scalar and Brans-Dicke-Maxwell fields. J. Math. Phys. 22 (1981), no. 1, 136-141. (Authors' summary) 82a:83030 83C50 (83D05)

(with Yadav, R. B. S.) A note on spherically symmetric self-gravitating fluids with pressure equal to energy density. J. Math. Phys. Sci. 15 (1981), no. 3, 283-289. (Authors' ammary) 82i:83049 83C55

Singh, U. B. On the existence of n-fundamental forms of a Kähler hypersurface. Indian J. Math. 21 (1979), no. 1, 1-10. (Akira Mizuhara) 82c:53039 53C40 Singh, U. P. (with Singh, Awadhesh Kumar) On Kählerian conharmonic* recurrent and

symmetric spaces. Progr. Math. (Allahabad) 13 (1979), no. 1-2, 9-15. (Raymond Couty)

(with Khan, K. A.) Projective motion in a Finsler space with concircular and concurrent transformations. Ann. Soc. Sci. Bruxelles Sér. I 94 (1980), no. 4, 191–198 (1981). (B. B. Sinha) 82j:53047 53B40

Hypersurfaces of C-reducible Finsler spaces. Indian J. Pure Appl. Math. 11 (1980), no. 10, 1278-1285. (S. Kawaguchi) 82g:53038 53B40 (with Agrawal, P. N.; Prasad, B. N.) On Finsler spaces with stretch curvature tensor

of some special forms. Progr. Math. (Allahabad) 14 (1980), no. 1-2, 49-58. (B. B. Sinha) 53B40

(with Singh, Arbind Kumar) Finsler spaces admitting recurrent neo-pseudo projective tensor fields. Indian J. Pure Appl. Math. 12 (1981), no. 10, 1201-1207. (Hiroshi Yasuda) 82m:53029 53B40

Singh, U. S. (with Kashyap, J. N. S.) On electromagnetic induction in Einstein's unified field theory. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 3, 220-227. (Authors' nary) 82d:83055 83E10

Singh, Umed (with Tayal, Vrinda) A technique for selection of variables in multiple regression. Multivariate statistical analysis (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1979), pp. 207–217, North-Holland, Amsterdam, 1980. (Colin L. Mallows) 82d:62116

Singh, V. B. (with Dwivedi, A. P.) Dual sequence equations involving Jacobi and Laguerre polynomials. Ganita 30 (1979), no. 1-2, 8-11. (Ram Kishore Saxena) 82m:45010 45F10 (33A65)

(with Dwivedi, A. P.) Correction: "Certain simultaneous dual integral equations associated with kernel of Fox" [Indian J. Mech. Math. 16 (1978), no. 2, 1-7; MR 81c:45006]. Indian J. Mech. Math. 17 (1979), no. 1, 85. (Editors) 82k:45006 gh, V. N. See Singh, Vishwa Nath

Singh, V. P. (with Prasad, B. N.) Finsler spaces with the Berwald's curvature tensor of a special form. Indian J. Pure Appl. Math. 11 (1980), no. 10, 1270-1277. (S. Kawaguchi) 82g:53037 53B40

Singh, Vijay A. (with Inomata, Akira) Path integrals and constraints: particle in box. Phys. Lett. A 80 (1980), no. 2-3, 105-108. (Authors' summary) 82b:81034 81C35

Singh, Vijendra Pal (with Kaul, B. N.) A note on almost convergence of functions. Inc. J. Pure Appl. Math. 12 (1981), no. 9, 1129-1132. (Shri Nivas Bhatt) 82j:42015 42B05

th, Vikramaditya (with Sinha, S. R.) On the Borel summability of the double Fourier series. Indian J. Math. 15 (1973), no. 3, 197-216. (From the text) 82c:40010 (42B05)

Singh, Vikramaditya (with Paul, Surinder) Constrained extremal problems for symmetric functions with real part positive. Indian J. Pure Appl. Math. 12 (1981), no. 4, 492–512. (M. S. Robertson) 82g:30039 30C70 (30C45)

Singh, Vimal (with Sharma, T. N.) On the absolute stability of multivariable discrete-time nonlinear systems. IEEE Trans. Automat. Control 26 (1981), no. 2, 585-586. (Authors' summary) 82i:93051 93D05

Singh, Virendra Application of Fatou and Delaunay-Hill mean schemes in the formation of periodic solutions in the restricted problem of three bodies. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 4, 314-321 (1978). (Author's summary) 82d:70018

(with Pasupathy, J.) Higher order JWKB expressions for the energy levels and the wavefunction at the origin. Z. Phys. C 10 (1981), no. 1, 23-27. (Authors' summary) 82i:81034 81C12 (34E20, 81G05)

Singh, Vishwa Nath A note on the nonhomogeneous Gauss equation. Ganita 28 (1977), 95–98. (H. E. Fettis) 82g:33008 33A30 (33A35)

A note on a paper of Glasser. Ganita 29 (1978), 85-92. (L. Debnath) 82i:44004

Solution of a general homogeneous linear difference equation. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 1, 53-57. (Dennis D. Berkey) 82i:39002a 39A10 Corrigendum: "Solution of a general homogeneous linear difference equation". J.

Austral. Math. Soc. Ser. B 22 (1980/81), no. 2, 254. (Dennis D. Berkey) 82i:39002b 39A10

Singh, Y. (with Sinha, S. K.) Semiclassical statistical mechanics of fluids. Phys. Rep. 79 (1981), no. 4, 213-329. (H. N. V. Temperley) 82m:82001 82-02 (82A50)

Singh, Y. P. Sum of certain well-poised generalized hypergeometric series. J. Math. Sci. 5 (1970), no. 2, 38-41 (1979). (L. J. Slater) 82g:33017 33A35 70), no. 2, 38-41 (1979). (L. J. Slater) 82g:33017 33A35 (with Subramanian, S.) Frequency-response identification of structure of nonlinear

systems. Proc. IEE-D 127 (1980), no. 3, 77-82. (Authors' summary) 82g:93014a

(with Subramanian, S.) Errata: "Frequency-response identification of structure of nonlinear systems". Proc. IEE-D 127 (1980), no. 4, 187. (Editors) 82g:93014b Quenching in a system of van der Pol oscillators with nonlinear coupling. J. Sound Vibration 77 (1981), no. 4, 445–453. (Author's summary) 82i:70024 70K40 (70K30)

nghal, B. M. Note on a formula of Erdelyi. *Indian J. Pure Appl. Math.* 7 (1976), no. 12, 1358–1360. (Indira Aggarawala) 82h:33065 33A30

Singhal, Kishore (with Lawless, J. F.) Analysis of data from life-test experiments under an exponential model. Naval Res. Logist. Quart. 27 (1980), no. 2, 323-334. (Authors' summary) 82m:62225 62N05

(with Vlach, Jiri) Method for computing time response of systems described by transfer functions. J. Franklin Inst. 311 (1981), no. 2, 123-130. (Authors' summary) 94C05 (65R10, 93B55)

nghal, M. L. (with Maggu, Parkash Lal; Das, Ghanshiam; Singh, Mahabir) On 3×n sequencing problem involving equivalent-job for a job-block with transportation-times of jobs. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 12 (1981), no. 2, 271-279. (Authors' summary) 82h:90065 90B35

chania, Ashok K. (with Berra, P. Bruce) Associative processor application to change grania, Astola (Mini Alexander) - Passilation processor processor (Minich, 1977), pp. 247–256, North-Holland, Amsterdam, 1977. (See 82k:68003) 68G10

igh Chandel, R. C. A further note on the class of polynomials $T_n^{a,b}(x,r,p)$. Indian J. Math. 16 (1974), no. 1, 39–48. (S. K. Chatterjea) 82h:33018 33A70

(with Agrawal, Hukum Chand) On some operational relationships. Indian J. Math. 19 (1977), no. 3, 173-179. (S. K. Chatterjea) 82i:33022 33A70

(with Yadava, H. C.) A note on a generating function for certain polynomial systems. Ranchi Univ. Math. J. 10 (1979), 61-66. (James M. Horner) 82m:33010

(with Dwivedi, B. N.) Generalized Whittaker transforms of hypergeometric fun of several variables. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 4, 595-602. (Harold Exton) 82e:33003 33A30 **

(with Bhargava, S. K.) A generalization of certain classes of polynomials.

Pure Appl. Math. 12 (1981), no. 1, 103-110. (J. P. Singhal) 82k:33016 33A65 (with Dwivedi, B. N.) The Srivastava and Daoust functions of several variables. Appl. Math. Sci. 14 (1981), no. 1-2, 53-59. (N. K. Thakare) 82j:33013 (33A15)

nghi, N. M. (with Deza, M.) Some properties of perfect matroid designs. Combinatorial mathematics, optimal designs and their applications (Proc. Sympos. Combin. Math. and Optimal Design, Colorado State Univ., Fort Collins, Colo., 1978). Ann. Discrete Math. 6 (1980), 57-76. (James G. Oxley) **82d:05047** 05B35 (05B05)

(with Athreya, K. B.; Pranesachar, C. R.) On the number of Latin rectangles and chromatic polynomials of $L(K_{r,z})$. European J. Combin. 1 (1980), no. 1, 9–17. (Diane Johnson) 824:05033 05B15 (05A15)

with Földes, Stephane) A nonconstructible projective plane. Geom. Dedicata 9 (80), no. 4, 497–499. (L. W. Szczerba) 82d:03052 03C57 (03B30, 03D40, 51B99) (1980), no. 4, 497-499. (L. W. Szczerba) 82d:03052

urjit Singh Khurana See Surjit Singh Khurana Singkofer, Karen (with Nagle, R. Kent) Nonlinear ordinary differential equations at

resonance with slowly varying nonlinearities. Applicable Anal. 11 (1980), no. 2, 137-149. (John R. Graef) 82c:34020 34B15 (34C25) Singleton, Kenneth J. (with Geweke, John F.) Maximum likelihood "confirmatory" factor analysis of economic time series. Internat. Econom. Rev. 22 (1981), no. 1, 37-54. (E. J.

Hannan) 82g:62123 62M10 (90A20)

gmaster, David On the asymptotic behavior of $\sum (n+t)^a x^n$ as $x \uparrow 1$. Indian J. Math. 19 (1977), no. 3, 163-166. (Tikam Singh) 82c:40001 40A05

(with Souppouris, D. J.) On the relationships among the axioms for a metric space and for general axiomatic systems. Portugal. Math. 37 (1978), no. 1-2, 145-155 (1981). (Joe A. Guthrie) 82i:54049 54E35

★Notes on Rubik's "magic cube". Fifth edition. David Singmaster, Polytechnic of the South Bank, London, 1980. iv + 67 pp. (W. M. Kantor) 82h:20005a 05A05, 05B15, 51F15)

Divisibility of binomial and multinomial coefficients by primes and prime powers. A collection of manuscripts related to the Fibonacci sequence, pp. 98–113, Fibonacci Assoc.,
Santa Clara, Calif., 1980. (Rodney T. Hansen) 82k:10008 10A05 (05A10)

★Notes on Rubik's magic cube. Corrected reprint of the fifth edition. Enslow Publishers, Hillside, N.J., 1981. vi+73 pp. ISBN 0-89490-043-0, 0-89490-057-9 (W. M. Kantor) 82h:20005b 20B25 (00A05, 05B15, 51F15)

Singpurwalla, Nozer D. (with Chandra, Mahesh) Relationships between some notions which are common to reliability theory and economics. Math. Oper. Res. 6 (1981), no. 1, 113-121. (Authors' summary) 82m:90059 90A99 (62N05)

Sinha, A. (with Ogielski, A. T.; Prasad, M. K.; Wang, Ling Lie Chau) Bäcklund transformations and local conservation laws for principal chiral fields. Phys. Lett. B 91 (1980), no. 3-4, 387-391. (Peter Holod) 82f:81050 81E10 (35A30, 35Q20, 58A15)

(with Prasad, M. K.; Wang, Ling Lie Chau) Systematic framework for generating multimonopole solutions. Phys. Rev. D (3) 23 (1981), no. 10, 2321-2334. (A. Comtet) 81E10 (14F05, 53C05)

(with Chau, Ling Lie; Prasad, M. K.) Some aspects of the linear system for self-dual Yang-Mills fields. Phys. Rev. D (3) 24 (1981), no. 6, 1574-1580. (A. Comtet) 82k:81049 81E10 (55R10)

Sinha, A. K. (with Sheel, Satya; Biswas, K. K.) Modelling and prediction of stochastic processes involving periodicity. Appl. Math. Modelling 5 (1981), no. 4, 241-245. (Authors' summary) 82m:62216 62M20

Sinha, A. S. C. (with Yokomoto, C. F.) Null controllability of a nonlinear system with variable time delay. IEEE Trans. Automat. Control 25 (1980), no. 6, 1234-1236. (From the introduction) 82i:93011 93B05

Stability of large-scale hereditary systems with infinite retardations. Intern Systems Sci. 12 (1981), no. 1, 111-117. (P. Bertrand) 82h:93050 93D05 (34K20,

Special matrix solution for functional-differential systems with infinite delays. Internat. J. Systems Sci. 12 (1981), no. 4, 519-523. (Author's summary) 82f:34085 34K05 (45J05)

nha, Bhabani P. (with Srimani, Pradip K.; Choudhury, Arun K.) A new method to find out the chromatic partition of a symmetric graph. Internat. J. Systems Sci. 9 (1978), no. 12, 1425-1437. (Authors' summary) 82j:68069 68E10 (05C15)

Sinha, Bimal Kumar (with Clement, Bernard; Giri, Narayan C.) Effect of additional variates on the power function of the R²-test. Sankhyā Ser. B 40 (1978), no. 1-2, 74-82. (D. Dabrowska) 82c:62082 62H15

(with Clement, Bernard; Chakraborty, Sukharanyan; Giri, Narayan C.) Tests for the mean vector under intraclass covariance structure. J. Statist. Comput. Simulation 12 (1980/81), no. 3-4, 237-245. (Authors' summary) 82h:62085 62H15

Sinha, Bipin Behari (with Sharma, Ramesh) Infinitesimal variations of hypersurfaces of a Sasakian manifold. Progr. Math. (Allahabad) 13 (1979), no. 1-2, 23-30. (Y. Tashiro) 53C25 (53B25)

(with Kalpana, Km.) On H-projective curvature tensor in a hyperbolic Kähler manifold. Progr. Math. (Allahabad) 13 (1979), no. 1-2, 65-72. (V. Mihova-Nehmer) 53C15

(with Prasad, Gunraj) Cordes magnétiques (électriques) en magnétohydrodynamiq relativiste. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 6, A439-A442. (E. G. Broadbent) 82a:76097 76Y05 (53C80, 83C55)

(with Sharma, Ramesh) Hypersurfaces in an almost paracontact manifold. Mat. Vesnik 4(17)(32) (1980), no. 1, 105–112. (Kouei Sekigawa) 82h:53055 53C15 (53C40) 53C15 (53C40) (with Kalpana, Km.) Semisymmetric metric connexion in an SP-Sasakian manifold. Progr. Math. (Allahabad) 14 (1980), no. 1-2, 77-83. (Giuseppe Arca) 82i:53639 53025

(with Yadava, S. L.) Almost product structures on tangent bundle. Indian J. Pure Appl. Math. 12 (1981), no. 1, 61–70. (R. Miron) 82h:53056 53C15 (53C60)

(with Singh, G.) Finsler space with recurrent neo-pseudoprojective curvature tensor. Indian J. Pure Appl. Math. 12 (1981), no. 9, 1063-1068. (B. D. Dwivedi) 82j:53048

- B. D. K. Mathematics of math matical sciences. Bull. Math. Assoc. India 11 (1979), no. 1-2, 26-31. (Editors) 82m:00028 00A69
 - (with Roy, Susanta) Mathematical modeling of harvesting on competitive system. Proceedings of the Second International Conference on Mathematical Modelling (St. Louis, Mo., 1979), Vol. 1, II, pp. 1097–1106, Univ. Missouri-Rolla, Rolla, Mo., 1980. (William J. Reed) 82c:92027 92A15 (90A30, 90C39)

 - Trends in some mathematical aspects of studies in social sciences. Bull. Math. Assoc. India 12 (1980), no. 1-2, 21-28. (Editors) 82m-92002. 92-01 (with Bagchi, Manish C.) Some aspects of biomechanical problems on fracture mechanics parameters in tensile forces. J. Indian Acad. Math. 2 (1980), no. 1, 1-7. (V. K. 73P05
- hha, Dipti Mixed topology for a function space. An. Stiint. Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.) 27 (1981), no. 1, 43–47. (William Lindgren) 82i:54033 54C35 (54E55) hha, Kripa Nath On the treatment of indeterminate forms in Hindu mathematical
- literature. Ganita Bhāratī 1 (1979), no. 3-4, 23-24. (E. J. Barbeau) 82h:01022 ha, Kumares C. (with Chang, Chia Juch; Miles, Robert D.) A regional railroad network optimization model for coal transportation. Transportation Res. Part B 15 (1981), no. 4, 227–238. (Authors' summary) 82g/9043 90B10

 ha, N. K. (with Rözsa, P.) Algorithm for transformation of a polynomial matrix to
- canonical form. (Russian summary). Problems Control Inform. Theory / Problemy Upravien. Teor. Inform. 10 (1981), no. 3, 175-180. (C. E. Langenhop) 82g:15005
 - (with Rógsa, P.) Some system theory applications of Egerváry's algorithm for transformation of a matrix to the Hermite normal form. (Russian summary) Problems Control Inform. Theory/Problemy Upravien. Teor. Inform. 10 (1981), no. 4, 267–277. (Authors' summary) 82h:93012 93B05 (93B07, 93B20)
- nha, P. C. See Mihailov, V. P., 82a:35003a and Efimov, N. V., 82e:51001 nt (with Zoltners, Andris A.) The multiple-choice knapsack problem. inha, Prabi
- Sinha, R. S. (with Lal, H. C.) Some commutation formulae of a complex manifold with direction dependent connections. Indian J. Pure Appl. Math. 12 (1981), no. 9, 1069–1077. (H. Rund) 82i:53022 53B40 (53B35)

 Sinha, Rajiv (with Mittal, S. C.; Arora, J. P.) On the degree of approximation. Acta Cienc. Indiaa 6 (1980), no. 3, 148–153. (N. Kishore) 82ai:40003 40A05
- tha, S. C. (with Carmi, S.) Asymptotic stability of unsteady inviscid stratified flows. Acta Tech. Acad. Sci. Hungar. 89 (1979), no. 1-2, 61-67 (1980). (Authors' summary) 82b:86003 86A10 (76E20)
- Sinha, S. K. (with Singh, Y.) Semiclassical statistical mechanics of fluids. Ph. (1981), no. 4, 213–329. (H. N. V. Temperley) 82m:82001 82–02 (82A50) iclassical statistical mechanics of fluids. Phys. Rep. 79
- Sinha, S. M. (with Kumar, Ashok; Agarwal, Manju) Analysis of a two-unit priority standby system with different operative states. J. Math. Sci. 12(13) (1977/78), 65-79 (1981). (Authors' summary) 82g:90053 90B25
- ha, S. R. (with Singh, Vikramaditya) On the Borel summability of the double Fourier series. Indian J. Math. 15 (1973), no. 3, 197-216. (From the text) 82c:40010 40G10
 - Prof. P. L. Bhatnagar. Indian J. Math. 20 (1978), no. 1, i-ii. (Editors) 82a:01046 01A70
- na, S. R. P. A note on contact transformation. J. Math. Sci. 9 (1974), 9-12 (1976).
- (Author's summary) 82g:70040 70H15 (58F05)

 Sinha, Snehesh Kumar (with Kale, Balvant Keshav) ★Life testing and reliability estimation. A Halsted Press Book. John Wiley & Sons, Inc., New York, 1980. vii + 196 pp. ISBN 0-470-26911-1 (Richard A. Johnson) 82d:62156
- Sinha, Sunil Kumar On a new class of polynomials and the polynomials related to them.

 Indian J. Math. 19 (1977), no. 3, 141-148. (Ram Kishore Saxena) 82e:33004 33A30
- Sinha, T. K. Correction: "Diffraction of a plane pulse due to a rigid quarter space upon an elastic half space" [Indian J. Mech. Math. 16 (1978), no. 2, 48-65; MR 80m:73023]. Indian J. Mech. Math. 17 (1979), no. 1, 85. (Editors) 82m:73022 73D25
 - Propagation of Love waves in elastic layer of variable thickness resting on a rigid half J. Tech. Phys. 21 (1980), no. 3, 275-289. (From the introduction) 82j:73019 73D15 (86A15)
- Sinha, T. N. (with Venkatramaiah, S.) Correction: "The equation $x^2 Py^2 = 2z^2$: P, a Mersenne prime" [Indian J. Mech. Math. 16 (1978), no. 2, 45-47; MR 81g:10030].
- Indian J. Mech. Math. 17 (1979), no. 1, 84. (Editors) 82m:10028 10B05
 Sinickii, A. L. Solution of Knuth's problem on construction of permutations using a deque. (Russian) Questions of the computational complexity of algorithms (Russian), pp. 34-41, 47-48, Preprint 79, 14, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Author's
- ummary) 82g:68033 68C05 (05A05, 68E05)
 (with Koževnikova, G. P.) ★Алторитым преобразования форм представления ыражений и их сложностный анализ. (Russian) [Algorithms for transformation of forms of representation of expressions and analysis of their complexity] Преприят 80 [Preprint 80], 4. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 42 pp. (Publisher's ::68033 68C20 description) 82
- ★Методы аналитической механики в теории электрических ickii, L. A. (Russian) [Methods of analytical mechanics in the theory of electric circuits] "Višča Škola", Lvov, 1978. 139 pp. (Editors) 82h:94026 94C05
 - (with Teslenko, V. P.) Computer design of circuits by the method of separation of motions. (Russian, English summ nary) Teoret. Elektrotehn. No. 28 (1980), 106-115, 170. (From the text) 82a:94104 94C05
- cyn, V. A. On the Carnot theorem in the theory of impulsive motion of mechanical systems. *Prikl. Mat. Meh.* 43 (1979), no. 6, 1114–1116 (*Russian*); translated as J. Appl. Math. Mech. 43 (1979), no. 6, 1207–1210 (1981). (Author's summary) 82g:70005
- wee, V. A group-theoretic approach to the dynamics of multispin systems. VIII. (Russian. Estonian and English summaries) Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. 28 (1979), no. 4, 325-331. (Author's summary) 82f:81089 81C40)
 - NMR of spin ½ and the group GL(4, R). (Russian. Estonian and English summaries)
 Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. 29 (1980), no. 3, 288-295. (Ē. S. Krjačko) 82i:82053a 82A50 (22E70, 81G30)
 - Analysis of the quantum kinetic Bloch equations. (Russian. Estonian and English

- aries) Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. 29 (1980), no. 4, 356-363,
- 465. (Author's summary) 82f:82031 82A35 (81K05)

 NMR of spin ½ and the group GL(4, R). II. (Russian. Estonian and English summaries) Eesti NSV Tead. Akad. Toimetised Fiitis.-Mat. 30 (1981), no. 1, 14-21, 90. 82A50 (22E70, 81G30) (E. S. Krjačko) 82i:82053b
- njavs'kii, V. F. A lower bound for the modulus of continuity of homogeneous Gaussian random fields. (Russian) Probability distributions in infinite-dimensional spaces (Russian), pp. 135-143, 178, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (N. M. Zinčenko) 60G60 (60G15, 60G17)
 - Conditions for the discontinuity of sample functions of homogeneous Gaussian random fields. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 22 (1980), 131–135, 165. (M. I. Jadrenko) 82i:60069 60G17 (60G60)
- 131-135, 165. (M. I. Jadrenko) 82i:60069 60G17 (60G60)
 nkhorn. Richard Power symmetric stochastic matrices. Linear Algebra Appl. 40 (1981). 225-228. (James R. Wall) 82j:15017 15A48
 - Concerning the magnitude of the entries in a doubly stochastic matrix. Linear and Multilinear Algebra 10 (1981), no. 2, 107-112. (Ray C. Shiflett) 82e:15017 15A51
- Sinkin, V. N. On the search for stable resonance modes by means of their extremal properties. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1981, no. 2, 22-29, 63. (Author's summary) 82i:70022 70K20 (70M10)
- Sin'ko, G. I. Asymptotic behavior of eigenvalues of a boundary value problem for an integro-differential operator. (Russian) Functional analysis, No. 14 (Russi pp. 132-138, Ul' janovsk. Gos. Ped. Inst., Ul' yanovsk, 1980. (Alexander Alenicyn) 45,05
- On the Stickelberger ideal and the circular units of an abelian field. Invent. Math. 62 (1980/81), no. 2, 181-234. (Lawrence Washington) 82i:12004 12A35
- On the Stickelberger ideal and the circular units of an abelian field. Seminar on Number Theory, Paris 1979-80, pp. 277-286, Progress in Math., 12, Birkhäuser, Boston,
- Mass., 1981. (See 82i:10004) 12A45 (12A35) Sinwel, Herbert F. (with Runck, P. O.) On constants of approximation in the theorems of Jackson and Jackson-Timan. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 763-768, Academic Press, New York, 1980. (J. Prasad) 82f:41029
- 41A44 *Konsta nten in den Sätzen von Jackson und Timan. (German) [Constants in the theorems of Jackson and Timan] Dissertationen der Johannes-Kepler-Universität Linz [Dissertations of the Johannes Kepler University of Linz], 27. Verband der Wissenschaftlichen Gesellschaften Österreichs (VWGÖ), Vienna, 1981. iv+46+A5 pp.
- ISBN 3-85369-457-8 (M. F. Timan) 82j:41017 41A17 Uniform approximation of differentiable functions by algebraic polynomials. J. Approx. Theory 32 (1981), no. 1, 1-8. (A. B. Pevnyĭ) 82i:41011 41A10
- ii, Minoru (with Olkin, Ingram) Asymptotic distribution of functions of a correlation
 - matrix. Essays in probability and statistics, pp. 235-251, Shinko Tsusho, Tokyo, 1976. (Authors' introduction) 82bs62061 62H10 (62E20)
 Conditional and stepwise multivariate t distributions. Essays in probability and statistics, pp. 287-303, Shinko Tsusho, Tokyo, 1976. (Author's summary) 82bs62062
 - ons for the general distributions of test statistics in multivariate Asymptotic expans analysis—the methods in recent development. II. J. Japan Statist. Soc. 6 (1976), no. 2, 63-87. (Author's summary) 824:62091a 62H10 (62E20)
 - Erratum: "Asymptotic expansions for the general distributions of test statistics in -the methods in recent development. II". J. Japan Statist. Soc. 7 (1977), no. 1, 56. (Editors) 82d:62091b 62H10 (62E20) See also Essays: Probability and statistics, 82a:62005
- Šīpka, I. G. (with Martynenko, M. D.) Analytic extension of metaharmonic potentials. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1979, no. 4, 132-134, 144, (I. Netuka) 82d:31010 31B30 (31B35)
 - (with Martynenko, M. D.; Svirskii, E. A.) General representation of the solutions of static equations of the moment theory of elasticity. (Russian. English summary) Dokl. Akad. Nauk BSSR 24 (1980), no. 10, 880-883, 956. (M. O. Bašeleišvili) 82e:73008 73B99 (35J99)
- Sipos, Ferenc (with Gertler, Janos) Performance index sensitivity of the constrained inimum variance input-output estimator. Automatica-J. IFAC 17 (1981), no. 2,
- 401-405. (Authors' summary) 82h:93068 93E10 oš, Ján (with Horáková, Galina) A note on restricted measurability. (Russian summary) Math. Slovaca 29 (1979), no. 2, 177-180. (J. D. Knowles) 824:28003 28A05 (with Dravecký, Jozef) On the additivity of Gudder integral. (Russian summary)
- Math. Slovaca 30 (1980), no. 3, 299-303. (Ralph Henstock) 82b:28009 (81B05)
- Integration in partially ordered linear spaces. (Russian summary) Math. Slovaca 31 (1981), no. 1, 39-51. (D. H. Fremlin) 82g:28016 28B05 (46G10)
- (with Olejček, Vladimír) On recurrent functions. Semigroup Forum 22 (1981), no. 3, 235-241. (J. M. Day) 82i:22006 22A15 (54H15)
- Sippu, Seppo (with Soisalon-Soininen, Eljas) On LALR(k) testing. Automata, la and programming (Akko, 1981), pp. 208–217, Lecture, Notes in Comput. Sci., 115, Springer, Berlin, 1981. (See 82i:68003) 68F05
- ser, Michael Lower bounds on the size of sweeping automata. J. Comput. System Sci. 21 (1980), no. 2, 195-202. (Author's summary) 82j:68029 68D22
- (with Katseff, Howard P.) Several results in program size complexity. Comput. Sci. 15 (1981), no. 3, 291-309. (Authors' summary) 82i:68028 68C25 (03D15)
- na, L. V. (with Goloskokov, E. G.; Nikul'čenko, A. G.; Frolov, Ju. A.)
- Regularization in the solution of an identification problem. (Russian) Mathematical methods in cybernetics (Russian), pp. 3–7, 82, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kieo, 1979. (Authors' summary) 82h;93018 93B30
- (with Goloskokov, E. G.; Nikul'čenko, A. G.; Frolov, Ju. A.) Finite-step methods of identification of the equilibrium state of an automatic regulatory system. (Russian) Methods for optimization, identification and allocation of resources in complex systems (Russian), pp. 23-44, 47, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (See

See also Methods for optimization, identification and allocation of resources in uplex systems, 82c:90002 y, Ibrahim H. Problem of a circular annular elastic plate for which normal stress and

tangential displacement are given on the boundary. Bull. Calcutta Math. Soc. 71 (1979), no. 6, 399-405. (Author's summary) 82h:73008 73C03 (30E25, 44A15)

Sira-Ramirez, Hebertt Evolution of generalized uncertainties in bi-linear systems. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 346-349, IEEE, New York, 1979. (See 82e:94002) 93C15

Edinov, S. H. (with Formanov, Š. K.; Mamatkulov, O.) Optimal statistical quality

control plans based on a multivariate quantitative attribute. (Russian) Limit theorems, random processes and their applications (Russian), pp. 183-201, 235, "Fan", Tashkent, 1979. (K. Sarkadi) 82e:62165 62N10

Asymptotic expression for Euler numbers. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1979, no. 6, 39-43, 92. (G. P. Egoryčev) 82g:05010

10A40, 60G50)

(with Džuraev, T. D.; Kabulov, V. K.; Polubarinova-Kočina, P. Ja.; Salahitdinov, M. S.; Sarymsakov, T. A.) Ivan Seměnovič Aržanyh. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 195-202. (Editors) 82b:01042 01A70

Širinbekov, M. Hartogs compacta of holomorphy. (Russian) Mat. Sb. (N.S.) 115(157) (1981), no. 3, 453–462, 496. (Harold P. Boas) 82j:32028 32D05 (31A05, 32A07)

ena, H. R. (with Chou, F. S.) State parameterization approach to the solution of optimal control problems. Optimal Control Appl. Methods 2 (1981), no. 3, 289-298. (Authors' summary) 82h:65046 65K10

Sirjaev, A. N. (with Mémin, Jean) Un critère prévisible pour l'uniforme intégrabilité des semimartingales exponentielles. Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 147–161, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Ralph Henstock) 82c:60091 60G48 (60G44, 60H05)

★Вероятность. (Russian) [Probability] "Nauka", Moscow, 1980. 576 pp. (D. A.

Darling) 82d:60002 60-01

(with Engelbert, H. J.) On absolute continuity and singularity of probability measures. Mathematical statistics, pp. 121-132, Banach Center Publ., 6, PWN, Warsaw, 1980. (P. S. Knopov) 82k:60091 60G30 (60G15)

Absolute continuity and singularity of probability measures in functional spaces. Proceedings of the International Congress of Mathematicians (Helsinki, 1978), pp. 209-225, Acad. Sci. Fennica, Helsinki, 1980. (Jean Memin) 82f:60088 (60G48, 60H05, 60J30)

(with Kabanov, Ju. M.; Lipcer, R. Š.) On absolute continuity of probability measures for Markov-Itô processes. Stochastic differential systems (Proc. IFIP-WG 7/1 Working Conf., Vilnius, 1978), pp. 114–128, Lecture Notes in Control and Information Sci., 25, Springer, Berlin, 1980. (M. P. Eršov) 82j:60106 60H10 (60G44)

(with Kabanov, Ju. M.; Lipcer, R. S.) Some limit theorems for simple point processes (a martingale approach). Stochastics 3, no. 3, 203-216 (1980). (Rolando Rebolledo) 82a:60027 60F05 (60G44, 60G55) Rebolledo) 82a:60027

(with Lipcer, R. S.) A functional central limit theorem for semimartingales. (Russian.

English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 4, 683-703. (G. K. Eagleson) 82d:60039 60F05 (60G42, 60G44) Englision Sattemany 60F05 (60G42, 60G44)

(with Lipcer, R. Š.) *Statystyka procesów stochastycznych. (Polish) [Statistics of random processes] Filtracja nieliniowa i zagadnienia pokrewne. [Nonlinear filtration and

related questions] Translated from the Russian by Wojciech Herer. Państwowe Wydawnictwo Naukowe (PWN), Warsaw, 1981. 680 pp. ISBN 83-01-00509-2 (Editors) 60G05 (60G35, 62M05, 93E10)

(with Lipcer, R. S.) Necessary and sufficient conditions:

limit theorem for semimartingales. (Russian. English summary) Teor. Verojatnost. i

26 (1081) 20 1 132–137. (D. A. Darling) 82e:60039 60F05 (60G48) (with Lipcer, R. S.) Necessary and sufficient conditions in the functional central

Širjaev, V. D. (with Petrosjan, L. A.) Group pursuit game with several evaders and one pursuer. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 3, 50-57, 130. (Authors' summary) 82c:90115 90D26

Širkov, D. V. (with Vladimirov, A. A.) The renormalization group and ultraviolet asymptotics. Uspehi Fiz. Nauk 129 (1979), no. 3, 407-441 (Russian); translated as Soviet Phys. Uspekhi 22 (1979), no. 11, 860-878 (1980). (Authors' summary) 82a:81028

(with Kazakov, D. I.) Asymptotic series of quantum field theory and their summation. Fortschr. Phys. 28 (1980), no. 8-9, 465-499. (B. Geyer) 82a:81033 (41A60, 81C12)

Sirlin, A. A class of useful identities involving correlated direct products of γ matrices Nuclear Phys. B 192 (1981), no. 1, 93-99. (Author's summary) 82k:81031 81C9

obokov, N. V. Exponential stability of difference equations. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 11, 87-88. (J. Albrycht) 824:39003

očenko, V. P. On the uniqueness of the solution of some periodic problems for Navier-Stokes equations. (Russian) Čisl. Metody Meh. Splošn. Sredy 11 (1980), no. 6 Mat. Modelirovanie, 123-129. (From the introduction) 82m:35121 35O10 (76D05)

oid, I. P. Sufficient conditions for the absence of spectral singularities in a nonselfadjoint Schrödinger operator in terms of potential. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 1,

151-157, 230. (P. A. Mišnaevskii) 82f:34028 34B25 (47E05, 81F05) okov, A. P. Tangent bundle of a one-dimensional space over an algebra. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 10 (1978), 113-120. (J. Vanžura) 82a:53045 (53C35)

(with Evtušik, L. E.; Lumiste, Ü.; Ostianu, N. M.) Differential-geometric structures on manifolds. (Russian) Problems in geometry, Vol. 9 (Russian), 248 pp., Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (V. Mihova-Nehmer) 53C10 82k:53054b

On holomorphically projective transformations in a tangent bundle. (Russian) Trudy m. Sem. Kazan. Univ. No. 11 (1979), 111-114. (K. M. Egiazarjan) 82h:53047 53C05

(with Višnevskii, V. V.; Il'inskii, N. B.; Norden, A. P.; Šapukov, B. N.) Boris Lukič Laptev (on the occasion of his 75th birthday). (Russian) Izv. Vysš. Učehn. Zaved.

Matematika 1980, no. 10, 3-5. (Editors) 82h:01067 01A70
A model for the ruled geometry of Lobačevskii space. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 12 (1980), 111-117. (Jerzy Krawczyk) 82i:53015

Strokov, Ju. M. Unified treatment of the classical and quantum mechanics. Math aspects of quantum field theory, Part II (Karpacz, 1978), pp. 5-74, ACTA Univ. Wratislav., 519, Wydawn. Uniw. Wrocław., Wrocław, 1979. (See 82:81004b) (22D25)

Representation of free solutions for Schrödinger equations with strongly singular concentrated potentials. (Russian. English summary) Teoret. Mat. Fiz. 46 (1981), no. 3,

291-299. (Woodford W. Zachary) 82i:81028 81C05 (46F10) (with Tolokonnikov, G. K.) An associative algebra of generalized functions, closed with respect to differentiation and taking primitives. (Russian English summary) Teoret. Mat. Fiz. 46 (1981), no. 3, 305-309. (Bl. P. Damyanov) 82j:46056

(with Talalov, S. V.) Interaction of a charged particle with an external electromagnetic field in the presence of a strongly singular potential. (Russian. English summary) Teoret. Mat. Fiz. 46 (1981), no. 3, 316-320. (Authors' summary) 82h:81025 81C05 (78A35)

(with Gorjaga, O. G.) Energy levels of an oscillator with a singular concentrated potential. (Russian. English summary) Teoret. Mat. Fiz. 46 (1981), no. 3, 321-324.

(Authors' summary) 82h:81019 81C05

skov, N. A. Approximation properties of a continuum. (Russian. English summary)

Investigations on linear operators and the theory of functions, IX. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 92 (1979), 241-252, 324. (D. L. Berman) 82a:30050 30E10

Estimates in $L^p(\mathbb{C})$ of certain singular integral operators. (Russian. Armer English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 15 (1980), no. 1, 63–76, 79. (S. G. Samko) 82f:42017 42B20 (42B25)

On the modulus of boundary values of analytic functions of class A. (Russian. English summary) Investigations on linear operators and the theory of functions, XI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 113 (1981), 258-260, 270-271. (D. Mitrovic) 82j:30043 30D40 (30H05)

okova, E. A. Application of homotopic families of closed curves for studying the univalence of the solution of inverse boundary value problems. (Russian) Trudy Se Kraev. Zadačam No. 16 (1979), 235-239, 246, (P. Ju. Alekna) 82a:30052

onvalle, Marco Alfaro The random coin method: solution of the problem of the simulation of a random function in the plane. J. Internat. Assoc. Math. Geol. 12 (1980), no. 1, 25-32. (D. Myers) 82c:86010 86A99 (60G15, 62M20)

Širšov, A. I. See Obituary: Širšov, A. I., 82m:01074

Sirugue, M. (with Combe, Ph.; Rodriguez, R.; Sirugue-Collin, M.) Weyl quantization of classical spin systems. Quantum spins and Fermi systems. Feynman path integrals (Proc. Internat. Colloq., Marseille, 1978), pp. 105-119, Lecture Notes in Phys., 106, Springer, Berlin, 1979. (Alberto Galindo) 82g:81022 81C35 (81D05)

(with Combe, Ph.; Heegh-Krohn, Raphael; Rodriguez, R.; Sirugue-Collin, M.) Feynman formula and Poisson processes for gentle perturbations. Functional integra theory and applications (Proc. Colloq., Louvain-la-Neuve, 1979), pp. 53-64, Plenum, New York, 1980. (Aubrey Truman) 82e:81017 81C35 (60K35)

(with Combe, Ph.; Rodriguez, R.; Sirugue-Collin, M.) Parafermi fields as projective representation of discrete groups. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 314-316, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81004) 81D05 (20C35)

(with Combe, Ph.; Rodriguez, R.; Sirugue-Collin, M.) A uniqueness theorem for central extensions of discrete products of cyclic groups. Quantum fields—algebras, processes (Proc. Sympos., Univ. Bielefeld, Bielefeld, 1978), pp. 207–221, Springer, Vienna, 1980. (Authors' summary) 824:82072 82A60 (20E22)

(with Combe, Ph.; Høegh-Krohn, Raphael; Rodriguez, R.; Sirugue-Collin, M.) Poisson processes on groups and Feynman path integrals. Comm. Math. Phys. 77 (1980), no. 3, 269–288. (G. Albinus) 82c:81040 81C35 (22A25, 58G32, 60J60)

ngue-Collin, M. (with Combe, Ph.; Rodriguez, R.; Sirugue, M.) Weyl quantization of classical spin systems. Quantum spins and Fermi systems. Feynman path integrals (Proc. Internat. Colloq., Marseille, 1978), pp. 105-119, Lecture Notes in Phys., 106, Springer, Berlin, 1979. (Alberto Galindo) 82g:81022 81C35 (81D05)

(with Combe, Ph.; Høegh-Krohn, Raphael; Rodriguez, R.; Sirugue, M.) Feynman formula and Poisson processes for gentle perturbations. Functional integration theory and applications (Proc. Colloq., Louvain-la-Neuve, 1979), pp. 53-64, Plenum, New York, 1980. (Aubrey Truman) 82e:81017 81C35 (60K35)

(with Combe, Ph.; Sirugue, M.; Rodriguez, R.) Parafermi fields as projective representation of discrete groups. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 314-316, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980, (See 82h:81004) 81D05 (20C35)

(with Combe, Ph.; Rodriguez, R.; Sirugue, M.) A uniqueness theorem for central extensions of discrete products of cyclic groups. Quantum fields—algebras. processes (Proc. Sympos., Univ. Bielefeld, Bielefeld, 1978), pp. 207-221, Springer, Vienna, 1980. 82A60 (20E22) (Authors' summary) 82d:82072

(with Combe, Ph.; Høegh-Krohn, Raphael; Rodriguez, R.; Sirugue, M.) Poisson processes on groups and Feynman path integrals. Comm. Math. Phys. 77 (1980), no. 3, 269-288. (G. Albinus) 82c:81040 81C35 (22A25, 58G32, 60J60)

vanjan, V. L. The word problem for groups with a recursive set of defining relations of the form A"=1. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 71 (1980), no. 4, 193-197. (L. Bokut') 82j:20073 20F10 (03D40)

atskii, S. P. (with Lavrent'ev, M. M.; Romanov, V. G.) ★Некорректиме задачи математической физики и анализа. (Russian) [Ill-posed problems of mathematical physics and analysis] "Nauka", Mascow, 1980. 287 pp. (I. K. Marek) 82g:65003 65-02 (00A69, 35R25, 53C65, 65J05, 86A20)

Šišijanu, F. S. (with Negura, V. V.) One-dimensional numerical analysis of the process of diffusion of an impurity in semiconductors. (Russian) Izv. Akad. Nauk Moldav. SSR Ser. Fiz.-Tehn. Mat. Nauk 1980, no. 1, 76-78, 94. (L. I. Rubinstein) 82b:80008

Šiškin, A. B. (with Zamjatin, V. N.) Čebylev centers and s-normal spaces. (Russian) Mat. Zametki 29 (1981), no. 5, 659-672, 797. (G. Godini) 82m:46022 46E05 (41A65,

Siškin, A. G. (with Konoplev, Ju. G.) Free oscillations of plates and shells weakened by

82-99. (P. P. Teodorescu) 82e-73062 73K12

Siskind, V. State probabilities for a random walk arising in the theory of casino games

Austral. Math. Soc. Gaz. 8 (1981), no. 2, 53-54. (From the text) 82k:60100 60G4

(with Pettitt, A. N.) Effect of within-sample dependence on the Mann-Whitney-Wilcoxon statistic. Biometrika 68 (1981), no. 2, 437-441. (Authors' summary) 82h:62075 62G10

to, N. P. Inverse problem for a parabolic equation. (Russian) Mat. Zametki 29 (1981), no. 1, 55-62, 155. (Author's summary) 82i:35164 35R30 (35K30) tov, A. E. (with Skripnik, I. V.) Acute angle between pairs of linear parabolic operators.

ssian. English su mary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 10, 27-30,

(Russian: Lagast statistics) 2004. Acad. Article Colonia. SSR Sec. A 1905, No. 10, 27-35, 93. (Enrice Obrecht) 824:35052 35K35

(kova, N. E. (with Beigel'zimer, Ja. E.; Kulesko, N. A.; Palant, Ju. A.) Investigation of the properties and structure of the solution of the hydrostatic extrusion problem. sian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 8, 34-36, 88. (Piero Bassanini) 82h:73042 73G99 (35Q20, 73F99)

Sisler, Mirodav Über die Konvergenzbeschleunigung des verallgemeinerten

Oberrelaxationsverfahrens (Czech summary) [Acceleration of convergence of the
generalized overrelaxation method] With loose English and Russian summaries. Apl. Mat. 27 (1982), no. 1, 17-26. (Author's summary) 82k:65017 65F10

dia, B. V. S. (with Dwivedi, V. K.) A class of ratio-cum-product-type of etrical J. 23 (1981), no. 2, 133-139. (Authors' summary) 82j:62006 62D05

Sitaram, Alladi An analogue of the Wiener-Tauberian theorem for spherical transforms on semisimple Lie groups. Pacific J. Math. 89 (1980), no. 2, 439-445. (P. C. Trombi) 82e:43008 43A80 (43A20)

aramachandra Rao, R. (with Ahmad, Z. U.; Siddiqui, Z. U.; Murty, G. Sri Rama Chandra) The number of M-void divisors of an integer. Indian J. Pure Appl. Math. 11 (1980), no. 6, 749–757. (G. J. Rieger) 82g:10010 10A20 (10H25) (with Suryanarayana, D.) On an identity of Eckford Cohen. II. Indian J. Math. 18 (1976), no. 3, 171–176. (From the introduction) 82b:10008 10A20

(with Murty, G. Sri Rama Chandra) On M-void integers. Indian J. Pure Appl. Math.

12 (1981), no. 1, 31-40. (T. M. Apostol) 82i:10061 10H25 (10A20)

Sita Ramaiah, V. (with Suryanarayana, D.) Sums of reciprocals of some multiplicative functions. Math. J. Okayama Univ. 21 (1979), no. 2, 155-164. (Jean-Marie De Koninck) 10H25

(with Suryanarayana, D.) On certain divisor sums over square-full integers Proceedings of the Conference on Number Theory (Mysore, 1979), pp. 98–109, Masscience Rep., 101, Inst. Math. Sci., Madras, 1980. (T. M. Apostol) 82i:10007 10A20

(with Suryanarayana, D.) Generalization of a problem of Evelyn-Linfoot and Page in additive number theory. Ann. Mat. Pura Appl. (4) 126 (1980), 1–17 (1981). (Karl-Heinz Indlekofer) 82i:10056 10H15 (10H25, 10J20)

(with Suryanarayana, D.) Sums of reciprocals of some multiplicative functions. II. ian J. Pure Appl. Math. 11 (1980), no. 10, 1334-1355. (Jean-Maric De Koninck)

(with Suryanarayana, D.) An order result involving the o-function. Indian J. Pure Appl. Math. 12 (1981), no. 10, 1192-1200. (D. R. Heath-Brown) 82k:10056 10H25

arski, Ryszard (with Dziubiński, Izydor) On classes of holomorph functions of many les starlike and convex on some hypersurfaces. Demonstratio Math. 13 (1980), no. 3, 619-632. (A. I. Heific) 82a:32003 32A07 (32A10)

Sitjuk, V. N. Limit behavior of an inhomogeneous Poisson process defined on a discrete Markov chain. (Russian) Analytical methods of probability theory (Russian), pp. 137-141, 155, "Naukova Dumka", Kiev. 1979. (G. I. Ivčenko) 82a:60110 60J30 (60F05) (with Anisimov, V. V.) Asymptotic behavior of inhomogeneous Poisson flow with

conductor function, dependent on a small parameter, controlled by a Markov chain. Kibernetika (Kiev) 1979, no. 4, 83-88 (Russian); translated as Cybernetics 15 (1979), no. 4, 526-532 (1980). (Serban Grigorescu) 82d:60128 60125 (60F05, 60K10)

(with Anisimov, V. V.) On the convergence of a nonhomogeneous Markov chain to a process with independent values controlled by a nonhomogeneous Markov process. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 23 (1980), 3-10, 146. (È. I. Kistauri) 82k:60138 60127 (60F05)

On the limit behavior of semi-Markov systems with nonhomogeneous probabilities of failures. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 7, 24-27. (From the text) 82k:60182

24-27. (From the text) 82k:60182 60K15 (60F99) ikov, K. A. (with Melija, V. I.) On the second fundamental theorem of homological nsion theory. (Russian) Uspehi Mat. Nauk 35 (1980), no. 5(215), 231-232. (Jože Vrabec) 82h:55002 55M10 (54F45, 55N05)

Sitt, Bernard Sur les instabilités convectives linéaires dans un fluide compressible non dissipatif. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 10, B243-B246. (Author's summary) 82a:76035 76E15 (35B32)

Sityuk, V. N. See Sitjuk, V. N.

Siu, M. K. (with Lam, Kin; Yu, C. T.) A generalized counter scheme. Theoret. Comput. Sci. 16 (1981), no. 3, 271-278. (Authors' summary) 82m:68043 68B15

Siu, W. W. C. (with Sengupta, S. S.; Lind, N. C.) A linear programming formulation of the lem of mom ents. (German and Russian summaries) Z. Annew. Math. Mech. 59 (1979), no. 10, 533-537. (J. H. B. Kemperman) 82d:60032 60E15 (44A60, 65D07, 90C50)

Siu, Yum Tong Extension problems in several complex variables. Proceedings of the International Congress of Mathematicians (Helsinki, 1978), pp. 669–674, Acad. Sci. Fennica, Helsinki, 1980. (From the text) 82d:32008 32D15

(with Mostow, G. D.) A compact Kähler surface of negative curvature not covered by the ball. Ann. of Math. (2) 112 (1980), no. 2, 321-360. (Robert E. Greene) 821:53075 53C55 (32C10, 32M05)

(with Trautmann, Günther) Deformations of coherent analytic sheaves with compact supports. Mem. Amer. Math. Soc. 29 (1981), no. 238, iii+155 pp. (G. M. Henkin) 82c-32023 32G05

dak, Marek Estimation of parameters of beta distribution. (Polish. Russian and English ries) Przegląd Statyst. 26 (1979), no. 3-4, 251-258 (1981). (Author's summary)

an, P. On two capacities in a harmonic space. Indian J. Pure Appl. Math. 11 (1980),

no. 5, 648-654. (M. Brelot) 82a:31012 31C15

On a generalized Newtonian potential. J. Math. Phys. Sci. 15 (1981), no. 2, 99–107. (N. V. Rao) 82k:31007 31B10

Sivan, Rapha el (with Frankena, Jan F.) A nonlinear optimal control law for linear system at. J. Control 30 (1979), no. 1, 159-178. (Authors' summary) 82m:93053 (93C05)

an, R. On extended Ramas ian sums. Proceedings of the Conference on umber Theory (Mysore, 1979), pp. 110-125, Matscience Rep., 101, Inst. Math. Sci., Madras, 1980. (K. Nageswara Rao) 82h:10008 10A20
Sivardière, J. Cyclic and dihedral point groups as subgroups of the limiting groups.

(German summary) Phys. Status Solidi (B) 107 (1981), no. 1, 117-125. (Author's summary) 82k:82047 82A60 (20H15)

Sivashinsky, G. I. Self-fluctuations in the motion of a free particle and the Schrödinger

equation. Lett. Nuovo Cimento (2) 29 (1980), no. 5, 135-139. (From the text) 82f:81032

On flame propagation under conditions of stoichiometry (1980), no. 1, 67-82. (Richard J. Field) 82b:80018 80A25 pagation under conditions of stoichiometry. SIAM J. Appl. Math. 39

(with Gertsberg, V. L.) Large cells in nonlinear Rayleigh-Bénard convection. Progr. ret. Phys. 66 (1981), no. 4, 1219-1229. (Authors' summary) 82m:76028 (76R 10)

(with Matkowsky, Bernard J.) On the stability of nonadiabatic flames. SIAM J. Appl. Math. 40 (1981), no. 2, 255-260. (Richard J. Field) 82h:80005 80A25

subramanian, K. (with Unni, K. R.) On the space of functions whose nth differences satisfy Lipschitz condition. Math. Rep. Toyama Univ. 4 (1981), 7-27. (J. B. Prolla) 46E15

Sivazlian, B. D. (with Mahoney, J. F.) Computation of stock-outs in a multi-installation inventory system. Comput. Math. Appl. 7 (1981), no. 5, 369–386. (Authors' summary)

wek, Edward * Analiza matematyczna. Część II. (Polish) [Mathematical analysis. Part II] Uniwersytet Śląski, Katowice, 1980. 347 pp. (loose errata). (Editors) 82g:26003 26-01 Six, H. W. (with Ottmann, Thomas; Wood, Derick) One-sided k-height-balanced trees.

(German summary) Computing 22 (1979), no. 4, 283-290. (Authors' summary) 82m-68114 68F10

(with Ottmann, Thomas; Wood, Derick) The analysis of search trees: a survey. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 234-249, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Authors' summary) 82h:68130 68H05 (68E05)

A framework for data structures. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 250-267, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Author's summary) 82h:68026 68B15 (05C99)

Sizer, Walter S. (with Pedersen, Franklin D.) Certain semigroups of complexes of an abelian group. Proceedings of the Conference on Semigroups in Honor of Alfred H. Clifford (Tulane Univ., New Orleans, La., 1978), pp. 215-221, Tulane Univ., New Orleans, La., 1979. (R. S. Pierce) 82c:20111 20M15

(with Pedersen, Franklin D.) Subsemigroups of the finite complexes of a group Semigroup Forum 20 (1980), no. 4, 285-292. (R. S. Pierce) 82i:20082 20M15 (20K20)

Sizikov, V. I. (with Emel'janov, S. V.; Korovin, S. K.) Use of coordinate-parametric feedback in design of control systems. (Russian summary) Problems Control Inform. Theory / Problemy Upravlen. Teor. Inform. 10 (1981), no. 4, 237-251. (Authors' summary) 82h:93056 937020

Sižuk, P. I. (with Černikov, V. V.) Some properties of spiral-shaped univalent functions (Russian) Metric questions of the theory of functions (Russian), pp. 132–135, 163, "Naukova Dumka", Kiev, 1980. (Olga Bereśniewicz-Rajca) 82k:30012 30C4

Sjerve, Denis Canonical forms for torsion matrices. J. Pure Appl. Algebra 22 (1981), no. 1, 103–111. (Abdul Majeed) 82k:15014 15A33 (15A36, 20G30)

Sjödin, Torgny (with Ivert, Per-Anders) Poincaré's principle determines the behaviour of moving particles and clocks. Acta Phys. Acad. Sci. Hungar. 48 (1980), no. 4, 439-448. (Authors' summary) 82f:83005 83A05

A note on Poincaré's principle and the behaviour of moving bodies and clocks. Z. rforsch. A 35 (1980), no. 10, 997-1000. (Author's summary) 82a:83004 (51B20)

Sjogren, J. A. Dimension and lower central subgroups. J. Pure Appl. Algebra 14 (1979), no. 2, 175-194. (Author's summary) 82j:20080 20F40 (18G99, 20J05)

Sjögren, Peter (with Sjölin, Per) Littlewood-Paley decompositions and Fourier multipliers with singularities on certain sets. (French summary) Ann. Inst. Fourier (Grenoble) 31 Convergence of Riemann sums for stochastic integrals. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 2, 181-193. (Marie-France Allain) 82g-60076 60H05

Math. 5 (1979), no. 3, 235-247. (Bent E. Petersen) 82d:35109 35S05 (42B20, 47G05) (with Sjögren, Peter) Littlewood-Paley decompositions and Fourier multipliers with singularities on certain sets. (French summary) Ann. Inst. Fourier (Grenoble) 31 (1981), no. 1, vii, 157-175. (William T. Sledd) 82g:42014 42B15 (42B25)

Convolution with oscillating kernels. Indiana Univ. Math. J. 30 (1981), no. 1, 47-55. (C. Carton-Lebrun) 82d:42018 42B30 (44A35)

Convolution with oscillating kernels on HP spaces: J. London Math. Soc. (2) 23

(1981), no. 3, 442–454. (Douglas Kurtz) 82h:42024 42B15 (46F12, 47B38) strand, Johannes (with Menikoff, A.) The eigenvalues of hypoelliptic operators. Équations aux dérivées partielles (Proc. Conf., Saint-Jean-de-Monts, 1977), pp. 157–163, Lecture Notes in Math., 660, Springer, Berlin, 1978. (Editors) 82b:35120 35P20 (58G25)

(with Menikoff, A.) On the eigenvalues of a class of hypoelliptic operators. II. Global analysis (Proc. Biennial Sem. Canad. Math. Congr., Univ. Calgary, Calgary, Alta., 1978), pp. 201-247, Lecture Notes in Math., 755, Springer, Berlin, 1979. (Akira Asada) 82m:35114 35P20 (58G15)

(with Menikoff, A.) The eigenvalues of hypoelliptic operators. III. The

mibounded case. J. Analyse Math. 35 (1979), 123-150. (Akira Asada) 82m:35115 35P20 (58G15)

Reflection of analytic singularities. Complex analysis, microlocal calculus and titistic quantum theory (Proc. Internat. Colloq., Centre Phys., Les Houches, 1979),

pp. 200-204, Lecture Notes in Phys., 126, Springer, Berlin, 1980. (See 81e:81003) 35A20 (58C27)

On the eigenvalues of a class of hypoelliptic operators. IV. (French summary) Ann. Inst. Fourier (Grenoble) 30 (1980), no. 2, vi, 109-169. (Akira Asada) 82m:35116 35P20 (58G15)

Note on a paper of F. Trèves concerning Mizohata type operators. Duke Math. J. 47 (1980), no. 3, 601–608. (Monty Strauss) 82b:58085 58G07 (35F05, 47F05)

Analytic singularities and microhyperbolic boundary value problems. Math. Ann. 254 (1980), no. 3, 211–256. (A. Hirschowitz) 82c:235086 35S15 (58G15, 58G17)

Analytic singularities of solutions of boundary value problem. 18th Scandi Congress of Mathematicians (Aarhus, 1980), pp. 469-473, Progress in Math., 11, Birkhäuser, Boston, Mass., 1981. (See 82i:00012) 35A99 (58G17)

(with Grigis, Alain; Schapira, Pierre) Propagation de singularités analytiques pour des opérateurs à caractéristiques multiples. (English summary) [Propagation of analytic singularities for operators with multiple characteristics] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 8, 397-400. (Authors' summary) 82m:58053 58G17 (35A20)

Propagation of analytic singularities for second order Dirichlet problems. III. Comm. Partial Differential Equations 6 (1981), no. 5, 499-567. (Jorge Hounie) 82k:35011 35B30 (35B65)

(with Rauch, Jeffrey) Propagation of analytic singularities along diffracted rays Indiana Univ. Math. J. 30 (1981), no. 3, 389-401. (K. A. Jagdžjan) 82j:35145 (58G17)

See also Helffer, Bernard, 82d:35030

abara, A. S. Commutative quivers of tame type. I. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1978, no. 42, 56 pp. (Sheila Brenner) 82m:16032 16A64 (15A21)

Skačkov, N. B. (with Solovcov, I. L.) Description of the form factor of a relativistic two-particle system in the covariant Hamiltonian formulation of quantum field theory. (Russian. English summary) Teoret. Mat. Fiz. 43 (1980), no. 3, 330–342. (V. E. Kuzmičev) 82d:81160 81G25 (81F20)

Škadinskii, K. G. (with Ivleva, T. P.; Meržanov, A. G.) A new type of nonuniqueness of stationary modes of combustion wave propagation. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 4, 897-900. 82e:80009 80A25

Skagerstam, Bo-Sture K. Some remarks on coherent states and conserved charges. Phys. Lett. A 69 (1978/79), no. 2, 76-78. (Author's summary) 82b:81051 (with Lang, C. B.; Salomonson, P.) A study of exactly solvable lattice gauge theories in two space-time dimensions. Phys. Lett. B 100 (1981), no. 1, 29-33. (Authors' summary) 82d:81105 81E99

Skakauskas, V. I. The asymptotic solution of the problem of the oscillation of a pneumatic vibrator plate. (Russian. Lithuanian and English summaries) Litovsk. Mat. Sb. 21 (1981), no. 1, 169–180. (Author's summary) 82f:73028 73H99 (73J05)

Asymptotic solution of the problem of oscillation of a pneumatic vibrator plate with allowance for gas viscosity. (Russian. Lithuanian and English summaries) Litovsk. Mat.

Sb. 21 (1981), no. 2, 201–208. (Author's summary) 82j:73048 73K12 (73105)
Skalak, Richard Blood rheology. Mathematical aspects of physiology (Proc. Summer Sem.,
Univ. Utah, Salt Lake City, Utah, 1980), pp. 109–139, Lectures in Appl. Math., 19, Amer. Math. Soc., Providence, R.I., 1981. (Author's introduction) 82h:92019 92A09

likov, A. A. The basis property of eigenfunctions of an ordinary differential operator. (Russian) Uspehi Mat. Nauk 34 (1979), no. 5(209), 235-236. (M. Otelbaev) 82e:34027 34B25 (47E05)

-Skalli, Bernard See Cohen-Skalli, Bernard

Skalmierski, Bogdan Identification of random motion and problem of crossings. (French and Russian summaries) Studia Geotech. Mech. 1 (1979), no. 2, 45-58. (Jan H. Van Schuppen) 82a:60076 60G99 (90B05, 93E12)

(with Brückner, Damian; Podhorodyński, Marian) The characteristic functional and some statistical characteristics of a stochastic process (sequential formulation). (Polish. Russian and English summaries) Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 29 (1979), 51-65. (From the summary) 82a:60075 60G99

Skalska, Krystyna Certain subclasses of the class of typically real functions. Ann. Polon.

Math. 38 (1980), no. 2, 141-152. (M. S. Robertson) 82a:30018 30C45 (30C50)
Skandalis, Georges (with Fack, Thierry) L'analogue de l'isomorphisme de Thom pour les groupes de Kasparov. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 10, A579-A581. (Claude Schochet) 82h:46077 46L05 (46M20, 58G12)
(with Connes, Alain) Théorème de l'indice pour les feuilletages. (English summary)

C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 18, 871-876. (Authors' summary) 58G12 (57R30) 82f:58079

(with Fack, Thierry) Connes' analogue of the Thom isomorphism for the Kasparov groups. Invent. Math. 64 (1981), no. 1, 7-14. (Claude Schochet) 82g:46113 46M20

Skar, Sherwin J. Stability of multimachine power systems with nontrivial transfer conductances.
 SIAM J. Appl. Math. 39 (1980), no. 3, 475-491. (Plácido Z. Táboas) 82d:34068
 34D20

urda, Vencil 1,-bounds for inner products. Unio. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 634-677 (1979), 143-147. (R. N. Mohapatra) 82g:26027b 26D15

1,-bounds for inner products. General inequalities, 2 (Proc. Second Internat. Conf., erwolfach, 1978), pp. 137–142, Birkhäuser, Basel, 1980. (Editors) 82g:26027a 26D15 (46A45)

a, Urszula See Wybraniec-Skardowska, Urszul

Skarin, V. D. See Methods of optimization and pattern recognition in problems of planning,

Skarpness, B. (with Sposito, V. A.) A modified Fritz John optimality criterion. J. Optim. Theory Appl. 31 (1980), no. 1, 113-115. (Joachim Hirche) 82e:90094

Skaržinskii, V. D. (with Dodonov, V. V.; Man'ko, V. I.) Nonuniqueness of the Yang-Feldman quantization procedure for the classical equations of motion. Phys. Lett. A 82 (1981), no. 2, 61-63. (Authors' summary) 82c:81059 81D05 (70H99)

Skau, Christian F. Geometric aspects of the Tomita-Takesaki theory. I. Math. Scand. 47 (1980), no. 2, 311-328. (M. Takesaki) 82e:46086 46L40

Skaugen, Erik (with Rekaa, Sveinung) Firing behavior in a nerve membrane model with long-term changes of a potassium conductance component. Math. Biosci. 55 (1981), no. 1-2, 65-87. (Authors' summary) 82h:92018 92A09

Skelboe, Stig Implementation of Chebyshevian linear multistep formulas. BIT 20 (1980), no. 3, 356-366. (E. H. Twizell) 82g:65036 65L05

(with Christensen, Brian) Backward differentiation formulas with extended regions of absolute stability. BIT 21 (1981), no. 2, 221-231. (Authors' summary) 82h:65061

(with Hajj, Ibrahim N.) Steady-state analysis of piecewise-linear dynamic systems. IEEE Trans. Circuits and Systems 28 (1981), no. 3, 234-242. (François Aribaud) 94C05 (34A10, 58F40, 93C05) 826-94018

Skelton, R. E. (with Hughes, P. C.) Modal cost analysis for linear matrix-second-order systems. Trans. ASME Ser. G.J. Dynamic Systems Measurement Control 102 (1980), no. 3, 151–158. (Stanislav K. Myskov) 82k:93036 93C05

No. 3, 131-136. (Statussiav R. Paysaur) observed. Skene, A. M. (with Titterington, D. M.; Murray, G. D.; Murray, L. S.; Spiegelhalter, D. J.; Habbema, J. D. F.; Gelpke, G. J.) Comparison of discrimination techniques applied to a complex data set of head injured patients. With discussion. J. Roy. Statist. Soc. Ser. A 144 (1981), no. 2, 145-175. (Authors' summary) 82h:62182 62P10 (62H30)
Skiba, A. N. On critical formations. (Russian. English summary) Vesci Akad. Navuk BSSR

Ser. Fiz.-Mat. Navuk 1980, no. 4, 27-33, 140. (S. S. Leviščenko) 82c:20047 On subformations of formations of finite groups. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 6, 492-495, 572. (Author's summary) 82i:20032

On formations generated by classes of groups. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 3, 33-38, 140. (Gerhard Pazderski)

Skibinsky, Morris The minimum probability on an interval when the mean and variance are known. Ann. Inst. Statist. Math. 32 (1980), no. 3, 377-385. (Gabriele Laue) 82e:60028

tan, I. A. Quasihelical, cyclic and canal G-surfaces. (Russian) Prikl. Geom. i Inžener.

Grafika No. 30 (1980), 31-34, 133. (Vladislav Goldberg) 82c:S3006 53A05 (53A17)
Skidmore, Duane R. (with Fong, Fred Ku) Combined ADI iteration and implicit central difference numerical method for solving nonlinear conjugated partial differential equations with moving boundary heat transfer in in-situ coal liquefaction. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 120-126, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82c:80007 80A20 (65N10)

Skiepko, J. (with Hocking, L. M.) The instability of flow in the narrow gap between two prolate spheroids. I. Small axis ratio. Quart. J. Mech. Appl. Math. 34 (1981), no. 1, 57–68. (Authors' summary) 824:76050 76E99 (76U05)

Škil', A. S. Construction of a complete universal test for digital devices. (Russian) Questions of the application of computers in the development and investigation of technical systems (Russian), pp. 44–51, 56, Preprint 80, 42, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (See 82g:68007) 94C10 (68D45)
Skillicorn, D. B. A note on directed coverings of pairs by triples. Ars Combin. 11 (1981), 221, 224, 46. Starbour, 821,0624, 05B40, 05C700.

231-234. (F. Sterboul) 82k:05043 05B40 (05C70)

(with Bate, John Aubrey) Sequences, arithmetic-progression free sets and van der Waerden numbers. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. I (Winnipeg, Man., 1980). Congr. Numer. 30 (1981), 203–211. (S. Stein) 82k:10076 10L20 (05B10) Skillings, John H. (with Mack, Gregory A.) A Friedman-type rank test for main effects in a

two-factor ANOVA. J. Amer. Statist. Assoc. 75 (1980), no. 372, 947-951. (Joachim 62G10 Krauth) 82d:62083

Škil'njak, S. S. (with Zubenko, V. V.; Kuzenko, V. F.) *Синтаксические дофи проблема переориентации. (Russian) [Syntactical definitions and the problem of reorientation] Преприит 80 [Preprint 80], 3. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiee, 1980. 45 pp. (Authors' summary) 82ge/8081 6879 (03D05)
Skimel', V. N. On the stiffness property of motion. Prikl. Mat. Meh. 42 (1978), no. 3,

407-414 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 3, 427-434 (1979).

407-414 (Russian); translated as J. Appl. main. mech. 42 (1976), no. 3, 427-434 (1979). (From the summary) 82:70004 70E05 mazi, J. (with Leaute, B.; Marcilhacy, G.) Sur une solution particulière transcendante de l'équation de "sinus-Gordon". [On a particular transcendent solution of the 'sine-Gordon' equation] Lett. Nuovo Cimento (2) 32 (1981), no. 1, 13-18. (Francesco Calogero) 82i:35156 35Q20 (53A05, 58F07)

Skinner, L. A. Uniformly valid expansions for Laplace integrals. SIAM J. Math. Anal. 11 (1980), no. 6, 1058-1067. (F. W. J. Olver) 82i:41038a 41A60 Note on the Lagerstrom singular perturbation models. SIAM J. Appl. Math. 41

(1981), no. 2, 362-364. (R. E. O'Malley, Jr.) 82i:34066 34E15 Erratum: "Uniformly valid expansions for Laplace integrals". SIAM J. Math. Anal. 12 (1981), no. 3, 487. (Editors) 82i:41038b 41A60

Skipping, C. R. (with Moore, B. N.; Oakes, M. E.) Theory of an iterative, two-mode transmission network. Internat. J. Circuit Theory Appl. 9 (1981), no. 2, 217-231. (From Notes) transmission network. Internat. J. Circuit Theory Appl. 9 (1981), no. 2, 217-231. (From the summary) 82d:94062 94C05

Skjelbred, Tor (with Ellingsrud, Geir) Profondeur d'anneaux d'invariants en caractéristiq sitio Math. 41 (1980), no. 2, 233-244. (R. E. MacRae) 82c:13015 (14M05)

Sklar, A. (with Schweizer, B.) How to derive all L_p-metrics from a single probabilistic metric. General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978), pp. 429–434, Birkhäuser, Basel, 1980. (K. Sundaresan) 824:46050 46E30 (08A02) (with Erber, T.: Rynne, T. M.) Quantum mechanics and mixing transformations Acta Phys. Austriaca 53 (1981), no. 3, 145-155. (Authors' summary) 82k:81018

Sklar, Michael G. L. norm estimation with linear restrictions on the parameters. Numer Funct. Anal. Optim. 3 (1981), no. 1, 53-68. (Author's summary) 82f:65013 65D10

Sklepovol, V. N. (with Ljaško, I. I.; Griščenko, A. E.) A difference scheme for nonlinear filtration of a heavy incompressible fluid. (Russian) Vyčisl. Prikl. Mat. (Kiev) No. 44 (1981), 126-136, 150. (Authors' summary) 82k:7669 76S05 (65P05)

in, E. K. (with Kuliš, P. P.) Quantum inverse scattering method and the Heisenberg ferromagnet. Phys. Lett. A 70 (1979), no. 5-6, 461-463. (Authors' summary) 82g:82018 82A15

(with Tahtadžjan, L. A.; Faddeev, L. D.) Quantum inverse problem method. I. (Russian. English summary) Teoret. Mat. Fiz. 40 (1979), no. 2, 194-220. (Woodford W. (with Kulis, A. G.) Solutions of the Yang-Baxter equation. (Russian) Differential geometry, Lie groups and mechanics, III. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 95 (1980), 129–160, 161. (E. E. Tarceva) 82i:82018 82A15 (35Q20,

Sidjar, B. S. On the observability of linear stationary systems with lumped delays. (Russian) Dokl. Akad. Nauk SSSR 248 (1979), no. 3, 549-552. (From the text) 82a:93016 93R07

On observability of linear systems with concentrated delays. (Russian. English amary) With a loose English translation. Problems Control Inform. Theory/Problemy . Teor. Inform. 9 (1980), no. 6, 417-428. (Author's summary) 82f:93016 93B07 (34K35)

arenko, E. G. On homologically locally connected spaces. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 6, 1417-1433, 1440. (Jože Vrabec) 82e:55011 55N99

On the Manovcev-Kuz'minov theorem. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 1, 144-150, 230. (V. A. Artamonov) 82j:20163 20K40 (18E99) Skljarevič, A. N. Test for realization of a specified function by a malfunctioning automaton. Aviomat. i Vyčisl. Tehn. (Riga) 1980, no. 2, 34–38, 97 (Russian); translated as Autom Control Comput. Sci. 14 (1980), no. 2, 30–34. (Author's summary) 82x68110 68D

Skljarevič, F. A. (with Andronov, A. M.) Numerical method of analyzing computer associations with two-dimensional Markov description. Automat. i Vyčisl. Tehn. (Riga) 1980, no. 4, 13-17, 95 (Russian); translated as Automat. Control Comput. Sci. 14 (1980),

4, 10-13. (Authors' summary) 82a:68057 68C15 Allowance for structural variability of computer systems. Automat. i Vyčisl. Tehn. (Riga) 1988, no. 6, 63-68, 97 (Russian); translated as Automat. Control Comput. Sci. 14 (1980), no. 6, 52-56. (Author's summary) 82h:68057 68C15 (68A05, 90B22)

Skłyanin, E. K. See Skljanin, E. K. Sklyarevich, A. N. See Skljarevič, A. N. Sklyarevich, F. A. See Skljarevič, F. A.

bekev, B. Ju. (with Molorodov, Ju. I.) Subcritical auto-oscillations and nonlinear neutral curve for Poiseuille flow. Comput. Math. Appl. 6 (1980), no. 1, Special Issue, 123–133.
 (From the summary) 82h:76023 76E05

(with Struminskii, V. V.) A nonlinear neutral curve for Poiseuille flow. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 3, 566-570. (C. Fetecău) 82i:76038

Dokl. Akad. Nauk SSSR 252 (1980), no. 3, 566-570. (C. Fetecau) 82i:76038 76E05 belev, V. G. Some problems of enumeration of finite automata. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 12, 64-66, 94. (Author's summary) Dokl. Aka summary) 82m:68099 68D05 (05A15)

da, Henri Diviseurs d'aire bornée dans la boule de C²: réflexions sur un article de Bo

Berndtsson. Séminaire Pierre Lelong-Henri Skoda (Analyse). Années 1978/79 (French), pp. 238-251, Lecture Notes in Math., 822, Springer, Berlin, 1980. (Eiichi Sakai) 82i:32018 32A35 (42B30)

Remarques à propos des théorèmes d'annulation pour les fibrés semi-positifs. ninaire Pierre Lelong-Henri Skoda (Analyse). Années 1978/79 (French), pp. 252-258, Lecture Notes in Math., 822, Springer, Berlin, 1980. (Eiichi Sakai) 82i:32057 (32F20)

nt des sections globales dans les fibrés semi-positifs. Séminaire Pierre Lelong-Henri Skoda (Analyse), Années 1978/79 (French), pp. 259-303, Lecture Notes in Math., 822, Springer, Berlin, 1980. (A. Hirschowitz) 82h:32027 32L20 (32J25)

(with Demailly, Jean-Pierre) Relations entre les notions de positivités de P. A. Griffiths et de S. Nakano pour les fibrés vectoriels. Séminaire Pierre Lelong-Henri Skoda (Analyse), Années 1978/79 (French), pp. 304–309, Lecture Notes in Math., 822, Springer, Berlin, 1980. (A. Hirschowitz) 82k:32028 32L20 (32125)

odrov, V. G. On the asymmetry of the planetary potential in relation to the equatorial plane. C. R. Acad. Bulgare Sci. 33 (1980), no. 12, 1639-1641. (From the text) 82g:86009

(with Gečev, T. G.) Some qualitative characteristics of the force function between two celestial bodies. C. R. Acad. Bulgare Sci. 34 (1981), no. 5, 609-611. (From the text) 82m:70003

Skopec, I. M. Graded real Lie algebras. (Russian) A collection of papers on algebra (Russian), pp. 299-307, Minist. Oborony SSSR, 1978. (I. L. Kantor) 82b:17021

Derivation of real Freudenthal trilinear systems. (Russian) A collection of papers on algebra (Russian), pp. 308-316, Minist. Oborony SSSR, 1978. (I. L. Kantor) 82b:17019

Orbits of the group of auto ns of FT-systems. (Russian) Trudy Sem. Vektor.

Tenzor. Anal. No. 20 (1981), 176–195. (H. de Vries) 82j:17012 17B20 (17A40, 20B27) ppin, A. I. See Modules and linear groups, 82f:20006 ordev, D. G. Semicombinatorial spaces. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 6, 739–742. (Horst Reichel) 82d-630766 03D75

ordev, G. S. Zarelua resolvents. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 221-224. (A. I. Baškirov) 82j:54018 54C10 (55R10)

wikov, A. V. Bisingular operators in convolutions and bipotentials in spaces with a mixed norm. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 9, 85-88. (N. K. Karapetjanc) 82c:47038 47B38 (45E10, 47A53)

rnik, Krystyna On the fractional integrals and derivatives of a class of generalized functions. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1085-1087. (H. Triebel) 46F10 (26A33)

On the theory of local derivatives. (Russian) Dokl. Akad. Nauk SSSR 257 (1981),

no. 2, 286–288. (J. Peetre) 82e:26008 26B05 rnjakov, L. A. See Kasch, Friedrich, 82m:16001 robogat'ko, V. Ja. ★Исследовання по качественной теории дифференциальных уравиений с частимын производными. (Russian) [Investigation in the qualitative theory of partial differential equations] "Naukova Dumka", Kiev., 1980. 244 pp. (P. C. Fife) 35-02 (35Bxx, 35Gxx)

See also Studies in the qualitative theory of differential equations and its application

rodinskii, I. T. A necessary condition for optimality of singular controls. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 19 (1979), no. 5, 1134-1140, 1355. (È. Jakubov) 82f:49021

Skorohod, A. V. (with Koroljuk, V. S.; Mitropol'skii, Ju. A.) İosif Il'ič Gihman (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 33 (1978), no. 5(203), 205-208. (Editors) 824:01028 01A70

Limiting behavior of a large number of randomly interacting particles. (Russian) Random processes in problems of mathematical physics (Russian), pp. 113-137, 153, Akad.

Nauk Ukrain. SSR, Inst. Mat., Kieo, 1979. (F. L. Spitzer) 82a:60150 60K35

(with Dorogoveev, A. Ja.; Sil'vestrov, D. S.; Jadrenko, M. I.) ★Teopus

вероатностей. (Russian) [Theory of probability] Сборияк задач. [A collection of problems] Translated from the Ukrainian. "Višča Škola", Kiev., 1980. 432 pp. (Publisher's cription) 82a:60001 60-01 (00A07)

ЖЭлементы теории вероктностей в случайных процессов. (Russian) [Elements of probability theory and random processes] Translated from the Ukrainian. "Višča Škola", Kiev, 1980. 344 pp. (Editors) 824:60003 60-01 ЖВероктность вокруг нас. (Russian) [Probability around us] "Naukova Dumka", Kiev, 1980. 196 pp. (Publisher's description) 821:60001 60-01

alilov, I. Š.) *Состоятельные оценки параметров случайных eccon. (Russian) [Consistent estimators of parameters of random processes] Naukova Dumka", Kiev, 1980. 190 pp. (B. Ja. Levit) 82h:62140 62M05

(with Gihman, I. I.) ★The theory of stochastic processes. I. Translated from the Russian by Samuel Kotz. Corrected reprint of the first English edition. Grundlehren der Mathematischen Wissenschaften [Fundamental Principles of Mathematical Sciences], 210. Springer-Verlag, Berlin-New York, 1980. viii + 574 pp. ISBN 3-540-06573-3 (Editors) 60-02 (65Gxx)

Linear stochastic operator equations. (Russian) Probabilistic methods of infinite-dimensional analysis (Russian), pp. 101-116, 173, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (A. T. Bharucha-Reid) 82j:60116 60H25 (47A50)

(with Nasirova, T. I.) Asymptotic behavior of the processes in a scheme of inventory

control. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 23 (1980), 130–136, 150. (Authors' summary) 82m:90066 90B05 (60K20) Measurability of stochastic processes. (Russian. English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 1, 140–142. (M. P. Eršov) 82c:60062 60G07

Stochastic differential equations depending on a parameter. (Russian. English nary) Teor. Verojatnost. i Primenen. 25 (1980), no. 4, 675-682. (Ju. M. Kabanov) 82k:60132 60H10

See also Probabilistic methods of infinite-dimensional analysis, 82f:60007 and Mitropol'skii, Ju. A.; et al., 82g:60049

rohod, S. F. On some multielement boundary value problems with non-Carleman shift for functions analytic in a domain. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 100 (1980), no. 1, 21-24. (I. M. Spitkovskii) 82k:30042 30E25

orov, D. M. (with Balankin, S. A.; Gorbačev, L. P.; Grigor'ev, E. G.) The cumulation phenomenon in dynamic compression of powdered materials. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 4, 132-136, 173. (Authors' summary) 82c:73025

ński, Andrzej On a connection between abelian Hopf algebras and modules Artinian rings. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 29 (1981). no. 1-2, 29-37. (Author's summary) 82m:16005 16A24

wrónski, Janisław M. **Liapunov dynamics of lumped systems. Hindustan Publishing Corp., Delhi, 1980. ii+595 pp. (V. M. Popov) 82k:58061 58F10 (34D20, 70–02, 70K15, 92A15, 93D05)

Adaptive identification of models stabilizing under uncertainty. Renew nangement (Proc. Workshop, Univ. Canterbury, Christchurch, 1980), pp. 64-78, Lecture Notes in Biomath., 40, Springer, Berlin, 1981. (See 82k:90001)

See also Renewable resource management, 82k:90001

Skrapek, W. A. (with Lalli, B. S.) On the boundedness and stability of a fourth-order differential equation. Ann. Mat. Pura Appl. (4) 123 (1980), 1-9. (V. Staikos) 82a:34043

34C11 (34D05) Some instability theorems for third order ordinary differential equations. Math. 34D20

Nachr. 96 (1980), 113-117. (V. M. Popov) 824:34069 Skrigan, N. I. (with Nikitin, A. S.; Pevzner, L. V.) Graph-programming grammars for nalysis of hierarchical graph structures. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 1, 5-9, 137. (Authors' summary) 82a:68150 68F05 (68E10)

Skriganov, M. M. Finiteness of the number of lacunae in the spectrum of a multidimensional polyharmonic operator with periodic potential. (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 1(9), 133-145, 176. (B. Hellwig) 82f:35142 35P05 (31B30,

General properties of the spectrum of differential and pseudodifferential operators with periodic coefficients and some problems of the geometry of numbers. (Russian)

Dokl. Akad. Nauk SSSR 256 (1981), no. 1, 47-51. (P. Günther) 82d:35074 35P05 (10E99, 47G05, 58G25)

Skripnik, A. I. Algebraic structure of algorithms of asymptotic methods of nonlinear mechanics. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 27, 30 pp. (Pavol Marušiak) 82g:65045 65L99 (70K99)

Skripnik, I. V. Solvability of general nonlinear elliptic problems. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 97-99, 250, Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (E. V. Tjurikov) 82i:35062 35J60 (with Šiškov, A. E.) Acute angle between pairs of linear parabolic operators (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 10, 27-30, 93. (Enrico Obrecht) 82d:35052 35K35

Skripnik, V. P. On the small parameter multiplying the derivative. (Russian) Asymptotic Asymptotic Russian Asymptotic Russian Asymptotic Russian Russi methods of nonlinear mechanics (Russian), pp. 128-133, 198, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1979. (Snežana Hristova) 82b:34076 34E15

Degenerate systems and a small parameter multiplying the derivative. (Russian) Differencial'nye Uravnenija 16 (1980), no. 3, 454-461, 573. (Franz Kappel) 82b:34067

Degenerating parameter and degenerate equations. (Russian. Lithuanian and English ries) Litovsk. Mat. Sb. 20 (1980), no. 1, 165-173, 220. (Nicolae Luca) 82b:34004

Degenerate linear differential equations. (Russian. Kazakh summary) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 1, 32-36, 86. (A. I. Perov) 82f:34086

Stability criteria for systems with transformed argument based on estimates of ametrized matrices. (Russian) Ukrain. Mat. Z. 33 (1981), no. 1, 109-112. (V. B. Smirnova) 82f:34102 34K20

Skrydlova, E. V. (with Govorkov, A. V.) On a class of degenerate congruences that are generated by a quadric and a point. (Russian) Kaliningrad. Gos. Univ. Differencial'n Geom. Mnogoobraz. Figur No. 11 (1980), 82-87, 127. (Hans Sachs) 82i:53013 53/

Skrypník, I. V. See Skripník, I. V.

1982

Skrzypczyk, J. Frequency methods in Hilbert space theory of dynamic systems. Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. II (Prague, 1978), pp. 659-664, Academia, Prague, 1979. (See 82k:70002b) 93C25 (46N05)

Skrzypiec, J. One-parameter class of first integrals of the post-Newtonian equations of motion in the Einstein theory of gravitation. (Russian. English summary) Acta Phys. Polon. B 11 (1980), no. 10, 729-734. (Author's summary) 82c:83027 83C25 (83C10)

Skubenko, B. F. Dense lattice packings of spheres in Euclidean spaces of dimension $n \le 16$. (Russian) Studies in number theory, 5. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 82 (1979), 144-146, 167. (R. A. Rankin) 82d:10044 10E30 (10E20,

A remark on the upper bound of the Hermite constant for the densest lattice packing of spheres. (Russian) Studies in number theory, 5. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 82 (1979), 147-148, 167-168. (R. A. Rankin) 82d:10045 10E30 (10E20, 52A45)

(with Bakiev, K.) Translation theorem in the nonhomogeneous Minkowski problem. (Russian. English summary) Analytic number theory and the theory of functions, 2. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 91 (1979), 119-124, 181. (S. A. Stepanov) 82b:10039 10E05 (52A20)

mov, V. V. (with Zel'dovič, Ja. B.; Pilipeckii, N. F.; Sudarkin, A. N.) Wave front reversal by a surface. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 1, 92-95. (From the text) 82e:78027 78A55

Skūpas, Antanas Distribution of the eigenvalues of a differential operator. (Russian. Lithuanian and English summaries) Differencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija No. 27 (1980), 99-107, 145. (K. S.

 Sem. Processy Optimal. Upraolenja I Sekcija No. 27 (1980), 99–107, 145. (K. S. Mamedov) 82j:35114
 Skupień, Zdzisław Extending dipath systems and arc-Hamiltonian properties. Contributions to graph theory and its applications (Internat. Colloq., Oberhof, 1977) (German), pp. 246–258, Tech. Hochschule Ilmenau, Ilmenau, 1977. (J. L. Jolivet) 82f:05070 05C45 (05C38)

Degrees in homogeneously traceable graphs. Combinatorics 79 (Proc. Colloq., Univ. Montréal, Montreal, Que., 1979), Part I. Ann. Discrete Math. 8 (1980), 185-188. (H. A. 05C38 (05C45)

(with Zygmunt, Władysław) On vertices and edges in maximum path-factors of a tree. Fund. Math. 109 (1980), no. 2, 89-101. (Linda Lesniak-Foster) 82h:05018

On homogeneously traceable non-Hamiltonian digraphs and oriented graphs. The theory and applications of graphs (Kalamazoo, Mich., 1980), pp. 517-527, Wiley, New York, 1981. (Carsten Thomassen) 82m:05052 05C20 (05C38)

rithin, E. E. Dimension of completely regular spaces. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 224-226. (Editors) 82d:54019 54D20 (55M99)

On the cohomology theory of completely regular spaces. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 225–226. (From the text) 824:55006 55N99 (18F20)

Skurnik, K. See Skórnik, Krystyna

Skurs'kii, P. P. (with Lerman, L. B.; Tereščenko, M. I.) Application of normal-regular solutions to problems of wave propagation in continuous-layered media. (Ukrainian. English and Russian summaries) Visnik Kiio. Univ. Ser. Mat. Meh. No. 22 (1980), 50-54, 149. (Authors' summary) 82k:35020 35C99

Škutin, L. I. Nonlinear models of deformable moment media. (Russian) Ž. Prikl. Meh. Tehn. Fiz. 1980, no. 6, 111-117, 140. (Author's summary) 821:73006 73B25 (73C50)
Skvorcov, G. E. (with Timohov, L. A.) Defining relations of a turbulent fluid. (Russian) 73B25 (73C50) Studies in elasticity and plasticity, No. 13 (Russian), pp. 295-300, 319-320, Leningrad. Univ., Leningrad, 1980. (J. D. Atkinson) 82k:76039 76F10 (60H15)

rorcov, V. A. An example of a double Haar series. (Russian) *Mat. Zametki* **28** (1980), no. 3, 343–353, 477. (A. Olevskii) **82h:42035** 42C10

An example of a series with respect to a Walsh system. (Russian) Mat. Zametki 28 (1980), no. 5, 737–748, 802. (F. Schipp) 82d-42026 42C10

On Fourier series with respect to the Walsh-Kaczmarz system. (Russian summary) Anal. Math. 7 (1981), no. 2, 141-150. (John A. Gosselin) 82k:42017 42C10

Some estimates of approximation of functions by Cesàro means of Fourier-Walsh series. (Russian) Mat. Zametki 29 (1981), no. 4, 539-547, 633. (E. A. Trachtenberg)

On the uniqueness theorem for double Haar series with convergent spherical partial sums. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1981, no. 1, 12-17, 106. (L. Gogoladze) 82m:42021 42C25

orcov, V. I. Numerical procedures for determining frequencies of natural oscillations and damping factors of one-dimensional systems with distributed parameters. (Russian) Moskov. Inst. Inž. Železnodorož. Transporta Trudy No. 630 Čislen. Metody v Stroit. Meh.

(1979), 34–38, 132. (Erich Miersemann) 82i-49042 49G10 (34D05, 65P05) warczyński, Maciej (with Kalina, Jerzy; Lawrynowicz, Julian; Ligocka, Ewa) On some biholomorphic invariants in the analysis on manifolds. Analytic functions, Kozubnik 1979 (Proc. Seventh Conf., Kozubnik, 1979), pp. 224-249, Lecture Notes in Math., 798, Springer, Berlin, 1980. (Eric Bedford) 82b:32025 32F05 (32H20)

A remark on holomorphic isometries with respect to the induced Bergman metrics.

Analytic functions, Kozubnik 1979 (Proc. Seventh Conf., Kozubnik, 1979), pp. 409–411,

Lecture Notes in Math., 798, Springer, Berlin, 1980. (Jacob Burbea) 824:32016

32H15

Biholomorphic invariants related to the Bergman function. Dissertation Rozprawy Mat.) 173 (1980), 59 pp. (Jacob Burbea) 82e:32038

The ideal boundary of a domain in Ca. Ann. Polon. Math. 39 (1981), 213-226. (Jacob Burbea) 82j:32051 32H05 (32H10, 32H15)

Skyum, Sven (with Riis, Hanne) k-visit attribute grammars. Math. Systems Theory 15 68F05 (1981/82), no. 1, 17-28. (Authors' summary) 82j:68081

binski, Victor J. A dynamical objection to the inversion of the Earth on its spin axis. J. Phys. A 14 (1981), no. 9, 2503-2507. (Author's summary) 82i:86012

kicińska-Słaby, Jadwiga See Kicińska-Słaby, Jadwiga
Sładek, Andrzej Abstract theory of quadratic forms. (Polish summary) Uniw. Śląski w
Katowicach Prace Nauk.-Prace Mat. No. 10 (1980), 46-57. (A. Rosenberg) 82i:10023

Stability in the abstract theory of quadratic forms. (Polish summary) Uniw. Śląski w Katowicach Prace Nauk.-Prace Mat. No. 10 (1980), 58-68. (A. Rosenberg) 82f:10024

Slådek, Oldřich See Source material for the history of natural science and techno 82e:01006b

owska, Janina Sur les fonctions univalentes, bornées, satisfaisant deux au moins n-equations. Demonstratio Math. 11 (1978), no. 2, 351-378. (W. C. Royster) 82e:30017 30C45

Slagstad, Dag Modeling and simulation of physiology and population dynamics of copepods. Effects of physical and biological parameters. MIC—Modeling Identification Control 2 (1981), no. 3, 119–162. (Author's summary) 82h:92036 92A15 (92A09)

pak, Ju. D. Periodic solutions of first-order ordinary differential equations unsolved with respect to the derivative. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 5, 638-644. (H. I. Freedman) 82f:34047 34C25

Slastnikov, A. D. (with Gafurov, M. U.) On the distribution of the time of last exit, the excess and the number of crossings of a random walk over a curvilinear boundary. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 3, 526-529. (D. A. Darling) 824-60125 60J15 (60F10)

Slater, Peter J. Appraising the centrality of vertices in trees. Studia Sci. Math. Hungar. 12 (1977), no. 1-2, 229-231 (1980). (Zevi Miller) 82b:05057 05C05

(with Bange, David W.; Barkauskas, Anthony E.) Simply sequential and graceful graphs. Proceedings of the Tenth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1979), pp. 155-162, Congress. Numer., XXIII-XXIV, Utilitas Math., Winnipeg, Man., 1979. (Gary S. Bloom) 82a:05072

(with Entringer, Roger C.) Gossips and telegraphs. J. Franklin Inst. 307 (1979), no. 6, 353-360. (Nguyen-Huu-Bong) 82a:05025 05B20 (10A40, 90A07) (with Hedetniemi, Sandra Mitchell; Hedetniemi, Stephen T.) Which grids are

Hamiltonian? Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II.

Congr. Numer. 29 (1980), 511-524. (R. H. Schelp) 82g:05061 05C45

(with Hedetniemi, Sandra Mitchell; Hedetniemi, Stephen T.) A note on packing two trees into K_N. Ars Combin. 11 (1981), 149–153. (J. Spencer) 82j:05086 05C70

On k-sequential and other numbered graphs. Discrete Math. 34 (1981), no. 2, 185-193. (Jean-Claude Bermond) 824:05092 05C99 (with Bange, David W.; Barkauskas, Anthony E.) Fibonacci numbers in tree counts for maximal outerplane and related graphs. Fibonacci Quart. 19 (1981), no. 1, 28-34. (J.

Sedlåček) 82e:05077 05C30 (05C05, 05C10, 05C35, 10A35) (with Buckley, Fred; Miller, Zevi) On graphs containing a given graph as center. J. Graph Theory 5 (1981), no. 4, 427-434. (Saul Stahl) 82k:05090 05C99

On locating a facility to service areas within a network. Oper. Res. 29 (1981), no. 3, 523-531. (Author's summary) 82h:90042 90B05

Slatkin, Montgomery The distribution of mutant alleles in a subdivided population Genetics 95 (1980), no. 2, 503-523. (Author's summary) 82a:92023 92A10 (9) Slavčev, S. G. On the fundamental solutions of the Stokes nonsteady equations. C. R. Acad. Bulgare Sci. 33 (1980), no. 9, 1179-1182. (Charles J. Amick) 82k76026 76D05

Slavik, Václav The amalgamation property of varieties determined by primitive lattices. Comment. Math. Univ. Carolin. 21 (1980), no. 3, 473-478. (G. Grätzer) 82b:06007

nov, S. Ju. (with Abramov, D. I.) Asymptotic formulas for a class of integrals. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 3, 117-118, 132. (È. Riekstipš) 82b:41033 41A60

vkova, M. Ja. (with Češankov, B. I.) Resonance oscillations of certain auto systems in the case of resonance of arbitrary rank. (Bulgarian. Russian and English summaries) Godišnik Visš. Učebn. Zaved. Priložna Mat. 14 (1978), no. 2, 117-124 (1979).

(G. Bojadžiev) 82e:34044 34C29

vnov, A. A. (with Arcfeva, I. Ja.) Geometric origin of the Higgs model. (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 1, 3–16. (E. Wieczorek) 82e:81027 81E10 (81G25)

rutskii, I. S. On the class number of the divisors of a real quadratic field. II. (Russian) Modern algebra (Russian), pp. 124-128, Leningrad. Gos. Ped. Inst., Leningrad, 1980. (J. Browkin) 82h:12003 12A25 (12A50)

wski, Jan J. Affine model of internal degrees of freedom in a non-Euclidean space Differential geometric methods in mathematical physics (Proc. Internat. Conf., Tech. Univ. Clausthal, Clausthal-Zellerfeld, 1978), pp. 259–279, Lecture Notes in Phys., 139, Springer, Berlin, 1981. (Takayuki Nôno) 821:70008 70G25

wny, Joseph Low-temperature expansion for lattice systems with many ground states. J. Statist. Phys. 20 (1979), no. 6, 711-717. (Author's summary) 82b:82088 82A67 Ergodic properties of equilibrium states. Comm. Math. Phys. 30 (1981), no. 4,

477-483. (D. ter Haar) 82k:82011 82A05 (28D99) womirski, Mariusz R. The constitutive equation and unsteady flow equation of the first-order integral-type incompressible isotropic liquid. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Tech. 28 (1980), no. 1-2, 69-76. (Author's summary) 82m:73004

73B05 (76A99) dd, W. T. Random series which are BMO or Bloch. Michigan Math. J. 28 (1981), no. 3,

259-266. (Ch. Pommerenke) 82k:30004 30B20 (30D50)
eman, B. D. Multiparameter periodic differential equations. Ordinary and partial
differential equations (Proc. Fifth Conf., Unio. Dundee, Dundee, 1978), pp. 229-250, Lecture Notes in Math., 827, Springer, Berlin, 1980. (Patrick J. Browne) 82d:34035

Acoustic scattering by inhomogeneous media. Quart. J. Mech. Appl. Math. 33 (1980), no. 4, 373-383. (Author's summary) 82c:76090 76Q05 (45P05) (with Ibrahim, Radhi Mohammad Ali) A regular left-definite eigenvalue problem

(wan toranim, Kadin Monammad Ali) A regular left-definite eigenvalue problem with eigenvalue parameter in the boundary conditions. Ordinary and partial differential equations (Proc. Sixth Conf., Unio. Dundee, Dundee, 1980), pp. 158–167, Lecture Notes in Math., 346, Springer, Berlin, 1981. (A. A. Škalikov) 82m:34022 34B25

Analysis of diffusion equations in biology. Bull. Inst. Math. Appl. 17 (1981), no. 1, 7–13. (E. D. Conway) 82f:35098 35K55 (92A09)

Two-dimensional inverse scattering and conformal mappings. IMA J. Appl. Math. 27 (1981), no. 1, 19-31. (Michael J. O'Carroll) 82k:76963 76Q05 (30C30, 35J05,

Boundary value problems for the vibrating string equation. Proc. Roy. Soc. Edinburgh Sect. A 88 (1981), no. 1-2, 185-194. (E. C. Zachmanoglou) 82f:35110 35L05 (73K03)

See also Ordinary and partial differential equations, 82c:34004
eswyk, Andre W. Vitruvius' waywiser. Arch. Internat. Hist. Sci. 29 (1979), no. 104,
11-22. (Giovanna Derenzini) 82b:01003 01A20

11-22 (Chovama Defending advances) of 17-20 (Chovama Defending on Emaciated sets. Bull. London Math. Soc. 13 (1981), no. 3, 219-223. (Anne C. Baker) 82e:28016 28C10

The dual of the space of measures with continuous translations. Semigroup Forum 22 (1981), no. 2, 139-150. (J. W. Baker) 82b:43007 43A20 (22A20, 46E27)

menzon, K. M. (with Nemirovskii, Ju. V.) Dynamical compactness of wave processes described by linear hyperbolic systems of second-order partial differential equations. (Russian) Dinamika Sploin. Sredy No. 39 (1979), 88–101, 166. (K. A. Jagdžjan) 35L55 (35B99)

(with Nemirovskii, Ju. V.) Dynamical compactness of connected thermoelastic waves in continuous-nonhomogeneous media. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1981, no. 3, 154–163, 174. (Authors' summary) 82k:73081 73U05

akov, L. N. (with Tivončuk, V. I.) Spline-iteration method for solving Volterra linear integral equations. (Russian) Boundary value problems of mathematical physics (Russian), pp. 159–166, 182, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1978. (R. S. Anderssen) 82e-66993. 65R20 65R20

(with Tivoncuk, V. I.) On convergence conditions and error estimation of a spline-iterative method for solving nonlinear Hammerstein integral equations. (Russian) Approximate and qualitative methods in the theory of differential and functional-differential tions (Russian), pp. 75-84, 111, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1979. (R. S. Anderssen) 82c:65094 65R20

(with Tivončuk, V. I.) Solutions of systems of Volterra-Fredholm linear integral equations by the spline-iterative method. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1979, no. 6 O Nekotornyh. Metodah Rešenija Integral. i Differen. Uravnenii, 31-46. (Ulrich Eckhardt) 82e:65135 65R20

(with Tivončuk, V. I.) Numerical-analytic method for solving systems of linear Volterra integral equations. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 1, 84–88. (V. V. Ivanov) 82f:65140 65R20 (45D05, 45L05)

epcova, I. P. Noethericity of mixed problems for second-order parabolic equations in a doubly-connected domain. (Russian) Mat. Fiz. No. 28 (1980), 96-100, 124. (Author's summary) 82j:35078 35K10

enčuk, K. N. See Slipenčuk, K. M.

epjan, L. I. (with Fiškov, A. L.) A two-dimensional mixed problem with an irregularly oving boundary condition separation point. (Russian) Studies in elasticity and asticity, No. 13 (Russian), pp. 172–181, 314, Leningrad. Univ., Leningrad, 1980. (Authors' summary) 82c:73075 73M99 (35L99)

(with Jakovlev, Ju. S.) Construction of formulas for integral transforms. (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 200–207, 315–316, Leningrad. Univ., Leningrad, 1980. (Hans-Jürgen Glaeske) 82b:44002 44A05 (46F12)

sarenko, A. P. Multidimensional problems of heat conduction with a heat exchange coefficient that varies with time. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 68-71. (L. I. Rubinstein) 82h:80014 80A20 (35K05, 65N30) Nonstationary heat conduction problems for bodies of complex cross section with heterogeneous through-going inclusions. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 10, 19-22, 93. (Author's summary) 82c:80011 80A20

(with Rvačov, V. L.; Arhipova, E. S.) Calculation of the temperature field in a doubly connected cylinder of complex cross section. (Russian) Mat. Fiz. No. 28 (1980),

87-92, 124. (Authors' summary) 82m:80003 80A20 (49D15, 65P05) ezin, Ju. B. (with Trubnikov, B. A.; Samoilenko, B. I.; Storčeus, A. V.) On the theory of deep volcanic tremor. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 6, 1337-1340. (From the text) 82i:86005 86A15

on, Dymitr Regularity of the optimal time and of the synthesis of optimal controls in linear antagonistic processes. (Polish. English summary) Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. 21 (1980), Algebra, Dydakt. Mat., Geom., Zastos. Mat., 155-168. (J. M. Skowroński) 82f:90119 90D26 (49A45, 90D05, 93D15)

im, H. A. Spectral ansatz in quantum electrodynamics. Spectral functions and gauge transformations. Nuclear Phys. B 177 (1981), no. 1, 172-188. (Author's summary)

82c-R1185 81L05

82c:81185 81L05

Slin'ko, A. M. On a theory of Jordan algebras with a minimality condition. (Russian)

Uspehi Mat. Nauk 35 (1980), no. 2(212), 221-222. (G. P. Kukin) 82k:17011 17C05 (with Bahturin, Ju. A.; Šestakov, I. P.) Nonassociative rings. (Russian) Algebra. Topology. Geometry, Vol. 18 (Russian), pp. 3-72, 214, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. (Harry F. Smith) 82h:17002

Slin'ko, M. G. (with Cumakov, G. A.; Beljaev, V. D.) Complex variations of the heterogeneous catalytic reaction rate. (Russian) Dokl. Akad. Nauk SSSR 253 (1980). no. 3, 653-658. (Editors) 82h:80007 80A30 (58F14)

omis, M. I. (with Stepanov, V. I.) Convective jet in a paramagnetic fluid. (Russian) Convective flows and hydrodynamic stability (Russian), pp. 61-67, 135, Akad. Nauk SSSR, Ural. Naučn. Centr, Sverdlovsk, 1979. (Authors' summary) 82i:76081 76R99

penchuk, K. M. Strong summability in the degree p of a series connected with the differentiated Fourier series by Abel's method. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 3, 409-414. (Włodzimierz Łenski) 82a:40009 40F05

enko, A. K. Structure of right n-groups. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 6, 853–855. (G. Čupona) 82a:20084 20N15

Slisenko, A. O. Real-time detection of all the periodicities in a word. (Russian) Dokl. Akad. (1980), no. 1, 48-51. (Author's introduction) 82h:68053 68C05 (with Maslov, S. Ju.; Matijasevič, Ju. V.; Minc, G. E.; Orevkov, V. P.) Nikolai Aleksandrovič Šanin (on the occasion of his 60th birthday). (Russian) Uspehi Mat. Nauk 35 (1980), no. 2(212), 241-245. (Editors) 82h-61165

Slitinskaja, S. K. (with Paklina, E. P.) The origin of limit cycles in the Salzmann-Lorenz system. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk. 1981, no. 1, 30–32, 102. (L. A. Bunimovich) 82g:58068 58F14 (70K20, 76E20, 86A10) Slivnik, Tomaž (with Tomšič, Gabrijel) On multiparameter problems. (Slovenian. English

ary) Obzornik Mat. Fiz. 27 (1980), no. 6, 163-167. (Authors' summary) 82b:47021 47A70 (93C35)

Śliwiok, Marian On positive definite rational functions over a real closed field. (Polish summary) Uniw. Śląski w Katowicach Prace Nauk. Prace Mat. No. 10 (1980), 43–45. (Thomas C. Craven) 82c:10020 10C04 (12D15)

sarčuk, L. M. Existence and behavior of solutions of completely integrable functional-differential equations with several deviations of the argument. (Russian) An investigation of differential and differential-difference equations (Russian), pp. 130-136, 190, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1980. (Erwin Kozakiewicz) 82k:34087

Sljusarčuk, V. E. Nonlocal theorems on bounded solutions of functional-differential equations with non-Lipschitz nonlinearities. (Russian) An investigation of differential and differential-difference equations (Russian), pp. 121-130, 190, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (D. Bainov) 82j:34077 34K30

Bounded and almost periodic solutions of functional equations. (Russian)

Qualitative investigations of functional-differential equations (Russian), pp. 144-149, 187, unkooa Dumka", Kiev, 1980. (Maciej Sablik) 822:39011 39870 (42A75) Invertibility of functional-differential operators. (Russian. English summary) Dokl.

Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 29-32, 104. (Stefan Balint) 82g:47037 47E05 (34G10, 34K30)

Invertibility of difference operators. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 11, 25-28. (I. M. Sheffer) 82i:47047 47B39 (39A70) Integral representation of c-continuous linear operators. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 8, 35-38, 97. (Author's summary) 82j:47053 47B38

Sloan, D. M. (with Bramley, J. S.) Note on the Riccati method for differential eigenvalue problems showing algebraic growth. J. Math. Anni. Appl. 83 (1981), no. 2, 351–356. (Authors' summary) 82m:65075 65L15 (34B25)

Sloan, Douglas Science in New York City, 1867–1907. Isis 71 (1980), no. 256, 35–76. (D. J. Struik) 82f:01055 01A55 (01A74)

Sloan, Ian H. Quadrature methods for integral equations of the second kind over infinite intervals. Math. Comp. 36 (1981), no. 154, 511-523. (Author's summary) 82c:65091 65R20 (45B05)

Analysis of general quadrature methods for integral equations of the second kind. Numer. Math. 38 (1981/82), no. 2, 263-278. (Author's summary) 82m:65128 65R20

ane, N. J. A. (with Graham, Ronald L.) On constant weight codes and harmonious graphs. Proceedings of the West Coast Conference on Combinatorics, Graph Theory and Computing (Humboldt State Univ., Arcata, Calif., 1979), pp. 25-40, Congress. Nu XXVI, Utilitas Math., Winnipeg, Man., 1980. (H. L. Abbott) 821:10067b (05C99, 94B05)

A note on the Leech lattice as a code for the Gaussian channel. Inform. and Control 46 (1980), no. 3, 270-272. (From the text) 82i:94015 94A29 (94A40) (with Graham, Ronald L.) On additive bases and harmonious graphs. SIAM J.

Algebraic Discrete Methods 1 (1980), no. 4, 382-404. (H. L. Abbott) 82f:10067a 10L05 (05C99, 94B05)

Error-correcting codes and cryptography. The mathematical Gardner, pp. 346-382, Wadsworth, Belmont, Calif., 1981. (See 82b:00003) 94B20

(with Thompson, John G.) The nonexistence of a certain Steiner system S(3, 12, 112). J. Combin. Theory Ser. A 30 (1981), no. 3, 209-236. (A. E. Brouwer) 82m:05023 05B07 (51E10)

(with Odlyzko, Andrew M.) On exceptions of integral quadratic forms. J. Reine Angew. Math. 321 (1981), 212-216. (H. Mizuno) 82b:10025 10C15 (10D12) Sloboda, Fridrich A generalized conjugate gradient algorithm for minimization.

Math. 35 (1980), no. 2, 223-230. (H. Mukai) 82c:65041 65K10 (49D10, 90C30) Slobodkina, F. A. (with Seleznev, L. I.) On the stability of compression shock in streams of

spontaneously condensing vapor. Prikl. Mat. Meh. 42 (1978), no. 4, 689-694 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 4, 733-739 (1979). (Authors' summary) 76L05 (76N99) božanin, L. A. (with Babskii, V. G.; Kopačevs'kii, N. D.; Myškis, A. D.; Tjupcov, A.

D.) On some unsolved problems of zero-gravity hydromechanics. Nonlinear Anal. 4 (1980), no. 3, 607-621. (From the introduction) 82a:76001 76-02 (76D99)

božanín, N. M. Justification of a conjecture of L. A. Petrosjan. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 3, 112-114, 128. (Author's summary) 82j:90091 90D26

zhanin, L. A. See Slobožanin, L. A.

Słodkowski, Z. (with Kowalski, S.) A characterization of multiplicative linear functionals in Banach algebras. Studia Math. 67 (1980), no. 3, 215–223. (James C. S. Wong) 82d:46070

Slodowy, Peter *Four lectures on simple groups and singularities. Communications of the Mathematical Institute, Rijksuniversiteit Utrecht, 11. Rijksuniversiteit Utrecht,

Mathematical Institute, Utrecht, 1980. ii + 64 pp. (I. Dolgachev) 82b:14002 (14J17, 17B20, 20C30, 32B30)

★Simple singularities and simple algebraic groups. Lecture Notes in Mathematics, 815. Springer-Verlag, Berlin-New York, 1980. x + 175 pp. ISBN 3-540-10026-1 (Jonathan M. Wahl) 82g:14037 14J17 (20G15, 32B30)

ma, L. I. (with Pokalo, A. K.) On a representation of the Lebesgue constant by an asymptotic series. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 3, 204-205, 284. (Ekkehard Krätzel) 82i:41036

-205, 284. (Ekkehard Krätzel) 82i:41036 41A60 ska, Jolanta Equivariant Bredon cohomology of classifying spaces of families of

subgroups. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 9-10, 503-508 (1981). (Author's summary) 82j:55007 55N35 sarska, Wanda On a certain property of the Ricci-recurrent space. Demonstratio Math.

13 (1980), no. 1, 313-316. (S. S. Pujar) 82a:53024 53B20

n, S. B. (with Dobrušin, R. L.) Nonexistence of one- and two-dimensional Gibbs fields with noncompact group of continuous symmetries. Multicomponent rando

systems, pp. 199–210, Advances in Probability and Related Topics, 6, Dekker, New York, 1980. (Hans-Otto Georgii) \$2e:60162 60K35 (82A05)
Limit theorems of probability theory for compact topological groups. (Russian. English summary) Teo. Verojatnast. i Primenen. 25 (1980), no. 3, 614–619. (V. M. Maksimov) \$21:60015 60B10 (60B15)

(with Barany, Imre; Szűcs, András) On a topological generalization of a theorem of Tverberg. J. London Math. Soc. (2) 23 (1981), no. 1, 158-164. (David Handel) 82d:55001 55M20 (52A35)

ss, J. M. (with Galib, T. A., Jr.; Bruch, J. C., Jr.) Solution of an oxygen diffusion-absorption problem. Internat. J. Bio-Med. Comput. 12 (1981), no. 2, 157-180. (Authors' summary) 82k:92024 92A09

ikowski, W. Concerning pre-supports of linear probability measures. Measure theo Oberwolfach 1979 (Proc. Conf., Oberwolfach, 1979), pp. 554-565, Lecture Notes in Math., 794, Springer, Berlin, 1980. (S. A. Čobanjan) 82a:60015 60B11 (28C20)

wiński, Roman Multiobjective network scheduling with efficient use of renewable and nonrenewable resources. European J. Oper. Res. 7 (1981), no. 3, 265-273. (Author's summary) 821:90033 90B05

L'ordonnancement des tâches préemptives sur les processeurs indépendants en presence de ressources supplémentaires. (English summary) [The scheduling of preemptive tasks on unrelated processors in the presence of additional resources]

RAIRO Inform. 15 (1981), no. 2, 155–166. (Author's summary) 82m:68057 68B20 (68C25, 90B35, 90C05)

Shud, Eric V. Loss of information from transforming stationary time series. Time series analysis (Houston, Tex., 1980), pp. 525-533, North-Holland, Amsterdam, 1981. (See

(with Kedem, Benjamin) On goodness of fit of time series models: an application of higher order crossings. Biometrika 68 (1981), no. 2, 551-556. (Authors' summary)

gin, S. N. (with Gavrikov, A. I.) Some approximate methods of searching for the optimal element in a partially ordered Banach space. (Russian) Mathematical analysis (Russian), pp. 82-90, Kazan. Gos. Univ., Kazan, 1978. (P. S. Milojević) 82e:65073 65J15 (49A27, 65K10)

(with Kalašnikov, A. L.; Gavrikov, A. I.) ★Применение теории частично упорядоченных пространств в задачах оптимизации. (Russian) [Application of the Heory of partially ordered spaces in problems of optimization | Gor/koc. Gos. Univ., Gorki, 1980. 47 pp. (W. W. Breckner) 82i:49004 49A27 (46A40)

Slutzki, Glora (with Pnueli, Amir) Automatic programming of finite state linear programs. SIAM J. Comput. 10 (1981), no. 3, 519-535. (Authors' summary) 82m:68103 (03D05, 68B10)

Šlyk, V. A. Some estimates in an annulus for weakly univalent functions that omit values on a circle. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 8, 85-86. (I. A. Volynec) 82m:30019 30C45 (30C55)

gulov, S. A variant of the approximation of the Navier-Stokes equations. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 57-62, 248, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (P. Szeptycki) 82g;35094 35Q10 Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (P. Szeptycki) 82g:35094

(with Rudjak, V. Ja.) On the hyperbolic modification of the Burgers equation (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 4, 801-804. (P. Szeptycki) 82a:35092 35O20 (35B25)

nakov, Ju. I. (with Šmakova, L. M.) Rheological behavior of dilute suspensions of rigid spherical particles with a power dispersive medium. (Russian) Mechanics of fluids and gases (Russian), pp. 77-83, 96, "Fan", Tashkent, 1980. (From the text) 82i:76004 76A99

(with Kuak Van Dong) Rheological state equations of weakly concentrated suspensions of deformable ellipsoidal particles. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 3, 84-90. (Authors' summary) 82j:76083 76T05

ova, L. M. (with Smakov, Ju. I.) Rheological behavior of dilute suspensions of rigid spherical particles with a power dispersive medium. (Russian) Mechanics of fluids and gases (Russian), pp. 77-83, 96, "Fan", Tashkent, 1980. (From the text) 82i:76004

ale, Steve The prisoner's dilemma and dynamical systems associated to noncooperative games. Econometrica 48 (1980), no. 7, 1617-1634. (From the introduction) 82i:90122

all, Charles Some functors which lie between the additive and multiplicative groups of a ring. Indian J. Math. 16 (1974), no. 1, 55-56. (Editors) 82d:16037a 16A90 (18B99) Corrections to: "Some functors which lie between the additive and multiplicative groups of a ring". Indian J. Math. 19 (1977), no. 1, 53. (Editors) 82d:16037b

(with Booker, J. R.) Finite element analysis of problems with infinitely distant boundaries. Internat. J. Numer. Analyt. Methods Geomech. 5 (1981), no. 4, 345–368. (Authors' summary) 82i:73038 73K25 (65N30, 73Q05)

Small, Kenneth A. (with Rosen, Harvey S.) Applied welfare economics with discrete choice models. Econometrica 49 (1981), no. 1, 105-130. (Authors' summary) 82a:90039 90A19

nall, Lance W. *Rings satisfying a polynomial identity. Written from notes taken by Christine Bessenrodt. Vorlesungen aus dem Fachbereich Mathematik der Universität Essen [Lecture Notes in Mathematics at the University of Essen], 5. Universität Essen, Fachbereich Mathematik, Essen, 1980. 38 pp. (S. A. Amitsur) 82j:16028 16A38

(with Wadsworth, Adrian R.) An example in affine PI-rings. Israel J. Math. 36

(1980), no. 3-4, 285-286. (A. Verschoren) 82a:16022 16A38
(with Irving, Ronald S.) On the characterization of primitive ideals in enveloping algebras. Math. Z. 173 (1980), no. 3, 217-221. (Marie-Paule Malliavin) 82j:17015

comery, Susan) Fixed rings of Noetherian rings. Bull. London Math. Soc. 33-38. (Donald S. Passman) 82a:16033 16A74 13 (1981), no. 1, 33-38. (Donald S. Passman) 82a:16033

(with Wadsworth, Adrian R.) Some examples of rings. Comm. Algebra 9 (1981), no. 10, 1105-1118. (J. C. Robson) 82h:16012 16A38 (16A33, 16A39) (with Stafford, J. T.) Localisation and completions of Noetherian PI algebras. J.

Algebra 70 (1981), no. 1, 156-161. (S. A. Amitsur) 82k:16003 16A08 (16A38) (with Cortzen, B.; Stafford, J. T.) Decomposing overrings. Proc. Amer. Math. Soc. 82 (1981), no. 1, 28-30. (Birge Zimmermann-Huisgen) 82i:16023 16A50 (16A62)

(with Robson, J. C.) Liberal extensions. Proc. London Math. Soc. (3) 42 (1981), no. 1, 87-103. (Donald S. Passman) 82c:16025 16A56

eil-Small, T. See Sheil-Small, T.

allwood, J. (with d'Inverno, R. A.) Covariant 2+2 formulation of the initial value problem in general relativity. *Phys. Rev. D* (3) **22** (1980), *no.* 6, 1233-1247. (J. E. Marsden) **82c:83011** 83C05 (58D25)

le, Sverre O. (with Auslander, Maurice) Preprojective modules: an introduction and some applications. Representation theory, II (Proc. Second Internat. Conf., Carleton Unio., Ottawa, Ont., 1979), pp. 48-73, Lecture Notes in Math., 832, Springer, Berlin, 1980. (Idun Reiten) 82:16027 16A64 (16A50)

(with Auslander, Maurice) Almost split sequences in subcategories. J. Algebra 69

(1981), no. 2, 426-454. (K. W. Roggenkamp) 82;16048a 16A64 (with Auslander, Maurice) Addendum to: "Almost split sequences in subcategories". J. Algebra 71 (1981), no. 2, 592-594. (From the text) 82j:16048b 16A64

A limit on the Loewy length of the endomorphism ring of a module of finite length Proc. Amer. Math. Soc. 81 (1981), no. 2, 164-166. (J. Zelmanowitz) 82b:16034 (16A64)

(103cd)

anenko, T. L. (with Ljaško, Ĭ. Ĭ.; Makarov, V. L.) Algorithmic aspects of the method of summary representations. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 4, 515-522. (Jozef Mikloško) 82e:65031 65F05 (15A24, 65N20)

arandsche, Florentin Gh. Deducibility theorems in mathematics logic. An. Univ.

Timişoara Ser. Ştiinţ. Mat. 17 (1979), no. 2, 163-168. (Editors) 82a:03012 03B05

arda, Bohumil Ideal systems of intersection and product type. Arch. Math. (Brno) 16 (1980), no. 1, 59-65. (Ferenc Fenyves) 82b:06021 06F99 (20N99)

art, D. R. When does $T^{n+1}x-T^nx\to 0$ imply convergence? Amer. Math. Monthly 8 (1980), no. 9, 748–749. (Rainald Schöneberg) 82d:54056 54H25 (40A05) arzewski, Ryszard On characterization of nonlinear best Chebyshev approximations.

Collog. Math. 43 (1980), no. 1, 111-116, 210 (1981). (Allan Pinkus) 82f:41044 (41A46)

eds, Per A. Line digraphs and the Moore-Penrose inverse. Linear Algebra Appl. 36 (1981), 165–172. (R. Balakrishnan) 82e:05074 05C20 (05C50, 15A09) eers, Y. (with Gochet, W.) A modified reduced gradient method for a class of

nondifferentiable problems. Math. Programming 19 (1980), no. 2, 137-154. (Siegfried 90C30 (90C25) Schaible) 82a:90136

melev, A. A. See Smel ov, O. O. mel'kin, A. L. The relation between Lie algebras and groups. (Russian) Uspehi Mat. Nauk 33 (1978), no. 3(201), 193-194. (R. O. Nazarjan) 82e:17014 17B60

el'ov, O. O. Algebraic independence of several numbers connected with exponential and elliptic functions. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 2, 277-282. (John H. Loxton) 10F37

nentek, Zygfryd (with Bittner, Ryszard) Taylor's formula for many derivatives. Integrals. atio Math. 12 (1979), no. 3, 565-580. (From the text) 82h:47002 (44A40, 46G05)

(with Bittner, Ryszard) A theorem on the existence and uniqueness of solutions for abstract, quasilinear differential equations. Demonstratio Math. 13 (1980), no. 4, 787-808. (J. A. Goldstein) 82h;34077 34G10 (47A50)

pereka, I. P. Construction of periodic solutions for a class of nonlinear partial differential equations by means of special Ateb functions. (Russian) Mat. Metody i Fiz.-Meh. Polja No. 13 (1981), 41-43, 114. (Author's summary) 82m:35017 35C99

Stationary oscillation processes in essentially nonlinear autonomous systems excited by instantaneous forces. (Russian) Ukrain. Mat. Z. 33 (1981), no. 1, 112-115. (Vincent Soltés) 82g:34047 34C20 (41A30)

de Smet, H. J. P. See De Smet, H. J. P.

Smetanič, Ja. S. (with Polozov, R. V.) On the algorithms for determining the primary structure of biopolymers. Bull. Math. Biol. 41 (1979), no. 1, 1-20. (Authors' summary) 82m:92037 92A09 (68G99, 92A40)

ets, Philippe Medical diagnosis: fuzzy sets and degrees of belief. Fuzzy Sets and Systems 5 (1981), no. 3, 259-266. (Author's summary) 82h:90017 90A10 (03E72)

nidt, A. A. (with Švedov, A. M.; Jakubovič, V. A.) Invariant systems of features in pattern recognition. Automat. i Telemeh. 1979, no. 3, 131-142 (Russian. English summary); translated as Automat. Remote Control 40 (1979), no. 3, part 2, 430-441. (Authors' summary) 82g:68087 68G10

(Adunors summary) segreeous oscillarsky, U. (with Mohring, K.) Semiclassical evaluation of inclusive transition probabilities. J. Chem. Phys. 74 (1981), no. 8, 4509–4518. (Authors' summary) 82f:81028 81C35 (80A30)

Smiljanskli, V. R. Some properties of Stokes multipliers. I. (Russian) Studies in the theory of operators and their applications (Russian), pp. 97-107, 178, "Naukova Dumka", Kiev. 1979. (Alexander Alenicyn) 82i:34067 34E05 (34A20)

w, A. I. On the question of continuous dependence of solutions of ordinary differential equations on the parameter. (Russian) Qualitative and approximate methods for the investigation of operator equations, No. 4 (Russian), pp. 123-136, Jaroslav. Gos.

Univ., Yaroslacl', 1979. (A. I. Perov) 82h:34086 34G20

Analysis of the development of a population under conditions of an unsteady environment. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 29 Metody dlja Nestacionar. Zadač Mat. Programmir. (1979), 94-103, 142. (Author's summary) 82h:92037 92A15 (90C30)

(with Fedorov, Ju. A.; Semenov, V. A.) Stability of dynamical systems under periodic unsteady parametric excitation. (Russian) Trudy Moskov. Orden. Lenin Energet. Inst. No. 459 (1980), 34-39, 131. (Authors' summary) 82c:70030 (34C35)

(Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 3, 114–117, 128. (Author's summary) 82k:73065 73L20 rnov, E. I. Topological abelian groups. (Russian) Qualitative and approximate metho

ns, No. 3 (Russia for the investigation of operator equations, No. 3 (Russian), w. Gos. Univ., Yaroslav!', 1978. (From the introduction) 82c roximate methods for the investiga pp. 162-170, Jaroslav. 6 46A40 (46G05, 58C20)

- mov, E. Ja. (with Abdullaev, N.) Analytic construction of discrete optimal regulators. Russian) Dokl. Akad. Nauk UzSSR 1980, no. 6, 10-12. (P. Rutkauskas) 82m:49037
- rmov, G. A. (with Zybin, L. M.) Approximation of continuous vector-valued functions. (Russian) Application of functional analysis to approximation theory (Russian), pp. 36-44, 158, Kalinin. Gos. Univ., Kalinin, 1980. (Hans-Jürgen Albrand) 82e:41041 41A50
- rmov, G. S. (with Mališev, Ī. G.) Some properties of the best approximation in spaces with a mixed integral norm. (Ukrainian. English and Russian summaries) Vīsnik Kiīv. Unīv. Ser. Mat. Meh. No. 21 (1979), 79–84, 164. (Ivan Singer) 82k:41018 41A52 (41A50)

A property of continuous mappings of a segment into a Hilbert space. (Russian)
Questions of the theory of the approximation of functions (Russian), pp. 146-153, 200,
Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (J. Kolomý) 82j:41027 41A50

irnov, I. P. (with Morozov, S. F.) Principles of minimum in problems of optimal control of random processes. *Prikl. Mat. Meh.* 42 (1978), no. 2, 233–244 (Russian); translated as Appl. Math. Mech. 42 (1978), no. 2, 243-255 (1979). (Authors' summary) 82h:93088 93E20

Optimal control of a dynamic system with random parameters under incomation. Prikl. Mat. Meh. 43 (1979), no. 4, 621-628 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 4, 664-672 (1980). (B. I. Anan'ev) 82j:49015

- nov, Ju. B. Investigation of difference schemes for quasilinear degenerate parabolic tions. (Russian) Issled. Prikl. Mat. No. 6 (1979), 60-73. (Jarosław Jeleń) 82b:65104 65N10
- irnov, Ju. F. (with Gruber, Bruno) Indecomposable representations of the algebra su(2, 1). Lett. Math. Phys. 4 (1980), no. 5, 367-372. (J.-P. Antoine) 82e:17005 (22E70, 81C40)

(with Vasilevskii, V. S.; Filippov, G. F.) Generating function for the full basis of the irreducible representation of the group Sp(6, R). Jadernaja Fiz. 32 (1980), no. 4, 987-997 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 4, 510-515 (1981). (M. K. F. Wong) 82:81156 81G30 (22E70)

(with Obuhovskii, I. T.; Čuvil'skii, Ju. M.) On the construction of wavefunctions in the six-quark system. J. Phys. A 15 (1982), no. 1, 7-23. (Authors' summary) 82m:81082 81G20 (22F70)

mov, Ju. M. (with Antonian, S. A.) Universal objects and bicompact extensions for topological groups of transformations. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 3, 521-526. (Helmut Ludescher) 82i:54072 54H15 (54D35)

irnov, M. M. (with Erugin, N. P.) Functionally invariant solutions of differential equations. (Russian) Differencial'nye Uravnenija 17 (1981), no. 5, 853-865, 956. (L. A. Ivanov) 82j:35006 35A25 (35C99)

On a Volterra equation with a hypergeometric function in the kernel. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 3, 117–119, 128. (Author's summary) 82i:45001 45D05 (33A30)

irnov, S. N. External diversity and internal uniformity of scientific growth. The logic and epistemology of scientific change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn.

and epistemology of scientific change (Froc. Conod., Freishat, 1971). Acta Philos. Penn. 30 (1978), no. 2-4, 91-110 (1979). (See 82:00024) 00A25 (03A05) (with Nazarov, L. V.) Limit theorems of n-multiple convolutions of probability measures on compact semitopological semigroups. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1980, no. 3, 62-64, 70. (Authors' summary) 82f:60029 60B15 (60F05)

imov, V. A. Singularities of the Feynman diagrams in the coordinate space and the α-representation. (Russian. English summary) Teoret. Mat. Fiz. 46 (1981), no. 1, 27-32. (Author's summary) 824:81043 81C30

Infrared and ultraviolet divergences of coefficient functions of Feynman diagrams as tempered distributions. II. (Russian. English summary) Teoret. Mat. Fiz. 46 (1981), no. 2, 199-212. (Author's summary) 82h:81040 81C30

Singularities of Feynman amplitudes in momentum space. (Russian. English marry) Teoret. Mat. Fiz. 47 (1981), no. 1, 140–143. (Author's summary) 82k:81022

w, V. A. Homology of fiber spaces. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 227-230. (J. Stasheff) 82a:57041b 57T30 (55R40)

nov, V. G. (with Leznov, A. N.; Savel'ev, M. V.) Explicit solutions to two-dimensionalized Volterra equations. Lett. Math. Phys. 4 (1980), no. 6, 445–449. (A. Degasperis) 82g:35108 35Q20 (45D05, 58F07)

Ogasperis) 82g:35106 35Q20 (45D05, 58F07)
(with Leznov, A. N.) Graded algebras of the second rank and integration of nonlinear equations $Y_{z\bar{z}} = \exp(2Y) - \exp(-2Y)$, $Y_{z\bar{z}} = 2 \exp(Y) - \exp(-2Y)$. Lett. Math. Phys. 5 (1981), no. 1, 31–36. (Authors' summary) 82g.81084 81E99 (17B70, 58A15)

ons of generalized thermoelasticity of Cosserat medium. Inž.-Fiz. Ž 39 (1980), no. 4, 716-723 (Russian); translated as J. Engrg. Phys. 39 (1980), no. 4, 1135-1140 (1981). (Author's summary) 821:73009 73B30 (73U05)

mov, V. P. (with Evarestov, R. A.) Construction of special points of the Brillouin zone by the large unit cell method. (Russian. English summary) Vestnik Leningrad. Him. 1980, vyp. 1, 28-34, 123. (V. Z. Enol'skii) 82b:82066 82A60 (82A67) ary) Vestnik Leningrad. Univ. Fiz.

rnov, Yu. F. See Smirnov, Ju. F. a, A. I. Uniform structure and Lipschitz structure in the family of lines of the Euclidean space Eⁿ. (Russian) Geometric methods in problems of analysis and algebra (Russian), pp. 114-120, Jaroslav. Gos. Univ., Yaroslavl', 1978. (E. J. F. Primrose) 51M05

rnova, E. D. Universals and the logical structure of language. (Russian) Studies in logical methodology (Russian), pp. 332–339, Moskov. Gos. Univ., Moscow, 1980. (Roman Murawski) 824:03015 03A05 (03B10)

wa, L.M. (with Gusev, L. A.; Petrov, S. V.; Tenenbaum, L. A.)

Collateral-hierarchical graphs and graph substitution operations. Automat. i Telemo 1960, no. 6, 142-151 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 6, part 2, 854-861. (Authors' summary) 82h:68128 68H05 (05C99,

rnova, N. A. (with Gusev, A. I.) Some properties of ordered rings. (Russian) Application of functional analysis in approximation theory (Russian), pp. 23-26, 158, Kalinin. Gos. Univ., Kalinin, 1979. (L. Fuchs) 82g,06029 06F25 (46A40)

nova, V. V. (with Girko, V. L.) Limit theorems for Leontief stochastic (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 12, 3-6, 91. (Rastislav Potocký) 82e:60036 60F05

it, C. F. On a class of rank tests for lack of fit. South African Statist. J. 15 (1981), no. 1, 43-55. (Author's summary) 82h:62076 62G10

mital, J. (with Kostyrko, Pavel; Neubruma, Tibor; Šalát, Tibor) On locally symmetric and symmetrically continuous functions. Real Anal. Exchange 6 (1980/81), no. 1, 67-76. (James Foran) 82c:26005 26A15 (26A21)

talová, Kristina See Grabiner, Judith V., 82b:00006

Smith, A. C. (with Guram, G. S.) Stagnation flows of micropolar fluids with strong and weak interactions. Comput. Math. Appl. 6 (1980), no. 2, 213-233. (Authors' summary) 76A05 (65P05)

Smith, A. F. M. (with Makov, Udi E.) Bayesian detection and estimation of jumps in linear systems. Analysis and optimisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 333-345, Academic Press, London, 1980. (R. S. Lipcer) 93E10

(with Verdinelli, I.) A note on Bayes designs for inference using a hierarchical linear model. Biometrika 67 (1980), no. 3, 613-619. (J. M. Bernardo) 82b:62091 (with Makov, Udi E.) Unsupervised learning for signal versus noise. IEEE Trans. Inform. Theory 27 (1981), no. 4, 498-500. (Authors' summary) 82k:62064 62F15

See also Bayesian statistics, 82k:62003 hith, A. G. (with Will, Clifford M.) Force on a static charge outside a Schwarzschild black hole. Phys. Rev. D (3) 22 (1980), no. 6, 1276-1284. (Andrew King) 824:83011 83C10 Smith, Albert F. (with Luce, R. Duncan; Baird, John C.; Green, David M.) Two classes of models for magnitude estimation. J. Math. Psych. 22 (1980), no. 2, 121–148. (Authors'

summary) 82a:92043 92A27 (62P15) Smith, B. (with Erdős, Paul) Finite abelian group cohesion. *Israel J. Math.* 39 (1981), no. 3, 177–185. (B. Garrison) 82m:20057 20K01 (10J99, 60C05)

nith, C. L. (with Tomber, Marvin L.; Norris, Diane M.; Welk, R.) Addenda to: "A nonassociative algebra bibliography" [Hadronic J. 3 (1979/80), no. 1, 507-725; MR 82i:17001]. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part C. Hadronic J. 4 (1980/81), no. 4, 1318-1443. (J. Dieudonné) 82i:17002 17-02 (00A15)

(with Tomber, Marvin L.: Norris, Diane M.) A subject index of works relating to nonassociative algebras. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part C. Hadronic J. 4 (1980/81), no. 4, 1444-1625, (J. Dieudonné) 82i:17001 17-02 (00A15)

ith, Carey (with Redheffer, Raymond M.) The case n=2 of the Goldberg-Straus inequality. General inequalities, 2 (Proc. Second Internat. Conf., Obernolfach, 1978), pp. 47-51, Birkhäuser, Basel, 1980. (Abbas A. El Gamal) 82e:05025 05A20 (15A99)

ith, Carl H. Applications of classical recursion theory to computer science. Recursion theory: its generalisation and applications (Proc. Logic Colloq., Univ. Leeds, Leeds, 1979), pp. 236-247, London Math. Soc. Lecture Note Ser., 45, Cambridge Univ. Press,

Cambridge, 1980. (Costică Cazacu) 82b:03089 03D80 (68C30)

Smith, Cedric A. B. Early reminiscences. Graph theory and related topics (Proc. Conf., Univ. Waterloo, Waterloo, Ont., 1977), pp. xix-xxi, Academic Press, New York, 1979. (Editors) 82e-01101 01A70

(with Penrose, Roger) A quadratic mapping with invariant cubic curve. Math. Proc. nbridge Philos. Soc. 89 (1981), no. 1, 89-105. (E. Morgantini) 82c:51027 51N15 (14N05, 92A10)

Smith, Crosbie Engineering the universe: William Thomson and Fleeming Jenkin on the nature of matter. Ann. of Sci. 37 (1980), no. 4, 387-412. (Evandro Agazzi) 82a:01021 01A55 (82-03)

murray-Smith, D. J. See Murray-Smith, D. J.
Smith, David A. (with Ford, William F.) Acceleration of linear and logarithmic convergence. SIAM J. Numer. Anal. 16 (1979), no. 2, 223-240. (From the introduction) 82a:65012 65B10

Smith, David Eugene *Le comput manuel" de Magister Anianus. (French) [The "Compotus manualis" of Magister Anianus] Reprint of the 1928 edition. Documents Scientifiques du XVe Siècle [15th Century Scientific Documents], IV. Slatkine Reprints,

Geneva, 1977. 107 pp. (H. L. L. Busard) 82k:01023 01A35 (01A75)

Smith, David P. The problem of persistence in economic-demographic cycles. The Population Biol. 19 (1981), no. 2, 125-146. (Author's summary) 82m:92065 92 92A15 (45J05, 90A99)

Smith, David Woodruff Indexical sense and reference. Synthese 49 (1981), no. 1, 101–127. (From the introduction) 82i:03011 03A05 (03B45)

Smith, Donald R. (with Black, R. Michael) The finite topology and variational calculus on nontopological vector spaces. J. Math. Anal. Appl. 78 (1980), no. 1, 117–126. (Authors' summary) 82i:49034 49D29 (90A30)

(with Derman, Cyrus) An alternative proof of the IFRA property of some shock models. Naval Res. Logist. Quart. 27 (1980), no. 4, 703-707. (Arnfried Streller) 60K20 (62N05, 90B99)

(with Whitt, Ward) Resource sharing for efficiency in traffic systems. Bell System Tech. J. 60 (1981), no. 1, 39-55. (Ralph L. Disney) 82a:60145 60K25

Smith, Edgar Roderick (with de Leeuw, S. W.; Perram, J. W.) Simulation of electrostatic systems in periodic boundary conditions. I. Lattice sums and dielectric constants. Proc. Roy. Soc. London Ser. A 373 (1980), no. 1752, 27-56. (From the summary) 82f:82055a 82A60 (81H05)

(with de Leeuw, S. W.; Perram, J. W.) Simulation of electrostatic systems in periodic boundary conditions. II. Equivalence of boundary conditions. Proc. Roy. Soc. London Ser. A 373 (1980), no. 1752, 57-66. (From the summary) 82/:82055b
 S2A60 (81H05)
 Charge neutrality and boundary conditions in the classical Coulomb lattice gas. J.
 Phys. A 14 (1981), no. 7, L257-L261. (Author's summary) 82g:82011
 82A05 (with Abraham, D. B.) Monte Carlo simulation of a planar Ising model roughening transition. J. Phys. A 14 (1981), no. 8, 2059-2071. (Authors' summary) 82f:82602 82-04 (82A25, 82A68)

Electrostatic energy in ionic crystals. Proc. Roy. Soc. London Ser. A 375 (1981), no. 1763, 475-505. (I. John Zucker) 82g:82050 82A60 ith, Edwin Shelby A comparison of the Riemann-complete and Lebesgue integrals.

Eleutheria 1979, no. 2, 493-499. (S. N. Mukhopadhyay) 82h:26016 26A42 nith, F. T. A three-dimensional boundary-layer separation. J. Fluid Mech. 99 (1980), no. 1, 185-224. (M. N. L. Narasimhan) 82c:76041 76D10 (76D15)

(with Bodonyi, R. J.) The upper branch stability of the Blasius boundary layer,

including nonparallel flow effects. Proc. Roy. Soc. London Ser. A 375 (1981), no. 1760, 65-92. (W. O. Criminale, Jr.) 82d:76046 76E99 (35B40, 76D10) th, G. C. De Morgan and the transition from infinitesimals to limits. Soc. Gaz. 7 (1980), no. 2, 46-52. (I. Grattan-Guinness) 82d:01017 01A55 (26-03)

Thomas Bayes and fluxions. (French and German summaries) Historia Math. 7 (1980), no. 4, 379-388. (Garry J. Tee) 82e:01057 01A50 Smith, Gary The systematic specification of a full prior covariance matrix for asset dema

equations. Quart. J. Econom. 96 (1981), no. 2, 317-339. (Author's summary) 82k:62210 62P20

Smith, H. L. A note on disconjugacy for second order systems. Pacific J. Math. 89 (1980), no. 2, 447–452. (W. J. Kim), 82d:34042 34C10
 Smith, Harry (with Draper, Norman Richard) ★Applied regression analysis. Second edition. Wiley Series in Probability and Mathematical Statistics. John Wiley & Sons, Inc.,

New York, 1981. xiv + 709 pp. ISBN 0-471-02995-5 (Editors) 82f:62002 (62J05)

Smith, Harry F. (with Hentzel, Irvin Roy; Kleinfeld, E.) Alternative rings with idempotent. J. Algebra 64 (1980), no. 2, 325-335. (M. L. Tomber) 82j:17022 17D05 (with Hentzel, Irvin Roy) Derivation alternator rings with idempotent. Trans. Amer. Math. Soc. 258 (1980), no. 1, 245-256. (Arie H. Boers) 82e:17002 17A30 (17D05)

Smith, Harvey A. (with Busby, Robert C.) Product-convolution operators and mixed-norm Amer. Math. Soc. 263 (1981), no. 2, 309-341. (J. Gil de Lamadrid) Trans. R2i-43003 43A15 (44A35, 47B38)

maynard Smith, J. See Maynard Smith, J.

th, J. C. (with Nichols, J. C.) A remark on the equivalence of certain dimension functions. Portugal. Math. 37 (1978), no. 1-2, 45-51 (1981). (M. G. Charalambous) 54F45

(with Davis, S. W.) The paracompactness of preparacompact spaces. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979). Topology Proc. 4 (1979), no. 2, 345-360 (1980). (Heikki J. K. Junnila) 82b:54032

Irreducible spaces and property b₁. The Proceedings of the 1980 Topology Conference (Univ. Alabama, Birmingham, Ala., 1980). Topology Proc. 5 (1980), 187-200 (1981). (Roy Dyckhoff) 82k:54032 54D20 (54C10)

ith, J. MacGregor (with Lee, Der Tsai; Liebman, Judith S.) An O(n log n) heuristic for

Steiner minimal tree problems on the Euclidean metric. *Networks* 11 (1981), *no.* 1, 23–39. (A. T. Amin) 82g:68050 68C25 (05C05, 52–04, 68E10, 90C25) (th. J. Q. Bayes estimates under bounded loss. *Biometrika* 67 (1980), *no.* 3, 629–638. (J. M. Bernardo) 82b:62005 62C10

(with Harrison, P. J.; Zeeman, E. C.) The analysis of some discontinuous decision processes. European J. Oper. Res. 7 (1981), no. 1, 30–43. (E. Vilkas) 82f:90011

The multiparameter steady model. J. Roy. Statist. Soc. Ser. B 43 (1981), no. 2, 256–260. (Author's summary) 82h:62163 62M10 (with Endicott, Patrick C.) A homology spectral sequence for

Pacific J. Math. 89 (1980), no. 2, 279-299. (J. M. Boardman) 82a:55020 55T10 (57R35)

Fiber homology and orientability of maps. Pacific J. Math. 89 (1980), no. 2, 453-470. (R. A. Piccinini) 82f:55026 55R65

ith, Jo E. I-group varieties. Ordered groups (Proc. Conf., Boise State Univ., Boise, Idaho, 1978), pp. 99–105, Lecture Notes in Pure and Appl. Math., 62, Dekker, New York, 1980. (F. D. Pedersen) 82c:08007 08B15 (06F15)

ith, Jon M.

* Математическое и инфровое моделирование для инженеров и исследователей. (Russian) [Mathematical modeling and digital simulation for engineers and scientists] Translated from the English by N. P. Il'ina. "Mašinostroenie", Moscow,

1980. 272 pp. (Editors) 821:68100 68105 (68C05, 93-01) ith, Jonathan D. H. Exterior algebra representations of commutative Moufang loops. Arch. Math. (Basel) 34 (1980), no. 5, 393-398. (V. A. Artamonov) 82b:20106 20N0 20N05 (with Romanowska, Anna B.) Bisemilattices of subsemilattices. J. Algebra 70 (1981), no. 1, 78-88. (D. R. Brown) 82h:06004 06A12

Smith, K. C. The prospects for multivalued logic: a technology and applications view.

IEEE Trans. Comput. 30 (1981), no. 9, 619-634. (Author's summary) 82m:94051 94C05 (03B50, 94-02)

ith, Kimberly G. (with MacMahon, James A.; Schmipf, David J.; Andersen, Douglas C.; Bayn, Robert L., Jr.) An organism-centered approach to some community and ecosystem concepts. J. Theoret. Biol. 88 (1981), no. 2, 287-307. (Authors' summary) 82f:92045 92A17

ith, Kirby C. (with Maxson, Carlton J.) Centralizer near-rings that are endomorphism Proc. Amer. Math. Soc. 80 (1980), no. 2, 189-195. (G. Betsch) 82d:16034 16A76 (16A44)

(with Maxson, Carlton J.) Centralizer near-rings determined by completely regular inverse semigroups. Semigroup Forum 22 (1981), no. 1, 47-58. (Günter Pilz) 82c:16037 16A76 (20M20)

ith, L. C. (with Lee, Y. S.) An analysis of power law viscous materials under a plane-strain condition using complex stream and stress functions. Trans. ASME Ser. E J. Appl. Mech. 48 (1981), no. 3, 486-492. (Authors' summary) 82i:73021 (73C05)

(1980) (1981), no. 3, 467-493. (P. Günther) 82m:35117 35P20 (35B40, 58G25) nith, Larry Some remarks on projective Stiefel manifolds, immersions of projective spaces and spheres. Proc. Amer. Math. Soc. 80 (1980), no. 4, 663-669. (Duane Randall) 82c:57018 57R42

Smith, M. C. On the generalized Nyquist stability criterion. Internat. J. Control 34 (1981), no. 5, 885-920. (Author's summary) 82m:93074 93D15

Smith, M. J. Junction interactions and monotonicity in traffic assignment. Transportation Res. Part B 16 (1982), no. 1, 1-3. (Author's summary) 82nn:90081

with, M. L. (with Sherif, Y. S.) Optimal maintenance models for systems subject to failure -a review. Nanal Res. Logist. Quart. 28 (1981), no. 1, 47–74. (Authors' summary) 0:0045 90B25 (90–02)

(with Panwalkar, S. S.; Woollam, C. R.) Counterexamples to optimal permutation schedules for certain flow shop problems. Naval Res. Logist. Quart. 28 (1981), no. 2, 339-340. (Authors' summary) 82f:90050 90B35

Smith, Malcolm (with Scher, Gary; Baranger, Michel) Numerical calculations in elementary quantum mechanics using Feynman path integrals. Ann. Physics 130 (1980), no. 2, 290-306. (Authors' summary) 82681050 81C35

h, Mark A. A Banach space that is MLUR but not HR. Math. Ann. 256 (1981), no. 2, 277-279. (S. Swaminathan) 82h:46032 46B20 (with Pach, A. J.; Turett, B.) Flat Orlicz spaces. Proc. Amer. Math. Soc. 81 (1981),

no. 4, 528-530. (Y. Benyamini) 82f:46031 46E30 (46B25)

ith, Michel Plane indecomposable continua no composant of which is accessible at more than one point. Fund. Math. 111 (1981), no. 1, 61-69. (L. E. Ward, Jr.) 82i:54060 54F20

ith, O. L. The influence of environmental gradients on ecosystem stability. Amer. Natur. 116 (1980), no. 1, 1-24. (Author's summary) 82e:92047 92A17

Smith, P. F. Injective modules and prime ideals. Comm. Algebra 9 (1981), no. 9, 989–999. (T. Cheatham) 82h:16018 16A52 (16A66)

The injective test lemma in fully bounded rings. Comm. Algebra 9 (1981), no. 17, 1701-1708. (G. Michler) 82k:16030 16A52 (16A33, 16A66)

(with Snider, Robert L.) Group rings of hyperabelian groups. Israel J. Math. 38 (1981), no. 1-2, 23-28. (I. B. S. Passi) 82d:16011 16A27 (20C07)

(with Passman, D. S.) Units in integral group rings. J. Algebra 69 (1981), no. 1, 213-239. (F. C. Polcino Milies) 82h:20009 20C05 (12A57)

-239. (F. C. Polcino Milles) 824:20007 2000 (1220),
Rings with every proper image a principal ideal ring. Proc. Amer. Math. Soc. 81
No. 3. 347-352. (C. R. Haiarnavis) 824:16001 16A04 (16A12, 16A46, 16A60) (1981), no. 3, 347-352. (C. R. Hajarnavis) 82f:16001

ith, Patricia L. The use of analysis of covariance to analyse data from designed experiments with missing or mixed-up values. J. Roy. Statist. Soc. Ser. C 30 (1981), no. 1, 1-8. (Author's summary) 82bc62118 62J10

ith, Philip W. (with Chui, Charles K.; Ward, Joseph D.) Approximation by M-ideals in the disc algebra. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 305-309, Academic Press, New York, 1980. (D. N. Zarnadze) 82f:30032 30E05 (41A65, 46J15)

(with Riemenschneider, S. D.; Sharma, Ambikeshwar) Lacunary trigonometric interpolation convergence. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 741–746, Academic Press, New York, 1980. (Jean Tzimbalario) 82b:42003 42A15

(with Riemenschneider, S. D.) Approximation by discrete totally positive systems Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 847-855, Academic Press, New York, 1980. (Allan Pinkus) 82a:41026 41A50 (15A99) (with Cavaretta, A. S., Jr.; Dahmen, Wolfgang A.; Micchelli, Charles A.) A

factorization theorem for banded matrices. Linear Algebra Appl. 39 (1981), 229-245. (H.-J. Rack) 82j:15014 15A23

th, R. L. See Smith, Richard L.

Smith, R. R. (with Ward, Joseph D.) Matrix ranges for Hilbert space operators. Amer. J. Math. 102 (1980), no. 6, 1031-1081. (Man-Duen Choi) 82a:46067 (with Ward, Joseph D.) Locally isometric liftings from quotient C*-algebras.

Math. J. 47 (1980), no. 3, 621-631. (Man-Duen Choi) 82a:46068 46L05 (47A12) (with Ward, Joseph D.) The geometric structure of generalized state spaces. Funct. Anal. 40 (1981), no. 2, 170-184. (Man-Duen Choi) 82i:46094 46L30 (47A12) The numerical range in the second dual of a Banach algebra. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 2, 301-307. (A. M. Sinclair) 82e:46065 46H05

The Riemann problem in gas dynamics. Trans. Amer. Math. Soc. 249 (1979), no. 1, 1-50. (Author's summary) 82g:35075 35L67 (35Q20, 76J99, 76L05, 76M05)

th, Richard L. A probability model for fibrous composites with local load sharing. Proc. Roy. Soc. London Ser. A 372 (1980), no. 1751, 539-553. (H. Taylor) 824:60172 (62N05, 82A99)

(with Phoenix, S. L.) Asymptotic distributions for the failure of fibrous materials inder series-parallel structure and equal load-sharing. Trans. ASME Ser. E J. Appl. Mech. 48 (1981), no. 1, 75-82. (Authors' summary) 82f:62181 62N05 ith, Rick L. (with Nerode, Anil) The undecidability of the lattice of recursively

enumerable subspaces. Proceedings of the Third Brazilian Conference on Math Logic (Inst. Math., Fed. Univ. Pernambuco, Recife, 1979), pp. 245-252, Soc. Brasil. Lógica, São Paulo, 1980. (Viggo Stoltenberg-Hansen) 82:03060 03D45 (03D35,

ith, Robert Arnold A generalization of Kuznietsov's identity for Kloosterman sums. C. R. Math. Rep. Acad. Sci. Canada 2 (1980), no. 6, 315-320. (H. Iwaniec) 82j:10068

(with Subbarao, M. V.) The average number of divisors in an arithmetic progression.

Canad. Math. Bull. 24 (1981), no. 1, 37-41. (Matti Jutila) 82:10063 10H25 (10G15) 10H25 (10G15) The L2-norm of Maass wave functions. Proc. Amer. Math. Soc. 82 (1981), no. 2, 179-182. (R. A. Rankin) 82f:10029 10D12

Smith, Robert E. (with Pitts, Joan I.) The solution of the three-dimensional viscous-compressible Navier-Stokes equations on a vector computer. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 245-252, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82c:76085 76N99 (65-04, 65P05)

nith, Robert Henry See Stigler, Stephen M., 82:e01032

nith, Roadd B. Calculation of shear-dispersion coefficients. Mathematical modelling of turbulent diffusion in the environment (Proc. Conf., Univ. Liverpool, Liverpool, 1978), pp. 343–362, Academic Press, London, 1979. (Author's summary) 82a:76077 76R99

th, Ronald L. M-matrices whose inverses are stochastic. SIAM J. Algebraic Discrete Methods 2 (1981), no. 3, 259-265. (Thomas L. Markham) 82h:15028 15A48 (15A51)

mith, Roy Campbell (with Donagi, Ron) The degree of the Prym map onto the moduli space of five-dimensional abelian varieties. Journess de Géometrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers, 1979, pp. 143-155, Sijthoff & Noordhoff, Alphen cam den Rijn, 1980. (V. V. Šokurov) 82k:14030a 14H40 (14K30) (with Donagi, Ron) The structure of the Prym map. Acta Math. 146 (1981), no. 1-2, 25-102. (V. V. Šokurov) 82k:14030b 14H40 (14K30)

See Eskin, G. I., 82k:35105

nith, S. H. The development of vertical layers in a rotating fluid. SIAM J. Appl. Math. 40 (1981), no. 1, 78–89. (Maddipati Srinivasa Sarma) \$2e:76105 76U05 76U05 nith, S. P. Krull dimension of the enveloping algebra of sl(2, C). J. Algebra 71 (1981), no. 1, 189–194. (Marie-Paule Malliavin) \$2m:17005 17B35 (16A55) The primitive factor rings of the enveloping algebra of sl(2, C). J. London Math. Soc. (2) 24 (1981), no. 1, 97–108. (Marie-Paule Malliavin) \$2i:17016 17B35 (16A08, 16A20)

torcoy
torcoy
th, Stephen D. The classification of finite groups with large extraspecial 2-subgroups.
The Santa Cruz Conference on Finite Groups (Unio. California, Santa Cruz, Calif., 1979), pp. 111–120, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (Editors) 82c:20034
20D05 (Editors) 82c:20034

(with Ronan, Mark A.) 2-local geometries for some sporadic groups. The Santa Cruz. Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 283–289, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (Authors' introduction) 82c:20033 20D05 (20B05, 20C20)

A characterization of some Chevalley groups in characteristic two. J. Algebra 68 (1981), no. 2, 390-425. (M. E. Harris) 82d:20021 20D05

th, T. M. F. (with Holt, David; Winter, P. D.) Regression analysis of data from complex surveys. J. Roy. Statist. Soc. Ser. A 143 (1980), no. 4, 474-487. (Authors' nary) 82a:62025 62D05

ith, Temple F. (with Bednarek, A. R.) A taxonomic distance applicable to paleontology.

Math. Biosci. 50 (1980), no. 3-4, 285-295. (Authors' summary) 82m:92005 92A05 (with Howell, J. A.; Waterman, M. S.) Computation of generating functions for biological molecules. SIAM J. Appl. Math. 39 (1980), no. 1, 119-133. (From the introduction) 82a:92018 92A10 (92A40)

mas C. (with Meyer, Harold D.) Convergence for a finite difference solution of a Stefan problem. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 196–200, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82b:65087 65M10

ith, V. M. (with Choike, J. R.; Kotlarski, I. I.) On a characterization using random ms. Pacific J. Math. 91 (1980), no. 1, 71-77. (Werner Fieger) 82f:60040

th, W. B. (with Dunn, C. L.) Combinatoric classification of multivariate n variates. Comm. Statist. A—Theory Methods 9 (1980), no. 13, 1317-1340. (Chien-Pai Han) 82e:62087 62H30

ith, Walter L. Harold Hotelling 1895-1973. Ann. Statist. 6 (1978), no. 6, 1172-1183 (1

plate). (Editors) 824:01031 01A70 ith, Wanda W. (with Spikes, Paul W.) Some asymptotic properties of the solutions of perturbed nonlinear differential equations. Ann. Mat. Pura Appl. (4) 125 (1980), 117-133. (J. S. W. Wong) 82a:34039 34C10 (34A34) (th. Wayne S. (with Kadane, Joseph B.; Dickey, James M.; Winkler, Robert L.; Peters,

Stephen C.) Interactive elicitation of opinion for a normal linear model. J. Amer. Statist. Assoc. 75 (1980), no. 372, 845-854. (D. V. Lindley) 82a:62092 62J05 (62A15)

ith, Wendell C. (with Han, Chien Pai) Error rate for testing a contrast after a significant F test. Comm. Statist. B-Simulation Comput. 10 (1981), no. 6, 545-556. (Authors' ary) 82k:62102 62H15

Sullmany Statement (with Silvert, William) The response of ecosystems to external perturbations. Math. Biosci. 55 (1981), no. 3-4, 279–306. (Authors' summary) 82h-92035 92A15 (34K15, 39A10)

m V. Convergence in measure of integrands. Appl. 26 (1981), no. 6, 899-903. (Dimo B. Dimitrov) 82::28008 28A20 (46G10) m, R. E. An order theoretic characterization of nested spaces. Proc. Amer. Math. Soc. 83 (1981), no. 1, 207-210. (L. E. Ward, Jr.) 82j:54068 54F05 (54F50)

nes, Marie-Luce The autonomous Bautin system and some nonautonomous applications to chemical oscillations. VII. Internationale Konferenz über nichtlineare Schwingungen (Berlin, 1975), Band II, 2, pp. 385–390, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1977, 6, Akademie-Verlag, Berlin, 1978. (From the introduction) 82a:34049 34C15 (80A30)

Milor, N. F. (with Vasilenko, Ju. G.; Kuznecov, E. N.; L'vov, V. S.; Nesterihin, Ju. E.; Sobolev, V. S.; Spektor, M. D.; Timohin, S. A.; Utkin, E. N.) Generation of Taylor vortices in a Couette flow. (Russian) Ž. Prikl. Meh. i Tehn. Fiz. 1980, no. 2, 58–64, 173. (M. Yanowitch) 824:76053 76E99

okler, Howard The collapse of modal distinctions in probabilistic contexts. Theoria 45 (1979), no. 1, 1-7 (1980). (David Makinson) 82g:03033 03B48 (03B45) olarski, Dennis C. (with Klosinski, Leonard F.) Recognition algorithms for Fibonacci

ers. Fibonacci Quart. 19 (1981), no. 1, 57-61. (Richard T. Bumby) 82i:10013 10A35 (03D10, 68C40)

ki. W. A new proof of the zero-one law for stable measures. Proc. Amer. Math. Soc. 83 (1981), no. 2, 398-399. (R. M. Dudley) 82h:60017 60B12 (60E07)

olin, Lee Superspace unmasked: the physical interpretation of supergravity theory. Ann. Physics 131 (1981), no. 2, 398-425. (A. Verona) 82m:83055 83E50 (58A99) oljakov, N. V. Electron scattering on the Dirac-Schwinger monopole for small angles.

(Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 427-430. (Author's summary) 82c:81139 81F99 (81G10)

Ika, Scott A. (with Broderick, John; Morino, Luigi) Recent developments in the Green's function method for aerodynamics. Adonces in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 100-107, IMACS, New Brunswick, N.J., 1977. (Authors' summary) 82c:76070 76G99

oklin, R. A. Optimization of the sequence of construction of a distribution network. (Russian) Mathematical methods for the solution of economic problems, No. 9 (Russian), pp. 144-152, "Nauka", Moscow, 1980. (See 824:90001) 90B10

ck, Howard A. (with Chen, Mo Shing) A new approach to near-optimal path

assignment through electric-circuit modeling. Networks 11 (1981), no. 4, 335-349. ary) 82m:94052 94C05 (90B10)

ller, Joel (with Conley, Charles) Remarks on the stability of steady-state solutions of reaction-diffusion equations. Bifurcation phenomena in mathematical physics and related topics (Proc. NATO Advanced Study Inst., Cargèse, 1979), pp. 47-56, NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci., 54, Reidel, Dordrecht, 1980. (Jagdish Chandra) 35K55 (58F10) 82h:35081

(with Conley, Charles) Topological techniques in reaction-diffusion equations.

Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 473-483, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (Theodore Laetsch) 82j:35014 35B32 (34B15, 35K55, 58F14, 92A09)

(with Wasserman, Arthur G.) Global bifurcation of steady-state solutions. J Differential Equations 39 (1981), no. 2, 269-290. (A. Vanderbauwhede) 82d:58056 58F14 (34B15, 35K55)

prodinskii, Ja. A. (with Vizgin, V. P.) From the equivalence principle to the equations of gravitation. Uspehi Fiz. Nauk 128 (1979), no. 3, 393-434 (Russian); translated Phys. Uspekhi 22 (1979), no. 7, 489-513 (1980). (H. Treder) 82g:01033 (83 - 03)

nsky, Meir (with Adler, Roy; Keane, Michael S.) A construction of a normal number for the continued fraction transformation. J. Number Theory 13 (1981), no. 1, 95-105. (B. Volkmann) 82k:10070 10K25 (10K05)

oryński, Craig Some rapidly growing functions. Math. Intelligencer 2 (1979/80), no. 3, 149-154. (A. A. Mullin) 82c:03064 03D20 (03F30, 10A20)

(with Stavi, J.) Cofinal extension preserves recursive saturation. Model theory of algebra and arithmetic (Proc. Conf., Karpacz, 1979), pp. 338–345, Lecture Notes in Math., 834, Springer, Berlin, 1980. (Klaus Potthoff) 82g-03062 03C62 (03C57, 03H15) Calculating self-referential statements. Fund. Math. 109 (1980), no. 3, 189–210. (P. Hájek) 82g-03099 03F30 (03D99, 03F40)

Recursively saturated nonstandard models of arithmetic. J. Symbolic Logic 46

(1981), no. 2, 259–286. (M. M. Richter) 82i:03045 03C62 (03H15)

Cofinal extensions of nonstandard models of arithmetic. Notre Dame J. Formal Logic 22 (1981), no. 2, 133–144. (Klaus Potthoff) 82g:03063 03C62 (03C57, 03H15) ntary extensions of recursively saturated models of arithmetic. Notre Dame J Formal Logic 22 (1981), no. 3, 193-203. (Klaus Potthoff) 82g:03064 03C62 (03C57, 03H15)

strov, Ju. A. Inversion of the Fourier transform by the method of an asymptotic extension of the interval. (Russian) Questions of electrodynamics and continuum mechanics, IV (Russian), pp. 128-142, Latv. Gos. Univ., Riga, 1978. (R. Kaufman)

McCanalis, 17 (1888), pp. 120-121 (1888), McCanalis, Mc

rov, M. V. On topological inhomogeneity of spaces of $\exp K^*$ -type. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 3, 526-531. (N. Hadžiivanov) 82i:54039 54C99 (54F25, 54H99)

Smyrev, G. A. Traces of functions of class $B_{p,\theta}^I$ on smooth surfaces. (Russian) Theory of cubature formulas and the application of functional analysis to problems of mathematical physics (Russian), pp. 136-164, 167, Trudy Sem. S. L. Soboleva, No. 1, 1978, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1978. (S. G. Samko) 82i:46037 46E35 Traces of functions of S. M. Nikol'skii's class $H_a^l(G)$ on smooth surfaces. (Russian) Theory of cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 239–248, 256, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (From the 46E35 introduction) 82f:46038

Smyrev, V. I. On the problem of obtaining fixed points of piecewise constant more mappings in R". (Russian) Dokl. Akad. Nauk SSSR 259 (1981), no. 2, 299-301. (J.

Danes) 82::9060 90C25 (47H05, 55M20)
Smystjaev, P. P. Boundary control in a problem of complex heat exchange. (Russian) matical methods of optimization and structuring of systems (Russian), pp. 29-35, 166, Nationin. Gos. Univ., Kalinin, 1980. (Author's summary) 82e:49016 49A22 (80A20)
Optimization of the heating of a strongly viscous heat conducting medium. (Russian. Kazakh summary) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 3, 22-26, 91. (B. Vuianović) 82i:76036 76D99 (80A20)

Smyšljaeva, L. G. The relation between spectral densities of continuous and discrete random processes. (Russian. Kazakh summary) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1979, no. 3, 30-35, 89. (A. I. Ponomarenko) 82e:62072 62G10 (62M15) (with Lebedev, S. A.) The method of conditional mathematical expectation in filtering of nonwhite perturbations. (Russian) Mathematical methods of opti structuring of systems (Russian), pp. 3-9, 165, Kalinin. Gos. Univ., Kalinin, 1980. (Authors' summary) **824:93065** 93E11

★Преобразование Лапласа функций многих переменных. (Russian) [Laplace transform of functions of several variables] Leningrad. Univ., Leningrad, 1981. 143 pp. (loose errata). (Hans-Jürgen Glaeske) 82j:44003 44A10

(with Vasil'eva, T. G.) Optimal estimate of a prediction in the case of first-order perturbations. (Russian. Kazakh summary) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.

1981, no. 1, 36-41, 86. (O. A. Glonti) 82h:60076 60G35 (62M20, 93B30)
Smyslov, A. Ju. (with Dudukalenko, V. V.) On the theory of deformation of soil with a porous structure. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 6, 122-127, 141.

(Authors' summary) 82j:73066 73Q05 Smyth, Brian (with Nagano, Tadashi) Minimal surfaces in tori by Weyl groups. II. Minimal submanifolds and geodesics (Proc. Japan-United States Sem., Tokyo, 1977), pp. 117-120, North-Holland, Amsterdam, 1979. (Authors' introduction) 82g:53063 53C40 (53A10)

Smyth, C. J. On the measure of totally real algebraic integers. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 2, 137–149. (Marthe Grandet) 82j:12002a 12A15 (10F25) On measures of polynomials in several variables. Bull. Austral. Math. Soc. 23 (1981).

no. 1, 49-63. (Gérard Rauzy) 82k:10074 10K50 (12A15) On the measure of totally real algebraic integers. II. Math. Comp. 37 (1981), no. 155, 205-208. (Marthe Grandet) 82j:12002b 12A15 (10F25)

Smyth, M. R. F. On problems of Olubummo and Alexander. Proc. Roy. Irish Acad. Sect. A 80 (1980), no. 1, 69-74. (W. Żelazko) 82a:46046 46H20 (46K05)

Smyth, Michael B. Computability in categories. Automata, languages and programming

- (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 609-620, Lecture Notes Comput. Sci., 85, Springer, Berlin, 1980. (Samuel Kamin) 82c:68055 68F20 (03D)
- nn, Daniel J.) Algebraic specification of data types: a synthetic pproach. Math. Systems Theory 14 (1981), no. 2, 97-139. (J. Paredaens) 82j:68013 68B15 (06A10, 18B20)
- nythe, R. T. Percolation models in two and three dimensions. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 504-511, Lecture Notes in Bi Springer, Berlin, 1980. (Lawrence Gray) 82i:60183 60K35 (82A25, 82A43 bb, Thomas (with Srihari, Sargur N.; White, Lee J.) Identity conditions for 60K35 (82A25, 82A43)
- nearest-neighbor and potential-function classifiers. *Inform. Sci.* 19 (1979), no. 1, 21-31. (Authors' summary) 82j:68092 68G10 (62G99) aith, Victor (with Seymour, Robert) A J-homomorphism associated with a space of
- empty varieties (addenda and corrigenda to two papers on the J-homomorphism). Algebraic topology, Waterloo, 1978 (Proc. Conf., Univ. Waterloo, Waterloo, Ont., 1978), pp. 643-652, Lecture Notes in Math., 741, Springer, Berlin, 1979. (Stanley Kochman)
 - A model for equivariant K-theory. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 3, 143–147. (J. P. May) 82i:55002 55N15 (55R50)
 - Localized stable homotopy of some classifying spaces. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 2, 325-330. (J. P. May) 82g:55006 55P42 (55N15)
 - On Ext (G2). Mathematika 28 (1981), no. 1, 79-85. (Claude Schochet) 82k:46102 46M20 (55N15)
- ksarev, A. M. Method of synthesis of structures of hierarchical multilevel system (Russian) Mathematical methods of optimization and structuring of systems (Russian), pp. 103-114, 170, Kalinin, Gos. Univ., Kalinin, 1980. (Author's summary) 82h:92054
- apper, Ernst An affine generalization of the Euler line. Amer. Math. Monthly 88 (1981), no 3. 196-198 (Cyril W. L. Garner) 82h:51003 51A20
- m, L. (with dos Santos, R. R.; Stinchcombe, R. B.) The 2D transverse Ising model at T=0: a finite-size rescaling transformation approach. J. Phys. A 14 (1981), no. 12, 329-3339, (Authors' summary) 82m:82018 82A25 (82-04, 82A68) (with dos Santos, R. R.) Finite-size rescaling transformations. Phys. Rev. B (3) 23
- (1981), no. 7, 3541-3546. (Authors' summary) 82d:82035 82A25 (82A05) cor, George W. (with Cochran, William G.) *Statistical methods. Seventh edition. Iowa State University Press, Ames, Iowa, 1980. xvi+507 pp. ISBN 0-8138-1560-6 (From the preface) 820-62003 62-01
- eed, Joseph D. Theoretization and invariance principles. The logic and epistemology of scientific change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn. 30 (1978), no. 2-4, 130-178 (1979). (See 82i:00024) 00A25 (00A69, 03A05)
- an, V. A. (with Kac, A. V.; Sobolev, Ja. M.) Anisotropic distributions in a turbulent plasma reactor. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 11, 1275-1281 (Russian. English summary); translated as Radiophys. and Quantum Electronics 23 (1980), no. 11, 845-850 (1981). (Authors' summary) 82i:76105 76X05 (82A45)
- Snelders, H. A. M. Christiaan Huygens and the concept of matter. Studies on Christiaan Huygens (Sympos., Amsterdam, 1979), pp. 104–125, Swets & Zeitlinger, Lisse, 1980. (See
- See also Studies on Christiaan Huygens, 82m:01036

 Snell, J. Laurie (with Kindermann, Ross P.) ★ Markov random fields and their applications. Contemporary Mathematics, 1. American Mathematical Society, Providence, R.I., 1980. ix + 142 pp. ISBN 0-8218-5001-6 (J. Theodore Cox) 82j:60183
- 60K35 (60G60, 82A42, 82A67, 94A05) erenko, K. L. (with Guz', O. M.; Černyšenko, I. S.; Čehov, Val. N.; Čehov, Vik. N.) ★Теория тонких оболочек, ослабленных отверстиями. (Russian) [Theory of thin shells weakened by holes] Методы Расчета Оболочек [Methods for Calculating Shells], 1. "Naukova Dumka", Kiev., 1980. 636 pp. (D. P. Rašković) 82f:73037a (73-02, 73K15, 73L10)
- tycki, Jedrzej *Geometric quantization and quantum mechanics. Applied Mathematical Sciences, 30. Springer-Verlag, New York-Heidelberg, 1980. ix + 230 pp. ISBN 0-387-90469-7 (R. A. Minlos) 82b:81001 82-02 (58F06)
 - On particles with gauge degrees of freedom. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part B. Hadronic J. 4 (1980/81), no. 3, 844-878. (Author's summary) 82k:70019
- der, R. F. (with Turner, R. E.) Superoperator methods of calculating cross sections. III. Unified description of classical and quantal scattering. (French summary) Canad. J. Phys. 58 (1980), no. 8, 1171-1182. (Jean-Paul Marchand) 82b:81105 81F05 (81C99) (with Turner, R. E.) A phase space moment method for classical and quantal dynamics. (French summary) Canad. J. Phys. **59** (1981), no. 3, 457-470. (Authors' summary) **82d:70032** 70G35 (35Q20, 58F05, 81C99)
- der, Robert L. The zero divisor conjecture for some solvable groups. Pacific J. Math. 90 (1980), no. 1, 191-196. (Kenneth A. Brown) 82h:16007 16A27 (20C07)
 - (with Smith, P. F.) Group rings of hyperabelian groups. Israel J. Math. 38 (1981), no. 1-2, 23-28. (I. B. S. Passi) 82d:16011 16A27 (20C07)
- (with Farkas, Daniel R.) Locally finite-dimensional algebras. Soc. 81 (1981), no. 3, 369-372. (K. R. Goodearl) 82c:16013 16A30
- Sniedovich, Moshe Preference order stochastic knapsack problems: methodological issues. J. Oper. Res. Soc. 31 (1980), no. 11, 1025-1032. (I. Bárány) 82d:90123 (65K10)
 - Some comments on preference order dynamic programming models. J. Math. Anal. Appl. 79 (1981), no. 2, 489-501. (From the introduction) 82k:90126
- Ray F. Cauchy-regular functions. J. Math. Anal. Appl. 79 (1981), no. 1, 18-25. (M.
- G. Murdeshwar) 82f:54042 54E15 (54C99)

 Snir, Marc On the size complexity of monotone formulas. Automata, languages and programming (Proc. Seventh Internat. Collog., Noordwijkerhout, 1980), pp. 621-631, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (R. P. Brent) 82c:68029 68C25 (03D15)
- ol', E. E. (with Hazin, L. G.) Smooth and sharp stability loss of stationary solutions differential equations. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No. 128 (1979), 31 pp. (A. I. Kir'janen) 82e:34055 34D20 (93D20)

- (with Hazin, L. G.) Stability of stationary solutions of general systems of differential quations near critical cases. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint No. 91 (1979), 30 pp. (A. I. Kir'janen) 82e:34054 34D20
- (with Hazin, L. G.) Equilibrium stability conditions under 1:3 resonance. Prikl. Mat. Meh. 44 (1980), no. 2, 229-237 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 2, 163-169 (1981). (Peter Smith) 82m:34050 34D20 (58F10, 70K30)
- w. Donald R. A functional inequality arising in combinatorics. General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978), pp. 17-28, Birkhäuser, Basel, 1980. (Ferenc Fenyves) 82e:39008 39C05 (05A19)
- ow, M. (with Kogut, John B.; Stone, Michael) Computer simulations of SU(N) SU(N) spin systems in two dimensions. Phys. Rev. Lett. 47 (1981), no. 25, 1767-1770. (Authors' summary) 82m:82002 82-04
- Snow, Richard Maximum likelihood estimation of linkage and interference from tetrad data. Genetics 92 (1979), no. 1, 231-245. (Author's summary) 82e:92031a 92A10
- Comment concerning: "Maximum likelihood estimation of linkage and interferer from tetrad data". Genetics 93 (1979), no. 1, 285. (From the text) 82e:92031b 92A Snyder, Donald L. (with Narayan, Prakash) The two-user cutoff rate for an asynchronous
- and a synchronous multiple-access channel are the same. IEEE Trans. Inform. Theory 27 (1981), no. 4, 414-419. (Authors' summary) 82m:94035 94A40
- Snyder, L. E. (with Jain, S. K.) Nonnegative \(\lambda\)-monotone matrices. SIAM J. Algebraic Discrete Methods 2 (1981), no. 1, 66-76. (Thomas L. Markham) 82e:15002
- Snyder, Lawrence (with Dobkin, David P.) On a general method for maximizing and minimizing among certain geometric problems (extended abstract). 20th Annual Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 9-17, IEEE, New York, 1979. (Authors' summary) 82b:52001 52-04 (68C05) IEEE, New York, 1979. (Authors' summary) 82b:52001
 - (with Holober, George) Scheduling parallel processes without a common scheduler. Proceedings of the 1979 International Conference on Parallel Processing (Bellaire, Mich., 1979), pp. 186-195, IEEE, New York, 1979. (See 82b:68024) 68C15 (68B20)
 - (with Rosenberg, Arnold L.) Time- and space-optimality in B trees. ACM Trans tabase Systems 6 (1981), no. 1, 174–193. (Authors' summary) 82m:68048 68B15
- Snyder, M. (with Jafarizadeh, M. A.; Tze, Hsiung Chia) Quaternionic multi-S4 instantons in general covariant SU(2) Yang-Mills and HP(n) σ-models. Nuclear Phys. B 176 (1980),
- no. 1, 221-242. (M. I. Monastyrskii) 82c:81083 81E10 (32M99, 58E20) Snyder, Ralph D. See Silver, Edward A., 82h:90040
- Snygg, John Use of operator wave functions to construct a refined correspondence principle via the quantum mechanics of Wigner and Moyal. Amer. J. Phys. 48 (1980), no. 11, 964-970. (F. R. Halpern) 82b:81029 81C20 (81D05)
 - Density operators and operator wave functions. Phys. Rev. A (3) 24 (1981), no. 6, 2877-2882. (Lawrence P. Horwitz) 82m:81036 81C99
- So, Bong Hak On an interpolation formula in R" using many-fold vectors. (Korean. English summary) Su-hak kwa Mul-li 1980, no. 2, 32-38. 82c:65007 65D05
 So, Ronald M. C. On the curvature/buoyancy analogy for turbulent shear flows. (German
- summary) Z. Angew. Math. Phys. 31 (1980), no. 5, 628-633. (Author's summary) 76F99 (86A05)
- So, Ving Chiu (with Sen, Pranab Kumar) Repeated significance tests based on likelihood ratio statistics. Comm. Statist. A—Theory Methods 10 (1981), no. 21, 2149–2176. (D. Siegmund) 82m:62185 62L10
- Yong Sian (with Pilz, Günter) Near-rings of polynomials over Ω-groups. Monatsh. Math. 91 (1981), no. 1, 73-76. (G. Betsch) 82e:16634 16A76 (08A40)
- Polynomial near-fields? Pacific J. Math. 96 (1981), no. 1, 213-223. (V. Havel) 821-12029 12K05
- Soare, Robert Irving Fundamental methods for constructing recursively enumerable degrees. Recursion theory: its generalisation and applications (Proc. Logic Colloq., Univ. Leeds, Leeds, 1979), pp. 1-51, London Math. Soc. Lecture Note Ser., 45, Cambridge Univ. Press, Cambridge, 1980. (From the introduction) 82j:03051 03D30
 - (with Lachlan, A. H.) Not every finite lattice is embeddable in the recursively nerable degrees. Adv. in Math. 37 (1980), no. 1, 74-82. (C. G. Jockusch, Jr.) 03D25
 - (with Lerman, Manuel) d-simple sets, small sets, and degree classes. Pacific J. Math.
 - 87 (1980), no. 1, 135-155. (Barry Cooper) 82g:03076 03D25 (03D30) (with Fejer, Peter A.) The plus-cupping theorem for the recursively enumerable degrees. Logic Year 1979-80 (Proc. Seminars and Conf. Math. Logic, Univ. Connecticut, Storrs, Conn., 1979/80), pp. 49-62, Lecture Notes in Math., 859, Springer, Berlin, 1981. (C. G. Jockusch, Jr.) 82j:03049 03D25
- See also Logic Year, 82e:03007 Soares, I. Damião (with Assad, M. J. D.) Anisotropic Bianchi VIII/IX cosmological models with matter and electromagnetic fields. Phys. Lett. A 66 (1978), no. 5, 359-361. (Brian O.
- J. Tupper) 82c:83024 83C20 (53C80, 83F05) Sobczyk, G. Plebański classification of the tensor of matter. Acta Phys. Polon. B 11 (1980), no. 8, 579-602. (M. Carmeli) 82b:83032 83C40 (53A55)
 - Conjugations and Hermitian operators in space time. Acta Phys. Polon. B 12 (1981), no. 6, 509-521. (Elisa Udeschini-Brinis) 82m:15034 15A72 (53A45, 83A05)
 - Space-time algebra approach to curvature. J. Math. Phys. 22 (1981), no. 2, 333-342. (Ann Stehney) 82i:83056 83C99 (53B30)
 - Spacetime vector analysis. *Phys. Lett. A* **84** (1981), *no.* 2, 45–48. (Author's summary) **82g81027a** 81C40 (15A72, 83C40)
- Algebraic classification of important tensors in physics. Phys. Lett. A 84 (1981), no. 2, 49-52. (Author's summary) 82g:81027b 81C40 (15A72, 83C40)
 Sobczyk, Kazimierz Stochastic media. Models and analysis. Analysis and control of systems
- (IRIA Sem., Rocquencourt, 1978), pp. 191-255, IRIA, Rocquencourt, 1978. (G. Paria) 76S05 (52A22, 62P99, 82A42)
- Vibrations of structures and stochastic models of structural failures. (Polish. Russian and English summaries) Mech. Teoret. Stos. 18 (1980), no. 2, 151-167. (Author's nary) 82d:73055 73K35
- Sobczyk, Krystyna On the accuracy of linearizing the dissipative element in unsteady gas flows through pipelines. Delft Progr. Rep. 6 (1981), no. 1, 23-35. (Author's introduction) 82m:76048 76N15
- Sobel, Joel (with Gale, David) Fair division of a random harvest: the finite case. General equilibrium, growth, and trade, pp. 193-198, Academic Press, New York, 1979. (Authors' summary) 82a:90024 90A10

el, Marthew J. Myopic solutions of Markov decision processes and stochastic games.

Oper. Res. 29 (1981), no. 5, 995-1009. (Author's summary) 82i:90118 90C40 (93E05) el, Milton (with Roth, Arthur J.) A probabilistically attained set of polynomials that generate Stirling numbers of the second kind. Discrete Math. 32 (1980), no. 1, 77–84. (L. Carlitz) 82mc05005 05A10 (10A40, 60C05)

(with Rao, Jammalamadaka Sreenivasa) Incomplete Dirichlet integrals with applications to ordered uniform spacings. J. Multivariate Anal. 10 (1980), no. 4, 603–610. (C. A. Robertson) 82e:62026 62E15 (62G30)

d, Yves (with Dubois, Jacques-Émile; Mercier, Christiane) Théorie des graph chimiques: méthode DARC/PELCO. Corrélations de topologie-information ie-information et concept de régularité. (English summary) C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci. Univers Sci. Terre 292 (1981), no. 10, 783-788. (Authors' summary) 82h:92061

ron, Jorge M. (with Martinez del Rio, Carlos) The dynamics of a plant-pollinator interaction. J. Theoret. Biol. 91 (1981), no. 2, 363-378. (Authors' summary) 82k:92067

inh, A. (with El Konyaly, E. H.; El Dokany, I.) Solution of $\dot{X} = A_1 X + X A_2 + D$, X(0)=C and receding horizon problem. Electron. Lett. 16 (1980), no. 17, 657-658. (Michael Minkoff) 82a:65046 65L05 (34A50)

wirov, M. (with Aliev, B.) Uniform convergence of the regularization method for systems of integral equations on a spectrum. (Russian) Differential and integral equations, No. 3, pp. 3-7, Tadtik. Gos. Univ., Dushanbe, 1980. (See 82m:34002) 65R20 (45L05)

pp. 3-7, Tadžik. Gos. Unic., Dushanbe, 1980. (See 82mc34002) 65R20 (45L05) shorvik, R. I. Periodic solutions of systems of first-order differential equations with a parameter. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 6, 828–834, 862. (M. K. Grammatikopoulos) 82kc34050 34C25

older, Ja. M. (with Kac, A. V.; Šneidman, V. A.) Anisotropic distributions in a turbulent plasma reactor. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 11, 1275–1281 (Russian. English summary); translated as Radiophys. and Quantum Electronics 23 (1980), no. 11, 845–850 (1981). (Authors' summary) 82:76105 76X05 (82A45) check.

olev, S. L. (with Oleinik, O. A.; Tihonov, A. N.) The works of I. G. Petrovskii on partial differential equations and their role in the development of the theory of differential equations. (Russian) Proceedings of an All-Union Conference on Partial Differential Equations (Moscow State Univ., Moscow, 1976) (Russian), pp. 9–20, Moskov. Gos. Univ., Meh.-Mat. Fakul'tet, Moscow, 1978. (Editors) 82j:01069 01A70 (35-03) On extreme roots of Euler polynomials. (Russian) *Dokl. Akad. Nauk SSSR* 242 (1978), no. 5, 1016–1019. (From the text) 82e:41049 41A60 (33A70)

(with Aleksandrov, P. S.; Bogoljubov, N. N.; Kolmogorov, A. N.; Ljusternik, L. A.; Marčuk, G. I.; Šabat, B. V.) In memory of Mihail Alekseevič Lavrent'ev. (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 3–10 (1 plate). (Editors) 82e:01081 01A70 (with Bogoljubov, N. N.; Išlinskii, A. Ju.; Kantorovič, L. V.; Sadovskii, B. N.;

Trapeznikov, V. A.; Bobylev, N. A.) Mark Aleksandrovič Krasnosel'skii (on the ion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 01A70 215-220. (Editors) 82f:01079

See also Birthday: Sobolev, S. L., 82b:01066; Theory of cubature formulas and numerical mathematics, 82b:65003; Partial differential equations, 82b:35003 and Theory of cubature formulas and the application of functional analysis to problems of mathematical

slev, V. S. (with Agranov, G. A.; Zaiceva, A. M.; Korennaja, L. N.) Distribution of energy in the plane of a transformant. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1980, no. 3, 3-7, 77. (Authors' summary) 82a:94008 94A11

(with Vasilenko, Ju. G.; Kuznecov, E. N.; L'vov, V. S.; Nesterihin, Ju. E.; Spektor, M. D.; Timohin, S. A.; Utkin, E. N.; Šmoilov, N. F.) Generation of Taylor vortices in a Couette flow. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 2, 58-64, 173. (M.

Yanowitch) 824:76053 76E99
Sobolev, Ya. M. See Sobolev, Ja. M.
Sobolevskii, P. E. Analogue of S. L. Sobolev's theorem on integrals of a potential type. (Russian) Theory of cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 233-234, 256, "Nauka" Sibirsk. Otdel., Nov 1980. (Author's summary) 821:46039 46E35 (47B38)

(with Gerštein, L. M.) A new approach to the investigation of the solvability of

olution equations. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 10, 9-12, 92. (A. A. Arsen'ev) 82d:47019 47A50 (34G10, 47F05)

(with Hoang Van La). Difference schemes of optimal type for approximate solution of parabolic equations. (Russian) Ukrain. Mat. Z. 32 (1980), no. 5, 623-629. (E. G. 65J10 (34G10) D'jakonov) 82f:65064

(with Hoang Van Lai) Difference schemes of optimal type for the approximate solution of parabolic equations (the Banach case). (Russian) Ukrain. Mat. Z. 33 (1981), no. 1, 39–46. (E. G. D'jakonov) 82e-65066 65J10 (34G10, 47D05)

olevskii, P. I. Recurrent formulas for an approximate calculation of Poisson continual integrals. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 1, 5-8, 91. (Gh. Oprişan) 82f:60168 60J27 (28C20)

tha, Leslaw Application of open-loop control for determining the optimal temperature distributions in chemical reactors in the presence of stochastic noise. (Polish. Russian and English summaries) Arch. Automat. Telemech. 25 (1980), no. 2, 139-155. (Author's nary) 82c:80025 80A30

in Some remarks to the connection between the alternative set theory and tandard methods. Begriffsschrift-Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 458-467, Friedrich-Schiller-Univ., Jena, 1979. (Author's introduction) 824:03104 03H05 (03E70)

olar, J. E. (with Gollub, J. P.; Romer, E. J.) Trajectory divergence for coup relaxation oscillators: measurements and models. J. Statist. Phys. 23 (1980), no. 3, 321-333. (Jean-Pierre Eckmann) 824:58043 58F13 (34C11)

1-1-333. (Jean-Friette Eckmann) 826:3042.

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387:13 (34:11)

387 Free and mixed boundary value problems (Proc. Conf., Oberwolfach, 1978), pp. 41-60, Methoden Verfahren Math. Phys., 18, Lång, Frankfurt, 1979. (Wolf von Wahi) 82h:35130

On some new boundary value problems for the stationary Navier-Stokes equations.

Free and mixed boundary value problems (Proc. Conf., Oberwolfach, 1978), pp. 117-140, Methoden Verfahren Math. Phys., 18, Lang, Frankfurt, 1979. (Wolf von Wahl) 82b:35131 35O10 (76D05)

Existenz- und Eindeutigkeitsbeweis für ein freies Randwertproblem für die stationären Navier-Stokesschen Bewegungsgleichungen. (German) Arch. Rational Mech Anal. 73 (1980), no. 3, 191-242. (W. Barański (Zbl 442:76028)) 82m:35122 35Q10

i (with Cesarini, Francesca; Grazzini, Elisabetta; Pinzani, Renzo; Pippolini, Fabio) *Dynamic page allocation for AVL trees. Pubblicazioni Serie III [Publication Series III], 164. Istituto per le Applicazioni del Calcolo "Mauro Picone" (IAC), Rome, 1978. 19 pp. (Authors' summary) 82m:68035 68B15 (05C05, 68B20, 90B05, 90B30)

rsten (with Stoica, Petre) On criterion selection in prediction error identification of least-squares models. (Romanian summary) Bul. Inst. Politehn. Bucureşti Ser. Electrotehn. 42 (1980), no. 4, 63-68. (From the introduction) 82k:93065

(with Stoica, Petre) Comparison of some instrumental variable

methods—consistency and accuracy aspects. Automatica—J. IFAC 17 (1981), no. 1, 101-115. (Authors' summary) 82a:93022 93B30 (93E12)

Identification of stochastic linear systems in presence of input noise. Au IFAC 17 (1981), no. 5, 713-725. (Author's summary) 82j:93051 93E12

(with Stoica, Petre) Analysis of an output error identification algorithm. Auto -J. IFAC 17 (1981), no. 6, 861-863. (Authors' summary) 82k:93083 93E25

(with Stoica, Petre) On the stability of dynamic models obtained by least-squares identification. IEEE Trans. Automat. Control 26 (1981), no. 2, 575-577. (Authors' 93E15

(with Stoica, Petre) The Steiglitz-McBride identification algorithm

revisited—convergence analysis and accuracy aspects. IEEE Trans. Automat. Control 26 (1981), no. 3, 712-717. (Hideaki Sakai) 82k:93073 93E12

(with Stoica, Petre) Asymptotic behaviour of some bootstrap estimators. Int Control 33 (1981), no. 3, 433-454. (From the introduction) 82i:93085 93E12

(with Stoica, Petre) On criterion selection and noise model parametrization for prediction-error identification methods. Internat. J. Control 34 (1981), no. 4, 801-811. (Authors' summary) 82m:93096 93E12

(with Stoica, Petre) Some properties of the output error method. Automatica—J. IFAC 18 (1982), no. 1, 93-99. (Authors' summary) 82m:93028 93B30

The correlation between sets of defect values and deviations for a meromorphic function of finite order. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 2, 198-206, 238. (I. N. Baker) 82i:30050 30D35

la, Takashi (with Ohmatsu, Shigeru; Nagamine, Hirosige) Optimal filter for a discrete-time distributed parameter system and its application to environmental data processing. Second International Conference on Information Sciences and Systems (Unio. Patras, Patras, 1979), Vol. III, pp. 69-79, Reidel, Dordrecht, 1980. (Authors' summary) 93E11

(with Ohe, Syunichiro; Tomita, Yutaka; Ohmatsu, Shigeru) Information-theoretical optimal smoothing estimators. Inform. Sci. 22 (1980), no. 3, 201-215. (L. L. Campbell) 93E14 (94A15)

(with Baba, N.; Shoman, T.; Sawaragi, Yoshikazu) An application of the stochastic automaton to the investment game. Internat. J. Systems Sci. 11 (1980), no. 12, 1447-1457. (From the introduction) 82c:90096 90D10 (68D25, 68D27)

(with Yoshimura, Toshio; Konishi, Katsunobu) A modified extended Kalman filter for linear discrete-time systems with unknown parameters. Automatica—J. IFAC 17 (1981), no. 4, 657-660. (Authors' summary) 82h:93078 93E11

(with Tamaki, Shirou; Ohmatsu, Shigeru; Kikuchi, Akira) Design of a discrete adaptive observer based on Lyapunov's direct method. Internat. J. Systems Sci. 12 (1981), no. 4, 473-484. (Authors' summary) 82d:93047 93D05

(with Watanabe, Keigo; Yoshimura, Toshio) A diagnosis method for linear

stochastic systems with parametric failures. Trans. ASME Ser. G J. Dynamic System Measurement Control 103 (1981), no. 1, 28-35. (Authors' summary) 82e:93112 (with Watanabe, Keigo; Yoshimura, Toshio) A discrete-time adaptive filter for stochastic distributed parameter systems. Trans. ASME Ser. G J. Dynamic Systems Measurement Control 103 (1981), no. 3, 266-278. (From the summary) 82h:93077 93E11

Sofi, G. Q. (with Ahmad, Mubarak; Jallu, M. S.) Clebsch-Gordan series for SU(5). Proc. Nat. Sci. Acad. Part A 45 (1979), no. 4, 337-347. (Wayne J. Holman, III) 82e:81105 81G20 (22E46, 22E70)

fiera, Ju. N. (with Cirlin, A. M.) Extension of extremal problems and nonstationary steady states of control objects. (Russian) Dynamics of control systems (Third All-Unio Četaev Conf., Irkutsk, 1977) (Russian), pp. 308-319, 344, "Nauka" Sibirsk. Otdel., Novosibirsk, 1979. (V. A. Dyhta) 82b:49053 49D99

o, Anthony (with Ross, Dieter K.) Special solutions of $dy/dx = (a_1x + b_1y + c_1)/(a_2x + b_2y + c_2)$. Internat. J. Math. Ed. Sci. Tech. 11 (1980), no. 4, 597-598. (John R. Graef) 82j:34002 34-01

onea, Liviu (with Ionescu-Pallas, Nicolas) Physical frames and geometries. Proceedings m on Geometry and Topology (Chij-Napoca, 1978) (Ron pp. 143-157, Univ. "Babes-Bolyai", Chij-Napoca, 1979. (See 82h:53003)

(with Atanasiu, Gheorghe) Propriétés systémiques des G-structures et quelques interprétations physiques. Proceedings of the International Symposium on Applications of Mathematics in System Theory (Univ. Braşov, Braşov, 1978), II, pp. 303-313, Univ. Braşov, Braşov, 1979. (A. Crumeyrolle) 82b:81042 81C99 (53C10, 53C80)

(with Ionescu-Pallas, Nicholas) Geometrizing the gravitation with the aid of a scalar field. (Romanian summary) An. Ştiinţ. Univ. "Al. I. Cuza" Iaşi Secţ. I b Fiz. (N.S.) 25 (1979), 7-12. (Authors' summary) 82c:83055 83D05 (83F05)

Soga, Hideo Parabolic mixed problems with an oblique derivative. Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 12 (1980), 17-30. (V. Ďurikovič) 82b:35076 35K20 (35A05)

Oscillatory integrals with degenerate stationary points and their application to the cattering theory. Comm. Partial Differential Equations 6 (1981), no. 3, 273–287.

(Gunther A. Uhlmann) 82±35144 35P25 (58G15, 81F05)
gami, Ikuo Generalized Dirac equation with four orthogonal families of spin ½ solutions.

Progr. Theoret. Phys. 66 (1981), no. 1, 303–317. (Author's summary) 82;81958 81G25 (81D25)

- dze, G. A. (with Satašvili, A. D.) Nonlinear transformations of Gaussian measure Hilbert space. (Russian) Theory of random processes, No. 7 (Russian), pp. 109-114, 132, "Naukova Dumka", Kiev., 1979. (V. V. Buldigin) 821:60067 60G15 (60B11)
 - Measures generated by solutions of nonlinear equations of elliptic type with Gaussian perturbations. (Russian) Theory of random processes, No. 8 (Russian), pp. 117-121, 126, "Naukova Dumka", Kiev, 1980. (Friedrich Liese) 82a:60057 60G30 (60H15)
- hi, N. S. (with Goel, R. M.) New criteria for p-valence. Indian J. Pure Appl. Math. 11 (1980), no. 10, 1356-1360. (P. T. Mocanu) 82c:30012 30C45
 - (with Goel, R. M.) Subclasses of univalent functions. Tamkang J. Math. 11 (1980), no. 1, 77-81. (Herb Silverman) 82g:30025 30C45
 - (with Goel, R. M.) Multivalent functions with negative coefficients. Indian J. Pure Appl. Math. 12 (1981), no. 7, 844-853. (W. C. Royster) 82i:30012 30C45
- Sohin, A. S. An economical iteration method for solving an elliptic equation in Hilbert space. (Russian) Vestnik Har'kov. Gos. Univ. No. 177, vyp. 44 (1979), 3-11, 95. (E. G. D'jakonov) 82j:65033 65J10
 - An optimal iteration method for solving evolution equations in Hilbert space. (Russian) Vestnik Har'kov. Gos. Univ. No. 177 vyp. 44 (1979), 44–48, 96. (V. Popescu) 34G10 (65J10)
 - Controllability of a nonlinear control system with distributed parameters described by an equation of oscillations. (Russian) Differencial'nye Uravnenija 16 (1980), no. 8, 1484-1491, 1534. (G. Bojadžiev) 82e:93058 93C20 (35B37)
- Some problems of optimal control for a nonlinear control system described by an oscillation equation. (Russian) Differencial'nye Uravnenija 17 (1981), no. 3, 501-509, 573-574. (L. Longdon) 82e:49033 49B22 (35B37)
- is, Martin F. The conformal group in superspace. Quantum theory and the structures of time and space, Vol. 2 (Second Conf., Tutzing, 1976), pp. 241–252, Hanser, Munich, 1977. (J. Löhmus) 82a:53069 53C80 (22E65, 22E70, 83E15)
 - 1977. (J. Löhmus) 82a:53069
 35C80 (22E50, 32E70, 38E15)
 (with Stelle, K. S.; West, P. C.) Dimensional reduction by Legendre transformation generates off-shell supersymmetric Yang-Mills theories. Nuclear Phys. B 173 (1980), no. 1, 127-153. (Authors' summary)
 82a:81051
 81G20 (58B20, 81E10)
 (with Breitenlohner, Peter) An almost simple off-shell version of SU(2) Poincaré
 - supergravity. Nuclear Phys. B 178 (1981), no. 1, 151-176. (Authors' summary) 82a:83053
 - (with Breitenlohner, Peter) Matter coupling and nonlinear σ-models in N=2 supergravity. Nuclear Phys. B 187 (1981), no. 3, 409-428. (Authors' summary) 82h:83066 83E50 (81G20)
- ohr, Hermann Ein neues Surjektivitätskriterium im Hilbertraum. (English sum Monatsh. Math. 91 (1981), no. 4, 313-337. (R. C. Gilbert) 82k:47051 47B44 (34G10. 47A05)
- ng H. The C*-algebra of the n-dimensional harmonic oscillator. muscripta Math. 34 (1981), no. 1, 45-70. (Gerd Grubb) 82i:35176 35S05 (46M20. 47G05, 58G15, 81D05)
- hranskaja, V. S. (with Tuškina, T. A.) An experiment in parallelization of computational processes modeled by bilogical graphs. (Russian) Numerical methods and questions in the organization of calculations. 5. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 111 (1981), 162–176, 238. (Authors' summary) 82h:68039 68B20
- Soi, Inder M. (with Aggarwal, K. K.) On shortest-path algorithms in the topological design of computer networks: a comparative study. Internat. J. Systems Sci. 12 (1981), no. 11, 1379–1387. (Authors' summary) 82m:68090 68C25 (68A05, 90B10, 94C15)
- Soihet, B. A. (with Arutjunjan, N. H.) Asymptotic behavior of the solution to a boundary value problem of the creep theory for inhomogeneous aging bodies with one-sided bonds. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 2, 302-304. (B. A. Bondarenko) 73C99 (49A29)
- Soihet, D. M. (with Hackevič, V. A.) On a generalization of Montel's theorem for the case of analytic mappings in Banach spaces. (Russian) Functional analysis, No. 15, pp. 157-159, Ul' janovsk. Gos. Ped. Inst., Ul' yanovsk, 1980. (J. S. Joel) 82k:46069 46G20 (32A10)
 - Some analytic isomorphisms in a strictly convex Banach space and Cartan's theorem. (Russian) Some problems of multidimensional complex analysis (Russian), pp. 253-256, 275, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Fiz., Krasnoyarsk, 1980. (Author's summary) 46G20 (47A05)
 - Some estimates of the domain of existence of p-valent inversions of holomorphic mappings in C". (Russian) Some problems of multidimensional complex analysis
 - (Russian), pp. 257-260, 275-276, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Fiz., Krasnoyarsk, 1980. (Toma V. Tonev) 82k:32007 32A10
 - (with Bolotov, V. A.) Estimate of the remainder term of an analogue of Taylor's formula for systems of implicit functions. (Russian) Izv. Vysš. Učebn. Zaved
- Matematika 1980, no. 8, 3-7. (M. Craioveanu) 82e:58010 58C15 (26B10) oisalon-Soininen, Eljas See Soisalon-Soininen, Eljas
- oinžurov, C. B. Weighted cubature formulas in weight spaces. (Russian) Application of the nal analysis to problems of mathematical physics and numerical analysis (Russian), pp. 152-158, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1979. (V. I. Polovinkin) 82f:65026 65D32 (41A55)
- -Soininen, Eljas (with Sippu, Seppo) On LALR(k) testing. Autom and programming (Akko, 1981), pp. 208-217, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (See 82:68003) 68F05
- oize, Christian Oscillators submitted to squared Gaussia
- (1980), no. 10, 2500–2507. (M. Dutta) 82a:60089 60H10 (34F05, 82A05)
 Sokačev, E. S. (with Ogieveckii, V. I.) The simplest Einstein supergravity group. Jadernaja Fiz. 31 (1980), no. 1, 264-279 (Russian); translated as Soviet J. Nuclear Phys. 31 (1980), no. 1, 140-148 (1981). (Authors' summary) 82e:83041 83E99
 - (with Ogieveckii, V. I.) The gravitational axial-vector superfield and the formalism of differential geometry. Jadernaja Fiz. 31 (1980), no. 3, 821-840 (Russiam); translated as Soviet J. Nuclear Phys. 31 (1980), no. 3, 424-433 (1981). (W. Cox) 82g:83030 (58B10, 81G20)
 - (with Ogieveckii, V. I.) The normal gauge in supergravity. Jadernaja Fiz. 32 (1980), o. 3, 862–869 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 3, 443–447 (1981). (Authors' summary) 82f:83090 83E99 (53C80)

- (with Ogieveckii, V. I.) Torsion and curvature in terms of the axial superfield. Jadernaja Fiz. 32 (1980), no. 3, 870-879 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), 2437 457 (1981) (Author), pp. 2542-269. 32 (1980), no. 3, 447-452 (1981). (Authors' summary) 82f:83091 83E99 (53C80)
- Sokal, Alan D. Existence of compatible families of proper regular conditional probabilities

 Z. Wahrsch. Verw. Gebiete 56 (1981), no. 4, 537-548. (A. I. Dale) 82h:60006 60Al
- Sokalski, K. Dynamical stability of instantons. Phys. Lett. A 81 (1981), no. 2-3, 102-104. 81E10 (58E07) (José M. Cerveró) 82b:81073
- skamolov, I. (with Pyhteev, G. N.) Some methods for the exact calculation of Cauchy-type integrals of a special form with weight function $\omega(x) = -i\sqrt{z^2 - 1}$. (Russian, Tajiki nmary) Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk 1981,
- no. 1(79), 10-19. (D. Mitrovič) 82;:30060 30E20 (65D30)
 Sokil, B. İ. (with Barvīnskil, A. F.) Asymptotic expansion for a class of nonlinear differential equations. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 5, 693-697. (V. G. Kolomiec) 82b:34072 34E05
- Šokin, Ju. I. Analyse des propriétés des schémas aux différences par la méthode d'approximation différentielle. Étude numérique des grands systèmes (Proc. Sympos., Novosibirsk, 1976), pp. 124-132, Methodes Math. Inform., 7, Dunod, Paris, 1978. (Author's introducti on) 82e:65128 65P05
- (with Urusov, A. I.; Janenko, N. N.) Qualitative investigation of difference schemes by the differential approximation method. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980,
- no. 5, 8-16, 203. (Jarosław Jeleń) 82i:65013 65D15 (41A60)
 Sokolić, Franjo (with Hendeković, Josip; Pavlović, Milica) Generalization of Wick's theorem. Chem. Phys. Lett. 77 (1981), no. 2, 382-386. (Authors' summary) 82h:81142 81G50 (22E70, 81H99)
- Sokolov, A. V. Minimax property of optimal equivariant estimates of covariance operators. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1980, no. 4, 23-27, 69. (A. L. Rukhin) 82b:62006 62C10 (62F11)
- Kolov, B. V. (with Frolov, S. A.) Sensitivity invariants. (Russian. English sum Teoret. Elektrotehn. No. 28 (1980), 18–23, 167. (J. Gregor) 82h:94037 94C05
- Sokolov, D. D. Surfaces in pseudo-Euclidean space. (Russian) Problems in geometry, Vol. 11 (Russian), pp. 177-201, 243, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (E. Pavlov) 82a:53061 53C45
 - (with Ruzmaikin, A. A.; Šukurov, A. M.) A disk dynamo with concentrated spirality. Magnit. Gidrodinamika No. 1 (1980), 20-26 (Russian); translated as Magnetohydrodynamics 16 (1980), no. 1, 15-20. (From the introduction) 82a:85003
- 85A05 (76W05) A limit cone of saddle surfaces in a pseudo-Euclidean space. (Russian) Uspehi Mat.
- Nauk 35 (1980), no. 6(216), 171–172. (From the text) 82m:53064 53C45 (53C50)

 Sokolov, L. L. (with Holsevnikov, K. V.) On the representability of solutions of three-body problems by conditionally periodic functions. I. Astronom. Z. 57 (1980), no. 1, 168–177 Russian); translated as Soviet Astronom. 24 (1980), no. 1, 99-104. (David Miller) 82c:70013a 70F07 (58F05)
 - (with Holsevnikov, K. V.) Representability of solutions of three-body problems by conditionally periodic functions. II. Astronom. Ž. 57 (1980), no. 2, 388–396 (Russian); translated as Soviet Astronom. 24 (1980), no. 2, 223-227. (David Miller) 82c:70013b 70F07 (58F05)
- Sokolov, O. B. (with Loginov, A. I.) Further results on codes with a majority decoding on reception and processing in structurally complex syste No. 8 (Russian), pp. 31-36, Kazan. Univ., Kazan, 1977. (Stefan Dodunekov) 82h:94028 94B30 (94B15)
- slov, P. V. Special differential rings. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 3, 225-227, 240. (Author's summary) 82i:13030 13N05
- Sokolov, V. G. Symmetric trajectories of a satellite of a nonspherical planet. (Russian. English summary) Bjull. Inst. Teoret. Astronom. 14 (1980), no. 10(163), 617-620. (Author's summary) 82m:70015 70F15 (58F05, 70M05)
- Sokolovski, Ju. (with Krupnik, N. Ja.) On the symbol on an algebra that is generated by multidimensional Wiener-Hopf operators. (Russian) Investigations in functional analysis and differential equations, pp. 59-61, 141, "Štiinca", Kishineo, 1981. (Authors' summary) 47B35 (47D25)
- Sokolovskii, A. V. Lower bounds in the "large sieve". (Russian. English summary) Analytic number theory and the theory of functions, 2. Zap. Naučn. Sem. Leningrad. Ordel. Mat. Inst. Steklov. (LOMI) 91 (1979), 125-133, 181-182. (H. Iwaniec) 82e:10082 10H30
- Sokolovskii, G. A. (with Gnesin, V. I.; Grodzinskii, V. L.) Equations of gas dynamics in a noninertial deformable coordinate system. Prikl. Mat. Meh. 42 (1978), no. 5, 841-847 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 5, 908-915 (1979). (Authors' summary) 82f:76024 76N15 (35O20)
- Sokolovskii, L. E. *Модели оптимального функционирования предприятия. (Russian) [Models of optimal functioning of an enterprise] Проблемы Советской Экон [Problems of Soviet Economics] "Nauka", Moscow, 1980. 174 pp. (M. I. Ledin)
- 82f:90027 90A16 (90B05)

 Sokolovskii, V. B. New relations of some problems for equations containing a Lévy-Laplace operator with problems of mathematical physics. (Russian) Izv. Vysš. Učebn. Zaved.
- Matematika 1989, no. 11, 82-85. (O. Vejvoda) 82h:35096 35R15 (46G05, 47B99)
 Sokołowski, Jan Control in coefficients for parabolic equations. Optimization technique (Proc. Ninth 1FIP Conf., Warsaw, 1979), Part 1, pp. 449-454, Lecture Notes in Control
- and Information Sci., 22, Springer, Berlin, 1980. (L. Longdon) 82e:49036 49B34
 Sokolowski, Stefan Programs as term transformers. Fund. Inform. (4) 3 (1980), no. 4, 419-431. (Author's summary) 82m:68030 68B10 (03D99)
- Sokof'skii, A. G. (with Markeev, A. P.) Method of constructing and investigating stability of periodic motions of autonomous Hamiltonian systems. Prikl. Mat. Meh. 42 (1978). no. 1, 52-65 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 1, 51-64 (1979). (J. S. Joel) 82i:70031 70M10 (34C25, 58F05, 70F15, 70K20)
- kurov, V. V. A study of the homology of Kuga varieties. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 2, 443-464, 480. (Werner Kleinert) 82f:14023 14G99 (10D20, 14J25, 14K22)
- Shimura integrals of cusp forms. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 3, 670-718, 720. (K.-B. Gundlach) 82h:10029 10D12 (14K22)
 Sokurov, Vladimir See Pritulenko, P. V., 82f:51018b and Krasnov, M. L.; et al., 82g:34001
 Sokuševa, M. R. On a mapping of two-dimensional surfaces. (Russian) Geometry of

imbedded mangous (ransum), pp. 12-23, Burago) 82k:53036 53B25 ak, Marek K. A differential representation for multivariable linear systems with bances. IEEE Trans. Au st. Control 26 (1981), no. 4, part 1, 937-939. (Author's 93C35 (34H05)

A. (with Toren, M.) Rotating compressible flow over the edge of a finite disk.

ASME Ser. E. J. Appl. Mech. 48 (1981), no. 2, 249-254. (Authors' summary)

Trans. A. R. T. (with Sharma, Bhagirath Lal) On the construction of Bol loops. An. Stiint, Univ. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.) 27 (1981), no. 1, 13–17. (Ján Duplák) 82g:20111 20N05

w, A. P. On the Noether theory of operators. One-dimensional singular integral operators of classical type. (Russian) Differencial nye Uraonenija 14 (1978), no. 7, 1285–1295, 1342. (Author's summary) 82a:47047 47G05 (45P05, 47A53)

Singular operators with a shift on the piecewise-smooth line in weight spaces. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 3, 555-559. (R. V. Duduchava) 47B38 (45E05)

A problem of linear conjugation with shift on a piecewise-smooth line in weight spaces (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 5, 1050-1055. (N. K. Karapetjanc) 824:30647 30E25

Algebra of singular integral operators with shift-contraction on the half line. ian) Differencial nye Uravnenija 17 (1981), no. 1, 137-149, 198-199. (V. B. Dybin) 47G05 (45P05)

Soldatov, E. A. (with Kuz'min, E. A.; Iljuhin, V. V.; Belov, N. V.) On the symmetry of an N-dimensional translational lattice. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 2, 361-363. (A.-A. A. Jucys) 82g:20075 20H15 (51F15)
Soler, F. r-manifolds and gravitational radiation. Gen. Relativity Gravitation 13 (1981),

no. 1, 37-41. (From the summary and introduction) 824:83025 83C30 (53B30) oler, J.-L. Some results for the quadratic analysis of Gaussian processes and applications. Mathematical statistics, pp. 289–302, Banach Center Publ., 6, PWN, Warsaw, 1980. (S. A. mjan) 82d:60016 60B11 (60G15, 62M09)

Joler, M. (with Garay, J.) On the Darboux property of positive measures. (Spar summary) Rev. Roumaine Math. Pures Appl. 25 (1980), no. 9, 1377-1386. (B. Rodriguez-Salinas) 82g:28004 28A12

oler, Roger (with Bert, Didier) About data type genericity. Form concepts (Proc. Internat. Colloq., Peñiscola, 1981), pp. 231-243, Lecture Notes in Comput. Sci., 107, Springer, Berlin, 1981. (See 821:68005) 68B15

er Dorda, Mariano A generalization of convexity and its application to topological vector

no A generalization of convexity and its application to topological vector spaces (Spanish) Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 226–234, Consejo Sup. Inv. Cient., Madrid, 1977. (Alan Shuchat) 82a:46003 46A10

ler Salcedo, Juan Miguel Random systems of differential equations and multidimensional stochastic processes. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 2, 231–234. (Author's summary) 82d:60111 60H10

olev, V. N. Approximation of a reproducing kernel. (Russian. English summary) Problems of the theory of probability distributions, VI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 97 (1980), 195-198, 231, 238. (A. Weron) 82g:60053 60G10

Letter to the editors: "Absolutely regular trajectories in Hilbert space" [Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 22 (1971), 139–160; MR 46 #9721]. (Russian) Investigations on linear operators and the theory of functions, XI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 113 (1981), 272. (Editors) 46E99 (42A16, 47B99, 60B10)

im, Ole A. On the use of low-order Riccati equations in the design of a class of feedback controllers and state estimators. MIC—Modeling Identification Control 1 (1980), no. 4, 231-245. (B. I. Anan'ev) 82a:49010 49A10

On the use of a block analogue of the Gerschgorin circle theorem in the design of decentralized control of a class of large-scale systems. MIC-Modeling Identification 93R99 Comm. Algebra 9 (1981), no. 10,

Control 2 (1981), no. 2, 107-118. (Author's summary) 82e:93044 ian, Alexandru Coherence in categorical groups. Comm. Algel 1039-1057. (G. M. Kelly) 82g:18008 18D10 (18D99)

iani, Giulio (with Leo, Mario; Leo, Rosario Antonio) On a special function related to a class of solutions of certain nonlinear wave equations. Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 1, 87-110. (F. W. J. Olver) 82e:33014 33A70 (35Q20)

Soliev, Ju. (with Leonov, A. I.) Approximation of functions of two variables in n-space (Russian. Tajiki summary) Dokl. Akad. Nauk Tadžik. SSR 23 (1980), no. 2, 63-65. (D. L. Berman) 821:41041 41A63 (41A05)

(with Solieva, M. A.) Quadrature formulas of Čebyšev type. (Russian. Tajiki ary) Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk 1981, no. 2(80), 74-76. (From the text) 82m:65023 65D32

ilieva, M. A. (with Soliev, Ju.) Quadrature formulas of Čebyšev type. (Russian. Tajiki nary) Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk 1981, no. 2(80), 74-76. (From the text) 82m:65023 65D32

n, H. M. (with Darwish, M.; Fantin, J.) Decentralized and hierarchical stabilization techniques for interconnected power systems. Large Scale Systems 2 (1981), no. 2, 113–122. (Authors' summary) 82h:93057 93D20 iman, M. A. (with Abd-Elkader, O. M.) Geometrical construction of particular kinds of

complexes in Euclidean space E³. (Arabic summary) Bull. Fac. Sci. Assiut Univ. 3 (1974), no. 1, 357–364 (1978). (Leo Boček) 82d:53015 53A25 (53A55)

(with Abdel-All, N. H.) A new class of complexes of lines in elliptic space S3 with one of the principal surfaces coincident with the coordinate surfaces. Kyungpook Math.

J. 21 (1981), no. 1, 57-61. (Josef Vala) 82j:53022 53A25 iman, M. O. (with Baker, A. J.) On the accuracy and efficiency of a finite element tensor product algorithm for fluid dynamics ap 27 (1981), no. 2, 215-237. (Authors' sur

duct algorithm for fluid dynamics applications. Comput. Methods Appl. Mech. Engrg. (1981), no. 2, 215–237. (Authors' summary) 82;76002 76A60 (76D05) (with Baker, A. J.) Accuracy and convergence of a finite element algorithm for bulent boundary layer flow. Comput. Methods Appl. Mech. Engrg. 28 (1981), no. 1, 102. (Authors' summary) 82;m:76039 76;F99 (65P05, 76A60)

81-102. (Authors' summary) 82nr.76039 76F99 (65P05, 76A60)
(with Baker, A. J.) Accuracy and convergence of a finite element algorithm for laminar boundary layer flow. Comput. & Fluids 9 (1981), no. 1, 43-62. (Authors'

ary) 82e:76025 76D10 (65P05, 76D99)

nas, Giovanni Newton and Buffon. Newton and the Enlightenment (Proc. Internat. Sympos, Cagliari, 1977). Vistas Astronom. 22 (1978), no. 4, 431–439 (1979). (K. E. Hirst) 82h-01022 01A50

a, Victor Some aspects of engineering time series analysis. Proceedings of the Twenty-sixth Conference on the Design of Experiments in Army Research, Development and Testing (New Mexico State Univ., Las Cruces, N.M., 1980), pp. 521-530, ARO Rep. 81, 2, U. S. Army Res. Office, Research Triangle Park, N.C., 1981. (See 82g:62008)

The second order properties of a time series recursion. Ann. Statist. 9 (1981), no. 2,

307-317. (Peter M. Robinson) 82:62170 62M10
Strong consistency of least squares estimators in regression with correlated disturbances. Ann. Statist. 9 (1981), no. 3, 689-693. (K. Helmes) 82m:62156

The convergence of an instrumental-variable-like recursion. Automatics (1981), no. 3, 545-547. (Author's summary) 82h:93070 93E10 (93E12)

ю, A. V. (with Solodova, E. A.) ★Системы с переменным зап [Systems with variable lag] Теоретические Основы Технической Кибернетика [Theoretical Foundations of Engineering Cybernetics] "Nauka", Moscow, 1980. 384 pp. (A. Halanay) 821:34087 34К05 (93В05, 93В07) оdova, Е. А. (with Solodov, A. V.) **Системы с переменным запазлыванием. (Russian)

[Systems with variable lag] Теоретические Основы Технической Кибернетики. [Theoretical Foundations of Engineering Cybernetics] "Nauka", Moscow, 1980. 384 pp. (A. Halanay) 82f:34087 34K05 (93B05, 93B07)

vnikov, A. I. Formation of optimal Karhunen-Loève bases with a fast transform algorithm. (Russian) Voprosy Teor. Sistem Automat. Upravlenija No. 5 (1980), 10-27, 153. (Author's summary) 82f:94006

(Author's summary) 82f:94006 94A14 ikov, A. S. (with Kamyšanskii, N. R.) Semireducible analytic spaces "in the large". (Russian) Uspehi Mat. Nauk 35 (1980), no. 5(215), 3-51, 271. (Hillel Gauchman) 53B20 (53C25)

odornikov, V. N. Optimization of elastic shells of revolution. *Prikl. Mat. Meh.* 42 (1978), no. 3, 511–520 (*Russian*); *translated as J. Appl. Math. Mech.* 42 (1978), no. 3, 535–544 (1979). (Author's summary) 82g:73043 73L99 (73K40)

wnikov, V. V. (with Milov, L. T.) Spectral representation of nonstationary systems in the state space. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 5, 182-188, 223 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 5, 133–139 (1980). (Tamer Başar) 82e:93072 93C50 (93B99)

ev, E. D. See Hayman, Walter Kurt; et al., 82a:31001

Solomin, J. E. (with Schaposnik, Fidel) Fibre bundle analysis of topological charges in spontaneously broken gauge theories. J. Math. Phys. 19 (1978), no. 10, 2229-2231. (Authors' summary) 82c:81117 81E99 (55R99, 81D20)

(Authors summary) 84c81117 81E59 (35R99, 81D20)

отпјак, М. Z. (with Birman, М. Š.) ★Спектральная теория самосопряженных

операторов в гильбертовом пространстве. (Russian) [Spectral theory of selfadjoint

operators in Hilbert space] Leningrad. Univ., Leningrad, 1980. 264 pp. (loose errata). (Dan Timotin) 82k:47001 47-01

(with Birman, M. S.) Asymptotic behavior of the spectrum of variational problems on solutions of elliptic equations. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 221-223, 255, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (From the text) 82b:35115 35P20 (49G05)

(with Birman, M. S.) Asymptotic behavior of the spectrum of variational problems on solutions of elliptic equations in unbounded domains. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 4, 27-35, 95. (Erich Miersemann) 82a:35084 35P20 (49G05) (with Ulare, Saion) Spaces dual to the spaces Λ_{Ω} (Russian English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 1, 113–115, 122. (Alan Shuchat) 82a:46029 46E15

lomon, A. I. Group theory and superfluid systems. Third International Conference on Collective Phenomena (Moscow, 1978), pp. 161-166, Ann. New York Acad. Sci., 337, New York Acad. Sci., New York, 1980. (See 82j:82002) 81J05

Dynamical group model of superfluid helium three. J. Phys. A 14 (1981), no. 9, 2177–2188. (Author's summary) 82i81171 81J05 (22E65)

on, Arthur R. Homotopy 2-regular mappings whose inverses are open 3-cells. Fund. Math. 109 (1980), no. 1, 55-70. (From the introduction) 82b:55015

mon, Jay M. (with Berger, Alan E.; Ciment, Melvyn) Higher order accurate tridiagonal difference methods for diffusion convection equations. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos. Lehigh Univ., Bethlehem, Pa., 1979), pp. 322-330, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82b:65149 65N99 (76R99)

(with Berger, Alan E.; Ciment, Melvyn) Uniformly accurate difference methods for a singular perturbation problem. Boundary and interior layers—computational and asymptotic methods (Proc. Conf., Trinity College, Dublin, 1980), pp. 14–28, Boole, Dun Laoghaire, 1980. (Authors' summary) 82e:65083 65L10

omon, Ronald The B(G)-conjecture and unbalanced groups. Finite simple groups, II (Proc. Sympos., Univ. Durham, Durham, 1978), pp. 63-87, Academic Press, London, 1980. (See 82h:20021) 20D05

Some results on standard blocks. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 43-46, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (From the text) 82i:20028 20D05

The maximal 2-component approach to the B(G) conjecture. The San Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 67-70, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R. I., 1980. (Editors) 82c:20041

on, B. Ja. Quasiminimal pF-degrees. (Russian) Recursive functions (Russian), pp. 85-98, Ivanov. Gos. Univ., Ivanovo, 1978. (G. N. Kobzev) 82d:03072 03D30 (03D25)

ikov, V. A. (with Ladyženskaja, Olga A.) Determination of the solutions of stationary boundary value problems in unbounded domains for Navier-Stokes equations having infinite dissipation. (Russian) Dokl. Akad. Nauk SSSR 249 (1979), no. 4, 828-831. (A. A. Arsen'ev) 82b:35128 35Q10 (76D05)

(with Kažihov, A. V.) Existence theorems for the equations of motion of a compressible viscous fluid. Annual review of fluid mechanics, Vol. 13, pp. 79–95, Annual Reviews, Palo Alto, Calif., 1981. (See 821:76001) 76N10

(with Ladyženskaja, Olga A.; True, Hans) Résolution des équations de Stokes et okes dans des tuyaux infinis. (English summary) C. R. Acad. Sci. Paris Sér. I

Math. 292 (1981), no. 4, 251-254. (Authors' summary) 82e:35066 35Q10 (76D05) op, S. A. The existence of solutions in the nonlinear theory of oscillations of Reissr shells of revolution. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk. 1980, no. 2, 22-25, 109. (Szczepan Borkowski) 82j:73062 (35D05)

vay, R. See Fraisse, R., 82b:03098

1982

vcov, I. L. (with Skačkov, N. B.) Description of the form factor of a relativistic two-particle system in the covariant Hamiltonian formulation of quantum field theory. (Russian. English summary) Teoret. Mat. Fiz. 43 (1980), no. 3, 330-342. (V. E. Kuzmičev) 82d:81160 81G25 (81F20)

ovei, L. A. (with Kedrovskii, O. I.) *Алгоритывчиость практики, мышления, творчества. (Russian) [Algorithmicity of practice, thought and of creation] "Višča Škola", Kiev, 1980. 184 pp. (Siegfried Gottwald) 82g:00007 00A25 (03A05)

Solov'ev, A. D. (with Pečinkin, A. V.; Jaškov, S. F.) A system with servicing discipline whereby the order of minimum remaining length is serviced first. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 5, 51-58, 220 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 5, 38-45 (1980). (Carl M. Harris) 82c:60170 60K25

ov'ev, A. I. (with Procento, V. S.) The symmetric contact problem for a compound strip. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 11, 58–63. (Authors' summary) 824:73082 73T05 (45B05)

ov'ev, A. P. Nonlinear elastic strains of an unevenly heated circular plate. *Prikl. Meh.* 16 (1980), no. 6, 85-91 (*Russian*); *translated as Soviet Appl. Mech.* 16 (1980), no. 6, 525-530 (1981). (Aloknath Chakrabarti) 824:73087 73U05 (73K10)

w'ev, Ju. P. (with Miščenko, A. S.) Representations of Banach algebras and formulas of Hirzebruch type. (Russian) Mat. Sb. (N.S.) 111(153) (1980), no. 2, 209-226, 319. (V. 46J25 (57N65, 58G12) Cruceanu) 82f:46059

(with Nemytov, A. I.) Homotopy multiplication in the classifying spaces of

Hermitian K-theory. (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 1, 30-34. (L. N. Vaserstein) 82i:18021 18F25

Signature realizable subgroups of the Wall group. (Russian) Uspehi Mat. Nauk 36 (1981), no. 3(219), 223-224. (A. A. Ranicki) 82k:57024 57R65 (18F25)

Solov'ev, M. A. Intersection of Jaffe spaces. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 2, 147-160. (I. Ju. Krivs'kii) 82g:81047 81E05

ov'ev, S. Ju. On a constructive procedure of grammatical inference. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1980, no. 3, 44-48, 70. (Author's summary) 820:68078 68F05 (03D05)

Phys. D 3 (1981), no. 3, 487–502. (David J. Kaup) 82j:35130 35Q20

(with Karpman, V. I.) The connection between the two forms of perturbed sine-Gordon equations. Phys. Lett. A 82 (1981), no. 5, 205-206. (Woodford W. Zachary)

35Q20 (81C05)

(with Karpman, V. I.) The influence of perturbations on the shape of a sine-Gordon soliton. Phys. Lett. A 84 (1981), no. 2, 39-41. (David J. Kaup) 82k:35008 35B20 (35O20, 53A05, 58F07, 81C05)

ov'eva, O. A. Simple pursuit of an object by m objects (the case of l-capture, where l is different for different pursuers). (Russian) Differential, noncooperative, cooperative and statistical games (Russian), pp. 94–98, 107–108, Kalinin. Gos. Univ., Kalinin, 1979. (A. I. Subbotin) 82b:90142

lov'yev, A. D. See Solov'ev, A. D.

Solpo, I. A. Hierarchical games with ordered outcomes. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 3, 209-214, 224 (Russian); translated as Engrg. Cybernetics 18 (1980), 10. 3, 144-149 (1981). (Author's summary) 82k:90135 90D05

Sols Lucia, Ignacio (with Meseguer Guaita, José) Categorical tensor representation of deterministic, relational and probabilistic finite functions. Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 340-346,

Consejo Sup. Inv. Cient., Madrid, 1977. (Jiří Adámek) 82b:18013 18D10 Soltan, V. P. Helly numbers and Carathéodory numbers in the axiomatic theory of convexity. (Russian) Bul. Akad. Štiince RSS Moldoven. 1979, no. 3, 31-35, 93. (L. G.

Šaraburova) 82c:52001 52A01 (52A35) Convex hulls that preserve diameters of sets. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1979, no. 4, 19-24, 139. (W. J. Firey) 82b:52005 52A01 (46A55, 54E35)

Metrical extremal and boundary points. (Russian) Modern geometry (Russian), pp. 64-73, Leningrad. Univ., Leningrad, 1980. (Ju. A. Šaškin) 82i:52003 52A01

On Kuratowski's problem. (Russian. English summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 7-8, 369-375 (1981). (A. Császár) 82m:54001 54A05

An axiomatic approach to the theory of convex functions. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 4, 813-816. (K. Zimmermann) 82a:26008 26A51 (52A01. 90C25)

(with German, L. F.) Quasiconvexity in linear and metric spaces. (Russian) Investigations in functional analysis and differential equations, pp. 19–24, 137–138, "Štiinca", Kishinev, 1981. (Authors' summary) 82m:46003 46A15 (46A55, 52A01) Soltanov, K. N. Solvability of some nonlinear parabolic problems in Orlicz-Sobolev spaces.

(Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 99-104, 250, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Russell C. Thom 82h:35053 35K55

tés, Pavel Oscillatory properties of solutions of second-order nonlinear delay differential uations. (Russian summary) Math. Slovaca 31 (1981), no. 2, 207-215. (G. Ladas) 82e-34085 34K15

lymosy, Andreas Synthese von analysierenden Automaten auf Grund von forma Grammatiken. Dissertation. Arbeitsber. Inst. Math. Masch. Datencerarb. (Inform.) 11 (1978), no. 10, 141 pp. (From the introduction) 821:68084 68F05 (68D05)

Sólyom, J. (with Nguyen Minh Khue) Exact solution of a quasi-one-dimension with long range interaction (coupled Tomonaga chains). Acta Phys. Acad. Sci. Hungar. 48 (1980), no. 2-3, 169–185. (Authors' summary) 82e:82020 82A65

(with Rezayi, E. H.; Sak, J.) Symmetry properties of one-dimensional Fermi systems: some nonperturbative results. Phys. Rev. B (3) 23 (1981), no. 3, 1342-1348. (Koichiro Matsuno) 82d:82021 82A15

Som, M. M. (with Banerjee, A.) Conformally flat charged dust. Internat. J. Theoret. Phys. 20 (1981), no. 5, 349-354. (Authors' summary) 82i:83012 83C15

(with Banerjee, A.) Einstein cluster of charged particles. Progr. Theoret. Phys. 65 (1981), no. 4, 1281-1289. (P. C. Vaidya) 82g:83018 83C99 (34A10, 83C15)

ner, Lawrence The divisibility properties of primary Lucas recurrences with respect to primes. Fibonacci Quart. 18 (1980), no. 4, 316-334. (Neville Robbins) 82g:10023 10A35

The residues of nº modulo p. Fibonacci Quart. 19 (1981), no. 2, 110-117. (Bruce C.

Berndt) 82g:10007 10A10 (10H35)
nerford, D. J. (with Sharma, S. K.; Powers, S. R.) Investigation of domains of validity of approximation methods in forward light scattering from long cylinders. Optica Acta 28 (1981), no. 11, 1439–1446. (Authors' summary) 82m:78004 78A10

va, V. K. (with Dem'janov, V. F.) Conditional subgradients and condition subdifferentials of convex functions. (Russian) Current state of the theory of open research (Russian), pp. 311-335, "Nauka", Moscow, 1979. (See 82f:90002) (with Dem'janov, V. F.) Subdifferentials of functions on sets: Kibernetika (Kiev) 1980, no. 1, i, 23-27, 149 (Russian); translated as Cybernetics 16 (1980), no. 1, 24-31. (Siegfried Schaible) 82c:990073 90C25 (26A24)

Continuous method for minimization of a convex function. (Russian) Differencial'nye Uravnenija 16 (1980), no. 8, 1445-1449, 1533. (W. W. Breckner)

la:49040 49D45 (90C25)

neijer, B. P. (with Verwer, J. G.) *A performance evaluation of a class of Runge-Kutta-Chebyshev methods for solving semidiscrete parabolic differential equations. Afdeling Numerieke Wiskunde [Department of Numerical Mathematics], 91. Mathematisch Centrum, Amsterdam, 1980. i+16 pp. (Authors' summary) 82a:65074

(with van der Houwen, P. J.) On the internal stability of explicit, m-stage Runge-Kutta methods for large m-values. (German and Russian summaries) Z. Angew Math. Mech. 60 (1980), no. 10, 479-485. (E. H. Twizell) 82m:65062 65L05 (65M05)

er, H. J. (with Meister, E.) Ein algebraisches Verfahren zur Lösung von gemischten Anfangsrandwertproblemen aus der Theorie instationärer Gitterströmungen. (English summary) Math. Methods Appl. Sci. 1 (1979), no. 2, 158-186. (H. C. Kranzer) 82b:65158 65P05 (76G99)

nmer, M. Continuous selections for metric projections. Quantitative approximation (Proc. Internat. Sympos., Bonn, 1979), pp. 301–317, Academic Press, New York, 1980. (William Hintzman) 82h:41637 41A50 (41A65, 54C65)

se, Andrew John Hyperplane sections of projective surfaces. I. The adjunction mapping. Duke Math. J. 46 (1979), no. 2, 377-401. (Norman Goldstein) 82f:14033 14115 (32115)

ogyi, J. See Optimization of design and computation of control networks, 82c:90026 nolinos, Alfredo S. (with Casal Piga, Alfonso) Analytic and numerical study of the equation of the sunflower. (Spanish) Rev. Real Acad. Cienc. Exact. Fls. Natur. Madrid 73 (1979), no. 4, 503-519. (Plácido Z. Táboas) 82g:34096 34K15 (34K20, 92A05)

See also Zhao, Su Xia, 82c:34091
Somorjai, R. L. (with Ali, M. K.) Reappearance of ordered motion in some nonintegrable Hamiltonian systems. Phys. D 1 (1980), no. 4, 383-390. (A. Vanderbauwhede) 824:58026 58F05 (58F13, 70K50)

(with Ali, M. K.) Perturbations that preserve integrability. A constructive approach. Lett. Nuovo Cimento (2) 30 (1981), no. 15, 465-468. (Francesco Calogero) 82h:58022 58F07 (70K99)

(with Ali, M. K.) On the integrability of three equal masses interacting through Morse-type potentials. Progr. Theoret. Phys. 65 (1981), no. 5, 1515-1525. (Authors'

summary) 82e:58037 58F05 (58E30, 58F13, 70H99) nos, Endre Upper bound for the optimal solution in the simplex method and in Dantzig-Wolfe's decomposition algorithm. (Hungarian. English and Russian summaries) Szigma-Mat.-Közgazdasági Folyóirat 13 (1980), no. 3, 213-221. (Author's summary)

82m:9013 90C06
ms, Andrew P. (with Harris, Bernard) Optimal upper confidence limits for products of Poisson parameters with applications to the interval estimation of the failure probability of parallel systems. Proceedings of the Twenty-sixth Conference on the Design of Experiments in Army Research, Development and Testing (New Mexico State Univ., Las Cruces, N.M., 1980), pp. 431-454, ARO Rep. 81, 2, U. S. Army Res. Office, Research mary) 82k:62184 62N05 (62F25) Triangle Park, N.C., 1981. (Authors' sum

ien hoa Son See Nguen Hoa Son nguyen quoc Son See Nguyen Quoc Son vu'o'ng manh So'n See Vu'o'ng Manh So'n

ann, Dieter Utility representations for partial orders. J. Econom. Theory 23 (1980), no. 2, 183-188. (From the introduction) 82k:90029 90A10 (06F30)

ne, Yoshio A uniformly convergent expression of the magnetic field induced by a helical coil. Mem. Fac. Engrg. Kyoto Univ. 42 (1980), no. 4, 413-420 (1981). (Author's summary) 82f:78004 78A25

summary) 821:78004 78A25

Song, Ch'ang Ho Numerical solution to one-dimensional heat conduction problem with radiant heat exchange. (Korean. English summary) Cho-sön In-min Kong-hwa-kuk Kwa-hak-wön T'ong-bo 27 (1979), no. 5, 6-9. (Author's summary) 82b:65099

Variational methods for the solution of linear operator equations in Hilbert space. (Korean. English summary) Su-hak kwa Mul-li 1980, no. 1, 3–12. (Author's summary) 824:65046 65J10 (47A50, 49G20) ng, Guo Zhu (with Wang, Qiao Ling) A property of $\{M_k\}$ and its associated function.

(Chinese. English summary) Nanjing Daxue Xuebao 1980, Special Issue on Mathematics, 1-6. (Authors' summary) 82f:46047 46F05

ug, Jian (with Yu, Jing Yuan) On stability theory of population systems and critical fertility rates of women. (Chinese. English summary) Acta Automat. Sinica 7 (1981), no. 1, 1-12. (Authors' summary) 82k:92053 92A15 (34D20) no. 1, 1-12. (Authors' summary) 82k:92053

(with Yu, Jing Yuan) Remarks on stability theory of population systems. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 23, 1061–1062. Kexue Tongbao (English) 26 (1981), no. 1, 9–11. (K. E. Swick) 82k:92054 92A15 (92A10)

(with Yu, Jing Yuan; Li, Guang Yuan) Theory on prospect of population evolution processes. Sci. Sinica 24 (1981), no. 3, 431-444. (Authors' summary) 82f:92639 92A15 (34K05)

- Tian Tai (with Hwang, F. K.; Du, Ding Zhu) Hypergeometric and generalized hypergeometric group testing. SIAM J. Algebraic Discrete Methods 2 (1981), no. 4, 426-428. (Authors' summary) 82k:62654 62F03
- Young Joon (with Kikuchi, Noboru) Penalty/finite-element approximations of a class of unilateral problems in linear elasticity. Quart. Appl. Math. 39 (1981/82), no. 1, 1–22. (Michael J. O'Carroll) 82a:73075 73T05 (49D30, 65N30, 73K25)
- K. (with Soni, Raj P.) On the asymptotic behavior of the solution of a n Volterra integral equation. Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Unio. Nijmegen, Nijmegen, 1980), pp. 359-368, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (Gustaf Gripenberg) 82g:45020 45M05 (45D05)
 - (with Soni, Raj P.) Asymptotic solution to a class of nonlinear Volterra integral ns. J. Integral Equations 3 (1981), no. 2, 165-174. (G. S. Jordan) 82g:45021 45M05 (26A12)
 - (with Soni, Raj P.) A note on uniform asymptotic expansions of finite K, and related transforms with explicit remainder. J. Math. Anal. Appl. 79 (1981), no. 1, 163–177. (John 41A60 (30E15, 44A15) S. Lew) 82a:41029
- ni, Raj P. (with Soni, K.) On the asymptotic behavior of the solution of a nonlinear Volterra integral equation. Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ. Nijmegen, Nijmegen, 1980), pp. 359-368, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (Gustaf Gripenberg) 82g:45020 45M05 (45D05)
 - (with Soni, K.) Asymptotic solution to a class of nonlinear Volterra integral ns. J. Integral Equations 3 (1981), no. 2, 165-174. (G. S. Jordan) 82g:45021 45M05 (26A12)
 - (with Soni, K.) A note on uniform asymptotic expansions of finite K, and related transforms with explicit remainder. J. Math. Anal. Appl. 79 (1981), no. 1, 163-177. (John S. Lew) 82a:41029 41A60 (30E15, 44A15)
 - (with Shelton, Robert O.) Aperiodic words on three symbols. III. J. Reine Angew. Math. 330 (1982), 44-52. (Henry S. Warren, Jr.) 82m:05004. 05A05 (26A03) See also Temme, N. M., 82a:65011a and Pexton, Robert L., 82a:65011b
- m, Jack Rational division algebras as solvable crossed products. Israel J. Math. 37 (1980), no. 3, 246-250. (Thomas Laffey) 82e:12027 12E15 (12A55, 16A39, 20D20)
- n, Hugo (with Novshek, William) Small efficient scale as a foundation for Walrasian equilibrium. Noncooperative approaches to the theory of perfect competition.

 J. Econom. Theory 22 (1980), no. 2, 243–255. (See 82e:90023) 90A14
- nevend, Gy. Structural problems in the theory of bounded control for linear discrete time partially observed systems under nonstochastic bounded disturbances. Survey of mathematical programming (Proc. Ninth Internat. Math. Programming Sympos., Budapest, 1976), Vol. 2, pp. 217–232, North-Holland, Amsterdam, 1979. (From the text) 82i:90128
 - Existence and numerical computation of extremal invariant sets in linear differential games with bounded controls. Optimization techniques (Proc. Ninth 1FIP Conf., Warsaw, 1979), Part 1, pp. 251-260, Lecture Notes in Control and Information Sci., 22, Springer,
- Berlin, 190. (A. B. Kurfanskii) 82f-90115 90D25 ss, L. R. (with Nicholls, Peter J.) Automorphic functions with gap power series. Illinois J. Math. 25 (1981), no. 3, 383–389. (A. M. Macbeath) 82j:10044 10D05
- na (with Böhm, Corrado; Machi, Antonio) Complexity bounds for equivalence and isomorphism of Latin squares. Inform. Process. Lett. 10 (1980), no. 4-5, 231-233. (Authors' summary) 82a:68066 68C25 (05B15)
- tag, Eduardo D. (with Hautus, M. L. J.) An approach to detectability and observers. Algebraic and geometric methods in linear systems theory (AMS-NASA-NATO Sum Sem., Harvard Univ., Cambridge, Mass., 1979), pp. 99-135, Lectures in Appl. Math., 18, Amer. Math. Soc., Providence, R.I., 1980. (Authors' summary) 82e:93016 93B07
- On quasireachable realizations of a polynomial response. Systems analysis (Conf., rdeaux, 1978), pp. 207-217, Astérisque, 75-76, Soc. Math. France, Paris, 1980. (Clyde F. Martin) 82a:93018 93B15
- inear regulation: the piecewise linear approach. IEEE Trans. Automat. Control
- 26 (1981), no. 2, 346-358. (Author's summary) 82d:93032 93C10 (58F10) (with Bumby, Richard T.; Sussmann, H. J.; Vasconcelos, Wolmer V.) Remarks on the pole-shifting problem over rings. J. Pure Appl. Algebra 20 (1981), no. 2, 113-127. (Valeriu Prepeliță) 82i:93006 93B05 (93B55, 93D15)
- (vaccius repenja) 82635000 52503, 52112)

 Sood, N. K. Equilibrium of self-gravitating polytropic cylinders with a magnetic field.

 Astrophys. and Space Sci. 73 (1980), no. 1, 213-225. (A. M. Finkel'štein) 82b:85006
- mets, K. Optimization of the form of an impulsively loaded two-step rigidly clamped beam. (Russian. English summary)
 Tartu Riikl. Ül. Toimetised No. 564 (1981), 24–34. (Author's summary)
 73K40
- ng, H. P. (with Wismath, S. K.; Akl, S. G.) Feature selection by interactive clustering Pattern Recognition 14 (1981), no. 1-6, 75-80. (Authors' summary) 82k:68057
- ng, Norman L. (with Franklin, Mark A.) One-dimensional optimization on nultiprocessor systems. IEEE Trans. Comput. 30 (1981), no. 1, 61-66. (Authors'
- summary) 82m:68054 68B20 (90C99)
 ng, T. C. (with Li, Chun) On the unbounded contact between plates and layered cylinders. Trans. ASME Ser. E J. Appl. Mech. 47 (1980), no. 4, 841–846. (Authors' mmary) 82a:73060 73T05
- ong, T. T. (with Chang, Min I. J.) On optimal control configuration in theory of modal Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 723-738, North-Holland, Amsterdam, 1980. (See 82g:93003) 93A15 (with Chang, Min I. J.) Optimal controller placement in modal control of complex J. Math. Anal. Appl. 75 (1980), no. 2, 340-358. (V. N. Burkov) 82c:49011 49B10 (93A10)
- Sopina, E. P. Congruences of ellipsoids with a developable surface of centers. (Russian) iningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur No. 11 (1980), 88-92, 127. (H. Kil'p) 82k:53013 53A15
- 50A15 50polov, N. N. The Cauchy problem for a fourth-order hyperbolic differential equation with many spatial variables. (Bulgarian. Russian and French summaries) Godišnik Visš. Učebn. Zaved. Priložna Mat. 13 (1977), no. 3, 43-49 (1978). (Author's summary) 35L30
 - undary value problems for the heat equation. (Russian) C. R. Acad. Bulgare

- Sci. 33 (1980), no. 1, 47-50, (J. Kačur) 82f:35088 35K05
- uev, A. (with Džuraev, T. D.) A three-dimensional problem for an equation of mixed parabolic-hyperbolic type. (Russian) Differencial'nye Uravnenija 17 (1981), no. 1, 50-57, 196. (A. P. Soldatov) 82m:35107 35M05
- Sor, N. Z. See Math
- ace, Emanuele (with Giachetti, Riccardo; Ricci, Riccardo) Tetrad fields and metric tensor in the gauge theory of gravitation. Lett. Math. Phys. 5 (1981), no. 2, 85-91. (Carl Brans) 82g-83020 83C99 (53C80, 83E10) ace, Eman
- race, Giuseppe A variety of algebras with two binary and one unary operation. (Italian) Matematiche (Catania) 33 (1978), no. 1, 18-25 (1980). (R. W. Quackenbush) 82i:08007
- race, Orazio Pappian properties in non-Desarguesian planes. (Italian) Matematiche (Catania) 33 (1978), no. 1, 125-129 (1980). (A. Barlotti) 82m:51008 51A35 (51A05)
- Sorba, P. (with Combe, Ph.; Sciarrino, A.) Little groups and Higgs representations for SU(n) gauge theories. Group theoretical methods in physics (Proc. Eighth Internat. oq., Kiryat Anavim, 1979), pp. 267-269, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81004) 81E10
 - (with Girardi, G.; Sciarrino, A.) Some relevant properties of SO(n) representations for grand unified theories. Nuclear Phys. B 182 (1981), no. 3, 477-504. (J. F. Cornwell) 82e:22035 81G20 (22E47, 22E70)
- Şorea, N. I. (with Matulea, Iordan C.; Bălan, George C.) Un modèle mathématique de la mécanique des fils immergés. (Romanian and English summaries) Bul. Univ. Galaţi Fasc. II Mat. Fiz. Mec. Teoret. 1 (1978), 75-82. (From the summary) 82a:73027a (70H99)
- reng, Jan Symmetric shift registers. Pacific J. Math. 85 (1979), no. 1, 201-229. (Henry 68D15
- sen, Jan P. (with Stewart, Warren E.) Bayesian estimation of common parameters from multiresponse data with missing observations. Technometrics 23 (1981), no. 2, 131-141. (Authors' summary) 82d:62063 62F15
- son, Harold W. *Parameter estimation. Principles and problems. Control and Systems Theory, 9. Marcel Dekker, Inc., New York, 1980. xi + 382 pp ISBN 0-8247-6987-2 (H. H. Martens) 82c:93021 93E10 (62-01)
- renson, Peter Sums of two integral squares in certain cyclotomic number fields. I. Bull. Number Theory Related Topics 5 (1980), no. 3, 17-24. (Author's introduction) 82j:10035 10B35
- Sums of two integral squares in certain cyclotomic number fields. II. Bull. Number Theory Related Topics 6 (1981), no. 1, 1-24. (Author's summary) 82j:12008 (10305)
- Sorgsepp, L. (with Löhmus, J.) About nonassociativity in physics and Cayley-Graves' octonions. Proceedings of the Second Workshop on Lie-Admissible Formulations (Sci. Center, Harvard Univ., Cambridge, Mass., 1979), Part A. Hadronic J. 2 (1979), no. 6, 17D05 (01A55, 01A60, 17-02, 17-03, 81C99) 1388-1459. (M. L. Tomber) 829:17019 (with Löhmus, J.) Binary and ternary sedenions. Proceedings of the Third
- Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part A. Hadronic J. 4 (1980/81), no. 2, 327-353. (Authors' summary) 82m:30050 30G35 (17D10, 35J99, 51A25, 51E30)
- in, A. S. (with Ivanov, E. A.) Structure of representations of a conformal supergroup in the OSp(1,4)-basis. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 1, 30-45. (B. Geyer) 82c:17011 17B70 (22E65, 81C40)
- nen, Pekka Extensions of isometric and symmetric linear relations in a Krein space. Ann. Acad. Sci. Fenn. Ser. A I Math. 5 (1980), no. 2, 355-375. (Björn Textorius) 82h:47036 47B50 (47B25)
- Sorkin, Gregory The enumeration of nonhomeomorphic graphs by edges. Combinatorics 79 (Proc. Colloq., Univ. Montréal, Montreal, Que., 1979), Part II. Ann. Discrete Math. 9
- (1980), 249-252. (Author's introduction) 82b:05076 05C30 (05C35)
 Sorkin, H. L. (with Johnson, Norman Lloyd; Kotz, Samuel) "Faulty inspection distributions. Comm. Statist. A-Theory Methods 9 (1980), no. 9, 917-922. (Authors' summary) 82k:62192 62N10
- Sorkin, Rafael D. (with Friedman, John L.) A spin-statistics theorem for composites containing both electric and magnetic charges. Comm. Math. Phys. 73 (1980), no. 2,
 - 161-196. (Andrzej Trautman) 82b:81089 81E99 (53C80, 81D05) (with Hartle, J. B.) Boundary terms in the action for the Regge calculus. Gen. Relativity Gravitation 13 (1981), no. 6, 541-549. (M. J. Perry) 82;:83024
- roka, Barry I. (with Andersson, Russell L.; Bajcsy, Ružena K.) Generalised cylinders from local aggregation of sections. Pattern Recognition 13 (1981), no. 5, 353-363. ary) 82h:68121 68G10
- rokina, N. G. Uniqueness of the weak solution of a boundary value problem for the wave equation. (Russian) Ukrain. Mat. Z. 33 (1981), no. 2, 273-277. (V. G. Romanov) 35D05 (35L05)
- No. On generalized orders of growth of analytic characteristic functions of probability laws. (Russian) Ukrain. Mat. Z. 33 (1981), no. 1, 115–118. (S. G. Maloševskii) 82d:60028 60E10
- roko, L. M. Maximum-entropy principle and its application to the solution of inverse problems. Fiz. Elementar. Castic i Atom. Jadra 12 (1981), no. 3, 754-795 (Russian. English summary); translated as Soviet J. Particles and Nuclei 12 (1981), no. 3, 303-319. (Author's summary) 82m:92015 92A07 (65K99, 68G10, 94A17)
- See also Harmuth, Henning F., 82a:94001
 Sorvali, Tuomas Angles and quasiconformal mappings. (Finnish. English summary) Arkhimedes 32 (1980), no. 4, 200-207. (Jukka Sarvas) 82c:30029
- Sós, Vera T. (with Erdős, Paul) Problems and results on Ramsey-Turán type theorems (preliminary report). Proceedings of the West Coast Conference on Combinatorics, Graph Theory and Computing (Humboldt State Univ., Arcata, Calif., 1979), pp. 17–23, Congress. XXVI, Utilitas Math., Winnipeg, Man., 1980. (Jerrold W. Grossman) 82a:05055 05C35 (05C55)
 - (with Dupain, Yves) On the one-sided boundedness of discrepancy-function of the nce {na}. Acta Arith. 37 (1980), 363-374. (V. Losert) 82c:10058
 - See also Algebraic methods in graph theory, 82k:05002

novič, V. A. Closed equation for the structure function of an isotropic turbulent velocity field. Inž.-Fiz. Ž. 40 (1981), no. 6, 980-992 (Russian); translated as J. Engrg. Phys. 40 (1981), no. 6, 584-594. (Author's summary) 82m:76033 76F05

nickii, S. P. Instability of gyroscopic systems. (Russian. English summary) Dokl. Aka. Nauk Ukrain. SSR Ser. A No. 2 (1980), 53-56, 96. (Rudolf Veselkov) 82c:70004

Mat. Preprint 1981, no. 16, 12 pp. (Publisher's description) 82m:70024 70 novskii, Ju. V. On a general isomorphism theory for linear groups. (Russian) 70J25 (70J15)

novsaii, via. V. Ori a general somorphism theory for linear groups. (Russian). Isomorphisms of classical groups over integral rings (Russian), pp. 259–268, Mat.: Novoe Zarub. Nauke, 20, "Mir", Mascow, 1980. (G. A. Soifer) 82i:20074 20030

Isomorphisms of symplectic groups over division rings of characteristic not equal to 2. (Russian). Algebra i Logika 19 (1980), no. 6, 726–739, 747. (A. H. Kuškulet)

82m-20052 20H25 (10C30, 20F32)

nowski, Andrzej Finite-dimensional approximation theory with application to stabilization of systems with time delay. Demonstratio Math. 13 (1980), no. 4, 961-973. (Andrzej W. Olbrot) 82i:34103 34K35 (93D15)

(with Olbrot, Andrzej W.) Duality theorems on control and observation of discrete-time infinite-dimensional systems. Math. Systems Theory 14 (1981), no. 2,

173-187. (Authors' summary) 82f:93012 93B05 (93D15)

wski, J. S. Method of regularized approximations and its application to convex programming. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 2, pp. 116-122, Lecture Notes in Control and Information Sci., 23, Springer, Berlin, 1980. (J. 90C25

stak, A. P. (with Zandere, M. K.) *Topologijas elementi. I. (Latvian) [Elements of topology. I] With a Russian summary. Latvijas Valsts Univ., Riga, 1977. 68 pp. (Editors)

Locally clustered spaces and their extensions. (Russian) Topological spaces and their opings (Russian), pp. 137-146, 154, Lato. Gos. Univ., Riga, 1979. (M. Katětov)

(with Mardešić, Sibe) On the homotopy type of ANRs for p-paracompacta. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 10, 803-808. (Ju. M. Smirnov) 82e:54018 54C56 (54F43)

(with Čerin, Zvonko) Some remarks on Borsuk's fundamental metric. Topology, Vol. I (Proc. Fourth Colloq., Budapest, 1978), pp. 233-252, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (R. Anantharaman) 82c:54033 54F43

(with Mardešić, Sibe) Perfect prototypes of stratifiable spaces. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat.

Nauk 35 (1980), no. 3(213), 84-93. (Y. Kodama) 82a:54024 54C55 tničenko, M. A. (with Feščenko, S. F.) Asymptotic representation of a solution for partial differential equations with time lag. (Russian) Analytic methods for investigating ear oscillations (Russian), pp. 155-161, 184, Akad. Nauk Ukrain. SSR, Inst. Mat.,

Kiev. 1980. (From the introduction) 82h:35095 35R10 (with Fedeščenko, S. F.) On the question of integration of systems of differential

nics and stability of mechanical systems (Russian), ations. (Russian) Dyna pp. 162-166, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (B. L. Sehter) 82i:34008 34A30 (34C20)

(with Feščenko, S. F.) Asymptotic solution for a system of nonlinear differential equations with slowly varying parameters. (Russian) Ukrain. Mat. Z. 32 (1980), no. 5, 697-699. (Vojislav Mariė) 82b:34073 34E05

ičenko, N. A. (with Feščenko, S. F.) Asymptotic integration of differential equations. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 3, 48 pp. (C.

Corduneanu) 82d:34073 34E05 otnikov, V. S. Hamel's works on the foundations of mechanics. (Ukrainian. Russian summary) Narisi Îstor. Prirodoznav. î Tehn. No. 25 (1979), 43-49, 114. (Editors)

01A70 (70-03) Soto, Francisco (with Claverie, Pierre) Some properties of the smoothed Wigner function. Phys. A 109 (1981), no. 1-2, 193-207. (Authors' summary) 82m:81025 81C20

o, M. F., Jr. (with Mirman, R.) Objects for the symmetric group. J. Math. Phys. 22 (1981), no. 6, 1144-1148. (Authors' summary) 82j:20027a 20C30 (20-04, 20B30, 81C40)

(with Mirman, R.) Addendum: "Objects for the symmetric group". 22 (1981), no. 12, 3010. (Editors) 82j:20027b 20C30 (20-04, 20B30, 81C40)

steau, D. (with Bermond, J.-C.; Germa, A.; Heydemann, M. C.) Chemins et circuits dans les graphes orientés. (English summary) Combinatorics 79 (Proc. Colloq., Univ. Montreal, Montreal, Que., 1979), Part I. Ann. Discrete Math. 8 (1980), 293-309. (J. Sheehan) 82g:05056 05C38 (05C20)

(with Bermond, J.-C.; Huang, Charlotte; Rosa, Alexander) Decomposition of complete graphs into isomorphic subgraphs with five vertices. Ars Combin. 10 (1980), 211-254. (D. K. Ray-Chaudhuri) 82c:05079 05C99 (05B05)

Decomposition of $K_{m,n}$ ($K_{m,n}^*$) into cycles (circuits) of length 2k. J. Combin. Theory Ser. B 30 (1981), no. 1, 75–81. (Carsten Thomassen) 82e:05088 05C38 (05C70)

ek, J. Quaternion quantum mechanics as a true 3+1-dimensional theory of tachyons.

J. Phys. A 14 (1981), no. 7, 1629-1640. (A. O. Barut) 82i:81016 81B99 udack, A. C. (with Brauer, Fred) Constant-rate harvesting and stocking in predator-prey systems. Differential equations and applications in ecology, epidemics, and population problems (Claremont, Calif., 1981), pp. 131–144, Academic Press, New York, 1981. (See

82m:92003) 92A15 (34K15, 90A30) nillard, Bernard (with Kunz, Hervé) Random Schrödinger operators. Some rigorous results. Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 83-87, Lecture Notes in Phys., 116, Springer, Berlin, 1980. (From the

(with Aizenman, Michael; Delyon, François) Lower bounds on the cluster size distribution. J. Statist. Phys. 23 (1980), no. 3, 267-280. (Georges A. Bécus) 82b:82048

(with Delyon, François; Stauffer, Dietrich) Percolative phase transition appearance of an infinite network. J. Phys. A 14 (1981), no. 7, L243-L246. (Authors' summary) 82g:82037 82A43 summary) 82g:82037

Soula, C. (with Labetoulle, J.; Pujolle, G.) Stationary distributions of flows in Jackson networks. Math. Oper. Res. 6 (1981), no. 2, 173-185. (Bent Natvig) 82g:60126 60K25 (90B22)

ilé, Christophe K-théorie et corps cyclotomiques. [K-theory and cyclotomic fields] Seminar on Number Theory, 1980–1981 (Talence, 1980–1981), Exp. No. 15, 6 pp., Univ. Bordeaux I, Talence, 1981. (See 82m:10006) 12A35 (12A62, 18F25)

nces algébriques. (English summary) C. R. Acad. Sci. Paris Sér. 1 Math. 292 (1981), no. 8, 433-435. (Author's summary) 82e:14012

ulie, F. See Fog -Soulie, F.

un, Y. (with Truemper, K.) Single commodity representation of multicommodity networks. SIAM J. Algebraic Discrete Methods 1 (1980), no. 3, 348–358. (A. K. Dewdney) 82x90056 90B10 (05C20)

dalgekar, V. M. (with Desai, G. A.) Finite-difference analysis of laminar flow in entry length of an annulus of two rotating cylinders. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 125-132, IMACS, New Brunswick, N.J., 1977. (Authors' summary) 824:76028 76D10 summary) 82d:76028

Maturanjan, T. (with Rajagopalan, M.; Jakel, D.) On perfect images of ordinals. Topology Appl. 11 (1980), no. 3, 305–318. (Authors' summary) 82i:54004

(with Kannan, V.) Properties that are productive, closed-hereditary and surjective Topology Appl. 12 (1981), no. 2, 141-146. (W. W. Comfort) 82f:54034 54D30 (54A2: 54D30 (54A25)

appouris, D. J. (with Singmaster, David) On the relationships among the axioms for a metric space and for general axiomatic systems. Portugal. Math. 37 (1978), no. 1-2, 145-155 (1981). (Joe A. Guthrie) 82i:54049 54E35

143-153 (1961), (doc A. Guunne) ostationers 39253 uriau, J. M. See Differential geometrical methods in mathematical physics, 82a:81003 urias, D. (with Jannussis, A. D.; Streclas, A.) The Lie algebra of Wigner operators of angular momentum. Hadronic J. 3 (1979/80), no. 5, 1431-1445. (Authors' summary) 81C40 (17B10, 22E70)

rlas, Nicolas (with Parisi, Giorgio) Critical behavior of branched polymers and the Lee-Yang edge singularity. Phys. Rev. Lett. 46 (1981), no. 14, 871-874. (Authors' summary) 82d:82058 82A42 (82A25)

Sousa, Almir Joaquim An extension operator for Orlicz-Sobolev spaces. An. Acad. Brasil. Ciènc. 53 (1981), no. 1, 9-12. (J.-P. Gossez) 82j:46046 46E35

Sasa, C. A. (with Brito, L. P.) Classical analogy of the concept of collective variables. J.

Phys. A 14 (1981), no. 9, 2239-2249. (From the introduction) 82j:70015 70H99 (70F99, 82A05)

(10197), 62.003a, Maria de Fátima See Fontes de Sousa, Maria de Fátima Southern, George W. See Combinatorial mathematics, 82c:05004 de Souza, Almir Joaquim See de Sousa, Almir Joaquim See de Sousa, Almir Joaquim Controllability and the linear equation Ax=b. Linear Algebra Appl. 36 (1981), 97-101. (Valeriu Prepelijā) 82i:93012

(with Bhattacharyya, Shankar Prashad) Controllability, observability and the solution of AX-XB=C. Linear Algebra Appl. 39 (1981), 167-188. (G. W. Stewart) 15A24 (93B05, 93B07)

aza, R. C. A Bayesian entropy approach to forecasting: the multistate model. Time series analysis (Houston, Tex., 1980), pp. 535-542, North-Holland, Amsterdam, 1981. (See 62M20

va, Miroslav On exponential growth of solutions of abstract initial value problems (Czech summary) With a loose Russian summary. Časopis Pěst. Mat. 106 (1981), no. 1, 1-30, 101. (L. Janos) 82f:34074 34G10

On the equivalence of Widder-Miyadera's and Leviatan's representability conditions for the Laplace transform of integrable vector-valued functions. (Czech summary) With a loose Russian summary. Časopis Pēst. Mat. 106 (1981), no. 2, 117-126, 209. (E. 44A10

On a fundamental theorem of the Laplace transform theory. (Czech summary) With a loose Russian summary. Časopis Pëst. Mat. 106 (1981), no. 3, 231-242, 316. (V. P. Mainra) 82m:44003 44A10

Sövegjártó, András A note on universal elements. (Hungarian) Mat. Lapok 28 (1977/80), no. 4, 327-328. (Author's summary) 82i:47044 47B38 Remark to a paper of E. M. Nikišin. Ann. Univ. Sci. Budapest. Eötvöv Sect. Math. 22/23 (1979/80), 135-138. (A. Olevskii) 82i:42003 42A20

vertkov, P. I. Reconstruction in pseudo-Euclidean space of surfaces with a given sum of the principal radii of curvature and boundary conditions. (Russian) Questions of global netry (Russian), pp. 57-64, Leningrad. Gos. Ped. Inst., Leningrad, 1979. (V. I. Oliker)

82e:53009 53A05 (53C40)

ward, A. M. A unified approach to Stefan's problem for spheres and cylinders. Proc.

Roy. Soc. London Ser. A 373 (1980), no. 1752, 131-147. (D. T. Haimo) 82e:80012 80A20 (35K05)

Soyster, A. L. (with Lev, B.) Integer programming with bounded variables via canonical separation. J. Oper. Res. Soc. 29 (1978), no. 5, 477-488. (Authors' summary) 82h:90078

(with Kortanek, K. O.) On equating the difference between optimal and marginal values of general convex programs. J. Optim. Theory Appl. 33 (1981), no. 1, 57-68. (Authors' summary) 82m:90130 90C25

anov, V. G. Uniform convergence and Riesz summability of spectral expansions. (Russian) Mat. Zametki 29 (1981), no. 6, 887-894, 956. (Stephan Rempel) 82k:35086

ou, C. (with Pickering, W. M.) The nonlinear flow field induced by a point force in the presence of a plane wall. Proc. Roy. Soc. London Ser. A 376 (1981), no. 1766, 435-450. (Authors' summary) 82i:76027 76D05 (76Q05, 76Z05)

ccarelli, Attilio (with Pietrabissa, Ettore) Remarks on weighted and constrained least squares methods. (Italian. English and French summaries) Statistica (Bologna) 39 (1979), no. 3, 479-497. (Adolfo Gili) 82a:62102 62J10

ccini, G. (with Rosato, E.; Vigilante, M.; De Cesare, N.; Perillo, E.) Weighted fit by orthonormal polynomials. Comput. Phys. Comm. 22 (1981), no. 2-3, 311-315. (Authors' introduction) 82h:65031 65F25

de, Paul Vincent Recent research on medieval logic. Synthese 40 (1979), no. 1, 3-18. (Editors) 82e:03004 03-03 (01A35)

★Peter of Ailly: Concepts and Insolubles. An annotated translation. Synthese Historical Library, 19. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xiii+193 pp. ISBN 90-277-1079-1 (Stephen Read) 828:03001 03-03 (01A35, 03A05)

gnolo, Sergio (with Colombini, Ferruccio) Second order hyperbolic equations with coefficients real analytic in space variables and discontinuous in time. J. Analyse Math. 38 (1980), 1-33. (K. A. Jagdžjan) 82i:35106 35L15

(with Colombini, Ferruccio) Non stabilité d'une équation hyperbolique dans le cas de l'homogénéisation des coefficients par rapport au temps. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 6, 351–353. (Authors' summary) 82b:35019 35B40 (49D50)

aizer, D. See Speiser, David R.

ak, G. S. Some estimates for functions that, at two points, have prescribed values and es of first derivatives. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 3,

values of Irist derivatives, (assissan) 120. 7935. Octob. Labour. Statements 2013, 100. 5, 67-71. (D. M. Campbell) 821:30035 30C99
ak, V. D. A lower bound for the probability of the sojourn of a semi-Markov process in a subset of states. (Russian) Methods in operations research and reliability theory in systems of analysis (Russian), pp. 29–36, 99, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kieo, 1979. (M. Skalsky) 82a:60133 60K15

alysis of the reliability of a system with inspection that is usable at a random moment of time. (Russian) Mathematical methods in operations research and reliability theory (Russian), pp. 16-22, 88, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (Arnfried Streller) 824:60181 60K20 (90B25)

(Artificu Steiner) accession of the Common (Curves and maps) Bibliographisch Institut, Mannheim, 1980. iii + 264 pp. ISBN 3-411-01593-4 (K. Strubecker) 82g-53002 53-01 (51-01, 86A99)

tion in real analytic coherent sheaves. (Italian sun Mat. Ital. A (5) 18 (1981), no. 1, 98-101. (J. G. Timourian) 82f:32019 32C05 (41A30. 58C05)

cci, E. (with Denardo, G.) Gauge fields in $S^1 \times \mathbb{R}^3$. (Italian summ A (11) 58 (1980), no. 3, 243-253. (Bernard S. Kay) 82f:81062 81E99 (53C05, 81G05) (with Denardo, G.) Finite-temperature effects in conformally flat space-times.

(Italian and Russian summaries) Nuovo Cimento A (11) 60 (1980), no. 2, 120-129.

(Authors' summary) 82248069 81E99 (81E99)

alt, Detlef D. *Was ist und was soll die mathematische Biologie? (German) [What is matical biology?] Wissenschaftliche Buchgesellschaft, Darmstadt, 1979. xxi + 161 pp. ISBN 3-534-08016-5 82e:00043 00A69 (92A05)

Itenstein, N. (with Lusztig, George) Induced unipotent classes. J. London Math. Soc. (2) 19 (1979), no. 1, 41-52. (Authors' introduction) 82g:20070 20G05

š, A. (with Grinhofs, M.) An analog processor accuracy analysis in the case of hybrid computer for solving boundary field problems. Parallel computers—parallel mathematics (Munich, 1977), pp. 165–169, North-Holland, Amsterdam, 1977. (See

See also Computer technology and boundary value problems, 82:65085a nos, P.-T. D. Numerical simulations of a van der Pol oscillator. Comput. Math. Appl. 6 (1980), no. 1, Special Issue, 135-145. (Author's summary) 82c:70031 65C20)

A method for analysis of nonlinear vibrations caused by modulated random excitation. (French and German summaries) Internat. J. Non-Linear Mech. 16 (1981), no. 1, 1–11. (Author's summary) 82e:70023 70L05 (60H99, 65N30)

ring, H.-D. Analytische Operatoren vektorieller Veränderlicher in reellen und elexen Banachräumen. II. Wiss. Z. Tech. Hochsch. Ilmenau 26 (1980), no. 1, 53-78. (J. Siciak) 82c:46057a 46G20 (32A30, 47H15, 58C10)

Analytische Operatoren vektorieller Veränderlicher in reellen und komplexen Banachräumen. III. Wiss. Z. Tech. Hochsch. Ilmenau 26 (1980), no. 2, 67-82. (J. Siciak)

46G20 (32A30, 47H15, 58C15)

rling, G. A. J. (with Penrose, Roger) The twistor quadrille: a line bundle based on the Coulomb field. Advances in twistor theory, pp. 136–141, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81D25 (83A05) The Schwarzschild graviton. Advances in twistor theory, pp. 142-146, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 83C45

th., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 83C45 (with Perjés, Z.) The twistor structure of hadrons. Advances in twistor theory,

pp. 192-197, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 81G20

(with Penrose, Roger) A note on the n-twistor internal symmetry group. Advances in r theory, pp. 228-229, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81G20

(with Tod, K. P.) An example of an 3c-space. J. Math. Phys. 22 (1981), no. 2, 331-332. (Beverly K. Berger) 82f:83035 83C30

Theory of massive particles. I. Algebraic structure. Philos. Trans. Roy. Soc. London Ser. A 301 (1981), no. 1458, 27-74. (Jouko Mickelsson) 82h:81142 81G20 (17B35) ar A new proof of Löwner's theorem on monotone matrix functions. Math. Scand. 47 (1980), no. 2, 266-274. (Ky Fan) 82e:47021 47A60 (15A45)

asskii, B. I. (with Maksakov, V. V.) Invariant-theoretic (Erlangen) approach to the interrelation of physical theories. (Russian. English summary) History and methodology of the natural sciences, No. XXI (Russian), pp. 15-20, Moskov. Gos. Univ., Moscow, 1979. (Andrzej Trautman) 82b:00015 00A69 (01A99)

h, H. Algorithm 39. Clusterwise linear regression. (German summary) Computing 22 (1979), no. 4, 367-373. (Author's summary) 82f:65003a 65-04 (65V05)

Correction to: "Algorithm 39: clusterwise linear regression" [Computing 22 (1979), no. 4, 367-373]. Computing 26 (1981), no. 3, 275. (Editors) 82f:65003b 65-04

The minisum location problem for the Jaccard metric. (German summary) OR Spektrum 1981, no. 3, 91-94. (Author's summary) 82i:90034 90B05 tschek, K. H. (with Laedke, E. W.) Two-dimensional evolution of packets of short water

waves in systems of finite depth. Phys. Fluids 24 (1981), no. 9, 1619-1624. (Authors' summary) 82;76015 76B15 (35O20)

h Yu, M. Y.; Shukla, P. K.) Alfvén wave excitation of the magnetostatic mode. Phys. Fluids 24 (1981), no. 10, 1799-1801. (Authors' summary) 82j:76101

ake, Theresa C. (1917, no. 10, 1199-1801. (Authors' summary) 82:76101 76X05

ake, Theresa C. (1917, no. 10, 1199-1801. (Authors' summary) 82:76101 76X05

algorithms for the evaluation of the summary of algorithms for the evaluation of the multidimensional DFT. IEEE Trans. Acoust. Speech Spears, William T. (with Jeffcott, Barbara; Jackson, D. M.) An algebraic theory of ence enumeration. J. Combin. Theory Ser. A 28 (1980), no. 2, 191-218. (Dominique 05A15 (05A05) Foata) 82e:05018

ale, Angela (with Di Benedetto, Mario) Measurable two-parameter families of curves in the affine plane. (Italian. French summary) Atti Accad. Sci. Lett. Arti Palermo Parte I (4) 37 (1977/78), 293-312 (1980). (L. A. Santaló) 82j:53114 53C65 (51N10, 60D05) (with Di Benedetto, Mario) On the measure of families of ellipsoids and

hyperboloids. (Italian) Rend. Circ. Mat. Palermo (2) 28 (1979), no. 3, 398-410 (1980). (L. A. Santaló) 82c:53048 53C65 (52A22)

Spector, Mitchell The s-closed unbounded filter and supercompact cardinals. J. Symbolic Logic 46 (1981), no. 1, 31-40. (James Baumgartner) 82h:03056 03E35 (03E60) Spector, Scott J. On monotonicity of the optimal strain path in linear viscoelasticity. Quart. Appl. Math. 38 (1980/81), no. 3, 369-372. (R. R. Huilgol) 82a:73005 73F99 (45B05)

On Gibbs stability in the classical theory of fluid mixtures. (French summary) Z. Angew. Math. Phys. 32 (1981), no. 3, 286-295. (K. S. Harinath) 82i:80003 80A15

ficato, Emilio Variable metric methods for unconstrained minimization. Nonlinear optimization (Proc. Internat. Summer School, Univ. Bergamo, Bergamo, 1979), pp. 31-63, Birkhäuser, Boston, Mass., 1980. (L. Mikolajczyk) 82a:65045 65K10

(with Bertocchi, M.; Cavalli, E.) Computational performance of diagonalized multiplier quasi-Newton methods for nonlinear optimization with equality constraints. Numerical optimisation of dynamic systems, pp. 247–268, North-Holland, Amsterdam, 1980. (Authors' summary) 82:90090 90C30 (65K05)

ped, F. M. (with Hocking, R. R.; Coleman, A. T.) Hypotheses to be tested with unbalanced data. Special issue on analysis of variance with unbalanced data. Comm. Statist. A-Theory Methods 9 (1980), no. 2, 117-129. (Authors' summary) 82f:62042

(with Monlezun, Charles J.) The geometry of estimation and hypothesis testing in the constrained linear model—the full rank case. Special issue on analysis of variance with unbalanced data. Comm. Statist. A—Theory Methods 9 (1980), no. 2, 213–230. (From the 62J05 summary) 82i:62094

(with Searle, S. R.; Henderson, Harold V.) Some computational and model

equivalences in analyses of variance of unequal-subclass-numbers data. Amer. Statist. 35 (1981), no. 1, 16-33. (Authors' summary) 82b:62067 62J10 (with Monlezun, Charles J.) Recovering sums of squares between full and reduced

near models. Comm. Statist. A - Theory Methods 10 (1981), no. 9, 875-882. (Authors' 62J10 summary) 82f:62138

See also Special issue: Analysis of variance with unbalanced data, 82d:62122 Speh, Birgit (with Vogan, David A., Jr.) Reducibility of generalized principal series representations. Acta Math. 145 (1980), no. 3-4, 227-299. (A. U. Klimyk) 82c:22018

(with Segal, I. E.; Jakobsen, Hans Plesner; Ørsted, B.; Paneitz, S. M.) Covariant chronogeometry and extreme distances: elementary particles. Proc. Nat. Acad. Sci U.S.A. 78 (1981), no. 9, part 1, 5261-5265. (Authors' summary) 82i:81150 81G20 (22E70, 83D05, 83F05)

Indecomposable representations of semisimple Lie groups. Trans. Amer. Math. Soc. 22E45 (20G05) 265 (1981), no. 1, 1-34. (Juan Tirao) 82j:22012

hner, J.-C. Les présentations des sous-monoïdes de rang 3 d'un monoïde libre. Semigroups (Proc. Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 116-155, Lecture

Notes in Math., 855, Springer, Berlin, 1981. (Author's introduction) 82i:20068 20M05 Speiser, Andreas ★Die Theorie der Gruppen von endlicher Ordnung. (German) [The theory of groups of finite order] Mit Anwendungen auf algebraische Zahlen und Gleichungen sowie auf die Kristallographie. [With applications to algebraic numbers and equations and also to crystallography] Fifth edition. Lehrbücher und Monographien aus dem Gebiete der Exakten Wissenschaften (LMW). Mathematische Reihe [Textbooks and Monographs in the Exact Sciences. Mathematical Series], 22. Birkhäuser Verlag, oston, Mass., 1980. xi+271 pp. ISBN 3-7643-1151-7 (Editors) 82j:20003 20-02 (20Dxx)

See also Burckhardt, Johann Jakob, 82m:01075

Speiser, David R. L. Euler. The principle of relativity and the foundations of classical mechanics. (Russian) Mechanics and physics in the second half of the 18th century (Russian), pp. 134-140, "Nauka", Moscow, 1978. (H. Treder) 82g:01023

(with Finkelstein, David; Jauch, J. M.) Notes on quaternion quantum mechanics. I. The logico-algebraic approach to quantum mechanics, Vol. II, pp. 367–421, Univ. Western Ontario Series in Philos. Sci., 5, Reidel, Dordrecht, 1979. (S. Gudder) 82i:81011 81B10

★Newton's Principia. CERN 80, 2. CERN—European Organization for Nuclear Research, Geneva, 1980. v+20 pp. (William R. Shea) 82m:01033 01A45 (70-03)

eiser, Robert Vanishing criteria and the Picard group for projective varieties of low codimension. Compositio Math. 42 (1980/81), no. 1, 13-21. (Allen B. Altman) 82g:14045

Extending m morphic functions on a Grassmann variety. Invent. Math. 62 (1981), no. 3, 381-391. (Gerd Faltings) 82g:14047 14M15 (14M07)

Spektor, A. A. Asymptotic behavior of the solutions of some three-dimensional contact problems of slip and adhesion near the division lines of boundary conditions. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Meh. 33 (1980), no. 1, 43-53, 79. (Vladimir Kerchman) 82h:73080 73T05

Spektor, M. D. (with Vasilenko, Ju. G.; Kuznecov, E. N.; L'vov, V. S.; Nesterihin, Ju. E.; Sobolev, V. S.; Timohin, S. A.; Utkin, E. N.; Šmollov, N. F.) Generation of Taylor vortices in a Couette flow. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 2, 58-64, 173. (M. Yanowitch) 82d:76053 76E99

Spektorov, V. L. (with Gurovič, V. C.; Desjatkov, G. A.) Solitonlike solutions in the model of slow laser burning. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 3, 596-599. (From the text) 82f:82047 82A45

Spellucci, P. An approach to backward analysis for linear and nonlinear iterative methods. (German summary) Computing 25 (1980), no. 3, 269-282. (Author's summary)

Spence, A. (with Moore, Gerald) The convergence of approximations to nonlinear equations at simple turning points. Bifurcation problems and their numerical solution (Proc. Workshop, Univ. Dortmund, Dortmund, 1980), pp. 135-146, Internat. Ser. Numer. Math., 54, Birkhäuser, Basel, 1980. (F. Odeh) 82d:65051 65J15

(with Moore, Gerald) A convergence analysis for turning points of nonlinear compact operator equations. Numerical treatment of integral equations (Workshop, Math. Res. Inst., Oberwolfach, 1979), pp. 203-212, Internat. Ser. Numer. Math., 53, Birkhäuser,

Res. Inst., Oberwolfach, 1979), pp. 203-212. Internat. Ser. Numer. Math., 53, Birkhäuser, Basel, 1980. (Authors' summary) 82e:65074 65J15 (47H15, 65R20)

nee, Robert (with Brayton, Robert King) ★Sensitivity and optimization. CAD of Electronic Circuits, 2. Elsevier Scientific Publishing Co., Amsterdam-New York, 1980. xii +368 pp. ISBN 0-444-41929-2 (Takao Ozawa) 82e:94010 94C05 (94C30)

neer, Domina Eberle (with Moon, Parry) ★The photic field. MIT Press, Cambridge, Mass-London, 1981. x+257 pp. ISBN 0-262-13166-8 (I. Kay) 82h:78001 78-01

ncer, Joel H. (with Graham, Ronald L.; Rothschild, Bruce L.) *Ramsey theory. Wiley-Interscience Series in Discrete Mathematics. A Wiley-Interscience Publication. John Wiley & Sons, Inc., New York, 1980. ix + 174 pp. ISBN 0-471-05997-8 (J. E. Graver) 05-02 (04A20, 05C55, 54H20)

Suresums. Combinatorica 1 (1981), no. 2, 203-208. (J. E. Graver) 82k:05007 05A05 (05C55)

Discrete ham sandwich theorems. European J. Combin. 2 (1981), no. 3, 291-298. (David M. Bressoud) 82k:05013 05A17 (05B20)

Coloring n-sets red and blue. J. Combin. Theory Ser. A 30 (1981), no. 1, 112-113. (H. Joseph Straight) 82e:05103 05C65 (05C15)

Balancing unit vectors. J. Combin. Theory Ser. A 30 (1981), no. 3, 349-350.

(Author's summary) 82f:60121 60G50

sencer, Thomas (with Fröhlich, Jürg) Kosterlitz-Thouless transition in the two-dimensional plane rotator and Coulomb gas. Phys. Rev. Lett. 46 (1981), no. 15, 1006-1009. (Authors' summary) 82b:82027 82A25

eranza, F. Problems of coloring and homomorphism of graphs. (Italian) Confer. Sem. Mat. Univ. Bari No. 176 (1980), 5 pp. (B. Zelinka) 82e:05069 05C15

rb, René P. On a mathematical model describing the aggregation of amoebae. Bull. Math. Biol. 41 (1979), no. 4, 555-571. (Author's summary) 82k:92034 92A09 (49G05) Comparison results in a class of reaction-diffusion problems. (German summary) Z. Angew. Math. Phys. 32 (1981), no. 1, 12-21. (J. Smoller) 82f:35009

Snerber, Steven (with Sibuya, Yasutaka) Some new results on power-series solutions of algebraic differential equations. Singular perturbations and asymptotics (Proc. Adv. Sem., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1980), pp. 379–404, Publ. Math. Res. Center Univ. Wisconsin, 45, Academic Press, New York, 1980. (W. Wasow) 82d:34072

(with Adolphson, Alan) Exponential sums on the complement of a hypersurface. Amer. J. Math. 102 (1980), no. 3, 461-487. (Daniel Barsky) 82c:14023

(with Sibuya, Yasutaka) Arithmetic properties of power series solutions of algebraic differential equations. Ann. of Math. (2) 113 (1981), no. 1, 111-157. (Alan Adolphson) 82j:12022 12B40 (12H25, 34A34)

See Zeitler, Herbert, 82j:01075

erner, Emanuel, Jr. Zur expliziten Bestimmung der Norm der selbstadjungierten Minkowski-Räume. Resultate Math. 1 (1978), no. 1, 61-87. (From the introduction) 52A07 (46A15)

Symmetrization and currents. *Mathematika* **26** (1979), *no.* 2, 269–289 (1980). (K. J. Falconer) **82e:52010** 52A40 (28A75, 49F20)

Spherical symmetrization and eigenvalue estimates. Math. Z. 176 (1981), no. 1, 75-86. (J. Hersch) 82e:35062 35P15 (49G05, 52A40)

evak, I. S. (with Kac, A. V.) Reconstruction of the sea-wave spectra from the measurements of moving sensors. Izv. Akad. Nauk SSSR Ser. Fiz. Atmosfer. i Okeana 16 (1980), no. 3, (Russian); translated as Izv. Acad. Sci. USSR Atmospher. Ocean. Phys. 16 (1980), no. 3, 194-200 (1981). (Authors' summary) 82f:76008 76B15 (60G15, 86A05)

evakov, V. N. Absolute summability of orthogonal series by methods (E, q). (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 2, 70-73. (S. Baron) 82j:42013

eziale, Charles G. (with Eringen, A. C.) Nonlocal fluid mechanics description of wall turbulence. Comput. Math. Appl. 7 (1981), no. 1, 27-41. (Authors' summary) 82a:76047

Spiegel, Eugene Schur indices and the Galois group. Proc. Amer. Math. Soc. 81 (1981), no. 2, 189-190. (Author's summary) 82b:20010 20C05 (12A55)

egelhalter, D. J. (with Titterington, D. M.; Murray, G. D.; Murray, L. S.; Skene, A. M.; Habbema, J. D. F.; Gelpke, G. J.) Comparison of discrimination techniques applied to a complex data set of head injured patients. With discussion. J. Roy. Statist. Soc. Ser. A 144 (1981), no. 2, 145-175. (Authors' summary) 82h:62182 (62H30)

Spies, G. O. (with Hellsten, T. A. K.) Necessary magnetohydrodynamic stability criterion for rotating plasmas. Phys. Fluids 23 (1980), no. 11, 2328-2329. (R. K. Gupta) 82a:76095 76X05 (35Q20, 76E25)

ież, Stanisław (with Kadlof, Andrzej) On the fundamental dimension of Cartesian product of metric compacta. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 3-4, 167-171 (1981). (J. Segal) 82g:54054 54F43 (55P55)

igler, Renato A generalization of the theorem of A. C. Dixon. (Italian. English summary)
Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur. 113 (1979), no. 3-4, 263-268. (Wadi Mahfoud) 824:34043 34C10

Errata: "The roots of the equation: $AC_{\nu}(x) + BxC_{\nu}'(x) = 0$ " [Atti Sem. Mat. Fis. Univ. Modena 27 (1978), no. 1, 153-166 (1979); MR 81a:33013]. (Italian) Atti Sem. Mat. Fis. Univ. Modena 28 (1979), no. 1. 248. (Editors) 82a:33010 33A40

The structure of the relations "much better" and "much worse" in fuzzy calculus

(Italian. English summary) Rend. Sem. Mat. Univ. Padova 63 (1980), 27-39. (From the summary and text) 82h:03062 03E72 (92A27)

ne results on the zeros of cylindrical functions and of their derivatives. (Italian English summary) Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 1, 67-85. (M. E. Muldoon) 82g:33020 33A40 (65A05)

Spijker, M. N. (with Hundsdorfer, W. H.) A note on B-stability of Runge-Kutta methods. Numer. Math. 36 (1980/81), no. 3, 319-331. (J. C. Butcher) 82h:65055

Spikes, Paul W. (with Smith, Wanda W.) Some asymptotic properties of the solutions of perturbed nonlinear differential equations. Ann. Mat. Pura Appl. (4) 125 (1980), 117-133. (J. S. W. Wong) 82a:34039 34C10 (34A34)

(with Graef, John R.; Grammatikopoulos, Myron K.) Oscillatory behaviour of differential equations with deviating arguments. C. R. Acad. Bulgare Sci. 33 (1980), no. 11, 1443-1446. (T. Yoshizawa) 82i:34083 34K15

(with Graef, John R.; Grammatikopoulos, Myron K.) Growth and oscillatory behavior of solutions of a differential equation with a deviating argument. Funkcial. Ekpac. 23 (1980), no. 3, 279-287, (Pavol Marušiak) 82h:34096 34K15

(with Graef, John R.; Grammatikopoulos, Myron K.) Asymptotic and oscillatory behavior of superlinear differential equations with deviating arguments. J. Math. Anal.

Appl. 75 (1980), no. 1, 134-148. (R. S. Dahiya) 82c:34084 34K15 (with Graef, John R.) The limit point-limit circle problem for nonlinear equations. Spectral theory of differential operators (Birmingham, Ala., 1981), pp. 207-210, North-Holland Math. Studies, 55, North-Holland, Amsterdam, 1981. (See 82k:34002)

(with Graef, John R.) On the asymptotic behavior of solutions of second order nonlinear delay equations. Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 13 (1981), 1-11. (Ch. G. Philos) 82g:34098 34K15 (34C10)

erman, Seymour (with Singer, Burton) Fitting stochastic models to longitudinal survey data-some examples in the social sciences. (French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 3. With discussion. Bull. Inst. Internat. Statist. 47 (1977), no. 3, 283-300, 315-321. (Authors' summary) 82m:92082 92A20

Špilevskii, E. K. Dynamical recognition of random processes and systems in continuous time. (Russian summary) Problems Control Inform. Theory/Problemy Upravlen. Teor. Inform. 10 (1981), no. 2, 115-127. (Author's summary) 82f:93681 93E12

See also Dynamical recognition of random processes and sequences, 82d:62146

Spiliotis, Jean Sur les intégrales stochastiques de L. C. Young. Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 253-259, Lecture Notes in Math., 721,

Springer, Berlin, 1979. (A. N. Al-Hussaini) 82g:60077 60H05
Sur les travaux de N. V. Krylov en théorie de l'intégrale stochastique. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 388-398, Lecture Notes in Math., 850, Springer, Berlin, 1981. (Halim Doss) 82m:60063 (60H10, 93E20)

Spilker, Jürgen Ramanujan expansions of bounded arithmetic functions. Arch. Math. (Basel) 35 (1980), no. 5, 451-453. (J. Knopfmacher) 82g:10070 10H45 (10K35) (with Hildebrand, Adolf) Charakterisierung der additiven, fast-geraden Funktion (English summary) Manuscripta Math. 32 (1980), no. 3-4, 213-230. (Axel Reich) 10H25 (10H45)

Spindel, P. Yano vector fields and conformally related spaces. Gen. Relativity Gravitation 11 (1979), no. 6, 419–425 (1980). (Author's summary) 82e:83019 83C40 (53B20)

Spindler, Heinz (with Hoppe, Hans Jürgen) Modulräume stabiler 2-Bündel auf

Regelflächen. Math. Ann. 249 (1980), no. 2, 127-140. (Masaki Maruyama) 82c:14018 14F05 (14D20)

Ein Satz über die Einschränkung holomorpher Vektorbündel auf P_n mit $c_1=0$ auf Hyperebenen. [A theorem on the restriction of holomorphic vector bundles on P, with =0 to hyperplanes] J. Reine Angew. Math. 327 (1981), 93-118. (Klaus Hulek) 14F05

Die Modulräume stabiler 3-Bündel auf P_3 mit den Chernklassen c_1 =0, c_3 : Math. Ann. 256 (1981), no. 1, 133-143. (Klaus Hulek) 82g:14023 14F05 (32L10)

Spindt, P. A. (with Tinsley, P. A.; Friar, Monica) Indicator and filter attributes of monetary aggregates. A nit-picking case for disaggregation. Econometric modeling and policy design at the Federal Reserve, Part I. J. Econo metrics 14 (1980), no. 1, 61-91. (See 82c-90003a) 62P20

Spinelli, G. (with Cavelleri, G.) Field-theoretic approach to gravity in the flat space-time.

Riv. Nuovo Cimento (3) 3 (1980), no. 8, 92 pp. (Larry L. Smalley) 82c:83060 83D03 (58D30)

an E. Submonotone subdifferentials of Lipschitz functions. Trans. Amer. parn, Jon Math. Soc. 264 (1981), no. 1, 77-89. (Frank H. Clarke) 82g:26016 49A51, 58C20, 90C25)

nearn, K. (with Hess, James: Kagiwada, Harriet: Kalaba, Robert: Tsokos, Chris P.) Optimal tactics for close support operations. II. Degraded communications with linear time-varying dynamics. Appl. Math. Comput. 5 (1979), no. 3, 199-212. (Josef Kaška) 82d:90147b 90D35 (90A05, 90D45)

(with Kalaba, Robert; Tesfatsion, Leigh) Optimal strategies for C3 problems. V. The incorporation of symmetrical rationality. Inform. Sci. 18 (1979), no. 2, 131-140. (Josef Kaška) 824:90147e 90D35 (90A05, 90D45) Kaška) 82d:90147e

(with Hess, James; Kagiwada, Harriet; Kalaba, Robert; Tsokos, Chris P.) Optimal tactics for close support operations. III. Degraded intelligence and commu Appl. Math. Comput. 6 (1980), no. 3, 217-228. (Josef Kaška) 82d:90147c (90A05, 90D45)

(with Kalaba, Robert; Tesfatsion, Leigh) A new differential equation method for finding the Perron root of a positive matrix. Appl. Math. Comput. 7 (1980), no. 3, 187-193. (Steven M. Serbin) 82c:65023 65F15 (65L05)

(with Hess, James; Kagiwada, Harriet; Kalaba, Robert; Tsokos, Chris P.) Optimal tactics for close support operations. I. Degraded communications. J. Optim. Theory.
Appl. 30 (1980), no. 1, 89-98. (Josef Kaška) 82d-90147a 90D35 (90A05, 90D45)

(with Hess, James; Kagiwada, Harriet; Kalaba, Robert; Tsokos, Chris P.) Optimal tactics for close support operations. IV. Perfect intelligence and communications. J. Optim. Theory Appl. 30 (1980), no. 2, 309-318. (Josef Kaška) 824:901474 (90A05, 90D45)

(with Kagiwada, Harriet; Kalaba, Robert) Optimal tactics for close support operations. VI. Summary of numerical results. J. Optim. Theory Appl. 30 (1980), no. 4, 589-600. (Josef Kaška) 82d:901471 90D35 (90A05, 90D45)

(with Kalaba, Robert; Tesfatsion, Leigh) Variational equations for the eigenvalues and eigenvectors of nonsymmetric matrices. J. Optim. Theory Appl. 33 (1981), no. 1, 1-8. (Authors' summary) 82e:65038 65F15 (15A18)

ri, P. (with Lhote, F.; Lang, B.; Miellou, J. C.) Relaxation methods for parallel in line calculations of the optimum control of large systems. Optimization techniqu. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 324-331, Lecture Notes in Co. iques (Proc.

Information Sci., 22, Springer, Berlin, 1980. (J. Stoer) 82bc9945 49D20 (49D27)
thorskii, L.M. (with Litvinčuk, G. S.) Exact estimates of defect numbers of the
generalized Riemann boundary value problem. (Russian) Dokl. Akad. Nauk SSSR 255
(1980), no. 5, 1042–1046. (A. P. Soldatov) 82bc30051 30E25

Multipliers that do not affect factorizability. (Russian) Mat. Zametki 27 (1980), no. 2, 291–299, 319. (M. Cotlar) 82g42008 42A50 (30E25, 42A85) Factorization of measurable matrix-valued functions and related problems in the theory of systems of singular integral equations and the vector Riemann boundary value problem. I. (Russian) Differencial nye Uravnenija 17 (1981), no. 4, 697–709, 766. (M. M. d) 82j:30067 30E25

(with Vasilevskii, N. L.) On the algebra generated by two projectors. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 8, 10-13, 96. (Authors' summary) 82i: 47063 47D25 (47A50, 47C05)

Spitzer, Frank (with Kesten, Harry) A limit theorem related to a new class of self-similar esses. Z. Wahrsch. Verw. Gebiete 50 (1979), no. 1, 5-25. (J. Theodore Cox) 82±60149 60K35 (60F05)

Infinite systems with locally interacting components. Ann. Probab. 9 (1981), no. 3, 349–364. (M. Roussignol) 82;60186 60K35 (82A05) (with Liggett, Thomas M.) Ergodic theorems for coupled random walks and other systems with locally interacting components. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 4, 443–468. (N. U. Prabhu) 82;60193 60K35 (60I15, 82A05)

Spivak, Avia Efficient allocations under a general transaction technology. Theory 22 (1980), no. 3, 465-476. (M. I. Ledin) 82e:90021 90A12 (90A12) 90A12 (90A14)

rak, Michael *A comprehensive introduction to differential geometry. Vol. I. Second edition. Publish or Perish, Inc., Wilmington, Del., 1979. xiv+668 pp. ISBN 0-914098-83-7 (M. A. Akivis) 82g:53003a 53-01

*A comprehensive introduction to differential geometry. Vol. II. Second edition. erish, Inc., Wilmington, Del., 1979. xv+423 pp. ISBN 0-914098-83-7 (M. A. 53-01 Akivis) 82e:53003b

Akivis) 22g:53003b 53-01

★A comprehensive introduction to differential geometry. Vol. III. Second edition.

Publish or Perish, Inc., Wilmington, Del., 1979. xii + 466 pp. ISBN 0-914098-83-7 (M. A.

Akivis) 82g:53003c 53-01

★A comprehensive introduction to differential geometry. Vol. IV. Second edition.

Publish or Perish, Inc., Wilmington, Del., 1979. viii+561 pp. ISBN 0-914098-83-7 (M. A.

Akivis) 82g-530034 53-01

*A comprehensive introduction to differential geometry. Vol. V. Second edition.

Publish or Perish, Inc., Wilmington, Del., 1979. viii+661 pp. ISBN 0-914098-83-7 (M. A. Akivis) 82g:53003e 53-01

pivak, S. I. Nonuniqueness of the solution of problems of reconstruction of constants of chemical kinetics and constants of chemical equilibria. (Russian) Mathematical problems of chemical thermodynamics (Russian), pp. 63-72, 119, "Nauka" Sibirsk. Otdel.,

of chemical thermodynamics (Russian), pp. 63-72, 119, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Frederick A. Howes) 82a:8003 80A30 (35K55, 92A09)

Špiz, G. B. Classification of irreducible locally transitive linear Lie groups. (Russian) Geometric methods in problems of analysis and algebra (Russian), pp. 152-160, Jaroslav. Gos. Univ., Yaroslav!, 1978. (From the text) 82j:22007 22E10 (20G20, 32M05)

Spizzichino, Fabio (with Capuzzo Dolcetta, Italo; Lorenzani, Massimo) A degenerate complementarity system and applications to the optimal stopping of Markov chains. (Italian summary) Boll. Un. Mat. Ital. B (5) 17 (1980), no. 2, 692-703. (Jürgen Groh) 60G40 (60J10, 90C33)

Spjøtvoll, Emil A simple technique for proving unbiasedness of tests and confidence regions. Mathematical statistics, pp. 303-308, Banach Center Publ., 6, PWN, Warsaw, 1980. (Nariaki Sugiura) 82f:62101 62H15

dianti, Maria (with Manara, Carlo Felice) R. G. Boscovich and the precursors of V. Poncelet. (Italian. English summary) Proceedings of the Brescia Mathematical Seminar, Vol. 3 (Italian), pp. 142–180, Univ. Cattolica Sacro Cuore, Milan, 1979. (Jean-Claude Pont) 82c-01024 01A50

nn, Herbert Approach to equilibrium for completely positive dynamical semigroups of N-level systems. Rep. Math. Phys. 10 (1976), no. 2, 189-194. (E. Størmer) 82h:82024 82A15 (47D05)

(with Frigerio, Alberto) Stationary states of quantum dynamical semigroups and applications. Mathematical problems in the quantum theory of irreversible processes (Naples, 1978), pp. 115–135, Lab. Cibernet. CNR, Naples, 1978. (See 82j:82003) 82A15 (46L60)

hm, Wolfgang Stochastic independence, causal independence, and shieldability. J Philos. Logic 9 (1980), no. 1, 73-99. (P. Suppes) 82a:60007 60A05 60A05 60A05 (00A06, 03B48)

okoinov, A. N. Numerical investigation of Kolesov's system of equations simulating the "predator-prey" problem: on the problem of biological suppression. (Russian. Lithuanian and English summaries) Differencial'nye Uravnenija i Primenen.-Trudy Sem. Processy Optimal. Upravlenija I Sekcija No. 29 (1981), 124-129, 148. (Author's summary) 82h:92048 92A17

ng, Mark W. (with Tarn, T. J.) On the spectral controllability of delay-differential ations. IEEE Trans. Automat. Control 26 (1981), no. 2, 527-528. (Authors' summary) 82e:93013 93B05

Sacch-Spörl, B. See Bartsch-Spörl, B. Seither, V. A. (with Skarpness, B.) A modified Fritz John optimality criterion. J. Optim. Theory Appl. 31 (1980), no. 1, 113–115. (Joachim Hirche) 82e-90094 90:30

ague, Alan P. Pasch's axiom and projective spaces. Discrete Math. 33 (1981), no. 1, 79–87. (M. J. Kallaher) 82h:51019 51E20 (05B25)

Incidence structures whose planes are nets. European J. Com 193-204. (P. B. Kirkpatrick) 82m:51002 51A05 (05B25, 51A25)

skels, Jürgen (with Glashoff, Klaus) An application of Glicksberg's theorem to set-valued integral equations arising in the theory of thermostats. SIAM J. Math. An 12 (1981), no. 3, 477–486. (M. Rama Mohana Rao) 82f:45008 45J05 (80A20) (with Kreth, Horst) On the uniqueness of conduction in relaxation-case

semiconductors. (German summary) Z. Angew. Math. Phys. 32 (1981), no. 3, 344–346. (From the introduction) 821:82040 82A55 (34A34)

weer, H. A method for the computation of bounds with convergence of arbitrary order for ordinary linear boundary value problems. J. Math. Anal. Appl. 81 (1981), no. 1, 99-133. (V. Pereyra) 82j:65057 65L10 (34B05)

n integral in constructive mathematics. Proc. Amer. Math. Soc. The Rieman ing, David The Remann Integral in Constitutive Institutional Sec. Amer. Math. Soc. 83 (1981), no. 4, 839–840. (Fred Richman) 82x-83097 03765 (26A42) inger, T. A. Geometric questions arising in the study of unipotent elements. The Santa

Cruz Conference on Finite Groups (Unio. California, Santa Cruz, Calif., 1979),
pp. 255-264, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R. I., 1980. (I.
Dolgachev) 82f:14049 14L40 (17B05, 17B35, 20G15)

Invariant theory, old and new. (Dutch) Nederl. Ake rk. 90 (1981), no. 4, 28-30. (Editors) 82g:14016 14D25 (15A72)

ingsteel, Frederic Complexity of hypothesis formation problems. Internat. J. Man-Mach. Stud. 15 (1981), no. 3, 319-332. (Author's summary) 82mc68091 (03B48, 03D15)

onk, Jaap (with Nijkamp, Peter) Interactive multidimensional programming models for locational decisions. European J. Oper. Res. 6 (1981), no. 2, 220–223. (Authors' summary) 82h:90038 90B05 (90C31) See also Nijkamp, Peter, 82c:90090

rössig, Wolfgang Lösungsdarstellungen einer Klasse spezieller Operatorgleichungen.

Math. Nachr. 90 (1979), 135-147. (R. Kress) 82a:35020 35C15 (35J30)

Zur Lösung der Maxwell-Gleichungen in inhomogenen Medien. No. 15 (1980), 71-76 (1981). (Author's summary) 82g:78007 78A25

Construction of local solutions for Maxwell equations. Nonlinear analysis (Berlin,

Akademie-Verlag, Berlin, 1981. (See 82k:49004) 35Q20 (78A25)

Sproston, J. P. Derivations on some (possibly nonseparable) C*-algebras. Glasgow Math. J. 22 (1981), no. 1, 43-56. (Christopher Lance) 82k:46080 46L05

Sprott, D. A. Maximum likelihood in small samples: estimation in the presence of nuisance parameters. Biometrika 67 (1980), no. 3, 515-523. (G. K. Robinson) 82e:62052 62F11

roull, Robert F. See VLSI systems and computations, 82::68006
ruck, Joel Regularity in elliptic free boundary problems. Proceedings of the International
Meeting on Recent Methods in Nonlinear Analysis (Rome, 1978), pp. 73–81, Pitagora, (with Gidas, B.) A priori bounds for positive solutions of nonlinear elliptic

equations. Comm. Partial Differential Equations 6 (1981), no. 8, 883–901. (Philip W. Schaefer) 82h:35033 35165 (53C45, 81E10)

oli, Renzo Randomly balanced binary trees. Calcolo 17 (1980), no. 2, 99-117 (1981). (Author's summary) 82j:68068 68E10 (05C05)

On the allocation of binary trees to secondary storage. BIT 21 (1981), no. 3, 305–316. (Author's summary) 82mc68113 68E05 (90B05)

aill, Carl Optimal designs for second order processes with general linear means. Ann. Statist. 8 (1980), no. 3, 652-663. (Andrej Pázman) 82c:62102 62K05

Some exact iterative procedures for finding the puncture point of a convex set. J. Optim. Theory Appl. 31 (1980), no. 1, 41-48. (D. Klatte) 82b:90092 90C25 (52A05) er, Daniel F. (with Easley, David) Stochastic equilibrium and optimality with rolling

plans. Internat. Econom. Rev. 22 (1981), no. 1, 79-103. (From the introduction)

82:50097 90C39 (90A99)

nurr, Barrie D. On estimating the parameters in mixtures of circular normal distributions.

J. Internat. Assoc. Math. Geol. 13 (1981), no. 2, 163–173. (Author's summary) 82:62063

Spurrier, John D. (with Hewett, John E.) Some two-stage k-sample tests. J. Amer. Statist. Assoc. 74 (1979), no. 366, part 1, 398-404. (J. V. Deshpande) 82e:62064 62G10 (with Locke, Charles) On the distribution of a new measure of heaviness of tails. nm. Statist. A-Theory Methods 10 (1981), no. 19, 1967-1980. (Authors' summary) 82i:62032 62E20

Spyrou, N. The far-field of a gravitating source in relation to its interior. Gen. Relativity Gravitation 13 (1981), no. 6, 551-559. (George Contopoulos) 82k:83011 83C25 (with Caporali, A.) Post-Newtonian spin and angular momentum of bounded systems. Gen. Relativity Gravitation 13 (1981), no. 7, 689-701. (George Contopoulos) 83C25

Perfect fluids as possible sources of the Kerr metric. Gen. Relativity Gravitation 13 (1981), no. 8, 771-776. (Author's summary) 82m:83030 83C55 (83C25)

Sraffa, P. See Abraham-Frois, Gilbert; et al., 82g:90018

ner, E. G. Geometric forms of non-Euclidean and quasi-non-Euclidean spaces, connected with unitary representations of simple and quasisimple Lie groups. (Russian)

Geometry of imbedded manifolds (Russian), pp. 101-109, Moskov. Gos. Ped. Inst.,

Moscow, 1979. (V. N. Berestovskii) 82g:53055 53C30 (22E46)

mčenko, B. L. (with Petrenko, A. I.; Tetel'baum, A. Ja.) Algebraic formulation of circuit design problems. Kibernetika (Kiev) 1981, no. 2, ii, 49-55, 150 (Russian. English mary); translated as Cybernetics 17 (1981), no. 2, 210-219. (From the conclusion) 94C05

mko, T. S. Normal subgroups in the one-dimensional group of formally analytic transformations over a local ring. (Russian) Ukrain. Mat. Z. 31 (1979), no. 2, 172–177,

222. (M. Bašmakov) 82c:14036 14L05 (20B27)
mo, Jozef Holonomy conditions. (Slovak) Sixth Scientific Conference of the College of Transport Engineering (College Transport Engrg., Žilina, 1979) (Slovak), pp. 79–83, College of Transport Engrg., Žilina, 1979. (I. Kolář) 82e:58007 58A20

židinov, A. Uniqueness of the solution of an integral Volterra equation of the first kind in a class of continuous functions. (Russian) Izv. Akad. Nauk Kirgiz. SSR 1980, no. 6, 3-7, 82. (M. A. Atahodžaev) 82d:45003 45D05

5-1, 02. (M. A. Atanouzaev) Salassous 45103 brny, Marian Constructible sets and analytic games. (Polish) Wiadom. Mat. (2) 22, no. 1, 30-34 (1979). (Peter G. Himman) 82ac03050 03E35 (03E50) (with Krajewski, Stanisław) The life and activities of Andrzej Mostowski. (Polish)

m. Mat. (2) 22, no. 1, 53-64 (1979). (Stanisław J. Surma) 82h:01055

Srednicki, Mark (with Susskind, Leonard) Colored monopoles on the lattice. Nuclear Phys. B 179 (1981), no. 2, 239–252. (Authors' summary) 82a:81052 81G20 (81E99)

Sreiber, I. R. (with Gasenko, V. G.; Nakorjakov, V. E.) Enhances ent of a shock wave in a liquid with gas bubbles. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 6, 1330–1332. (From the text) 82b:76039 76L05

er, Ju. A. Majority-structure representation of voting-type systems. Kibernetika (Kiev) 1979, no. 4, 57-61 (Russian); translated as Cybernetics 15 (1979), no. 4, 497-502 (1980). (Dennis J. Packard) 82h:90013 90A08

Sridhar, B. (with Teneketzis, D.; Javid, H.) Operations scheduling by Markov chains with strong and weak interactions. Electric power problems: the mathematical challenge (Proc. Conf., Seattle, Wash., 1980), pp. 426-436, SIAM, Philadelphia, Pa., 1980. (Authors' summary) 824:90066 90B35 (93F20) nary) 82d:90066

Sridhar, Thirumalai (with Hayes, John P.) Design of easily testable bit-sliced systems. IEEE Trans. Circuits and Systems 28 (1981), no. 11, 1046-1058. (Authors' summary)

82m:94072 94C30 (68B20) dharan, M. R. (with Shukla, S. K.; Mohanty, S. P.) Stability of strongly regular graphs. Bull. Austral. Math. Soc. 23 (1981), no. 1, 139–142. (J. J. Seidel) 82m:05053 05C25

Sridharan, R. (with Raman, Parimala) Quadratic forms over rings of dimension 1.
Comment. Math. Helv. 55 (1980), no. 4, 634-644. (Manuel Ojanguren) 82i:13012 13C10 (10C05, 15A63)

Srihari, Sargur N. (with White, Lee J.; Snabb, Thomas) Identity conditions for nearest-neighbor and potential-function classifiers. *Inform. Sci.* 19 (1979), no. 1, 21-31. (Authors' summary) 82j:68092 68G10 (62G99)

nani, P. K. (with Rudraiah, N.) Finite-amplitude cellular convection in a fluid-saturated porous layer. Proc. Roy. Soc. London Ser. A 373 (1980), no. 1753, 199-222. (E. Ungureanu-David) 82f:76037 76S05 (76R10, 80A20)

Srimani, Pradip K. (with Sinha, Bhabani P.; Choudhury, Arun K.) A new method to find comatic partition of a symmetric graph. Internat. J. Systems Sci. 9 (1978),

no. 12, 1425-1437. (Authors' summary) 82;68069 68E10 (05C15)
Srinivasa, B. R. (with Nagaraj, Muppinaiya) Geodesic in a de Sitter space-time. Vignana Bharathi 6 (1980), no. 1, 37-44. (Authors' summary) 82g:83002 83C10 (53B50,

Srinivasan, Bhama Characters of finite groups of Lie type. II. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 333–339, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (Editors) 82m:20044 20G05 (20C15, 20G40)

The blocks of the general linear group GL(n,q). Algebra, Carbondale 1980 (Proc. Conf., Southern Illinois Univ., Carbondale, Ill., 1980), pp. 152–160, Lecture Notes in Math., 848, Springer, Berlin, 1981. (Karin Erdmann) 82g:20071 20G05 (20C30)

Srinivasan, R. (with Arkles, L.) On the sequential selection of the better of two binomial alations. Sankhyā Ser. B 41 (1979), no. 1-2, 15-30. (Authors' summary) 82f:62048 62F07 (62L05)

Srinivasan, S. K. (with Nigam, S. D.) Professor Bhoj Raj Seth (1907-1979). J. Math. Phys. Sci. 13 (1979), no. 6, i-ii. (Editors) 82f:01145 01A70 (with Udayabaskaran, S.) Stochastic perturbation of a stable deterministic plasma

system. Phys. Lett. A 80 (1980), no. 5-6, 387-389. (Authors' summary) 82c:82082

(with Sampath, G.) On a cumulative process resulting from interacting renewal processes and its applications. J. Math. Phys. Sci. 15 (1981), no. 1, 39-46. (Torgny Lindvall) 82m:60109 60K05 (60K35)

shadri Some remarks on $\alpha p + \beta q$. Proceedings of the Conference on Number Theory (Mysore, 1979), pp. 126-130, Matscience Rep., 101, Inst. Math. Sci., Madras, 1980. (Author's summary) 82e:10085 10115

nian Groups in which every proper subgroup is cyclic. Indian J. Math.

inivasan, Sundarajan (with Sastry, Sundaram M. A.; Viswanath, K.) Orthogonality in Banach space and approximation theory. J. Madurai Kamaraj Univ. 8 (1979), no. 2, 93-97. (Geetha S. Rao) 82a:41035 41A65 (46B20)

Srinivasan, V. K. Corrigenda: "On some Gel'fand-Mazur-like theorems in Banach algebras" [Bull. Austral. Math. Soc. 20 (1979), no. 2, 211-215; MR 81e:46029a]; "On some Gel'fand-Mazur-like theorems in p-normed algebras" [ibid. 21 (1980), no. 2, 211-221; MR 81f:46058] with H. Shaing. Bull. Austral. Math. Soc. 23 (1981), no. 3, 479-480. (Editors) 82h:46067 46H20 (46J35, 46P05) See also Heinze, Joachim, 82a:46045

Šrira, V. I. Nonlinear refraction of solitons. Ž. Eksper. Teoret. Fiz. 79 (1980), no. 1, 87-98 (Russian); translated as Soviet Phys. JETP **52** (1980), no. 1, 44-49 (1981). (Author's summary) **82**;7**6022** 76B25 (35Q20, 76N15)

On the propagation of a three-dimensional packet of weakly nonlinear internal gravity waves. (French and German summaries) Internat. J. Non-Linear Mech. 16 (1981), no. 2, 129-138. (Author's summary) 82f:76009 76B15

Srivastav, R. P. (with Jen, Erica) Cubic splines and approximate solution of singular integral equations. Transactions of the Twenty-Sixth Conference of Army Mathematicians (Hanover, N.H., 1980), pp. 167-185, ARO Rep. 81, 1, U. S. Army Res. Office, Research Triangle Park, N.C., 1981. (Authors' summary) 82a:45021 45L05 (41A15, 45E05,

(with Jen, Erica) Cubic splines and approximate solution of singular integral equations. Math. Comp. 37 (1981), no. 156, 417–423. (Authors' summary) 82i:65082 65R20 (41A15, 45E05)

On the numerical solution of singular integral equations using Gauss-Jacobi formulae. Transactions of the Twenty-seventh Conference of Army Mathematicians (West Point, N.Y., 1981), pp. 239–246, ARO Rep. 82, 1, U. S. Army Res. Office, Research Triangle Park, N.C., 1982. (See 82k:00010) 65R20

Srivastava, A. K. (with Singh, Padam) Sampling schemes providing unbiased regression estimators. Biometrika 67 (1980), no. 1, 205-209. (Jan Lanke) 82a:62027 62D05

(with Singh, D.) A sampling procedure with inclusion probabilities proportional to size. Biometrika 68 (1981), no. 3, 732–734. (Authors' summary) 82k:62027 62D05 Srivastava, A. N. On a new class of generalized Hermite polynomials. III. Acta Cienc. Indica 6 (1980), no. 4, 229-236. (Author's summary) 82k:33023 33A65

(with Singh, Surya Narain) On orthogonal polynomials related to the ultraspherical polynomials. Indian J. Pure Appl. Math. 11 (1980), no. 7, 870-873. (B. R. Bhonsle) 33A65

Srivastava, B. L. (with Juneja, O. P.) On a Banach space of a class of Dirichlet series.

Indian J. Pure Appl. Math. 12 (1981), no. 4, 521-529. (J. A. Siddiqi) 821:46039 46E15

Srivastava, G. S. On the zeros of successive derivatives of an entire function. Demo Math. 12 (1979), no. 1, 255-259. (Editors) 82m:30028 30D20 (30C15)

On the proximate order and proximate type of a subharmonic function. India Math. 21 (1979), no. 2, 73-79. (O. P. Juneja) 82h:30025 30D15 (31A05)

(with Vaish, Satendra Kumar) On the mean values of an entire function and its derivatives. Tamkang J. Math. 10 (1979), no. 2, 189-195. (P. K. Jain) 82h:31008 31B10 (30D15)

Srivastava, H. M. See Srivastava, Hari M.
Srivastava, H. S. P. Some results involving generalized function of two variables and Gegenbauer polynomials. Bul. Ştiinţ. Tehn. Inst. Politehn. "Traian Vuia" Timişoara 23(37) (1978), no. 1, 5-8 (1979). (H. M. Srivastava) 82b:33009 33A35 (33A65)

Integration with respect to parameters of products involving generalized Legendre functions and a generalized function of two variables. J. Natur. Sci. Math. 18 (1978), no. 1, 9-22. (P. Anandani) 82g:33018 33A35 (33A45)

Srivastava, Hari M. Charles Fox: a mathematician I have known. Jñanabha 7 (1977), 5-12 01A70 (1 plate). (Editors) 82f:01146

Certain theorems on bilateral generating functions. Indian J. Math. 20 (1978), no. 1, 9–13. (M. E. Cohen) 82h:33019 33A99 (05A15)

Charles Fox, 1897-1977. Proc. Roy. Soc. Canada (4) 16 (1978), 67-70 (1 plate). (Editors) 82f:01147 01A70

Certain dual series equations involving Jacobi polynomials. (Italian su Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 6, 395-401 (1980). (N. K. Thakare) 82j:45009 45F10 (33A65, 42C10)

Some generating functions for Laguerre and Bessel polynomial Acad. Sinica 8 (1980), no. 4, 571-579. (R. F. A. Abiodun) 82g:33033 33A65 (33A45)

(with Pathan, M. A.) Some bilateral generating functions for extended Jacobi nent. Math. Univ. St. Paul. 29 (1980), no. 2, 105-114. (Ram polynomials. II. Com Kishore Saxena) 82g:33009 33A30 (33A65)

A note on the Konhauser sets of biorthogonal polynomials suggested by the Laguerre polynomials. Pacific J. Math. 90 (1980), no. 1, 197-200. (B. R. Bhonsle) \$2g:33034

(with Srivastava, Rekha) New generating functions involving several complex variables. Rend. Circ. Mat. Palermo (2) 29 (1980), no. 1, 23-41. (H. L. Manocha)

82i:33024 33A99 Some generalizations of Carlson's identity. (Italian summary) Boll. Un. Mat. Ital. A

(5) 18 (1981), no. 1, 138–143. (L. J. Slater) 82c:33007 33A30 (with Goyal, S. P.; Agrawal, Ram Kishor) Some multiple integral relations for the H-function of several variables. Bull. Inst. Math. Acad. Sinica 9 (1981), no. 2, 261-277. (L. J. Slater) 82h:33006 33A30

(with Raina, R. K.) New generating functions for certain polynomial systems sociated with the H-functions. Hokkaido Math. J. 10 (1981), no. 1, 34-45. (C. L. Koul) 82b:33012 33A35 (42C15)

Some polynomial expansions for functions of several variables. IMA J. Appl. Math. 27 (1981), no. 3, 299–306. (Mourad E. H. Ismail) 82m:33002 33A30 (C For the learned referee of Dr. C. L. Parihar's paper: "Double series of 33A30 (05A19)

hypergeometric type which are infinite in both directions" [Math. Ed. (Siwan) 12 (1978), no. 1, A11-A17; MR 58 #6383]. Math. Ed. (Siwan) 15 (1981), no. 2, A43-A44.

(Editors) 82j:33008 33A30 Comics) 642-5000 57-55 Some series of Fox's H-functions. Nederl. Akad. Wetensch. Indag. Math. 43 (1981), no. 1, 129–138. (C. L. Koul) 824:33013 33A35

Srivastava, J. B. (with Shah, Sudesh K.) Semilocal and semiregular group rings. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 3, 347-352. (Uno Kaljulaid) 82f:16024 16A51 (16A35)

Srivastava, J. N. (with Rasmuson, D. M.) Some good new confounded designs with two or three factors. Essays in probability and statistics, pp. 95-103, Shinko Tsusho, Tokyo, 1976. (From the introduction) 82b:62095 62K15

Some basic results on search linear models with nuisance parameters. Mathem statistics, pp. 309-314, Banach Center Publ., 6, PWN, Warsaw, 1980. (K. R. Shah) 82m:62157 62J05

Srivastava, J. P. (with Mishra, Ratan Shanker) Connections in the tangent bundle T(M"). Nepali Math. Sci. Rep. 4 (1979), no. 2, 55-61. (S. S. Singh) 82e:53049

Srivastava, K. K. (with Singh, Punyatma; Verma, R. L.) Thermodynamic method to two-dimensional stagnation flow and heat transfer. Czechoslovak J. Phys. B 31 (1981), no. 1, 32-40. (B. Vujanović) 82e:76024 76D10 (80A20)

Srivastava, K. N. (with Palaiya, R. M.; Choudhary, Arati) Thermal stresses in bonded dissimilar elastic half-spaces containing a penny-shaped crack at the interface. Indian J. Math. 20 (1978), no. 2, 173–186. (Authors' summary) 82h:73058 73U05 (73M05)

Srivastava, M. S. (with Khatri, C. G.) Asymptotic expansions of the nonnull distributions of the likelihood ratio criteria for covariance matrices. II. Metron 34 (1976), no. 1-2, 55-71 (1978). (Authors' summary) 82i:62079 62H10 (62E20)

(with Carter, E. M.) Asymptotic distribution of latent roots and application Multivariate statistical analysis (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1979), pp. 219-236, North-Holland, Amsterdam, 1980. (Yasuko Chikuse) 82c:62077 62H10 (62E20)

(with Carter, E. M.) Asymptotic distribution of the latent roots of the noncentral Wishart distribution and the power of the likelihood ratio test for nonadditivity. (French summary) Canad. J. Statist. 8 (1980), no. 1, 119-134. (Yasuko Chikuse) 82c:62673

Effect of equicorrelation in detecting a spurious observation. (French summary Canad. J. Statist. 8 (1980), no. 2, 249-251 (1981). (Author's summary) 82g:62129

Srivastava, P. D. (with Nanda, Sudarsan; Nayak, K. C.) Certain subspaces of a Fréchet space. Indian J. Pure Appl. Math. 12 (1981), no. 8, 971-976. (V. K. Srinivasan) 82i:46040 46E10 (30H05)

Tastava, Pramila (with Prakash, Anand) A note on almost convergence. Indian J. Math. 18 (1976), no. 3, 169–170. (From the text) 82h:54011 54A20 (with Prakash, Anand) Some results on weak continuity, almost continuity and C-continuity. Indian J. Math. 19 (1977), no. 1, 47–52. (Hughes B. Hoyle, III) 82g:54019

- (with Azad, K. K.) On lattice invariant topological properties. Indian J. Math. 20 78), no. 2, 123-127, (O. T. Alas) 82b:54030 54C99 (1978), no. 2, 123-127. (O. T. Alas) 82b:54030
- (with Azad, K. K.) Lattice equivalent topological spaces and covers. Indian J. Math. 21 (1979), no. 1, 17-23 (Å. Csaszár) 82h-54006 54A99 (06B99)
 (with Gupta, R. L.) Fuzzy symmetric generalized proximity spaces. J. Math. Anal. Appl. 82 (1981), no. 2, 491-502. (Ying Ming Liu) 82h-54008 54A40 (54E05)
- nastava, R. C. (with Verma, B. G.) On singular surfaces of order one in magnetogasdynamics. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 6, 452–460 (1978). (Authors' summary) 82e:76077 76W05 (76Q05)
- rith Verma, B. G.) Behaviour of sonic waves in dissociating gases in the presence of netic field. Defence Sci. J. 30 (1980), no. 3, 137–142. (Authors' summary) (with Verma, B. G.) Behaviour of sonic way 76W05 (76K05)
- astava, R. C. Two characterizations of the geometric distribution by record values. Sankhyā Ser. B 40 (1978/79), no. 3-4, 276-278. (S. Talwalker) 82j:62008 62E10 (with Foutz, Robert V.) On the asymptotic normality of the maximum likelihood or. South African Statist. J. 15 (1981), no. 1, 73-83. (Authors' summa 825-62054 62F12
- Srivastava, R. S. L. Summability of Fourier series by a class of regular methods. Nat. Acad. Sci. Lett. 2 (1979), no. 9, 337-339. (H. P. Dikshit) 82j:42007 42A24 (40C05)
- ★Engineering mathematics. Vol. 1. Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 1980. xiv+511 pp. ISBN 0-07-096621-4 (Ram Krishan Sharma) 82h:00004a
- ★Engineering mathematics. Vol. 2. Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 1980. xi+314 pp. ISBN 0-07-096625-7 (Ram Krishan Sharma) 82h:00004b
- uvastava, Rajiv Kumar On a class of entire Dirichlet series. Ganita 30 (1979), no. 1-2, 115-119. (P. K. Jain) 82j:30076 30H05 (30B50) ivastava, Rekha On a multiple integral involving the H-function of several variables. Indian J. Math. 19 (1977), no. 3, 157-162. (Ram Kishore Saxena) 82h:33007 33A30 On the generalized polynomials $A_n(x)$. Indian J. Math. 20 (1978), no. 2, 155–159. (R. C. Varma) 82c:33022 33A70
 - (with Srivastava, Hari M.) New generating functions involving several complex rariables. Rend. Circ. Mat. Palermo (2) 29 (1980), no. 1, 23-41. (H. L. Manocha) 82i-33024 33A99
 - Definite integrals associated with the H-function of several variables. Com Math. Univ. St. Paul. 30 (1981), no. 2, 125-129. (Harold Exton) 82k:33016 (44A15)
- Srivastava, S. K. (with Srivastava, Sudha) Few aspects on thermodynamics of chemical relaxation process. Proc. Indian Nat. Sci. Acad. Part A 44 (1978), no. 4, 252–265.
 (Authors' summary) 82d-92010 92A09 (80A30)
 Srivastava, S. R. (with Ali, M. A.) On certain approximations of power of a test procedure using two preliminary tests in a mixed model. Bull. Math. Statist. 19 (1980/81), no. 3-4, 1980/81, no. 3-4.
- 103-113. (Authors' summary) 82m:62140 62J05 (62F03)
- Srivastava, Shashi Mohan A representation theorem for closed valued multifunctions. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 7-8, 511-514 (1980). (Michel Valadier) 82a:54027 54C60 (28B20)
- (with Raha, Asit Baran) Spaces for which Dini's theorem holds. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 29 (1981), no. 5-6, 275-278. (R. M. Stephenson, Jr.) 82m-54009 54C40 (54C30) 54C40 (54C30)
- (with Mauldin, R. Daniel) Paramétrisations des ensembles coanalytiques à coupes relativement non maigres. C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 16, 743-745. (Authors' summary) 82e:54044 54H05 (54C65)
 Selection and representation theorems for σ -compact valued multifunctions. Proc.
- Amer. Math. Soc. 83 (1981), no. 4, 775-780. (J. Bourgain) 82m:04002 04A15 (04A05, 54C65, 54H05)
- tava, Sudha (with Srivastava, S. K.) Few aspects on thermodynamics of chemical relaxation process. Proc. Indian Nat. Sci. Acad. Part A 44 (1978), no. 4, 252-265. (Authors' summary) 824:92010 92A09 (80A30)
- ivastava, Surendra K. A class of estimators using auxiliary information in sample surveys. (French summary) Canad. J. Statist. 8 (1980), no. 2, 253-254 (1981). (Author' summary) 82e:62026 62D05
- (with Jhajj, Harbans Singh) A class of estimators of the population mean in survey mation. Biometrika 68 (1981), no. 1, 341-343. (Kenneth R. pling using auxiliary info 62D05 W. Brewer) 82g:62025
- ivastava, U. N. (with Ramanujam, N.) Singular perturbation problems for systems of partial differential equations of elliptic type. J. Math. Anal. Appl. 71 (1979), no. 1, 18–35. (Frederick A. Howes) 82a:35044 35J65 (35B25) (with Ramanujam, N.) Singular perturbation problems for systems of partial
- differential equations of parabolic type. Funkcial. Ekvac. 23 (1980), no. 3, 245-258. (L.
- E. Bobisado 82j:39013 35B25 (35K40)

 Srivastava, Virender Kumar (with Dwivedi, T. D.) Optimality of least squares in the seemingly unrelated regression equation model. J. Econometrics 7 (1978), no. 3, 391-395.
 - (Authors' summary) 82ks62126 62105 (with Dwivedi, T. D.) Estimation of seemingly unrelated regression equations: a brief survey. J. Econometrics 10 (1979), no. 1, 15-32. (Makoto Tawada) 82b:62145 62P20
 - (with Agnihotri, B. S.; Dwivedi, T. D.) Dominance of double k-class estimators in multaneous equations. Ann. Inst. Statist. Math. 32 (1980), no. 3, 387-392. (Hilman Drygas) 82j:62079 62P20
 - (with Ullah, Aman) On Lindley-like mean correction in the improved estimation of linear regression models. Econom. Lett. 6 (1980), no. 1, 29-35. (H. Toutenburg)
 - (with Dwivedi, T. D.; Bhatnagar, S.) Estimation of the square of mean in normal population. (French and Italian summaries) Statistica (Bologna) 40 (1980), no. 4, 455-466. (Authors' introduction) 82e:62047 62F10
- taramana, T. (with Tracy, D. S.) Transforming the study variate after PPS ding. Metron 37 (1979), no. 1-2, 175-181 (1980). (Authors' summary) 82m:62022
- On use of auxiliary information in sampling. Vignana Bharathi 5 (1979), no. 1-2, 46. (Author's summary) 82h:62021 62D05 44-46. (Author's summary) 82h:62021

- (with Narasimha Prasad, N. G.) A modification to the Horvitz-Thompson estimator der the Midzuno sampling scheme. Biometrika 67 (1980), no. 3, 709-711. (David illhouse) 82x:62026 62D05 Bellhouse) 82a:62026
- On the solution of optimal control problems with phase inequality-constraints Sročko, V. A. on the right end. (Russian) Upravljaemye Sistemy No. 19 (1979), 65-77, 80. (Author's introduction) 82i:49025 49D05
- Srubščik, L. S. Precritical equilibrium of a thin shallow shell of revolution and its stability. Prikl. Mat. Meh. 44 (1980), no. 2, 327–337 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 2, 229–235 (1981). (Author's summary) 82k73046 73L99 (49G10, 53C45 58F07 73H05)
- Staar, Jan A study of MBH-type realization algorithms. Automatica-J. IFAC 17 (1981),
 - no. 3, 523-532. (Author's summary) 82k-93019 93B15
 (with Vandewalle, Joos) How to obtain a simple inverse Z-transform of a rational function of z. Proc. IEE-D 128 (1981), no. 6, 275-278. (Authors' summary) 82m:65118
- Stabell, R. (with Knutsen, H.) On the possibility of general relativistic oscillations. Ann. Inst. H. Poincaré Sect. A (N.S.) 31 (1979), no. 4, 339-353 (1980). (Authors' summary) 83C55
- rski, Marek (with Sikora, Jan) Some problems of numerical analysis of
- electromagnetic field distribution in an electric motor with composite motion. (Polish. English, French, German and Russian summaries) Rozprawy Elektrotech. 26 (1980), no. 2, 307-320. (Authors' summary) 82b:78030 78A55 (65N30)
- An algorithm for the solution of very large banded unsymmetric linear equation systems. Internat. J. Numer. Methods Engrg. 17 (1981), no. 7, 1103-1117. (Author's summary) 82f:65004 65-04 (65F05)
- Stacey, P. J. Local and global splittings in the state space of a JB-algebra. *Math. Ann.* 256 (1981), no. 4, 497–507. (Horst Behncke) 82j:46078 46L30 (17C65)
- The structure of type I JBW-algebras. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 3, 477-482. (Horst Behncke) 82j:46089 46L99 (17C65)
- Stacey, Richard Techniques for naturality isolation. I. With a bosonic t channel. J. Math. Phys. 22 (1981), no. 2, 430-434. (Author's summary) 82d:81142a 81F20
- Techniques for naturality isolation. II. With a fermionic t channel. J. Math. Phys. 22
- (1981), no. 2, 435-441. (Author's summary) 82d:81142b 81F20

 Stachel, John Einstein and the rigidly rotating disk. General relativity and gravitation, Vol. 1, pp. 1-15, Plenum, New York, 1980. (Author's introduction) 82f:83007 83A05
- Stachó, László L. On the existence of fixed points of holomorphic automorphisms. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 8-9 (1980). (Jean-Pierre Vigué) 82f:58022 58C30 (32M15)
- Minimax theorems beyond topological vector spaces. Acta Sci. Math. (Szeged) 42 (1980), no. 1-2, 157-164. (V. F. Dem'janov) 82a:49017 49A40
- wicz, Marian S. (with Kania, Aleksander A.; Kiszka, Jerzy B.; Gorzalczany, Marian B.; Maj, Jarosław R.) On stability of formal fuzziness systems. Inform. Sci. 22 (1980), 93D99 (03E72) no. 1, 51-68. (Authors' summary) 82k:93055
- Stachura, A. (with Goebel, Kazimierz; Sekowski, T.) Uniform convexity of the hyperbolic metric and fixed points of holomorphic mappings in the Hilbert ball. Nonlinear Anal. 4 (1980), no. 5, 1011-1021. (K. T. Hahn) 82:32039 32H20 (47H10)
 Stachurski, Andrzej Superlinear convergence of symmetric Huang's class of methods.
- mer. Math. 38 (1981/82), no. 2, 209-218. (Author's summary) 82m:65055 (90C30)
- Stadje, Wolfgang Efficient stopping of a random series of partially ordered points. Multiple criteria decision making theory and application (Proc. Third Conf., Hagen/Königswinter, 1979), pp. 430-447, Lecture Notes in Econom. and Math. Systems, 177, Springer, Berlin, 1980. (David W. Balmer) 82e:60072 60G40 (90A05)
- Eine Erweiterung des Riemann-Lebesgue-Lemmas. (English summary) Monatsh. Math. 89 (1980), no. 4, 315-322. (J. Albrycht) 82a:42009 42A16
- dtmüller, U. (with Trautner, Rolf) Tauberian theorems for Laplace transforms in dimension D>1. J. Reine Angew. Math. 323 (1981), 127-138. (Sonja Lyttkens) 44A10 (40E10)
- (with Gawronski, Wolfgang) Smoothing histograms by means of lattice and continuous distributions. Metrika 28 (1981), no. 3, 155-164. (Authors' summary) 62G05
- Staffans, Olof J. A priori bounds for a discontinuous Volterra equation. Equations 3 (1981), no. 3, 231-243. (D. F. Shea) 82j:45003 45D05 (45M10)

 A bound on the solutions of a nonlinear Volterra equation. J. Math. Anal. Appl. 83
- (1981), no. 1, 127–134. (G. S. Jordan) 82j:45004 45D05 (45J05)
 Stafford, J. T. Cancellation for nonprojective modules. Module theory (Proc. Special Session, Amer. Math. Soc., Univ. Washington, Seattle, Wash., 1977), pp. 3–15, Lecture Notes in Math., 700, Springer, Berlin, 1979. (From the text) 82m:16019
 - On the stable range of right Noetherian rings. Bull. London Math. Soc. 13 (1981), no. 1, 39–41. (M. E. Keating) 82:16017 16A38 (16A55)
 - Generating modules efficiently: algebraic K-theory for noncommutative Noetherian J. Algebra 69 (1981), no. 2, 312-346. (K. R. Goodearl) 82k:16018 (13C05, 16A54, 17B35)
 - (with Small, Lance W.) Localisation and completions of Noetherian PI algebras. J. Algebra 70 (1981), no. 1, 156-161. (S. A. Amitsur) 82k:16003 16A08 (16A38)
 - (with Cortzen, B.; Small, Lance W.) Decomposing overrings. Proc. Amer. Math. Soc. 82 (1981), no. 1, 28-30. (Birge Zimmermann-Huisgen) 82i:16023 16A50 (16A62) 16A50 (16A62) (with Brown, Kenneth A.; Lenagan, T. H.) K-theory and stable structure of some Noetherian group rings. Proc. London Math. Soc. (3) 42 (1981), no. 2, 193-230. (G. Krause) 82e:16017 16A27 (16A33, 16A54, 20C07)
- Stafney, James D. Density of the linear span of principal solutions of second order linear differential equations. J. Approx. Theory 30 (1980), no. 3, 226-236. (O. Shisha) 41A30 (34A30) 82m:41018
 - A spectral mapping theorem for generating operators in second-order linear ferential equations. J. Math. Anal. Appl. 77 (1980), no. 2, 433–450. (M. S. P. Eastham) differential equatio 34G10 (47A50)
 - Correction to: "Functions of a matrix and their norms" [Linear Algebra Appl. 20 (1978), no. 1, 87-94; MR 57 #3162]. Linear Algebra Appl. 39 (1981), 259-260. (From the text) 82f:15011 15A30

- Stahl, János On multi-objective optimization. (Hungarian. English summary) SZÁMKI Tanulmányok No. 6 (1980), 3-16. (Author's summary) 82a:90160 90C31 Stahl, Saul (with Jungerman, Mark; White, Arthur T.) Imbeddings of hypergrap
- Proceedings of the Eleventh Southeastern Conference on Combinate and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 545-557. (Jonathan L. Gross) 82f:05035 05C10 (05B05, 05C65)

Permutation-partition pairs: a combinatorial generalization of graph embedding Trans. Amer. Math. Soc. 259 (1980), no. 1, 129-145. (Seth R. Alpert) 82e:05065a

- Erratum to: "Permutation-partition pairs: a combinatorial generalization of graph embeddings". Trans. Amer. Math. Soc. 266 (1981), no. 1, 333. (Editors) 82e:05065b 05C10
- Staikos, V. A. (with Philos, Ch. G.) Boundedness and oscillation of solutions of differential constant of solutions of uniteritate equations with deviating argument. An. Stiint. Univ. "Al. I. Cuza" Iaşi Seçt. I a Mat. (N.S.) 26 (1980), no. 2, 307–317. (Bhagat Singh) 82e:34083 34K15
 Basic results on oscillation for differential equations with deviating arguments.

shima Math. J. 10 (1980), no. 3, 495-516. (B. S. Lalli) 82c:34087

- Stakgold, Ivar Estimates for some free boundary problems. Ordinary and partial differential equations (Proc. Sixth Conf., Univ. Dundee, Dundee, 1980), pp. 333-346, Lecture Notes in Math., 846, Springer, Berlin, 1981. (Antonio Fasano) 82f:35189 35R35 (35J65)
- Stallings, John R. Topologically unrealizable automorphisms of free groups. Proc. Amer. Math. Soc. 84 (1982), no. 1, 21–24. (G. Peter Scott) 82m:20030 20E05 (57M99) Stalnaker, Robert C. Logical semiotic. Modern logic—a survey, pp. 439–456, Synthese Library, 140 Beidel Dordrocket, 1981. (See 821:43002) 03B45 Library, 149, Reidel, Dordrecht, 1981. (See 82f:03002)

Indexical belief. Synthese 49 (1981), no. 1, 129-151. (From the introduction) 82i:03012 03A05 (03B45)

- Stam, A. J. A nonrandom limit for the volume covered k times. J. Appl. Probab. 18 (1981),
- no. 1, 148-156. (Gedalia Ailam) 821:60038 60D05

 Stamatescu, Ion Olimpiu (with Wu, Tai Tsun) Perturbation theory for two-dimensional gauge models. Nuclear Phys. B 143 (1978), no. 3, 503-520. (Authors' summary) 81E10

Stamatis, Evangelos S. See Archimedes' balance, 82b:01004
Stamenković, Borivoje B. On the least upper bound on the number of grounded VCVS's required for the realization of grounded active RC multiport networks with a minimum amber of capacitors. IEEE Trans. Circuits and Systems 28 (1981), no. 8, 846-849. (Author's summary) 82f:94022 94005

The realization of grounded active RC multiport networks with a minimum number of capacitors. J. Franklin Inst. 311 (1981), no. 1, 1-31. (Author's summary) 82a:94105

- Stamnes, Jakob J. Focusing of two-dimensional waves. J. Opt. Soc. Amer. 71 (1981), no. 1, 15-31. (Author's summary) 82a:78016 78A45
- mes, Knut (with Swanson, Roy A.) A new look at the discrete ordinate method for radiative transfer calculations in anisotropically scattering atmospheres. J. Atmospheric Sci. 38 (1981), no. 2, 387-399. (Authors' summary) 82g/85010. 85A25 (65F15) Sci. 38 (1981), no. 2, 387-399. (Authors' summary) 82g:85010 85A25 (65F15)

mou, George Characterizations of the sphere by the mean II-curvature. Bull. Austral. Math. Soc. 23 (1981), no. 2, 249-253. (S. B. Klimentov) 82k:53085 53C45

- Stan, Mircea A method for computing the fluctuation spectrum in weak nonlinear systems (Romanian summary) Bul. Inst. Politehn. Bucureşti Ser. Electrotehn. 42 (1980), no. 3, 19-27. (Author's summary) 82m:82023 82A35
- Stănășilă, O. (with Stanomir, D.) On real-rational holomorphic matrices. (Romanian. English summary) Bul. Inst. Politehn. Bucureşti Ser. Electrotehn. 40 (1978), no. 4, 3-9. (Vasile Brînzănescu) 82e:94067 94C05 (30C15)
- Stănciulescu, Fl. Optimization in conditions of uncertainty of large-scale systems with hierarchical structure and applications. (Romanian. English summary) Numerical transmission, data processing and computerized process control (Romanian), pp. 197-207, Probleme de Automat., 11, Ed. Acad. R.S. România, Bucharest, 1979. (Author's summary) 93A15 (49D27, 90A16, 92A05)

Stancu, D. D. Application of divided differences to the study of monotonicity of the derivatives of the sequence of Bernštein polynomials. Calcolo 16 (1979), no. 4, 431-445 (1980). (D. Leviatan) 82b:41008 41A10 (41A36)

Stancu-Minasian, I. M. Applications of the fractional programming. (French and Russian maries) Econom. Comput. Econom. Cybernet. Stud. Res. 14 (1980), no. 1, 69-86. (Author's summary) 82k:90115 90C32 (90-02)

Bibliography of fractional programming, 1960-1976. Pure Appl. Math. Sci. 13 (1981), no. 1-2, 35-69. (From the introduction) 82i:90115 90C32 (00A15) Fractional program ming in complex space: the state of the art. Rev. Ros

Math. Pures Appl. 26 (1981), no. 3, 481-491. (C. R. Bector) 82j:90073 90C32 Stanczak, W. (with Nowicki, T.) Partitioning a set of elements into subsets due to their similarity. (French summary) Data analysis and informatics (Proc. Second Internat. Sympos., Versailles, 1979), pp. 583-591, North-Holland, Amsterdam, 1980. (See 821:62004) 92A20 (94C15)

ndish, E. Myles, Jr. (with Eichhorn, Heinrich) Remarks on nonstandard least-squares problems. Astronom. J. 86 (1981), no. 1, 156-159. (Authors' summary) 82f:65012 65D10 (62J02, 85A35)

něk, Svatoslav Phase and dispersion theory of the differential equation y connection with the generalized Floquet theory. Arch. Math. (Brno) 14 (1978), no. 2, 109-122. (From the introduction) 82h:34045 34C20

Two-point boundary problem in a second order nonhomogeneous linear differential equation. (Czech and Russian summaries) Sb. Praci Přírodověd. Fak. Univ. Palackého v Olomouci Mat. 18 (1979), 59-71. (G. J. Etgen) 82b:34022 34B05 (34B10)

On the dispersion structure of the differential equation y'' = q(t)y having in the generalized Floquet theory the same characteristic multipliers. (Czech and Russian summaries) Sb. Praci Přirodověd. Fak. Univ. Palackého v Olomouci Mat. 18 (1979), 73-79. (Yiannis Sficas) 82b:34046 34C20 (34A30)

On an application of the generalized Floquet theory to the transformation of the equation y"=q(t)y into its associated equation. (Czech and Russian summaries) Sb. Praci Přírodověd. Fak. Univ. Palackého v Olomouci Mat. 18 (1979), 81-92. (Yiannis Sficas) 82b:34047 34C20 (34A30)

Stànescu, C. A. Applications of decorated lattices to solutions. I. Equilibrium polymerisation in a decorated lattice model. An. Univ. Bucureşti Fiz. 29 (1980), 75–80.

(From the introduction) 824:82059 82A42 (82A67)

Stanfel, Larry E. A Lagrangian treatment of certain nonlinear clustering problems. European J. Oper. Res. 7 (1981), no. 2, 121–132. (Author's summary) 82h:90079

Stanford, David P. (with Conner, Luther T., Jr.) Controllability and stabilizability in multipair systems. SIAM J. Control Optim. 18 (1980), no. 5, 488-497. (N. Harris McClamroch) 82b:93022 93B99

Stanhouse, Bryan E. (with Fackler, James S.) Stochastic macroeconomic control with nonidentical control intervals. J. Econom. Dynamics Control 2 (1980), no. 4, 377-393. (Authors' summary) 82h:90028 90A17

- design of complex systems by the method of variable constraints and partial enumeration. (Polish. English and Russian summaries) Prace Nauk. Inst. Cybernet. Tech. Politech. Wrocław. Ser. Konfer. No. 18 Projektowanie III, t.1 (1978), 265-278. (Author's summary) 82i:90081 90C10
- niewski, Piotr (with Kacprzyk, Janusz) A new approach to the control of stochastic systems in a fuzzy envir nent. (Polish and Russian summaries) Arch. Auto Telemech. 25 (1980), no. 4, 433-444 (1981). (Authors' summary) 82h:90080

(with Weinfeld, Roman) Optimization of denumerable semi-Markov decision processes. (Russian summary) Systems Sci. 6 (1980), no. 2, 129-141. (Eduardo J. Subelman) 82c:90095 90C40 (90B05)

ik, Rotraut Ein Beitrag zur Axiomatik metrisch-affiner Ebenen von Charakteristik +2. Abh. Math. Sem. Univ. Hamburg 50 (1980), 18-19. (E. Morgantini) 82c:51011 51D15 (51F05)

Anordnung in Rechtseitebenen und Integritätssystemen. (English summary) J. Geom. 15 (1980), no. 2, 99–107. (E. Otto) 82k:51013 51G05

Stanišić, M. M. On the stability of generalized Hill's equation with three independent parameters. (French and German summaries) Internat. J. Non-Linear Mech. 15 (1980), no. 6, 485-496. (A. A. Freiria) 82d:34060 34D10

nisz, Tadeusz Functions with some given partial elasticities. (Polish. Russian and English summaries) Przegląd Statyst. 26 (1979), no. 1-2, 95-100 (1980). (Author's summary) 90A11

ukovič, K. P. Steady-state centrally symmetric motions in an external gravitational field. (Russian) Problemy Teor. Gravitacii i Element. Častic No. 10 (1979), 10-11. (K. S. Bhamra) 821:83014 83C10

Štan'ko, M. A. See Venema, Gerard A., 82d:57009

Stankov, D. K. (with Tonev, Toma V.) Singular points of generalized analytic functions. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 1, 23-24. (R. N. Abdulaev) 82h:30053

nković, B. (with Takači, D.) Linear differential equations with coefficients in a field. II. (Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 9-17 (1980). (John S. Lew) 821:35181 35R10 (34K30, 44A40)

nković, Ljubomir R. (with Milovanović, Igor Ž.) Some inequalities for convex functions. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 191-198 (1981). (E. F. Beckenbach) 82g:26028 26D15 (26A51)

tović, Miomir S. (with Mitrinović, Dragoslav S.; Lacković, Ivan B.) Addenda to: Analytic inequalities [Springer, New York, 1970; MR 43 #448] by Mitrinović. Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 634-677 (1979), 3-24. (R. A. Askey) 26A51

Semidiscrete transform. Mat. Vesnik 4(17)(32) (1980), no. 1, 113-118. (I. Fenyő) 824:44006 44A55 (34K05)

A transform which maps differences into derivatives. (Serbo-Croatian sur Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 132-134 (1981). (K. C. Gupta) 82i:44010 44A99

Stanley, H. Eugene (with Gawlinski, Edward T.) Continuum percolation in two dimensions: Monte Carlo tests of scaling and universality for noninteracting discs. J. Phys. A 14 (1981), no. 8, L291-L299. (B. Derrida) 82m:82026 82A43

(with Nakanishi, Hisao) Erratum: "Scaling studies of percolation phenomena in systems of dimensionality two to seven: cluster numbers" [Phys. Rev. B (3) 22 (1980), no. 2466-2488; MR 81g:82045]. Phys. Rev. B (3) 23 (1981), no. 3, 1489. (Editors) 82c:82072 82A42

Stanley, Richard P. Decompositions of rational convex polytopes. Combinatorial mathematics, optimal designs and their applications (Proc. Sympos. Combin. Math. and Optimal Design, Colorado State Univ., Fort Collins, Colo., 1978). Ann. Discrete Math. 6 (1980), 333-342. (P. McMullen) 82a:52007 52A43

The character generator of SU(n). J. Math. Phys. 21 (1980), no. 9, 2321-2326. (Jiří

Patera) 823:17010 17B10 (05A15, 22E70, 81C40)
Weyl groups, the hard Lefschetz theorem, and the Sperner property. SIAM J.
Algebraic Discrete Methods 1 (1980), no. 2, 168–184. (Author's summary) 824:20083 20G05 (05A05, 06A10, 14M17)

Stanojević, Časlav V. (with Rees, Charles Sparks; Shah, Swarupchand M.) *Theory and applications of Fourier analysis. Monographs and Textbooks in Pure and Applied Math., 59. Marcel Dekker, Inc., New York, 1981. viii +419 pp. ISBN 0-8247-6903-1 (Paul Nevai) 82a:42001 42-01 (44-01)

(with Suchanek, Ana M.) Integral identities of norms and characterization of inner product spaces. Proc. Amer. Math. Soc. 81 (1981), no. 1, 101-103. (B. R. Gelbaum) 82i:46036 46C05

Classes of L1-convergence of Fourier and Fourier-Stieltjes series. Proc. Amer. Math. Soc. 82 (1981), no. 2, 209-215. (E. R. Love) 82g:42006 42A32 (42A20)

omir, D. (with Stănășilă, O.) On real-rational holomorphic matrices. (Romanian English summary) Bul. Inst. Politehn. București Ser. Electrotehn. 40 (1978), no. 4, 3-9. (Vasile Brinzanescu) 82e:94067 94C05 (30C15)

Variational analysis of nonlinear electrical networks. I. Resistive networks (Romanian summary) Bul. Inst. Politehn. București Ser. Electrotehn. 42 (1980), no. 1, 99-108. (François Aribaud) 82a:94106 94C05

nsberg, Carl Trygve On the first-order probability density function of integrated laser speckle. Optica Acta 28 (1981), no. 7, 917-932. (Author's summary) 82h:78018

78A45 (60E05) n, Charles M. A characterization of the polydisc. Math. Ann. 253 (1980), no. 2, 129-135. (Zvi Har'El) 82g:32028 32H15 (32H20)

On the closed ideals in A(W). Pacific J. Math. 92 (1981), no. 1, 199-209. (M. sumi) 82g.36079 30H05 (30F99, 46J15)

nton, Desmis Some q-Krawtchouk polynomials on Chevalley groups. Amer. J 102 (1980), no. 4, 625-662. (C. F. Dunkl) 82a:33015 33A75 (05A15, 20G40)

e addition theorems for some q-Krawtchouk polynomials. Geom. Dr. p. 1-4, 403-425. (Mourad E. H. Ismail) 82g:33035 33A65 (20G05)

m. R. G. (with Kalbsleisch, J. G.) Introduction to Ramsey theory. Combinatorial athematics, VII (Proc. Seventh Australian Conf., Univ. Newcastle, Newcastle, 1979), pp. 1-28, Lecture Notes in Math., 829, Springer, Berlin, 1980. (David P. Sumner) 05C55 (05-02)

(with Bate, John Aubrey) A computer search for B-coverings. Combinatorial mathematics, VII (Proc. Seventh Australian Conf., Univ. Newcastle, Newcastle, 1979), pp. 37-50, Lecture Notes in Math., 829, Springer, Berlin, 1980. (Chester J. Salwach) 05B30 (05-04, 05B40)

(with Mullin, R. C.) Some new results on the covering numbers N(t, k, v).

Newcastle, 1979), pp. 51–58, Lecture Notes in Math., 829, Springer, Berlin, 1980. (A. Florian) 82g:05022 05B05 (05B40)

s. Ars Combin. 10 (1980), 187-192. (Charles J. A conjecture on quintuple systems. Colbourn) 82c:05021 05B05 (51E10)

(with Eades, Peter; Van Rees, G. H. J.; Cowan, D. D.) Computation of some exact g-coverings. Utilitas Math. 18 (1980), 269–282. (J. Spencer) 82h:05052 05B40

(with Hoskins, W. D.; Walton, D. J.) An improved fourth order method for the solution of the Lyapunov matrix equation. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. II (Winnipeg, Man., 1980). ner. 31 (1981), 63-76. (Authors' summary) 82m:65029

(with Bate, John Aubrey) Some algorithmic results on (2, 3, 3, V) designs and (2, 4, 4, V) designs. Utilitas Math. 20 (1981), 195–220. (Mary McLeish) 82n:05027

See also Proceedings: Southeastern Conference on Combinatorics, Graph Theory and iting, 82b:05004

ton, Robert J. (with Weinstein, Alan D.) On the L4 norm of spherical harmonics. th. Proc. Cambridge Philos. Soc. 89 (1981), no. 2, 343-358. (J. Weidmann) 82d:58015 58C40 (33A45, 43A85, 58G25)

n, Robert O. Decompositions of modules over a discrete valuation ring. J. Austral. ath. Soc. Ser. A 27 (1979), no. 3, 284-288. (From the introduction) 82k:13012 13C05 (13H99, 18E15)

ples, John Computation on graphlike expressions. *Theoret. Comput. Sci.* 10 (1980), no. 2, 171–185. (Author's summary) 82c:68019a 68C05 (05C99, 68E10)

Optimal evaluations of graphlike expressions. Theoret. Comput. Sci. 10 (1980), no. 3, 297-316. (Author's summary) 82c:68019b 68C05 (05C99, 68E10)

Speeding up subtree replacement systems. Theoret. Comput. Sci. 11 (1980), no. 1, 39–47. (Author's summary) 82c-68019c 68C05 (05C99, 68E10) phes, Phillip O. (with Kelingos, John A.) A characterization of solutions to a perturbed Laplace equation. Illinois J. Math. 22 (1978), no. 2, 208–216. (L. E. Payne) 82b:35127 35Q05 (31A35, 35R05)

on, R. C. See Kreps, David M.; et al., 82a:90033

Stara, J. (with Necas, Jindřich; John, O.) Counterexample to the regularity of weak solution of elliptic systems. Comment. Math. Univ. Carolin. 21 (1980), no. 1, 145-154. (Bernhard Kawohl) 82e:35023 35D10 (35J60)

rbird, Michael Null sequence cellular decompositions of S^3 . Fund. Math. 112 (1981), no. 2, 81–87. (R. J. Daverman) 82j:57007 57N12 (54B15) rbird, T. (with Dor, L. E.) Projections of L_p onto subspaces spanned by independent

n variables. Comp tio Math. 39 (1979), no. 2, 141-175. (A. Pelczyński) 82e-46043 46E30 (60B11)

Stare, Zdravko F. Linearization of a nonlinear functional-differential equation. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 634-677 (1979), 179-180. (V. G. Angelov) 82x34082 34K05 (34A05)

A class of nonlinear second-order ordinary differential equations. (Serbo-Croatian. sh summary) Mat. Vesnik 4(17)(32) (1980), no. 1, 119-121. (L. Janos) 82c:34012

rčenko, A. A. (with Volčenko, M. V.) Semantics of questions in natural language. (Russian) Studies in logical methodology (Russian), pp. 265-284, Moskov. Gos. Univ., Moscow, 1980. (Roman Murawski) 82d:03044 03B65

See also Studies in logical methodology, 82c:03003 Starfield, A. M. (with Joubert, S. C. J.; Cohen, B. H.; Hague, E. K.; Stein, D. J.) An exploratory model of impala population dynamics. Mathematical modelling in biology as ecology (Proc. Sympos. Pretoria, 1979), pp. 338-355, Lecture Notes in Biomath., 33,

Springer, Berlin, 1980. (T. G. Hallam) 82g-92042 92A15
Starikov, A. F. Certain features of resonance regimes of a regulator in systems with distributed parameters. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 1, 178-182, 223 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 1, 135-139 (1981). (Author's summary) 82m:93051 93C05

rita, Giulio (with Iannece, Donatella; Romano, Antonio) An approach to

thermodynamics of materials with fading memory. Arch. Rational Mech. Anal. 75 (1980/81), no. 4, 373-385. (J. Dunwoody) 824:73006 73B30 (80A99)

(with Iannece, Donatella) A new proof of the existence of the internal energy and entropy for rate type materials. Ricerche Mat. 29 (1980), no. 2, 269-276. (From the introduction) 82m:73001 73A05 (80A15)

rius, Göran On composite mesh difference methods for hyperbolic differential equations. Numer. Math. 35 (1980), no. 3, 241-255. (Author's summary) 82b:65089

Asymptotic expansions for a class of elliptic difference schemes. Math. Comp. 37 (1981), no. 156, 321-326. (Author's summary) 82:65066 65N15 (65B05)

Stark, E. L. (with Bleimann, G.) Kernels of finite oscillations and convolution integrals. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 3-4, 419-429. (J. Szabados) 82f:42013 42A50 (41A35, 41A40)

Stark, Henry (with Woods, John W.; Paul, Indrancel; Hingorani, Rajesh) Direct Fourier reconstruction in computer tomography. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 2, 237-245. (Avraham A. Melkman) 82e:68099 68G10 (94A12)

(with Cahana, D.; Webb, Heywood E., Jr.) Restoration of arbitrary finite-energy optical objects from limited spatial and spectral information. J. Opt. Soc. Amer. 71 (1981), no. 6, 635–642. (Authors' summary) 82e-94012 94A05 (78A10)

Stark, Marceli See Biography: Stark, Marceli, 82g:01080

Stark, Robert M. (with Ellner, Paul M.) On the distribution of the optimal value for a class

of stochastic geometric programs. Naval Res. Logist. Quart. 27 (1980), no. 4, 549-571. (Klaus Tammer) 82d:90086 90C15 (65C99) Stark, W. Richard A logic of knowledge. Z. Math. Logik Grundlag. Math. 27 (1981), no. 4,

371-374. (Scott K. Lehmann) 82j-0023 03B45
Starke, Peter H. On the languages of bounded Petri nets. Mathematical foundations of computer science, 1979 (Proc. Eighth Sympos., Olomouc, 1979), pp. 425-433, Lecture Notes in Comput. Sci., 74, Springer, Berlin, 1979. (Ju. G. Karpov) 82c:68036

Starkman, V. S. See Knuth, Donald E., 82c:68039

Starkov, A. S. (with Molotkov, I. A.) Local resonance interaction of normal waves in a

system containing connected waveguides. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 2, 327-331. (A. S. Alekseev) 824.78024 78.450 (35P9, 86A15) Star'kov, Ju. M. (with Siforov, V. I.; Dobrušin, R. L.; Samoilenko, Stanislav I.; Cybakov, B. S.; Bojarinov, I. M.; Gel'fand, S. I.; Košelev, V. N.) The theory of information transmission and its applications. (Russian) Cybernetics—in the service of Communism, Vol. 9: Control and information (Russian), pp. 28-57, "Énergija", Moscow, 1978. (J. S. Joel) 82e:94001 94-02 (01A65, 94A15)

kov, V. V. A property of the Bazilevič class functions. (Russian. English sum

Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1979, vyp. 1, 84–87, 135. (L. A. Aksent'ev) 82e:30020a 30C45

Letter to the editors: "Certain properties of functions of the Bazilevič class" [Vestnik

Leningrad. Univ. Mat. Meh. Astronom. 1978, vyp. 3, 148–149; MR 80d:30008]. (Russian) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1979, vyp. 1, 132. (L. A. Aksent'ev) 82e:30020b 30C45

Letter to the editors: "A variational formula in the class of Bazilevič functions" [Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1978, vyp. 4, 81–88; MR 80d:30009].
(Russian) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1979, vyp. 1, 132. (Editors)

rling, A. Gregory (with Klerlein, Joseph B.) Hamiltonian groups are color-graph-Hamiltonian. J. Graph Theory 5 (1981), no. 2, 197–199. (Authors' summary)

05C45 (05C15, 05C25, 20F32)

rokadoms/kii, L. O. Approximate solution of some differential equations by means of Čebyšev polynomials. (Ukrainian. Russian summary) Vīsnik L'vīv. Derž. Unīv. Ser. Meh.-Mat. No. 13 (1978), 44-47, 125. (Author's summary) 82g:34016

d'skii, L. A. (with Berdičevskii, V. L.) On the theory of naturally twisted curvilinear tods. Izv. Akad. Nauk SSSR Meh. Tverd. Tela 14 (1979), no. 6, 103-113 (Russian); translated as Mech. Solids 14 (1979), no. 6, 87-95. (From the introduction) 82c:73045

Starostin, B. A. See Jones, R. V., 82h:01058

Staroverov, O. V.

★Модели движения населения. (Russian) [Models of population movement] "Nauka", Moscow, 1979. 342 pp. (Contents) 82j:92057 92A15 (90A30)

na, E. N. Strongly coatomic topological groups. (Russian) Ural. Gos. Univ. Mat. Zap. 11 (1979), no. 3 Issled. po Sovremen. Algebre, 170-179, 213. (K. A. Ross) 82d:22008 22D05 (06B99)

Starun, I. I. (with Milošević, Radivoje) Asymptotics of the solutions of singular perturbed systems. (Russian) Mat. Vesnik 4(17)(32) (1980), no. 2, 235-243. (G. S. Žukova) 82g:34084 34E15

The construction of solutions of singularly perturbed linear systems. (Russian) Mat. Vesnik 4(17)(32) (1980), no. 3, 373–380. (G. S. Žukova) 82j:34058 34E15

Staržinskii, V. M. ★Applied methods in the theory of nonlinear oscillations. Translated from the Russian by V. I. Kisin. "Mir", Mascow, 1980. 263 pp. (W. S. Loud) 82f:34042

rzyk, J. Signal-flow-graph analysis by decomposition method. *Proc. IEE-G* 127 (1980), no. 2, 81–86. (Author's summary) 82a:94127 94C15 (90B10)

Stas, W. An explicit estimate for zeros of Dedekind zeta functions. Acta Arith. 37 (1980), 43-54. (È. Gaigalas) 82a:10045 10H10

Stasišin, V. M. (with Semenjuk, E. P.) Mathematization of scientific knowledge and computer science. Applied aspects. (Russian) Naučn.-Tehn. Informacija (VINITI) Ser. 2 Informacionnye Processy i Sistemy 1980, no. 4, 1-8, 32. (A. A. Mullin) 82e:00042 00A69 (68-02, 68G20)

Štastna, J. (with Vodák, F.) Material constants of a mixture. Acta Tech. ČSAV 25 (1980), no. 5, 561-574. (C.-C. Wang) 82e:73010 73B99

Statjuha, G. A. (with Bondar', A. G.; Bugaeva, L. N.) An algorithm for decision making in a problem with many target functions. Aviomatika 1980, no. 3, 69-73, 94 (Russian. English summary); translated as Soviet Automat. Control 13 (1980), no. 3, 59-63 (1981). (Authors' summary) 82e:90103 90C31

man, Richard On the existence of closed terms in the typed λ-calculus I. To H. B. Curry: essays on combinatory logic, lambda calculus and formalism, pp. 511–534, Academic Press, London, 1980. (J. P. Seldin) 82m:03014a 03B40 (68C25)

Speed-up by theories with infinite models. Proc. Amer. Math. Soc. 81 (1981), no. 3, 465-469. (M. M. Richter) 82c:03075 03F20

On the existence of closed terms in the typed \(\lambda \) calculus. II. Transformations of Theoret. Comput. Sci. 15 (1981), no. 3, 329-338. (J. P. Seldin) unification problems. 82m:03014b 03B40 (68C25)

Staton, William Edge deletions and the chromatic number. Ars Combin. 10 (1980),

103-106. (Paul A. Catlin) 82d:05061 05C15 (05C35)

(with Alexander, Charles C.; Hopkins, Glenn) On the independence dimension of a graph. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. I. Congr. . 28 (1980), 211-215. (G. O. H. Katona) 82m:05078

Statyukha, G. A. See Statjuha, G. A. Staude, J. (with Müller-Pfeiffer, Erich) Integral theorems for eigenfunctions of second-order elliptic differential operators. Math. Nachr. 98 (1980), 37-47. (M. M. Skriganov) 82h:35082 35P10 (47F05) Stauffer, Dietrich (with Klein, William) Note on the asymptotic decay of the numbers of percolation clusters. Phys. Lett. A 78 (1980), no. 3, 217-218. (Authors' summary)

(with Delyon, François; Souillard, Bernard) Percolative phase transition without the appearance of an infinite network. J. Phys. A 14 (1981), no. 7, L243-L246. (Authors' nary) 82g:82037 82A43

sections, and plane projections. J. Internat. Assoc. Math. Geol. 13 (1981), no. 2, 135–152.

(O. Bottema) 82g:52001 52-04 (58F40, 86A60)

Stavi, J. (with Smoryński, Craig) Cofinal extension preserves recursive saturation. Model theory of algebra and arithmetic (Proc. Conf., Karpacz, 1979), pp. 338–345, Lecture Notes in Math., 834, Springer, Berlin, 1980. (Klaus Potthoff) 82g:03062 03C62 (03C57, 03H15)

Stavitsky, D. (with Macagno, E.; Christensen, J.) On the eighteen degrees of freedom wroulakis, Nikias The notion of tensor field in Finsler geometry and its generalizations.

Eleutheria 1979, no. 2, 526–548. (Yoshihiro Ichijyö) 82i:53055 53C60 (53B40)

Stavroulakis, Peter (with Tzafestas, S. G.) Optimal control of distributed-parameter systems via the matrix minimum principle. Second International Conference on Info Sciences and Systems (Univ. Patras, Patras, 1979), Vol. II, pp. 399-407, Reidel,

Science and Systems (Critic, Futura, Futuras, 1977), vol. 11, pp. 399—401, Retuet, Dordrecht, 1980. (Authors' summary) 824:93072 93E20 (with Tzafestas, S. G.) Partitioning approach to adaptive distributed-param filtering. Ricerche Automat. 11 (1980), no. 1, 51-71 (1981). (R. S. Bucy) 82m:93091 93F11 (93F10)

(with Paraskevopoulos, P. N.) Reduced-order feedback law implementation for 2D digital systems. Internat. J. Systems Sci. 12 (1981), no. 5, 525-537. (Authors' summary) 82i:93015 93B07

Low sensitivity feedback law implementation for 2-D digital systems. J. Franklin Inst. 312 (1981), no. 3-4, 217-229. (Author's summary) 82k:93030 93B35 (93C35)

Inst. 312 (1981), no. 3-4, 211-229. (Author's summary) 82x59409 93835 (93C35) (with Paraskevopoulos, P. N.) Decoupling of linear multivariable two-dimensional systems via state feedback. Proc. IEE-D 129 (1982), no. 1, 15-20. (Authors' summary)

cenko, V. Ja. (with Krasnosel'skii, M. A.; Lifšic, E. A.; Pokornyi, Ju. V.) Positive invertibility of linear operators. (Russian) Qualitative and approximate methods for the investigation of operator equations (Russian), pp. 90-99, 167, Jaroslav. Gos. Univ., Yaroslavl', 1980. (G. M. Ustinov) 82f:47050 47B55 (47A05, 65J10)

Strengthening and further development of the theorems of A. Ostrowski on the nonsingularity of matrices. (Russian. Tajiki summary) Dokl. Akad. Nauk Tadžik. SSR 24 (1981), no. 4, 222-225. (Zdeněk Dostál) 82k:15010 15A18 (47G05)

Stech, Harlan W. The effect of time lags on the stability of the equilibrium state of a population growth equation. J. Math. Biol. 5 (1977/78), no. 2, 115-120. (Author's 92A15 (45J05)

Burns, John A.; Herdman, Terry L.) The Cauchy problem for linear functional-differential equations. Integral and functional differential equations (Proc. Conf., West Virginia Univ., Morgantown, W. Va., 1979), pp. 139–149, Lecture Notes in Pure and Appl. Math., 67, Dekker, New York, 1981. (Karl Kunisch) 82g:34090 34K05 (with Williams, Michael) Stability in a class of cyclic epidemic models with delay. J. Math. Biol. 11 (1981), no. 1, 95-103. (H. W. Hethcote) 82k:92055 92A15 (34K20,

(with Hethcote, Herbert W.; van den Driessche, P.) Nonlinear oscillations in epidemic models. SIAM J. Appl. Math. 40 (1981), no. 1, 1-9. (K. Gopalsamy) 82d:92025 92A15 (34K20)

See also Integral and functional differential equations, 82d:45001

Stechel, Ellen B. (with Davis, Michael J.; Heller, Eric J.) Quantum dynamics in classically integrable and nonintegrable regions. Chem. Phys. Lett. 76 (1980), no. 1, 21-26. 81C20 (58F13, 81B05) (Lawrence Sklar) 82d:81038

Steckin, B. S. (with Katona, D.) Combinatorial numbers, geometric constants and probabilistic inequalities. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 6, 1293-1296. (Ljuben R. Mutafčiev) 82c:60017 60C05 (46B20, 52A37)

On a surprising fact in extremal set theory. J. Combin. Theory Ser. A 29 (1980), no. 3, 368-369. (From the text) 82a:05054 05C30

(with Frankl, Peter) Local Turán property for k-graphs. (Russian) Mat. Zametki 29 (1981), no. 1, 83-94, 156. (G. O. H. Katona) 821:05079 05C65

See also Cameron, Peter J.; et al., 82d:05003 and Problems of combinatorial

alveis 82d-05005

Stečkin, S. B. See Birthday: Stečkin, S. B., 82g:01083

Steeb, W.-H. (with Wilhelm, F.) Nonlinear autonomous systems of differential equations and Carleman linearization procedure. J. Math. Anal. Appl. 77 (1980), no. 2, 601–611. (D. Bainov) 82b:34012 34A45 (80A30, 92A09, 92A15)

(with Wilhelm, F.) Exponential functions of Kronecker products and trace calculation. Linear and Multilinear Algebra 9 (1980/81), no. 4, 345-346. (Authors' summary) 82h:15022 15A24 (17B05, 82A15)

(with Erig, W.; Strampp, W.) Symmetries and the Dirac equation. J. Math. Phys. 22
 (1981), no. 5, 970-973. (F. R. Halpern) 82h:81024
 81C05 (58G35, 81C40, 81D25)
 (with Erig, J.; Oevel, W.) A note on the nonrelativistic and relativistic classical mechanics and the control of the control

mechanics and the constants of the motion. Lett. Nuovo Cimento (2) 30 (1981), no. 14, 421-426. (Frans Cantrijn) 82g:58033 58F05 (70H99)

421-426. (Frans Cantryin) 42g:28033 58705 (701799) (with Strampp, W.) Symmetries of nonlinear reaction-diffusion equations and their solutions. Phys. D 3 (1981), no. 3, 637-643. (Wolf von Wahl) 82m:35081 35K55

ece, Bert M. On the exact distribution for the product of two independent

beta-distributed random variables. Metron 34 (1976), no. 1-2, 187-190 (1978). (Author's nary) 82b:62018 62E15

The distributions for quotients of correlated log-normal and correlated gas variates. Metron 36 (1978), no. 3-4, 93-97 (1980). (From the introduction) 82m:62040 62F15

Model adequacy: a Bayesian viewpoint. Biometrical J. 22 (1980), no. 5, 391-397. (Khursheed Alam) 82e:62055 62F15 (62J02)
Steel, John R. Analytic sets and Borel isomorphisms. Fund. Math. 108 (1980), no. 2, 83-88.

(John E. Jayne) 82h:03091 03E15 (28A05)

A note on analytic sets. Proc. Amer. Math. Soc. 80 (1980), no. 4, 655-657. (John E.

Jayne) 830-03992 03E15 (03D55)
sele, C. R. (with Ranjan, G. V.) Nonlinear corrections for edge bending of shells. Trans. ASME Ser. E J. Appl. Mech. 47 (1980), no. 4, 861-865. (Authors' summary) 82a:73047

Steele, Guy, Jr. See VLSI systems and computations, 82:68006
Steele, J. Michael (with Rudolph, Daniel) Sizes of order statistical events of station processes. Ann. Probab. 8 (1980), no. 6, 1079–1084. (Eric V. Slud) 82e:60061 600

D05, 60C05)
(with Zidek, James V.) Optimal strategies for second guessers. J. 1000, pc. 271, 506-601. (James Berger) 82a:62022 62C99

Assoc. 75 (1980), no. 371, 596-601. (James Berger) 82ac62022 62C99
Subadditive Euclidean functionals and nonlinear growth in geometric probability. Ann. Probab. 9 (1981), no. 3, 365-376. (Herbert Ziezold) 82j:60049

Long unimodal subsequences: a problem of F. R. K. Chung. Discr (1981), no. 2, 223-225. (Vangalur S. Alagar) 82i:60029 60C05 (05A05) Discrete Math. 33

Complete convergence of short paths and Karp's algorithm for the TSP. Math. Oper. Res. 6 (1981), no. 3, 374-378. (Author's summary) 32i:90040 90B15 (60F05) (with Ellis, Martin H.) Fast sorting of Weyl sequences using comparisons. SIAM J. Comput. 10 (1981), no. 1, 88-95. (Authors' summary) 82k:68030 (68C25) 68E05 (10K05,

m der Steen, J. (with Henry-Labordère, A.) Un algorithme sous-ontimal pour construire un graphe K-arête connexe de coût minimal. (English summary) RAIRO Rech. Opér. 15 (1981), no. 2, 119–127. (D. de Werra) 82k-99083 90B10 (05C40) een, Lynn Arthur See Index: Math. Mag., 82k-90006 and Mathematics tomorrow,

art, Willem (with Dubois, Daniel) A low-pass-bandpass transform for arithmetical symmetry in digital filters. IEEE Trans. Circuits and Systems 28 (1981), no. 4, 347-352. (Authors' summary) 82b:94038 94C05

nbrink, Joseph (with Oort, Frans) The local Torelli problem for algebraic curves. Journées de Géometrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers, 1979, pp. 157-204, Sijthoff & Noordhoff, Alphen aan den Rijn, 1980. (A. Duma) 82i:14014

eman, Ton (with Schaafsma, Willem) Discriminant analysis when the number of features is unbounded. IEEE Trans. Systems Man Cybernet. 11 (1981), no. 2, 144-151. (Authors' summary) 82k:92075 92A27 (62H30)

Stefan, Peter See Br rown, Ronald; et al., 82f:01983

Ştefânescu, Anton Analytic construction of solutions of a three-person game. (Romanian. English summary) Stud. Cerc. Mat. 33 (1981), no. 3, 329-342. (Author's summary) 82i:90084 90D12

82;59084 90D12 Stefanescu, I. Sabba On the stable analytic continuation with rational functions. J. Math. Phw 21 (1980). no. 1. 175-188. (Author's summary) 82;50055 30E10 (30B40,

Ştefanescu, Mirela On semisimple infra-near rings. II. An. Ştiinţ. Unio. "Al. I. Cuza" Iaqi Secţ. I a Mat. (N.S.) 26 (1980), no. 2, 253–259. (Steve Ligh) 82h:16029 16A76 Self-distributive infra-near rings. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 68 (1980), no. 1, 26-33. (G. Betsch) 82m:16035

Multiplications infra-distributives sur un groupe. Publ. Math. Debrecen 27 (1980), no. 3-4, 255-262. (John D. P. Meldrum) 82c:16038 16A76 (16A28, 20F99) (with Radu, Gheorghe Gh.; Tofan, I.) On algebraic theories. An. Stiint. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 27 (1981), no. 1, 7-11. (Jiří Adámek) 82j:18011

18C10 (08A99)

Stefani, Stefano Recursive functions with measurable oracles: an approach to a probabilistic recursion theory. (Italian summary) Boll. Un. Mat. Ital. B (5) 17 (1980), no. 2, 634-649. (Iraj Kalantari) 82h:03046 03D75

Stefanik, Richard J. Harsanyi's critical rule utilitarianism. Theory and Decision 13 (1981), no. 1, 71-80. (Author's summary) 82i:90009 90A10 Stefanjuk, V. L. See Winston, Patrick Henry, 82c:68058 90A10 (90D30)

de Stefano, Stefania See De Stefano, Stefania

Stefański, J. A heuristic search for the best hierarchical structure. Kybernetes 10 (1981), no. 2, 91-98. (Author's summary) 82d:90124 90C39 (93A13) Stegall, Charles The Radon-Nikodým property in conjugate Banach spaces. II. Trans.

Amer. Math. Soc. 264 (1981), no. 2, 507-519. (J. Diestel) 82k:46030 Stegeman, J. D. Some problems on spectral synthesis. Harmonic analysis, Iraklion 1978 (Proc. Conf., Univ. Crete, Iraklion, 1978), pp. 194–203, Lecture Notes in Math., 781, Springer, Berlin, 1980. (D. L. Salinger) 82a:43007 43A45 (43A46)

genga, David A. (with Bennett, Grahame; Timoney, Richard M.) Coefficients of Bloch and Lipschitz functions. Illinois J. Math. 25 (1981), no. 3, 520-531. (Kenneth

Stephenson) 82m:30022 30C50 (30B20)

(with Stephenson, Kenneth) A geometric characterization of analytic functions with bounded mean oscillation. J. London Math. Soc. (2) 24 (1981), no. 2, 243-254. (D. Sarason) 82m:30036 30D50 (30F25, 46E99)

Steger, Joseph L. (with Caradonna, F. X.) Implicit potential methods for the solution of transonic rotor flows. Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 19–38, ARO Rep. 80, 3, U. S. Army Res. Office, Research Triangle Park, N.C., 1980. (Authors' summary) 65M05 (76H05)

(with Warming, R. F.) Flux vector splitting of the inviscid gasdynamic equation with application to finite-difference methods. J. Comput. Phys. 40 (1981), no. 2, 263-293.

(N. N. Janenko) 82k:76053 76N15 (65P05)

Stegmüller, Wolfgang The structuralist view: survey, recent developments, and answers to some criticisms. The logic and epistemology of scientific change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn. 30 (1978), no. 2-4, 113-129 (1979). (See 82i:00024) (00A69, 03A05)

*Neue Wege der Wissenschaftsphilosophie. (German) [New directions in the philosophy o science] Springer-Verlag, Berlin-New York, 1980. vi+ 198 pp. ISBN 3-540-09668-X (Evandro Agazzi) 82e:03016 03A05 (00A69)

Stehney, Ann K. See Selected papers Geometry, 82:e01041
Stehney, Ann K. See Selected papers Geometry, 82:e01041
Stehn, J. (with Berg, B.) Comments on the computation of quantum fluctuations of glu

sh, Michael Lee A Cauchy type condition and integrability. Czechoslovak Math. J. 31(106) (1981), no. 2, 241-274. (Ralph Henstock) 82h:26017 26A42

- names H. On the empirical equivalence of regression components and common British J. Math. Statist. Psych. 33 (1980), no. 2, 200-204. (Naganori Mori) 62H25
- with Bloomfield, Peter) Least absolute deviations curve-fitting. SIAM J. Sci. Statist. Comput. 1 (1980), no. 2, 290-301. (Corrado Corradi) 82f:65011 65D10 (62J05)
- th (with Kodek, Dušan M.) Filter-length word-length tradeoffs in FIR digital filter design. IEEE Trans. Acoust. Speech Signal Process. 28 (1980), no. 6, 739-744. (Authors' summary) 82a:94020 94A12

(with Capello, Peter R.) Digital signal processing applications of systolic algorithms.

(with Capeto, Feeter V, Digital signal processing applications of systom agoritams.)

VLSI systems and computations (Pittsburgh, Pa., 1981), pp. 245-254, Computer Sci. Press, Rockville, Md., 1981. (Authors' introduction) 82m:94004 94A05

Steimel, Ulrich Fast computation of Toeplitz forms under narrowband conditions with applications to statistical signal processing. (German and French summaries) Signal Process. 1 (1979), no. 2, 141-158. (Author's summary) 82g:94002 94A12

Stein, C. (with Efron, Bradley) The jackknife estimate of variance. Ann. Statist. 9 (1981),

no. 3, 586-596. (Vishnu Dayal Jha) 82k:62074 62G05

ein, D. J. (with Starfield, A. M.; Joubert, S. C. J.; Cohen, B. H.; Hague, E. K.) An exploratory model of impala population dynamics. Mathematical modelling in biology and ecology (Proc. Sympos., Pretoria, 1979), pp. 338–355, Lecture Notes in Biomath., 33, Springer, Berlin, 1980. (T. G. Hallam) 82g-92042 92A15

Stein, D. L. (with Pisarski, Robert D.) Critical behavior of linear Φ^4 models with $G \times G'$

symmetry. Phys. Rev. B (3) 23 (1981), no. 7, 3549-3552. (Authors' summary) 82c:82034

ein, Elias M. (with Nagel, Alexander) ★Lectures on pseudodifferential operators: regularity theorems and applications to nonelliptic problems. Mathematical Notes, 24. Princeton University Press, Princeton, N.J.; University of Tokyo Press, Tokyo, 1979. 159 pp. 15BN 0-691-08247-2 (V. S. Rabinovič) 82f:47059 47G05 (32-02, 35S05,

(with Knapp, A. W.) Intertwining operators for semisimple groups. II. Invent. th. 60 (1980), no. 1, 9-84. (P. C. Trombi) 82a:22018 22E46 Math. 60 (1980).

(with Nagel, Alexander; Wainger, Stephen) Boundary behavior of functions holomorphic in domains of finite type. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 11, part 1, 6596–6599. (From the text) 82k:32027 32A40 (31820, 32E35, 42R25) elin, Martin Interpretations of Heyting's arithmetic—an analysis by means of a language with set symbols. Ann. Math. Logic 19 (1980), no. 1-2, 1-31. (M. Yasushara) 82k:63067

03F35 (03F25)

ein, Michael R. Maps of rings which induce surjections on K₃. J. Pure Appl. Algebra 21 (1981), no. 1, 23-49. (Jean-Louis Loday) 82e:18019 18F25 See also Algebraic K-theory, 82e:18

an See Barenblatt, G. I., 82c:76001b

Stein, Paul R. (with Metropolis, N.) The enumeration of graphical partitions. European J. Combin. 1 (1980), no. 2, 139-153. (K. Vesztergombi) 82e:05080 05C30 (05A17) (with Rota, Gian-Carlo; Sagan, Bruce) A cyclic derivative in nonco algebra. J. Algebra 64 (1980), no. 1, 54-75. (David M. Jackson) 82b:05017 05A15 (12H05, 13F25)

n, R. B. (with Oğuztöreli, M. N.) A kinetic study of muscular contractions. J. Math. Biol. 5 (1977/78), no. 1, 1-31. (Authors' summary) 82m:92033 92A09 (with Leung, K. V.; Oğuztöreli, M. N.) Numerical solution of neuro-muscular systems. Applied nonlinear analysis (Proc. Third Internat. Conf., Univ. Texas, Ari analysis (Proc. Third Internat. Conf., Univ. Texas, Arlington, Tex., 1978), pp. 245-266, Academic Press, New York, 1979. (From the introduction) 82f:92012 92A09

Stein, S. K. Existence out of chaos. Mathematical plums, pp. 62–93, Dolciani Math. Exp., 4, Math. Assoc. America, Washington, D.C., 1979. (See 82e:00006) 05–01
 Stein, William E. (with Talati, Kirit) Convex fuzzy random variables. Fuzzy Sets and Convey Conv

Systems 6 (1981), no. 3, 271-283. (Authors' summary) 82k:60041 60E99 (03E72,

rg, David (with Rodeh, Michael) A layout for the shuffle-exchange network with $\Theta(N^2/\log N)$ area. Inform. Process. Lett. 12 (1981), no. 2, 83-88. 82d:68020 Numerical treatment of singularities in elliptic problems. J. Inst. Math. Appl. 65N99

26 (1980), no. 4, 349-368. (Author's summary) 82b:65155 berg, L. (with Kaskey, G.; Kolman, B.; Krishnaiah, P. R.) Transformations to normality. Analysis of variance, pp. 321–341, Handbook of Statistics, 1, North-Holla Amsterdam, 1980. (See 82f:62102) 62E15
Steinberg, Richard (with Földes, Stéphane) A topological space for which graph

dability is undecidable. J. Combin. Theory Ser. B 29 (1980), no. 3, 342-344. (Saul Stahl) 82d:03073 03D35 (05C10, 54F99, 57M15)

Steinberg, Robert Kleinian singularities and unipotent elements. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 265–270, oc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (I. Dolgachev) 82i:14031 14J17 (14L40, 20G99)

rg, Stanly Local propagator theory. Rocky Mountain J. Math. 10 (1980), no. 4, 767-798. (Maria Cinquini-Cibrario) 82i:34075 34G20 (35A10)

(with Wolf, Kurt Bernardo) Symmetry, conserved quantities and moments in diffusive equations. J. Math. Anal. Appl. 80 (1981), no. 1, 36-45. (Wolf von Wahl) 35Q20 (35B99)

Steinberg, Stuart A. Lattice-ordered modules of quotients. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 2, 243-251. (D. G. Johnson) 82e:06019 06F25 (16A08, 16A86)

erg, V. I. (with Bašarin, G. P.; Boguslavskii, L. B.) Analysis of common-storage conflicts in multiprocessor systems. Avtomat. i Vyčisl. Tehn. (Riga) 1980, no. 6, 27-32, 95 (Russian); translated as Automat. Control Comput. Sci. 14 (1980), no. 6, 20-24. (Authors' summary) 82h:68028 68B20

nby, Magnus (with Gécseg, Ferenc) The algebraic theory of the tree automata. II. (Hungarian) Mat. Lapok 27 (1976/79), no. 3-4, 283-336. (A. Adám) 82a:68157 68F10 (68D30)

ach, Josef Das Gesetz der grossen Zahlen von Erdős-Rényi im Wartemodell

G/G/1. Studia Sci. Math. Hungar. 11 (1976), no. 3-4, 459-466 (1978). (Dietrich Stoyan) 82m:60121 60K25 (60F15)

(with Csorgo, Miklós) Improved Erdős-Rényi and strong approximation laws for rements of partial sums. *Ann. Probab.* 9 (1981), no. 6, 988-996. (J. Steinebach) 60F15 (60F10, 60G50)

The stochastic geyser problem for first-passage times. J. Appl. Probab. 18 (1981), no. 1, 91–103. (Sándor Csörgő) 82a:60042 60F15

On general versions of Erdős-Rényi laws. Z. Wahrsch. Verw. Gebiete **56** (1981), no. 4, 549–554. (Reinhard Michel) **82g:60047** 60F15

Steiner, A. Introduction to Mikusiński operator theory for the solution of differential equations with applications. (Spanish English summary) Rev. Tècn. Fac. Ingr. Univ. Zulia 3 (1980), no. 1, 77-92. (R. G. Buschman) 82d:44005 44A40

Steiner, Hans-Georg Zur Geschichte der Lehrplanentwicklung für den

Mathematikunterricht der Sekundarstufe (1810-1945). Math.-Phys. Semesterber. 25 (1978), no. 2, 172-193. (M. Kline) 82d:01041 01A74

Philosophische Thematisierungen von Fragen aus der und über die Mathematik.

Math. Semesterber. 28 (1981), no. 1, 52-73. (Albert C. Lewis) 82f:00015 00A25

Steiner, Ray On Fibonacci numbers of the form $x^2 + 1$. A collection of manuscripts related to the Fibonacci sequence, pp. 208–210, Fibonacci Assoc., Santa Clara, Calif., 1980. (Neville Robbins) 82j:10022 10A35

ner, Richard J. An isomorphism between products of abelian groups. Algebra

topology, Waterloo, 1978 (Proc. Conf., Univ. Waterloo, Waterloo, Ont., 1978), pp. 512–519, Lecture Notes in Math., 741, Springer, Berlin, 1979. (R. M. Vogt) 82e:55007

Infinite loop structures on the algebraic K-theory of spaces. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 1, 85–111. (J. P. May) 82m:55013 55P47 (18F25)

Steinfeld, O. On completely regular semigroups. Semigroup Forum 21 (1980), no. 1, 93-94. (Phullendu Das) 82a:20071 20M10

grad, Z. A. Evolution of classical scalar and vector fields in spaces with Killing vectors. (Russian) Dokl. Akad. Nauk SSSR 243 (1978), no. 4, 913-916. (Author's summary) 83C40 (53C80)

Steinhardt, Paul J. Two-dimensional gauge theories with diagonal SU(N) color. Ann. Physics 132 (1981), no. 1, 18-31. (Author's summary) 82f:81080 81G05

rn, Charles I. (with King, James H.) The uniformization property for N₂. Israel J. Math. 36 (1980), no. 3-4, 248-256. (Thomas J. Jech) 82a:03051

Steinig, J. Inequalities involving convex sequences. Elem. Math. 36 (1981), no. 3, 58-64. (E. F. Beckenbach) 82k:26016 26D15

(L. A. Takhtajan (Tahtadžjan)) 82c:81093
 81E10 (35Q20, 53C05)

Steinmetz, Norbert Zur Wertverteilung der Quotienten von Exponentialpolynomen. Arch. Math. (Basel) 35 (1980), no. 5, 461-470. (Ilpo Laine) 82e:30035

Über das Anwachsen der Lösungen homogener algebraischer Differentialgleichu zweiter Ordnung. (English summary) Manuscripta Math. 32 (1980), no. 3-4, 303-308. (A. I. Perov) 82d:34010 34A20 (30D20)

(with Mues, E.) The theorem of Tumura-Clunie for meromorphic functions London Math. Soc. (2) 23 (1981), no. 1, 113-122. (Chung-Chun Yang) 82b:30021 30D05 (30D35)

Über die Nullstellen von Differentialpolynomen. Math. Z. 176 (1981), no. 2, 255-264. (Günter Frank) 82g:30053 30D30 (34A20)

Steinmüller, K. (with Bellmann, K.) Systems analysis and modeling in ecology. Systems analysis and simulation, 1980 (Proc. Internat. Sympos., Berlin, 1980), pp. 74-82, Math. earch, 5, Akademie-Verlag, Berlin, 1980. (Authors' summary) 82g:92045

inparz, Franz-X. (with Mühlbacher, Jörg R.) Canonical F-factors of graphs. (German summary) Discrete structures and algorithms (Proc. Conf., Berlin, 1979), pp. 93-104, Hanser, Munich, 1980, (W. Dörfler) 82b:05086 05C35 (05C70)

Steketee, J. A. Unsteady rectilinear gas flows with the velocity distribution of homentropic centered simple waves. (Polish and Russian summaries) Arch. Mech. (Arch. Mech. Stos.) 32 (1980), no. 5, 791-808 (1981). (Author's summary) 82j:76064 76N15

Steklov, V. A. (with Kneser, Adolph) * Haymas nepemicka (1901-1925). (Russian) [Scientific correspondence (1901-1925)] Edited by E. P. Ožigova. With contributions by I. I. Markuš, P. V. Mursepp and T. V. Byrdina. "Nauka", Moscow, 1980. 80 pp. (E. Stipanić) 82i:01073 01A70

Stelen', V. M. (with Zdanov, V. I.) Equations of the motion of a black hole in the quasistationary approximation. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 11, 21-26. (Authors' summary) 82e:83011 83C10 (83C25)

Group analysis of nonlinear systems of differential equations connected with the Schrödinger equation. (Russian. English summary) Ukrain. Fiz. Ž. 26 (1981), no. 2, 323-326, 352. (Author's summary) 82d:81024 81C05 (35A30, 81C40)

Stell, G. (with Høye, J. S.) Classical description of the polarizability and dielectric constant of monatomic fluids. J. Chem. Phys. 75 (1981), no. 7, 3565-3571. (Authors' summary) 82j:82057 82A50

(with Høye, J. S.) Quantum statistical mechanical model for polarizable fluids. J. Chem. Phys. 75 (1981), no. 10, 5133-5142. (Authors' summary) 82k:82035 (81C35)

(with Cummings, P. T.) Mean spherical approximation for a model liquid metal potential. Molecular Phys. 43 (1981), no. 6, 1267-1291. (Authors' summary) 82j:82065 R7A65

(with Ziff, Robert M.; Merajver, Sofia D.) Approach to equilibrium of a Boltzmann-equation solution. Phys. Rev. Lett. 47 (1981), no. 21, 1493-1496. (Authors'

summary) 82j:82046 82A40

Stella, Attilio (with Dekeyser, Raf) Differential renormalization of van der Waals spin models. J. Statist. Phys. 23 (1980), no. 5, 587-607. (Koichiro Matsuno) 82a:82004 82A05

(with Indekeu, J. O.) Comment on the reliability of a real space renormalization approach to the kinetic Ising model. Phys. Lett. A 78 (1980), no. 2, 160-162. (Authors' 82A42 (82A67)

(with Nalesso, G. F.) Magnetic field diffusion through infinite conducting media. J. Franklin Inst. 311 (1981), no. 2, 67–92. (Authors' summary) 82c:78006 78A25 (with Dekeyser, Raf) Dynamical renormalization of kinetic van der Waals spin models. J. Statist. Phys. 25 (1981), no. 3, 443-458. (Authors' summary) 82j:82018 82A05 (82A25)

Random field singularities in renormalization group transformations on van der Waals-Ising models. Phys. A 108 (1981), no. 1, 211–220. (Author's summary) 821:82046

(with Indekeu, J. O.; Magnus, W.) A renormalization group analysis of correlation function series expansions. *Phys. Lett. A* 81 (1981), no. 1, 47-50. (Authors' summary) 82A67 (82A25)

Stelle, K. S. (with Gates, S. James, Jr.; West, P. C.) Algebraic origins of superspace constraints in supergravity. Nuclear Phys. B 169 (1980), no. 3-4, 347-364. (Authors' summary) 82g:83029 83E50 (58A05)

(with Sohnius, Martin F.; West, P. C.) Dimensional reduction by Legendre transformation generates off-shell supersymmetric Yang-Mills theories. Nuclear Phys. B 173 (1980), no. 1, 127–153. (Authors' summary) 82a:81051 81G20 (58B20, 81E10) (with Howe, P. S.; Townsend, Paul) The vanishing volume of N=1 superspace.

Phys. Lett. B 107 (1981), no. 6, 420-424. (Authors' summary) 82m:83063 83E50

Stellmacher, Bernd Über endliche Gruppen mit 2-lokalen maximalen Untergruppen. J. Algebra 70 (1981), no. 1, 48-77. (Bernd Baumann) 82g:20038 20D05

cher, I. Periodic orbits around an oblate spheroid. Celestial Mech. 23 (1981), no. 2,

145-158. (Author's summary) 82c:70017 70F15 (58F22)
Stelmach, Jerzy (with Garczyński, Włodzimierz) Quasicontinual approach to a field theory on a lattice: general theory. J. Math. Phys. 22 (1981), no. 5, 1106-1113. (Authors summary) 82j:81046 81F25

summary) 3-510-90 olica/ Stembridge, John R. (with Todd, John) On a trigonometrical sum. Linear Algebra Appl. 35 (1981), 287-295. (S. Lajos) 82b:15002 15A15

nger, F. (with Hagmann, M.; Schwing, J.) An algorithm for the electromagnetic scattering due to an axially symmetric body with an impedance boundary condition. J. Math. Anal. Appl. 78 (1980), no. 2, 531-573. (D. L. Colton) 82b:78020 78A45

nger, H. (with Gabler, S.) On the completeness of the class of fixed size sampling strategies. Ann. Statist. 9 (1981), no. 1, 229-232. (Steven Arnold) 82b:62004 62C07 engers, Isabelle (with Prigogine, Ilya) Le problème de l'invention et la philosophie des sciences. Philosophy of science: contemporary issues. Rev. Internat. Philos. 34 (1980), no. 1-2, 5-25. (See 82e:00034) 00A69 (82-03) no. 1-2, 5-25, (See 82e:00034) See also Fourez, Gérard, 82h:00019

nius, Erik Foundations of mathematics: ancient Greek and modern. Dialectica 32

(1978), no. 3-4, 255-290. (A. G. Molland) **82e:01012** 01A20 (03A05) On the definition of congruence by recursion. Soc. Sci. Fenn. Comment. Phys.-Math. **49** (1979), no. 2-4, 131-167. (L. W. Szczerba) **82e:51017** 51F20 (03B30)

Kant and the apriority of mathematics. *Dialectica* 35 (1981), no. 1-2, 147-166. (Charles F. Kielkopf) 82m:00022 00A25 (03A05, 03B45)

Anschauung und formaler Beweis. (English summary) Studia Leibnitiana 13 (1981),

no. 1, 133-146. (Roland Fischer) 82m:00023 00A25 (03A05) Sets. II. Synthese 49 (1981), no. 3, 423-426. (Editors) 82k:03009 03A05 (03E99)

Sten'kin, V. V. Solution of a biharmonic equation in an angular region by the splicing method. (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 67-73, 308, Leningrad. Univ., Leningrad, 1980. (W. K. Hayman) 82a:31004 31A30
Stenseth, Nils Chr. Optimal food selection: some further considerations with special

reference to the grazer-hunter distinction. Amer. Natur. 117 (1981), no. 4, 457-475. (Author's summary) 82m:92077 92A17

(Author's summary) 62m:2011 22x11 On Chitty's theory for fluctuating populations: the importance of genetic polymorphism in the generation of regular density cycles. J. Theoret. Biol. 90 (1981),

no. 1, 9-36. (Andris Abakuks) 82;92060 92A17

Stensholt, Elvind (with Tjostheim, Dag) Factorizing multivariate time series operators. J.

Multivariate Anal. 11 (1981), no. 2, 244-249. (Benjamin Kedem-Kimelfeld) 82;60059

60G10 (62M10) panauskas, G. A local limit theorem for a class of arithmetical functions. (Russian. Lithuanian and German summaries) Litousk. Mat. Sb. 20 (1980), no. 2, 159–174, 210. (W. Schwarz) 82h:10075 10K20 (10H25)

ec', O. I. Asymptotic formulas for the roots of the cosine integral. (Russian) Questions of the theory of the approximation of functions (Russian), pp. 154-159, 200, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (Walter Gautschi) 82i:33001

Asymptotically exact estimates of the deviations of partial Fourier sums on classes of continuous periodic functions of several variables. (Russian) Ukrain. Mat. Z. 33 (1981),

no. 1, 119-123. (Włodzimierz Lenski) 82f:42015 42B05 On simultaneous approximation of periodic functions and their derivatives by Fourier sums. (Russian) Ukrain. Mat. Z. 33 (1981), no. 3, 356-367. (V. Totik) 82j:42002

panenko, E. N. See Problems of the normative theory of games and its applications, 82a:90182; Stochastic methods in problems of optimization, 82d:90003; Questions of the application of computers in the development and investigation 82g:68007 and Questions on numerical mathematics, 82i:65003 on of technical systems,

enko, I. D. See Application of mathematical econ

epanenko, V. A. Description of rational differential forms on a product of projective spaces. (Russian) Some problems of multidimensional complex analysis (Russian), pp. 247–252, 274–275, Akad. Nauk SSSR Sibirsk. Oidel., Inst. Fiz., Krasnoyarsk, 1980. 14F10 (Gerhard Pfister) 82i:14011

panjan, S. S. Integral representation of functions of classes A and H_g. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 10, 55-59. (N. V. Rao) 82g:30071 30E20 Stepanov, A. K. (with Molčanov, S. A.) Excursions of a Gaussian field over a high level.

(Russian) Dokl. Akad. Nauk SSSR 249 (1979), no. 2, 294-297. (D. A. Darling) 82±60098 60G60

Stepanov, G. Ju. (with Neiland, V. Ja.) Laminar and turbulent detached flows. (Russian) Current problems in theoretical and applied mechanics (Proc. Fourth All-Union Congress Theoret. Appl. Mech., Kiev, 1976) (Russian), pp. 216–232, 408, "Naukova Dumka", Kiev, 1978. (L. A. Bunimovich) 82c:76040 76D10 (35B40, 35Q10, 76F10)

nov, N. S. (with Zelekson, L. A.) Reflection of signals from the boundary between a moving and a stationary medium. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 9, 1046–1053 (Russian); translated as Radiophys. and Quantum Electronics 23 (1980), no. 9, 695–700 (1981). (Authors' summary) 82h:78022 78A45

panov, S. A. Diophantine equations over function fields. (Russian) *Mat. Sb.* (N.S.) 112(154) (1980), no. 1(5), 86-93, 143. (S. V. Kotov) 82a:10021 10B15

panov, S. E. Realization of Čebylev connection on a hypersurface of affine space. Stepanov, S. E. Realization of Ceroysev connection on a hypersurface of attner spote.

(Russian) Modern geometry (Russian), pp. 73–76, Leningrad. Univ., Leningrad, 1980.

(Author's introduction) 82j:5013 53A15

Stepanov, S. Ja. See Wittenburg, Jens, 82c:70003

Stepanov, V. D. Multipliers generated by hypoelliptic expressions. (Russian) Theory of

cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978) (Russian pp. 234-236, 256, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (A. S. Dynin) 82j-47066

epanov, V. I. (with Sliomis, M. I.) Convective jet in a paramagnetic fluid. (Russian) Convective flows and hydrodynamic stability (Russian), pp. 61-67, 135, Akad. Nauk SSSR, Ural. Naučn. Centr, Sverdlovsk, 1979. (Authors' summary) 821:76081 76R99

nova, T. V. Representations of TO-solutions of the equation X(x,y)dy = Y(x,y)dx in the quasianalytic case. (Russian) Differencial nye Uravnenija 16 (1980), no. 12, 2156-2161, 2300-2301. (T. Čanturija) 82c:34032 34C05 (58F14) 2156-2161, 2300-2301. (T. Čanturija) 82c:34032

panovskii, Ju. P. Wave equations of massless fields. (Russian. English s Mat. Fiz. 47 (1981), no. 3, 343-351. (Author's summary) 82i:81069

Stepaško, T. A. Forms of simplicity and semisimplicity of spaces with simple and quasisimple fundamental groups. (Russian) Geometry of imbedded manifolds (Russian) pp. 97-103, Moskov. Gos. Ped. Inst., Moscow, 1978. (K. Strambach) 82e:22022 22E15

Invariant metric and affine connection in manifolds of pairs of images of a simplicity. (Russian) Studies in geometry and algebra (Russian), pp. 134-141, Kirgiz. Gos. Univ., Frunze, 1978. (K. Strambach) 82f:51013 51F99 (51H20, 53A40)

Geometry of forms of simplicity and semisimplicity of simple, quasisimple and

r-quasisimple Lie groups. (Russian) Geometry of imbedded manifolds (Russian), pp. 85-92, Moskov. Gas. Ped. Inst., Moscow, 1979. (V. N. Berestovskii) 82g:53056 53C30 (22E10)

Stephan, E. (with Wendland, Wolfgang L.; Hsiao, George C.) On the integral equation method for the plane mixed boundary value problem of the Laplacian. Math. Methods Appl. Sci. 1 (1979), no. 3, 265-321. (Authors' summary) 82e:31003 31A25 (35J05)

ni, H. (with Kramer, Dietrich; Herlt, E.; MacCallum, M.) *Exact solutions of Einstein's field equations. Edited by Ernst Schmutzer. Cambridge Monographs on Mathematical Physics. Cambridge University Press, Cambridge-New York, 1980. 425 pp. ISBN 0-521-23041-1 (Colin B. G. McIntosh) 82h:83002 83-02 (53C80, 83C15, 83C20)

los, George (with Morari, Manfred; Aris, Rutherford) Finite stability regions for large-scale systems with stable and unstable subsystems. Internat. J. Control 26 (1977), no. 5, 805-815. (P. Fischer) 82d:93046a 93D05

(with Morari, Manfred; Aris, Rutherford) Errata: "Finite stability regions for large-scale systems with stable and unstable subsystems". Internat. J. Control 27 (1978), no. 4, 656. (Editors) 82d:93046b 93D05 See also Bitsoris, Georges, 82d:93046c

chanopoulos, Gregory (with Michalopoulos, Panos G.; Pisharody, Vijay B.) Modeling of traffic flow at signalized links. Transportation Sci. 14 (1980), no. 1, 9-41. (Authors' mary) 82m:90080 90B20 (with Fredrickson, A. G.) Microbial competition. Science 213 (1981), no. 4511,

972-979. (Authors' summary) 82h:92044 92A17

Stephen, Michael J. (with Nettleton, R. E.) XY model near the percolation point. Phys. Rev. B (3) 24 (1981), no. 3, 1500-1503. (Authors' summary) 82h:82009 (82A42, 82A68)

Stephen, N. G. Considerations on second order beam theories. Internat. J. Solids at Structures 17 (1981), no. 3, 325–333. (Author's summary) 82f-73030 73K05

Stephens, A. B. (with Kellogg, R. Bruce; Shubin, Gregory R.) Uniqueness and the cell Reynolds number. SIAM J. Numer. Anal. 17 (1980), no. 6, 733–739. (C. Wayne Mastin)

82c:76047 76D30 (65L10, 92A09)

Stephens, Larry Joe (with Combs, Charles A.) Group testing to eliminate defectives when prior probabilities for the proportion defective are known. Indust. Math. 30 (1980), no. 2,

95-102. (J. Gladitz) 82g:62133 62N10 (90B25)

phenson, F. Richard (with Houlden, Michael A.) The accuracy of Tuckerman's solar and planetary tables. J. Hist. Astronom. 12 (1981), no. 2, 133-138. (V. E. Thoren) 82i:01076

Stephenson, John See Statphys, 82d:82003
Stephenson, Kenneth (with Stegenga, David A.) A geometric characterization of analytic functions with bounded mean oscillation. J. London Math. Soc. (2) 24 (1981), no. 2, 243-254. (D. Sarason) 82m:30036 30D50 (30F25, 46E99)

Stephenson, Rodney A. On the uniqueness of the square-root of a symmetric. positive-definite tensor. J. Elasticity 10 (1980), no. 2, 213-214. (Krishna Amur) 82e:53028 53A45

Stephenson, W. (with Pearson, K. R.; Watters, J. F.) Skew polynomials and Jacobson rings. Proc. London Math. Soc. (3) 42 (1981), no. 3, 559-576. (G. Michler) 82j:16058 16A66 (16A05, 16A21)

Stepień, Teodor (with Dywan, Zdzisław) Every two-valued propositional calculus has the interpolation property. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 9 (1980), no. 4, 152-153. (From the introduction) 82h:03026 03B05 (with Biela, Andrzej) Lindenbaum's extensions. Polish Acad. Sci. Inst. Philos.

Sociol. Bull. Sect. Logic 10 (1981), no. 1, 42-47. (Editors) 82f:03021 03B99 Stepin, A. M. (with Tagi-Zade, A. T.) Variational characterization of topological pres of the amenable groups of transformations. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 3, 545-549. (Radu Nicolae Gologan) 82a:28016 28D15 (22D40)

(with Ahalaja, S. I.) On invariant measures of noncontracting mappings. (Russian. Georgian and English summaries) Sooble. Akad. Nauk Gruzin. SSR 100 (1980), no. 3, 549-552. (Hans G. Bothe) 82i:58040 58F11 (28D05, 58F15)

Jay 3-32. (Plans U. Boute) accessored Sort (2010), 367(3) peleman, R. S. Refinements of the method of moments for the solution of the charged lamina problem in 3-D. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lekigh Univ., Bethlehem, Pa., 1977), pp. 34–40.

See also Advances in computer methods for partial differential equations, 82a:65005 pling, Josef See Kolomy, Rudoll, 82f-91118 palak, Czeshw (with Torgersen, Erik N.) Comparison of linear models with partially known covariances with respect to unbiased estimation. Scand. J. Statist. 8 (1981), no. 3, 183–184. (Authors' summary) 82mc5160 62110 rboul, F. (with Wertheimer, D.) Comment construire un graphe PERT minimal. (English propagate).

. (with Wertheimer, D.) Comment construire un graphe PERT minimal. (Engli ry) RAIRO Rech. Opér. 15 (1981), no. 1, 85-98. (Authors' summary) 82c:90049

90B35 (05C35)

rbová, Dina Square roots and quasi-square roots in locally multiplicatively convex algebras. (Czech and Russian summaries) Sb. Praci Přírodověd. Fak. Univ. Paluckého v Olomouci Mat. 19 (1980), 103–110. (F. F. Bonsall) 82i:46072 46H05

ngas, S. Riesz summability of Fourier series in eigenfunctions of an abstract perator. (Russian) Mat. Zametki 26 (1979), no. 6, 865-873, 973. (Ju. L. Daleckii) operator. (82e:47031 47A70 (47D99)

rling, Leon S. (with Havas, George; Richardson, J. S.) The last of the Fibonacci groups.

Proc. Roy. Soc. Edinburgh Sect. A 83 (1979), no. 3-4, 199-203. (Authors' sum 20F05 (20-04)

Appl. 15 (1979), no. 1, 27–28. (Editors) 82e:01051 01A70

erg-Stern, H. See Kluberg-Stern, H.

Stern, Jacques Perfect set theorems for analytic and coanalytic equivalence relations. Logic Colloquium '77 (Proc. Conf., Wroclaw, 1977), pp. 277-284, Stud. Logic Foundations Math., 96, North-Holland, Amsterdam, 1978. (Douglas Cenzer) 82a:03046 03E15 (03E60)

m, Ju. M. (with Gancevič, M. M.) Multilevel optim Izo. Akad. Nauk SSSR Fehn. Kibernet. 1979, no. 4, 52-57, 219 (Russian); translated Engrg. Cybernetics 17 (1979), no. 4, 43-48 (1980). (From the introduction) 821:90660 ization in the planning of systems

rm, Manfred A note on p-compatible AC-lattices. Acta Math. Acad. Sci. Hungar. 33 (1979), no. 3-4, 293-297. (Author's introduction) 82:06008 06B05 Neatness in certain algebraic lattices. Publ. Math. Debrecen 27 (1980), no. 3-4,

305-308. (Ralph Freese) 82f:06013 06C05

m, Ronald J. Asymptotic holdability. *IEEE Trans. Automat.* 1196–1198. (A. Halanay) **82k:93017** 93B05 (34H05, 93C05)

(with Fintushel, Ronald) Constructing lens spaces by surgery on knots. Math. Z. 175 (1980), no. 1, 33-51. (W. D. Neumann) 82i:57009a 57N10 (57M25)

(with Fintushel, Ronald) Correction to: "Constructing lens spaces by surgery on ots". Math. Z. 178 (1981), no. 1, 143. (W. D. Neumann) 82:57009b 57N10

rm, Samuel T. The theory of s-groups. Rend. Circ. Mat. Palermo (2) 29 (1980), no. 3, 347-363 (1981). (G. Čupona) 82m:20068 20M10 rnberg, Eli On singular problems in linearized and finite elastostatics. Theoretical and

applied mechanics (Proc. 15th Internat. Congr., Univ. Toronto, Toronto, Ont., 1980), pp. 33–43, North-Holland, Amsterdam, 1980. (See 82&0008) 73G05

(with Knowles, James K.) Antiplane shear fields with discontinuous deformation nts near the tip of a crack in finite elastostatics. J. Elasticity 11 (1981), no. 2,

129-164. (Authors' summary) **82‡:73038** 73G99 (73M05)

rnberg, Helen (with Sternberg, Robert) Letter. Math. Intelligencer **2** (1979/80), no. 2, 62. (L. Neuwirth) **82m:01068** 01A70

rg, Robert (with Sternberg, Helen) Letter. Math. Intelligencer 2 (1979/80), no. 2, 62. (L. Neuwirth) 82m:01068 01A70

mo (with Guillemin, Victor) On the spectra of commuting

pseudodifferential operators: recent work of Kac-Spencer, Weinstein and others. Partial differential equations and geometry (Proc. Conf., Park City, Utah, 1977), pp. 149–165, Lecture Notes in Pure and Appl. Math., 48, Dekker, New York, 1979. (P. Wintgen) 58G25

(with Guillemin, Victor) Some problems in integral geometry and some related problems in microlocal analysis. Amer. J. Math. 101 (1979), no. 4, 915-955. (Rolf 58G15 (35S05, 44A15, 53C65)

(with Guillemin, Victor) The metaplectic representation, Weyl operators and spectral theory. Differential geometrical methods in mathematical physics (Proc. Conf., Aix-en-Provence/Salamanca, 1979), pp. 420-431, Lecture Notes in Math., 836, Springer,

manca, 1979), pp. 420-431, Lecture Notes in Math., 836, Springer, Berlin, 1980. (Rolf Sulanke) 82i:58032 58F06 (58G25)

(with Guillemin, Victor) ★Teomerparaecase accommonstan. (Russian) [Geometric asymptotics] Translated from the English and with a preface by S. G. Gindikin. "Mir", Moscow, 1981. 502 pp. (J. S. Joel) 82k:58085 58Gxx (35B40, 58-02, 78A99, 81C99) ***Infeld, Robert Frege's achievements and literal scientific discourse. Rev. Internat.

Philos. 33 (1979), no. 4, 723-738. (David W. Miller) 824:03006 03-03 (01A55,

rnifeld, Y. Superpositions of continuous functions. J. Approx. Theory 25 (1979), no. 4, 360-368. (R. Doss) 824:26008 26B40 Characterization of Bauer simplices and some other classes of Choquet simplices by

their representing matrices. Notes in Banach spaces, pp. 306-358, Univ. Texas Press, Austin, Tex., 1980. (Wolfgang Lusky) 82e:46017 46A55 (46B20) (with Haydon, R.; Odell, E.) A fixed point theorem for a class of star-shaped sets in

Israel J. Math. 38 (1981), no. 1-2, 75-81. (K. Goebel) 82c:47070 52A30)

(with Roitman, M.) When is a linear functional multiplicative? Trans. Amer. Math. Soc. 267 (1981), no. 1, 111-124. (W. Żelazko) 82j:46061

rnheimer, D. (with Arnal, Didier; Cortet, J. C.; Flato, Moshé) Star-product: quantization and representations without operators. Field theory, quantization and quantization and physics, pp. 85-111, Math. Phys. Appl. Math., 6, Reidel, Dordrecht, 1981. (A. Crumeyrolle) 82e-81019 81C40 (22E65, 58F06)

(with Angelopoulos, Eughénios; Flato, Moshé; Fronsdal, C.) Massless particles, formal group, and de Sitter universe. Phys. Rev. D (3) 23 (1981), no. 6, 1278-1289. (Authors' sumr

(Authors' summary) 82g/81034 81D25 (22E70, 58F06)
raheimer, R. M. (with Creutz, Michael) On the convergence of iterated exponentiation.

I. Fibonacci Quart. 18 (1980), no. 4, 341–347. (Shigeru Haruki) 82b:26006 26A18

Sternin, B. Ju. (with Satalov, V. E.) Analytic Lagrangian manifolds and Feynman integrals.
(Russian) Uspehi Mat. Nauk 34 (1979), no. 6(210), 194–198. (Rémi Vaillancourt)
82f:58061 58G15

(with Satalov, V. E.) Asymptotic behavior in the large of the characteristic Cauchy problem on a complex analytic manifold. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 188-190, 254, "Nauka" Sibirsk. Oidel., Novosibirsk, 1980. (From the text) 82e:58093 58G17 (35B40)

(with Satalov, V. E.) A method for calculating diffraction by a convex body.

(Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 191–193, 254, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (J. S. Joel) 82h:58091 58G20 (58G15, 78A45)

(with Satalov, V. E.) A method of calculating diffraction by a convex body.
(Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 2, 347-349. (J. S. Joel) 82k:78010

(with Satalov, V. E.) Legendre uniformization of multivalued analytic functions. (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 2(10), 263-284, 350. (Stephan Rempel) 58G15 (32A25, 35S99)

(with Nazaikinskii, V. E.; Ošmjan, V. G.; Šatalov, V. E.) Fourier integral operators and the canonical operator. (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 81-140. (Alan Weinstein) 82h:58049 58G15 (35S05, 47G05, 81C15)

etter, H. J. (with Weinmüller, E.) On the error control in ODE solvers with local extrapolation. (German summary) Computing 27 (1981), no. 2, 169–177. (Authors' summary) 82m:65066 65L05

Stettner, L. (with Zabczyk, J.) Strong envelopes of stochastic processes and a penalty method. Stochastics 4 (1980/81), no. 4, 267-280. (F. B. Knight) 82e:60081 (60J35, 62L15)

el, H. A relation connecting scale transformation, Galilean transformation and Backlund transformation for the nonlinear Schrödinger equation. *Phys. D* no. 4, 420-421. (F. A. E. Pirani) 82b:35008 35A22 (35A30, 58H15, 81C05) Phys. D 1 (1980),

Steudel, Reinhard Zur eindeutigen Lösbarkeit eines nichtlinearen

Operatordifferentialgleichungssystems. Comment. Math. Univ. Carolin. 21 (1980), no. 3, 591-604. (Sadakazu Aizawa) 82c:34078 34G20 (47H15)

Steuer, Ralph E. (with Kornbluth, Jonathan S. H.) On computing the set of all weakly efficient vertices in multiple objective linear fractional programming. Multiple criteria decision making theory and application (Proc. Third Conf., Hagen/Königswinter, 1979), pp. 189-202, Lecture Notes in Econom. and Math. Systems, 177, Springer, Berlin, 1980. (I. M. Stancu-Minasian) 82c:90091 90C32

(with Kornbluth, Jonathan S. H.) Goal programming with linear fractional criteria. nean J. Oper. Res. 8 (1981), no. 1, 58-65. (Authors' summary) 82i:90113

Algorithms for linear programm ing problems with interval objective functi coefficients. Math. Oper. Res. 6 (1981), no. 3, 333-348. (N. N. Abdelmalek) 82k:90080 90C05 (90C31)

rwalt, Michael (with Parter, Seymour V.) On k-line and $k \times k$ block iterative schemes for a problem arising in 3-D elliptic difference equations. Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 233-265, ARO Rep. 80, 3, U. S. Army Res. Office, Research Triangle Park, N.C., 1980. (Authors' summary) 82e:65032 65F10 (68K05)

(with Parter, Seymour V.) On k-line and $k \times k$ block iterative schemes for a problem arising in three-dimensional elliptic difference equations. SIAM J. Numer. Anal. 17 (1980), no. 6, 823-839. (Authors' summary) 82ac65084 65N20 (65F10)

statel, F. W. (with Schurer, F.) Exact degrees of approximation for two-dimensional Bernstein operators on C¹. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 823–828, Academic Press, New York, 1980. (P. C. Sikkema) 82h:41010 41A10 (41A44)

Stevens, P. K. A generalization of the Nyquist stability criterion. IEEE Trans. Automat. Control 26 (1981), no. 3, 664-669. (Author's summary) 82j:93033 93D15

Stevens, Samuel N. (with Lin, Pen Min) Analysis of piecewise-linear resistive networks using complementary pivot theory. IEEE Trans. Circuits and Systems 28 (1981), no. 5, 429-441. (Authors' summary) 82d:94063 94C05 (90C33)

Stevens, T. Christine Non-(CA) analytic groups and groups of rotations. Proc. Amer. Math. Soc. 83 (1981), no. 2, 400-402. (Helmut Boseck) 82j:22005 22D05 (22E10)

venson, David K. Numerical algorithms for parallel computers. 1980 National Computers. Conference (Proc. AFIPS Conf., Anaheim, Calif., 1980), pp. 357-361, AFIPS Conf. Proc., 49, AFIPS Press, Arlington, Va., 1980. (See 82f:68004) 65-04 (68B20)

on, Edith On the representation of integers by p-adic diagonal forms. J. Number Theory 12 (1980), no. 3, 367-371. (Masahiko Fujiwara) 82b:10019 10B40 wart, Alan L. (with Berman, Simeon M.) Application of ordered topological vector

spaces in the modeling of visual difference thresholds. Math. Biosci. 50 (1980), no. 1-2, 133-154. (Authors' summary) 82g:92062 92A27 (46N05, 92A09)

wart, B. M. *Adventures among the toroids. A study of orientable polyhedra with regular faces. Second edition. B. M. Stewart, Okemos, Mich., 1980. v+256 ISBN 0-686-119-36-3 (H. S. M. Coxeter) 82b:51028 51M20 (51N05, 52A25)

wart, Bob (with Papadopoulos, Demetrios; Witten, Louis) Some properties of a particular static, axially symmetric space-time. *Phys. Rev. D* (3) **24** (1981), *no.* 2, 320–326. (Colin B. G. McIntosh) **82h:83021** 83C20

Stewart, C. L. (with Shorey, T. N.) On divisors of Fermat, Fibonacci, Lucas and Lehmer bers. II. J. London Math. Soc. (2) 23 (1981), no. 1, 17-23. (András Sárközi) 82m:10025 10A40

Stewart, D. G. (with Carver, M. B.; Liu, J. L.) *Assessment of available integration algorithms for initial value ordinary differential equations: selection for the CRNL subroutine library and simulation packages. With a French summary. AECL, 6220.

Atomic Energy of Canada, Ltd., Chalk River Nuclear Laboratories, Chalk River, Ont., 1979. ii+92 pp. (Authors' summary) 82b:65057 65L05

wart, Frank M. (with Levin, Bruce R.) The population biology of bacterial plasmids: a priori conditions for the existence of mobilizable nonconjugative factors. Genetics 94 (1980), no. 2, 425–443. (Andris Abakuks) 82c:92024 92A15 (34A50) wart, G. W. Preface: A. S. Householder. Linear Algebra Appl. 28 (1979), 1–3 (1 plate). (Editors) 82g:91071 01A70

The behavior of a multiplicity independent root-finding scheme in the presence of

error. BIT 20 (1980), no. 4, 526-528. (Author's summary) 82h:65043 65H05 (65G05) On the implicit deflation of nearly singular systems of linear equations. SIAM J. Sci. Statist. Comput. 2 (1981), no. 2, 136-140. (Author's summary) 82f:65030

Stewart, H. Bruce Generation of analytic semigroups by strongly elliptic operators under general boundary conditions. Trans. Amer. Math. Soc. 259 (1980), no. 1, 299-310. (From the introduction) 82h:35048 35K35 (35J99, 47D05)

me introduction (with Poston, Tim) ★Теория катастроф в ее приложения. (Russian) [Catastrophe theory and its applications] Translated from the English and with a preface by A. V. Černavskii. With an appendix by D. R. Olsen, S. R. Carter and A. Rockwood. Moscow, 1980. 608 pp. (Editors) 82i:58019 58C28 (00A69, 70-02, 73-02, 76-02, 78-02, 81-02, 92A05)

Catastrophe theory and equations of state: conditions for a butterfly singularity. Math. Proc. Cambridge Philos. Soc. 88 (1980), no. 3, 429-449. (Leslie Charles Wilson)

82a:58016 58C28 (80A10, 82A30)

Bifurcation and hysteresis varieties for the thermal-chainbranching model with a tive modal parameter. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 1, 127-139. (P. J. Holmes) 82g:58018 58C28 (58C30, 80A30)

Applications of catastrophe theory to the physical sciences. *Phys. D* 2 (1981), *no.* 2, 245–305. (James Callahan) 82j:58025 58C28 (00A69, 78A10, 78A99)

wart, J. M. (with Porrill, J.) Electromagnetic and gravitational fields in a Schwarzschild space-time. Proc. Roy. Soc. London Ser. A 376 (1981), no. 1766, 451–463. (Garry Ludwig) 82i:83029 83C30 (83C50)

ames P. (with Lemeshow, Stanley; Hosmer, David W.) A comparison of sample size determination methods in the two group trial where the underlying disease is rare. Comm. Statist. B.—Simulation Comput. 10 (1981), no. 5, 437-449. (Authors' summary)

wart, M. Irregularities of uniform distribution. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 1-3, 185-221. (V. Drobot) 82k:10072 10K30 (28D05)

Stewart, P. N. (with Cornish, William H.) Direct and subdirect decompositions of universal algebras with a Boolean orthogonality. Acta Math. Acad. Sci. Hungar. 38 (1981), no. 1-4, 9-14. (Tadashi Ohkuma) 82m:98003 08A30

Stewart, Warren E. (with Sørensen, Jan P.) Bayesian estimation of common parameters from multiresponse data with missing observations. Technometrics 23 (1981), no. 2, 131-141. (Authors' summary) 82d:62063 62F15

Stewartson, Keith (with Brown, S. N.) On the nonlinear reflexion of a gravity wave at a critical level. I. J. Fluid Mech. 100 (1980), no. 3, 577-595. (J. Dunwoody) 82e:76012

(with Brown, S. N.) On the algebraic decay of disturbances in a stratified linear shear flow. J. Fluid Mech. 100 (1980), no. 4, 811-816. (Authors' summary) 82j:76086

(with Cebeci, Tuncer) Asymptotic properties of the zarf. AIAA J. 19 (1981), no. 6, 806-807. (W. O. Criminale, Jr.) 82e:76032 76E99

Marginally stable inviscid flows with critical layers. IMA J. Appl. Math. 27 (1981), no. 2, 133-175. (Author's summary) 82j:76045 76E30 (76-02)

d'Alembert's paradox. SIAM Rev. 23 (1981), no. 3, 308-343. (Author's summary) 82k:76001 76-02

Steyaert, Jean-Marc (with Flajolet, Philippe) On the analysis of tree-matching algorithms. Automata, languages and programming (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 208–219, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (G. P. Bhattacharjee) 824:68023 68C05 (05C05, 05C70, 68E10)

(with Flajolet, Philippe) On the analysis of tree-matching algorithms. Trees in algebra and programming (Proc. 5th Lille Colloq., Lille, 1980), pp. 22-40, Univ. Lille I, Lille, 1980, (From the introduction) 82g:68030 68C05 (68E10)

Steyn, A. G. W. Estimating parameters in an autoregressive process by combining the methods of moments and of least squares. South African Statist. J. 14 (1980), no. 2, 103–120. (Author's summary) 82c:62123 62M10 (62F10)

Stickel, Mark E. A unification algorithm for associative-commutative functions. J. Assoc. Comput. Mach. 28 (1981), no. 3, 423-434. (Author's summary) 82h:68123 (03R35)

Stickler, D. C. (with Ahluwalia, Daljit S.; Ting, L.) Application of Ludwig's uniform progressing wave ansatz to a smooth caustic. J. Acoust. Soc. Amer. 69 (1981), no. 6, 1673–1681. (Authors' summary) 82g:76032 76Q05

Stidham, Shaler, Jr. (with Heyman, Daniel P.) The relation between customer and time averages in queues. Oper. Res. 28 (1980), no. 4, 983-994. (Peter Franken) 82g:60124

Stiefel, Eduard L. See Bauer, F. L.; et al., 82e:01083 and Waldvogel, J.; et al., 82e:01063
Stiegler, Helmut G. The effect of sharing on page replacement. GI—9. Jahrestagung (Bonn, 1979) (German), pp. 402-418, Informatik-Fachber., 19, Springer, Berlin, 1979. (Author's nary) 82g:68027 68B20

(with Jammel, Alfons J.) On expected costs of deadlock detection. Inform. Process.

Lett. 11 (1980), no. 4-5, 229-231. (Authors' introduction) 821:68067 68E10 (68C25)

el (with Jakimovski, Amnon) Some identities for B-splines with multiple knots, and applications to interpolation problems. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 537-542, Academic Press, New York, 1980. (M. Marsden) 82d:41012 41A15

stra, Jan The formal completion of the second Chow group, a K-theoretic approach. Journées de Géométrie Algébrique de Rennes (Rennes, 1978), Vol. II, pp. 149-168, Astérisque, 64, Soc. Math. France, Paris, 1979. (H. Gillet) 82i:14006

On K₂ and K₃ of truncated polynomial rings. Algebraic K-theory, Evanston 1980 (Proc. Conf., Northwestern Univ., Evanston, Ill., 1980), pp. 409–455, Lecture Notes in Math., 854, Springer, Berlin, 1981. (J. Browkin) 82k:13016 13D15 (12A62, 18G99)

ther Das Problem der Beziehung der Mathematik zur materiellen Wirklichkeit in der weltanschaulichen Auseinandersetzung. Jenaer "Anti-Dühring"-Konferenz (Friedrich-Schiller-Univ., Jena, 1978), pp. 283-291, Friedrich-Schiller-Univ., Jena, 1979. (Roland Fischer) 82g:00009 00A25 (03A05)

Stigler, Stephen M. Studies in the history of probability and statistics. XXXVIII. R. H. Smith, a Victorian interested in robustness. Biometrika 67 (1980), no. 1, 217-221. (Author's summary) 82e:01032 01A55 (01A70, 62-03)

Gauss and the invention of least squares. Ann. Statist. 9 (1981), no. 3, 465-474. (V. P. Godambe) 82g:62007 62-03 (01A55)

Stiglitz, Joseph (with Dasgupta, Partha) Resource depletion under technological uncertainty. Econometrica 49 (1981), no. 1, 85-104. (Florian Sauter-Servaes) \$21:90028

Stiller, Peter F. Elliptic curves over function fields and the Picard number. Amer. J. Math. 102 (1980), no. 4, 565-593. (F. Oort) 82f:14035 14J25 (32J15)

er, Silke Konvergenzverhalten bei der numerischen Lösung von Randwertproblemen mittels eines Doppelschichtpotential-Ansatzes. (English summary). Computing 21 (1978/79), no. 3, 233–243. (Author's summary) 82e:65122 65N99 (65R20) well, John C. *Classical topology and combinatorial group theory. Graduate Texts in

Mathematics, 72. Springer-Verlag, New York-Berlin, 1980. xii + 301 pp.
ISBN 0-387-90516-2 (Jože Vrabec) 82h:57001 57-01 (20-02, 20Fxx, 57M99)

The word problem and the isomorphism problem for groups. Bull. Amer. Math. Soc. (N.S.) 6 (1982), no. 1, 33-56. (D. E. Cohen) 82m:20039

See also Serre, Jean-Pierre, 82c:20083
Stinchcombe, R. B. (with Davies, M. R.; Harris, C. K.) Infinite- and finite-spin Ising chains at low temperatures. J. Phys. A 14 (1981), no. 2, 459-469. (Authors' summary) 82a:82043 82A67

(with dos Santos, R. R.; Sneddon, L.) The 2D transverse Ising model at T=0: a (with dos Santos, R. R.; Sneddon, L.) The 2D transverse Ising model at T=0: a finite-size rescaling transformation approach. J. Phys. A 14 (1981), no. 12, 3329-3339. (Authors' summary) 82me82018 82A25 (82-04, 82A68) ason, D. R. (with Mullin, R. C.; Wallis, Walter D.) Concerning the spectrum of skew Room squares. Ars Combin. 6 (1978), 277-291. (G. H. J. Van Rees) 82a:05023

(with Dinitz, J. H.) The construction and uses of frames. Ars Combin. 10 (1980), 31-53. (Arnold Neumaier) 82c:05024 05B15

A skew Room square of order 129. Discrete Math. 31 (1980), no. 3, 333-335. (Spyros S. Magliveras) 82f:05017 05B15

(with Archdeacon, D. S.; Dinitz, J. H.; Tillson, Timothy W.) Some new

row-complete Latin squares. J. Combin. Theory Ser. A 29 (1980), no. 3, 395-398. (Authors' summary) 82d:05031a 05B15

(with Anderson, B. A.; Mullin, R. C.) More skew Room squares. Utilitas Math. 18 (1980), 201-205. (Katherine Heinrich) 82e:05036 05B15

(with Dinitz, J. H.) A note on Howell designs of odd side. Utilitas Math. 18 (1980), 207-216. (J. H. van Lint) 82c:05033 05B30

The nonexistence of a (2,4)-frame. Ars Combin. 11 (1981), 99-106. (Jennifer Seberry) 82k:05025 05B15

(with Schellenberg, P. J.; Vanstone, S. A.; Yates, J. W.) The existence of Howell designs of side n+1 and order 2n. Combinatorica 1 (1981), no. 3, 289-301. (W. D. Wallis) 82m:05028 05B30 (05B15)

(with Dinitz, J. H.) The spectrum of Room cubes. European J. Combin. 2 (1981), no. 3, 221-230. (W. D. Wallis) 82k:05023 05B15

Some results concerning frames, Room squares, and subsquares. J. Austral. Math. Soc. Ser. A 31 (1981), no. 3, 376-384. (Jennifer Seberry) 82k:05026 05B15

The spectrum of skew Room squares. J. Austral. Math. Soc. Ser. A 31 (1981), no. 4, 475–480. (W. D. Wallis) 82k:05027 05B15 (05B30)

(with Archdeacon, D. S.; Dinitz, J. H.; Tillson, Timothy W.) Addendum: "Sor new row-complete Latin squares". J. Combin. Theory Ser. A 30 (1981), no. 1, 116.

(Editors) 824:05031b 05B15 (with Dinitz, J. H.) A fast algorithm for finding strong starters. SIAM J. Algebraic Discrete Methods 2 (1981), no. 1, 50-56. (R. C. Mullin) 82e-05033 05B15 (05-04,

The existence of Howell designs of odd side. J. Combin. Theory Ser. A 32 (1982), no. 1, 53-65. (A. Rosa) 82m:05029 05B30

Stipanić, Ernest Sur quelques vues de Bošković relatives à l'infini. Unio. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 634-677 (1979), 169-173. (Marcel Guillaume) 82a:01017 01A50 (00A25, 03-03, 03A05)

Stirzaker, David Inheritance. Adv. in Appl. Probab. 12 (1980), no. 3, 574-590. (Andrew D. Barbour) 82h:90094 90C50 (60K20, 92A20)

Stjapanauskas, G. See Stepanauskas, G. Stockmeyer, Paul K. Which reconstruction results are significant? The theory and applications of graphs (Kalamazoo, Mich., 1980), pp. 543-555, Wiley, New York, 1981. (B. Manvel) 82k-05084 05C60 (05C20)

(with Kimble, Robert J., Jr.; Schwenk, Allen J.) Pseudosimilar vertices in a graph J. Graph Theory 5 (1981), no. 2, 171-181. (B. Manvel) 82f:05075 05C60 (05C25)

secker, Roll Schlußeflekt in einem Preisduopolexperiment. Decision in small groups (Workshop, Jungholz, 1977) (German), pp. 152–180, Math. Systems in Econom., 45, Hain, Königstein/Ts., 1979. (See 82e:90130) 90A12

sprii, A. O. See Methods and practice of construction of data processing systems, 82a:90006; Data bases and information retrieval systems, 82a:68057a and Data base formation retrieval systems, 82g:68003

ngnii, B. S. (with Min'ko, A. A.; Petunin, Ju. I.) Confidence boundaries for the extremal value of a specific function. (Russian) Ukrain. Mat. Z. 33 (1981), no. 4, 453–458. (L. B. Klebanov) 82j-62022 62F25 Klebanov) 82j:62022

ignyi, A. A. See Stognii, A. O.

Stöhr, R. Freie Produkte torsionsfreier abelscher Gruppen in der Varietät der zentralen Erweiterungen metabelscher Gruppen. Math. Nachr. 96 (1980), 271-292. (L. Fuchs) 20F19 (20K99)

Stoia, Manuela (with Bănică, Constantin) Gorenstein points of a flat morphism of complex spaces. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 5, 687-690. (L. Andrew Campbell) 82i:32032 32C35 (13H10)

Stoica, Anca The equivalence of certain classes of stationary-optimal management problems. (Romanian. English summary) Bul. Inst. Politehn. București Ser. Electrotei 42 (1980), no. 3, 81-88. (Author's summary) 82h:90084 90C20 (90B30, 90D05)

Stoica, Lacretiu On the hyperharmonic functions associated with a degenerated elliptic operator. Romanian-Finnish Seminar on Complex Analysis (Proc., Bucharest, 1976), pp. 589-599, Lecture Notes in Math., 743, Springer, Berlin, 1979. (From the introduction) 82h:31003 31A35 (35J70)

★Local operators and Markov processes. Lecture Notes in Mathematics, 816.
Springer-Verlag, Berlin-New York, 1980. viii + 104 pp. ISBN 3-540-10028-8 (Jean-Pierre 31D05 (47D07, 60Jxx)

On a result of T. Watanabe on excessive functions. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 9, 422-424. (Eugen Popa) 82c:60136 60J35 (31CO5) ica, Petre (with Tertigco, Mihai) *Identificarea şi estimarea parametrilor sistemelor. (Romanian) [System identification and parameter estimation] With an English summary. Editura Academiei Republicii Socialiste România, Bucharest, 1980. 291 pp. (Authors' summary) 82m:93030 93B30 (65UO5, 93E12)

(with Soderström, Torsten) On criterion selection in prediction error identification of least-squares models. (Romanian summary) Bul. Inst. Politehn. Bucureşti Ser. Electrotehn. 42 (1980), no. 4, 63–68. (From the introduction) 82i:93065 93E10

(with Söderström, Torsten) Comparison of some instrum ental variable

methods—consistency and accuracy aspects. Automatica—J. IFAC 17 (1981), no. 1, 101-115. (Authors' summary) 82æ93022 93B30 (93E12)
(with Söderström, Torsten) Analysis of an output error identification algorithm.
Automatica—J. IFAC 17 (1981), no. 6, 861-863. (Authors' summary) 82k:93083 93E25

On a procedure for testing the orders of time series. IEEE Trans. Aut 26 (1981), no. 2, 572-573. (Author's summary) 82e:93104 93E10

(with Soderström, Torsten) On the stability of dynamic models obtained by least-squares identification. IEEE Trans. Automat. Control 26 (1981), no. 2, 575-577.

(with Söderström, Torsten) The Steiglitz-McBride identification algorithm revisited -convergence analysis and accuracy sapects. IEEE Trans. Automat. Control 26 (1981), no. 3, 712-717. (Hideaki Sakai) 82k-93073 93E12

No. 3, 112-111. (ITUGALI JARAI) Samuel Samue

(with Söderström, Torsten) Asymptotic behaviour of some bootstrap estimators.

at. J. Control 33 (1981), no. 3, 433-454. (From the introduction) 82i:93085 93E12

On a procedure for structural identification. Internat. J. Control 33 (1981), no. 6, 1177-1181. (Author's summary) 82e:93030 93B30

(with Söderström, Torsten) On criterion selection and noise model parametrization

for prediction-error identification methods. Internat. J. Control 34 (1981), no. 4, 801–811. (Authors' summary) 82m:93096 93E12 (with Söderström, Torsten) Some properties of the output error method. Automatica — J. IFAC 18 (1982), no. 1, 93–99. (Authors' summary) 82m:93028 93B30

ova, L. K., 82h:10069

Stojaković, Mila (with Hadžić, Olga) On the existence of a solution of the system x = H(x,y), y = K(x,y) in random normed spaces. (Serbo-Croatian summary) Univ. u d. Prirod.-Mat. Fak. 9 (1979), 43-48 (1980). (V. Istrățescu)

du Zb. Re 82b:47078 47H15 (46B99, 47H10) (with Hadžić, Olga) Two random fixed point theorems. (Serbo-Croatian summary)

Univ. u Nocom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 49-52 (1980). (Gheorghe Bocsan) 82:60149 60H25

jaković, Mirko D. ★Metode i tehnika istraživanja u matematici. (Serbo-Croatian)

[Methods and techniques of mathematical investigation] Udžbenik za II godinu srednjeg pozivnousmerenog obrazovanja i vaspitanja matematičke struke. [A textbook in mathematical education and development for the second year of high school] Radnički Univerzitet "Radivoj Ćirpanov", Novi Sad, 1979. 215 pp. (loose errata). (R. P. Boas, Jr.) 00A25

Incompatibility of individual and collective order relations. (Serbo-Croatian. English summary) Acad. Serbe Sci. Arts Glas 311 (1979), no. 44, 1-5. (Author's summary)

On a formal language for group theory. (Serbo-Croatian. English summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 101–104 (1980). (Author's summary) 82b:20003 20A05 (03B30)

ajaković, Zoran (with Ušan, Janez) On a maximal system of functional equations on quasigroups. (Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 8 (1978), 53-57. (Editors) 82b:20107 20N05 (39B50)

(with Usan, Janez) D-complete orthogonal systems of partial quasigroups. (Russian. Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 175-184 (1980). (Petr Němec) 82i;20130 20N99

(with Usan, Janez) A classification of finite partial quasigroups. (Serbo-Croatian summary) Unio. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 185-190 (1980). (Petr Němec) 82i:20131 20N99

Stojan, Ju. G. See Mathematical methods in cybernetics, 82d:93006 Stojan, V. A. (with Abdužabborov, A.) On constructing minimax estimates for the state of one-dimensional objects with distributed parameters. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A No. 12 (1979), 1039-1042, 1070. (C. Ilioi) 82e:93047 93C05

Solution of the axisymmetric Cauchy problem for an elastic layer. (Ukrainian. English and Russian summaries) Visnik Kiio. Univ. Ser. Mat. Meh. No. 22 (1980), 137–142, 152. (Author's summary) 82k:73025 73D30

anov, D. C. (with Aneva, B. L.; Mikhov, S. G.) On the nonunique definition of the current in the Thirring model. J. Phys. A 14 (1981), no. 2, 493-500. (Authors' summary)

anov, Jordan M. (with Enčev, O. B.) Construction and properties of a class of stochastic integrals. Stochastic differential systems (Proc. IFIP-WG 7/1 Working Conf., Vilnius, 1980. (D. Kannan) 821:60128 60H05 (60G15)

Stojanov, Ivan S. (with Tonov, Ivan K.) The union and product of a variety of associative algebras. (Russian) PLISKA Stud. Math. Bulgar. 2 (1981), 130-133. (Authors' summary) 08B10 (16A99)

janova-Venkova, A. N. The lattice of the variety of associative algebras defined by a

Stojanova-Venkova, A. N. commutator of length five. (Russian) C. R. Acad. Bulgare Sci. 34 (1981), no. 4, 465-467. (Editors) 82h:08006 08B15 (16A38)

ović, S. M. On an asymptotic distribu ion connected with a loss queueing system. Mat. Vesnik 3(16)(31) (1979), no. 3, 339-342. (Micha Yadin) 82k:60202

On a loss queucing system with the reserve channel. Mat. Vesnik 3(16)(31) (1979), no. 4, 521-524. (Micha Yadin) 82g:60128 60K25

pop-Stojanović, Zoran R. See Pop-Stojanović, Zoran R.
Stoka. Marius I. Problems of integral geometry in the projective plane P₂. (Italian) Atti Accad. Sci. Lett. Arti Palermo Parte I (4) 37 (1977/78), 99-119 (1980). (L. A. Santaló) 53C65 (51N15, 60D05)

Stokalo, I. Z. An important contribution to the development of differential equations and their application. (Russian) Differencial nye Uraonenija 14 (1978), no. 12, 2123-2130, 2298. (Editors) 82a:01047 01A70 (30E25, 34A20)

Stoker, J. J. Introduction to issue dedicated to Fritz John. Comm. Pure Appl. Math. 33 (1980), no. 3, 213 (1 plate). (Editors) 82g-01072 01A70

Stokes, Houston H. See Maravall, Agustin, (See 82c:90003a)
Stokes, Maura E. (with Koch, Gary G.; Amara, Ingrid A.; Gillings, Dennis B.) Some views on parametric and nonparametric analysis for repeated measurements and selected bibliography. (French summary) Internat. Statist. Rev. 48 (1980), no. 3, 249-265. (B. Raja Rao) 82b:62086 62J10

Stokes, S. Lynne Inferences on the correlation coefficient in bivariate normal populations from ranked set samples. J. Amer. Statist. Assoc. 75 (1980), no. 372, 989-995. (Alain Pousse) 82j:62045 62H20

Stokhof, Martin B. J. See Formal methods in the study of language, 82k:03031

Stoklosa, Janusz Some remarks on periodic sums and extensions of shift registers. Found. Control Engrg. 5 (1980), no. 4, 209-213. (Author's summary) 82j:68035 68D30 (with Zakowski, Wojciech) Computations of (a, K)-machines. Theoret. Comput. Sci. 14 (1981), no. 3, 247-265. (Authors' summary) 82m:68105 68D20 (68C99)

larczyk, Maria (with Drewniak, Józef) Number of iterative steps in the interval. (Polish summary) Uniw. Śląski w Katowicach Prace Nauk.-Prace Mat. No. 11 (1981), 59-72

(loase errata). (From the text) 82k:65023 65G99 larsky, Kenneth B. Integers whose multiples have anomalous digital frequencies. Acta Arith. 38 (1980/81), no. 2, 117-128. (Carl Pomerance) 82h:10012 10A30

The power and generalized logarithmic means. Amer. Math. Monthly 87 (1980), no. 7, 545-548. (V. Ganapathy Iyer) 82g:26029 26D20

Mapping properties, growth, and uniqueness of Vieta (infinite cosine) products. Pacific J. Math. 89 (1980), no. 1, 209-227. (R. P. Boas, Jr.) 82a:30054 30E99 (40A20) Zero-free regions of exponential sums. Proc. Amer. Math. Soc. 83 (1981), no. 3, 486-488. (A. J. van der Poorten) 82k:32008 32A10 (30C15)

Stoljarov, A. V. (with Bazylev, V. T.; Kuz'min, M. K.) Nets on manifolds. (Russian) Problems in geometry, Vol. 12 (Russian), pp. 97-125, 192, Akad. Nauk SSSR, Vsesojuz.

Inst. Naučn. i Tehn. Informacii, Moscow, 1981. (M. C. Chaki) 82k:53029 53A60
Stoljarov, E. P. Solution of a linearized inhomogeneous Helmholtz equation describing the propagation of small vortex perturbations in potential flows of an ideal compressible gas. (Russian) Učen. Zap. CAGI 11 (1980), no. 1, 1-11. (Author's summary) 82c:76079

Distribution of weak vortex and entropy waves in potential flows of a compressible ideal gas. (Russian) Učen. Zap. CAGI 11 (1980), no. 3, 1-13. (Author's sur 82c:76080 76N10 (35L65)

Stoll, E. (with Schneider, Toni) Classical statistical mechanics of soliton-bearing systems. Physics in one dimension (Proc. Internat. Conf., Fribourg, 1980), pp. 75-86, Springer Ser. Solid-State Sci., 23, Springer, Berlin, 1981. (See 82g:82003) 82A05

(with Schneider, Toni) Classical statistical mechanics of the sine-Gordon and φ^4 chain. II. Dynamic properties. Phys. Rev. B (3) 23 (1981), no. 9, 4631-4660. (Authors' summary) 82g:82058 82A68

Stoll, Manfred Radial limits of the Poisson kernel on the classical Cartan domains. Ann. Polon. Math. 38 (1980), no. 2, 207-216. (A. Korányi) 82c:32037 32M15

A class of generators of pseudo-Markov chains. (Russian) Issled. Prikl. Mat.

No. 8 (1980), 66–71. (M. V. Kartašov) 82;68096 68J10 (60J10, 60J20)

Stenberg-Hansen, Viggo (with Tucker, J. V.) Computing roots of unity in fields. Bull.

London Math. Soc. 12 (1980), no. 6, 463–471. (A. Nerode) 82d:03074 03D45 (12A45) On computational complexity in weakly admissible structures. J. Symbolic Logic 45 (1980), no. 2, 353–358. (Peter G. Hinman) 82a:03036 03D15 (03D60)

(with Moldestad, J.; Tucker, J. V.) Finite algorithmic procedures and inductive definability. Math. Scand. 46 (1980), no. 1, 62-76. (Gabriel Lolli) 82d:03077a (03D70)

(with Moldestad, J.; Tucker, J. V.) Finite algorithmic procedures and computation theories. Math. Scand. 46 (1980), no. 1, 77-94. (Gabriel Lolli) 82d:03077b (03D70)

Stölting, Rolf Ebene metrische Geometrien über projektiven Moduln. Abh. Math. Sem. Univ. Hamburg 50 (1980), 166-177. (Frieder Knüppel) 82f:51012 51F15

Stolz, Claude (with Huy Doung Bui; Ky Dang Van) Formulations variationnelles du problème en vitesse pour le solide élastique-fragile avec zone endommaglée (English summary) [Variational principles applicable to rate boundary value problems of an elastic-brittle solid with a damaged zone] C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci. Univers Sci. Terre 292 (1981), no. 3, 251-254. (Authors' summary) 82k:73066 73M05 (49H05)

Iz, Stephan ★Beziehungen zwischen Transfer und J-Homomorphismus. (German) [Relationships between transfer and J-homomorphisms] Dissertation, Universität Bonn, Bonn, 1979. Bonner Mathematische Schriften [Bonn Mathematical Publications], 125. nische Friedrich-Wilhelms-Universität, Bonn, 1980. i + 72 pp. (P. J. Kahn) 82g:57012 57R77 (55R99, 57R75, 57R85)

m, C. S. Graph-theoretic construction of periodic bond chains. I. General case. Z. Krist. ne, A. Douglas (with Joannopoulos, J. D.; Chadi, D. J.) Scaling studies of the resistance

of the one-dimensional Anderson model with general disorder. Phys. Rev. B (3) 24 (1981), no. 10, 5583-5596. (Authors' summary) 82m:82040 82A57

ne, A. H. Analytic sets in nonseparable metric spaces. Analytic sets (Conf., University Coll., Univ. London, London, 1978), pp. 471-480, Academic Press, London, 1980. (See 04A15 82m:03063)

Absolutely FG spaces. Proc. Amer. Math. Soc. 80 (1980), no. 3, 515-520. (V. Kannan) 82c:54022 54D45

Erratum: "Inverse limits of compact spaces" [General Topology Appl. 10 (1979), no.

- 2, 203-211; MR 80m:54014]. Topology Appl. 11 (1980), no. 3, 335. (Editors) 82a:54018
- ne, David A. (with Phillips, Anthony) The Euler cycle of a foliation. J. Differential Geom. 15 (1980), no. 1, 39-50 (1981). (John Cantwell) 82b:57022 57R30 On the combinatorial Gauss map for C¹ submanifolds of Euclidean space. Topology

20 (1981), no. 3, 247-272. (Robert Connelly) 82k:57015 57R20 (53C05, 57Q99)

- ne, David R. Maximal left ideals and idealizers in matrix rings. Canad. J. Math. 32 (1980), no. 6, 1397-1410. (M. Teply) 82d:16015 16A42 (16A66)
- ne, James (with Thiele, Everett; Goodman, Myron F.) A class of master equations that exhibit a generalized form of canonical invariance and other "displacement" invariances J. Chem. Phys. 74 (1981), no. 11, 6394-6406. (Authors' summary) 82f:82032
- Stone, Mervyn See Jaynes, Edwin T., (See 82d:62170)
- ne, Michael (with McKane, A. J.) Localization as an alternative to Goldstone's theorem. Ann. Physics 131 (1981), no. 1, 36-55. (Authors' summary) 82c:82084 82A55 (82A42) (with Kogut, John B.; Snow, M.) Computer simulations of SU(N) SU(N) spin systems in two dimensions. Phys. Rev. Lett. 47 (1981), no. 25, 1767-1770. (Authors' 82-04
- nehewer, Stewart E. Subnormal composition factors of infinite groups. Rend. Sem. Mat. Univ. Padova 63 (1980), 285-294. (David McDougall) 82c:20072 20F22 (20F15)
- nesifer, J. Randolph Modularly complemented geometric lattices. Discrete Math. 32 (1980), no. 1, 85–88. (Mary Katherine Bennett) 82h:06008 06C10
- ng, R. E. (with Kosniowski, Czes) Involutions and characteristic numbers. Topology 17 (1978), no. 4, 309-330. (From the introduction) 82a:57036 57517
 - (with Hiller, Howard L.) Immersion dimension for real Grassman 255 (1981), no. 3, 361-367. (Kee Yuen Lam) 82m:57016 57R42
- Storn, R. (with Becchi, C.; Rouet, A.) Renormalizable theories with symmetry breaking. Stora, R. (with Beccm, C.; Kouet, A.) Kenormalizatio theories with symmetry breaking. Field theory, quantization and statistical physics, pp. 3–32, Math. Phys. Appl. Math., 6, Reidel, Dordrecht, 1981. (K. S. Viswanathan) 82i:81099 81E15 (58D30, 81D20)
 Storčai, V. F. (with Ligun, A. A.) Best choice of nodes in the approximation of functions by local Hermite splines. (Russian) Ukrain. Mat. Z. 32 (1980), no. 6, 824–830. (A. B. Pevnyi) 82c:41011 41A15 (65D07)
- reeus, A. V. (with Trubnikov, B. A.; Slezin, Ju. B.; Samoilenko, B. I.) On the theory of deep volcanic tremor. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 6, 1337-1340. (From the text) 82i:86005 86A15
- rčevaja, G. D. A mapping of classes of generalized Appell polynomials by means of an operator of generalized differentiation. (Russian) Differencial nye Uraonenija (Ryazan) No. 15 (1980), 138–149. (Author's summary) 82j:47065 47E05 (26A24) orer, James A. (with Gallant, John; Maier, David) On finding minimal length
- superstrings. J. Comput. System Sci. 20 (1980), no. 1, 50-58. (Thomas G. Szymanski) 68C25
- presletten, Leiv (with Eckhoff, Knut S.) On the stability of rotating compressible and inviscid fluids. J. Fluid Mech. 99 (1980), no. 2, 433-448. (A. Pozzi) 82e:76071 76U05 (85A20)
- (63/20)

 roey, Colin (with Bell, D. J.; Bryant, G. F.; Cook, P. A.; Crossley, T. R.; Denham, M. J.; Fallside, F.; Luntz, R.; MacFarlane, Alistair G. J.; Mayne, D. Q.; Munro, N.; Owens, D. H.; Rosenbrock, H. H.) ★Modern approaches to control system design. IEE Control Engineering Series, 9. Peter Peregrinus, Ltd., Stevenage; on behalf of the Institution of Electrical Engineers (IEE), London, 1979. xviii + 413 pp.
 - ISBN 0-906048-06-0 (Publishers' description) 82f:93060 93D15 (15A99, 34H05) (with Frost, M. G.) Equivalence of matrices over $\mathbb{R}[s,z]$: a counterexam Internat. J. Control 34 (1981), no. 6, 1225-1226. (Editors) 82m:93024 93B25 (15A21)
- rmer, Erling (with Effros, Edward G.) Positive projections and Jordan structure in operator algebras. Math. Scand. 45 (1979), no. 1, 127-138. (Dorte Olesen) 82e:46076
 - (with Høegh-Krohn, Raphael; Landstad, Magnus B.) Compact ergodic groups of automorphisms. Ann. of Math. (2) 114 (1981), no. 1, 75-86. (József Szűcs) 82i:46097 46L40
- rož, O. G. Representation of a boundary operator in the form of a sum of independent pairs. (Russian) Mat. Metody i Fiz.-Meh. Polja No. 11 (1980), 16-17, 120. (R. M. Džabar-Zade) 82k:47007 47A05
 - On the question of the invertibility of second-order triangular operator matrices. (Russian) Mat. Metody i Fiz.-Meh. Polja No. 12 (1980), 85-87, 122. (G. K. Kalisch) 47A05
 - Asymptotic formulas for eigenvalues of an operator that is akin to a differential of odd order. (Russian) Differencial'nye Uravnenija 17 (1981), no. 4, 744-746, 768. (J. Svejda) 82f:34029 34B25 (47E05)
- roženko, E. A. Approximation of functions of class HP, 0<p<1. (Russian) Mat. Sb. 105(147) (1978), no. 4, 601-621, 640. (Editors) 82b:30046 30E10 (30D55) Imbedding theorems for derivatives of a certain class of functions. (Russian) Mat.
- Zametki 24 (1978), no. 1, 85-94, 142. (From the text) 82d:46056 46E35 (46E30) Storožev, V. I. (with Kosmodamians'kii, O. S.; Obodovskii, L. B.) The effect of an elastic
- wave in an isotropic solid with a series of curvilinear anisotropic inclusions. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 10, 35-39, 95. (Authors' summary) 82m:73028 73D99
- (Authors summary) 82m:73028 / 73D99

 Storvick, D. A. (with Cameron, R. H.) Analytic Feynman integral solutions of an integral equation related to the Schroedinger equation. J. Analyse Math. 38 (1980), 34–66. (Aubrey Truman) 82;81025 81C35 (35J10)
- Story, Donald P. A characterization of the local Radon-Nikodým property by tensor products. Pacific J. Math. 91 (1980), no. 1, 219-222. (Constantin Nicula 46G10 (28B05)
- Stothers, W. W. On a result of Petersson concerning the modular group. Proc. Roy. Soc. Edinburgh Sect. A 87 (1980/81), no. 3-4, 263-270. (Carol Tretkoff) 82c:10026 10D07 (10A21, 20H10)
- Subgroups of finite index in a free product with amalgamated subgroup. Math. Comp. 36 (1981), no. 154, 653-662. (Ian M. Chiswell) 82e:20036 20E06 (10D07,
- Stott, B. (with Alsac, O.; Marinho, J. L.) The optimal power flow problem. Electric power problems: the mathematical challenge (Proc. Conf., Seattle, Wash., 1980), pp. 327–351, SIAM, Philadelphia, Pa., 1980. (Authors' summary) 824:90132 90C50

- Stout, Edgar Lee Uniform approximation on certain unbounded sets in Co. Complex approximation (Proc. Conf., Quebec, 1978), pp. 80-82, Progress in Math., 4, Birkhäuser, ston, Mass., 1980. (From the text) 82a:32019 32E30
 - (with Globevnik, Josip) Highly noncontinuable functions on convex domains (French summary) Bull. Sci. Math. (2) 104 (1980), no. 4, 417-434. (Georges Dioussky)
 - 82c:32013 32D99 (32A40, 32E35)
- Stout, Quentin F. Improved prefix encodings of the natural numbers. IEEE Trans. Inform. Theory 26 (1980), no. 5, 607-609. (J. J. Stiffler) 824:94045 94B45 (94A40)
 - Schur multiplication on $\Re(I_p, I_q)$. J. Operator Theory 5 (1981), no. 2, 231–243. (Richard M. Crownover) 82h:47028 47B37
 - Chard M. Crownovery earth-ruse 47537 Schur products of operators and the essential numerical range. Trans. Amer. Math. 264 (1981). no. 1. 39–47. (F. F. Bonsall) 82h:47029 47B37 (47A05, 47A10, Soc. 264 (1981), no. 1, 39-47. (F. F. Bonsall) 82h:47029
- Stoy, Gabrielle A. (with Neumann, Peter M.; Thompson, E. C.) *Groups and geometry.
 - yol. I. Chapters 1–11. Oxford University, Mathematical Institute, Oxford, 1980.

 "iii+150 pp. (loae errata). (Editors) 82j:20002a 20–01 (20Bxx, 51–01)

 (with Neumann, Peter M.; Thompson, E. C.) ★Groups and geometry. Vol. II.

 Chapters 12–19. Oxford University, Mathematical Institute, Oxford, 1980. pp. 151–312. (Editors) 82j:20002b 20-01 (20Bxx, 51-01)
- Stoy, Joseph E. ★Denotational semantics: the Scott-Strachey approach to programming language theory. Reprint of the 1977 original. With a foreword by Dana S. Scott. MIT Press Series in Computer Science, 1. MIT Press, Cambridge, Mass.-London, 1981. xxx + 414 pp. ISBN 0-262-69076-4 (Editors) 82m:68003 68-01 (03B40, 68B05 68F20)
 - The congruence of two programming language definitions. Theoret. Comput. Sci. 13 (1981), no. 2, 151–174. (David B. Benson) 82e:68017 68B10 (68F20)
- oyan, Dietrich (with Koschitzki, S.) Some models and problems of stochastic geometry. (Russian) Combinatory principles in stochastic geometry (Russian), pp. 133-156, Akad.
 - Nauk Armjan. SSR, Erecan, 1980. (See 82k:60027) 60D05 (with Mecke, Joseph) A general approach to Buffon's needle and Wicksell's corpuscle problem. Combinatory principles in stochastic geometry (Russian), pp. 164-171,
- Akad. Nauk Armjan. SSR, Erevan, 1980. (See 82k:60027) Two stochastic models for spatial patterns of geological origin. (German and Russian summaries) Elektron. Informationsverarb. Kybernet. 16 (1980), no. 8-9, 493-494. (From
- 60D05 (52A22, 60G55, 86A60)
- (with Mecke, Joseph) Stereological problems for spherical particles. Math. Nachr. 96 (1980), 311-317. (Pamela J. Dichomides) 82f:60037 60D05 (60G55) (with Stoyan, Helga) On some partial orderings of random closed sets. (German and
- ssian summaries) Math. Operationsforsch. Statist. Ser. Optim. 11 (1980), no. 1, 145-154. (M. Zähle) 82e:60021 60D05 (60G55)
- (with Konig, Dieter) ★Merona теории массового обслуживании. (Russian) [Methods of queueing theory] Translated from the German by V. F. Matveev and R. Š. Nagapetjan. "Radio i svjaz", Moscow, 1981. 128 pp. (From the preface) 82k:60192
- 60K25 (60-02, 90B22) Stoyan, Helga (with Stoyan, Dietrich) On some partial orderings of random closed sets. (German and Russian summaries) Math. Operationsforsch. Statist Ser. Optim. 11 (1980), no. 1, 145-154. (M. Zähle) 82e:60021 60D05 (60G55)
- Stoyanov, D. T. See Stojanov, D. C. Stoyanov, J. M. See Stojanov, Iordan M.
- Strabbe, Arnoldus Bastiaan See Wansink, Joh. H., 82f:01154
- Strackee, J. (with Nagelkerke, N. J. D.; Hart, A. A. M.) Sample sizes in sequential survival clinical trials. Biometrical J. 23 (1981), no. 7, 709-711. (Authors' summary) 82m:62184 62L05 (62P10)
- Strada, M. (with Comini, G.; Del Giudice, S.) Laminar forced convection in ducts. Numerical methods in thermal problems (Proc. First Internat. Conf., Univ. College, Swansea, 1979), pp. 233–242, Pineridge, Swansea, 1979. (See 82g:80001) 76R05
- affin, Philip D., Jr. Linear algebra in geography: eigenvectors of networks. Math. Mag. 53 (1980), no. 5, 269–276. (Author's summary) 82d:90059 90B20 (05C38, 05C50) Straffin, Philip D., Jr.
- ahov, V. N. Synthesis of series expansion of external gravitational potential in spherical functions. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 4, 839-841. (V. M. Isakov) 82d:86009 86A20 (33A45, 65D99)
- Straight, H. Joseph The existence of certain types of semiwalks in tournaments.
 - Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 901-908. (N. Ito) 82g:05047 05C20
 - (with Fink, John Frederick) A note on path-perfect graphs. Discrete Math. 33 (1981), no. 1, 95-98. (G. Chartrand) 82a:05077 05C99
- Straka, Gunther A strictly causal state description of input-output systems. Progress in cybernetics and systems research, Vol. VI, pp. 370-374, Hemisphere, Washington, D.C., 1982. (Author's summary) 82m:93020 93B15
- Stralka, Albert R. A partially ordered space which is not a Priestley space. Semigroup Forum 20 (1980), no. 4, 293-297. (H. A. Priestley) 82f:54051 54F05 (06D05) (with Lystad, Garr S.) Lawson semilattices with bialgebraic congruence lattices
- General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 247–254, Academic Press, New York, 1981. (James W. Lea, Jr.) 82h:06006 06B30 (54H12)
- mibach, Karl (with Plaumann, Peter) Die lokal kompakten Halbgruppen und Ringe von Pollåk-Rédeischem Typus. Publ. Math. Debrecen 26 (1979), no. 3-4, 199–203. (A. B. Paalman-de Miranda) 82e:22005 22A15
 - (with Bonetti, Flavio; Lunardon, Guglielmo) Permutation loops. (Italian. English amary) Rend. Mat. (6) 12 (1979), no. 3-4, 383-395 (1980). (Authors' summary)
- See also Geometry-von Staudt's point of view, 82e:51005
- mpp, W. Invariant group solutions of hydrodynamical equations. J. Math. Anal. Appl. 78 (1980), no. 2, 618-633. (J. Verosky) 82i:35011 35A30 (35Q20, 58G35, 76A60,
- Über die Vlasov-Gleichung für ein Elektronengas in einem äußeren Magnetfeld. Z. Angew. Math. Mech. 60 (1980), no. 7, T273-T275. (Author's summary) 82j:82055
 - (with Steeb, W.-H.; Erig, W.) Symmetries and the Dirac equation. J. Math. Phys.

- 22 (1981), no. 5, 970-973. (F. R. Halpern) 82h:81024 81C05 (58G35, 81C40, 81D25) (with Steeb, W.-H.) Symmetries of nonlinear reaction-diffusion equations ations. Phys. D 3 (1981), no. 3, 637-643. (Wolf von Wahl) 82m:35081 (35Q20, 80A20)
- mg. Gilbert The quasi-Newton method in finite element calculations. Computation methods in nonlinear mechanics (Proc. Second Internat. Conf., Univ. Texas, Austin, Tex 1979), pp. 451–456, North-Holland, Amsterdam, 1980. (Darrell L. Hicks) 824:6976 65N30 (73K25)
 - (with Temam, Roger) Functions of bounded deformation. Arch. Rational Anal. 75 (1980/81), no. 1, 7-21. (Scott J. Spector) 82c:46042 46E35 (73E99)
 - (with Temam, Roger) Duality and relaxation in the variational problems of sticity. (French summary) J. Mécanique 19 (1980), no. 3, 493-527. (Z. Mróz) nary) J. Mécanique 19 (1980), no. 3, 493-527. (Z. Mróz) 73E20 (49A29, 73C60)
 - (with Engelman, M. S.; Bathe, Klaus-Jürgen) The application of quasi-Newton methods in fluid mechanics. Internat. J. Numer. Methods Engrg. 17 (1981), no. 5, 707-718. (Authors' summary) 821:76005

 See also Germain, Paul. 821:730176
- ani, M. Boundary conditions for the relativistic motion of two immiscible fluids. (Italian aries) Nuovo Cimento B (11) 65 (1981), no. 1, 115-134. (Author's and Russian sur ary) 82m:83031 83C55 (76Y05)
- antzalos, Polychronis (with Abels, Herbert) Homogeneous factors of Riemannian manifolds. J. Differential Geom. 16 (1981), no. 1, 83-91. (Raymond Couty) 82m:53037 53C20 (57S99)
- raha, I. (with Vejvoda, O.) Perturbed nonlin (1981), no. 3, 265-276. (Micczysław Altman) 82g-47043 47H15 (34700, 35L99) asnick, Steven Extended sympathy comparisons and the basis of social choice.
- Methodological developmen s in social sciences. Theory and Decision 10 (1979), no. 1-4,
- 311-328. (Author's summary) 82b:90009 90A08 (92A25)
 ssberg, Helen (with Rothman, Sheldon) The algebraic von Neumann kernel and linear rg, Helen (with Roth algebraic groups. Matt Math. Z. 177 (1981), no. 1, 9-14. (William Moran) 824:20040
- rassen, V. (with Alder, A.) On the algorithmic complexity of associative algebras.

 Theoret. Comput. Sci. 15 (1981), no. 2, 201-211. (Claus-Peter Schnorr) 82g:68038
- 68C25 (12-04, 16-04) Straszak, A. See Models and decision making in national economies, 82m:90001 Strathdee, J. (with Salam, Abdus) On Witten's charge formula. Lett. Math. Phys. 4 (1980),
- no. 6, 505-508. (Authors' summary) 82a:81049 81G05 (81E99)
- os, Panagiotis D. Extension of additive set-functions. Serdica 6 (1980), no. 3, 197-201. (Wayne C. Bell) 82i:28002 28A10
 - A general measure decomposition theorem, by means of the general Wallman remainder. Measure theory and its applications (Proc. Conf., Northern Illinois Univ., De Kalb, Ill., 1980), pp. 261-267, Northern Illinois Univ., DeKalb, Ill., 1981. (See 82g:28002)
- Strătilă, Şerban Twisted Plancherel theorem for weights. A noncommutative case. (French summary) Algèbres d'opérateurs et leurs applications en physique mathématique (Proc. Colloq., Marseille, 1977), pp. 353–359, Colloques Internat. CNRS, 274, CNRS, Paris, 1979. (A. T.-M. Lau) 82a:46074 46L10 (46L40)
 On the tensor product of weights on W*-algebras. Acta Sci. Math. (Szeged) 41 (1979), no. 3-4, 385–390. (Uffe Haagerup) 82b:46083 46L10
- antum Electronics 23 (1980), no. 8, 632-642 (1981). (Author's summary) 82f:82020 82A25 (81K05)
 - (with Tolstopjatenko, A. V.) Calculation of three-time thermal fluctuation moments by methods of Markov nonlinear nonequilibrium thermodynamics. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 8, 956-967 (Russian); translated as Radiophys. and tum Electronics 23 (1980), no. 8, 643-651 (1981). (Authors' summary) 82e:82011 82A35 (94C05)
 - An H-theorem for a homogeneous gas taking into account various approximations with respect to density parameter. (Russian. English summary) Teoret. Mat. Fiz. 46 (1981), no. 3, 402-413. (Author's summary) 82i:82043 82A40
- the, Bernd (with Reibiger, Albrecht) Isomorphiedefinitionen für allgemeine Netzwerke. Wiss. Z. Tech. Univ. Dresden 29 (1980), no. 1, 239-248. (H.-J. Voss) 82c:94015
- nube, Emil On the existence of invariant, absolutely continuing Phys. 81 (1981), no. 1, 27-30. (B. Weiss) 82k:28020 28 28D05
- Straubel, R. (with Sydow, A.) Distributed system simulation by multilevel optimal control. on of systems '79 (Proc. Ninth IMACS Congress, Sorrento, 1979), pp. 923-931, North-Holland, Amsterdam, 1980. (Authors' summary) 82a:49037 49D15 (93A13) (with Tai, N. D.; Gössel, Michael) On decomposition methods of large-scale systems
 - for optimization problems. Systems analysis and simulation, 1980 (Proc. Internat. Sympos., Berlin, 1980), pp. 135–139, Math. Research, 5, Akademie-Verlag, Berlin, 1980.
- (Authors' summary) 82b:49047 49D27 (93A10) with Fig. (1987)
- 111-113. (Authors' summary) 82k:69027 68D30 (20M07, 20M35) A generalization of the Schützenberger product of finite monoids. Theoret. Comput. Sci. 13 (1981), no. 2, 137–150. (Václav Koubek) 82a:20079 20M35 (68D30)
- Strauch, Otto The decomposition of uncountable closed sets of real numbers. (Slovak and Russian summaries) Acta Fac. Rerum Natur. Univ. Comenian. Math. 36 (1980), 41-46. 26A03 (04A15)
- mghan, Brian A novel type of wave behaviour in a compressible inviscid dipolar fluid and stability characteristics of generalized fluids. *Ann. Mat. Pura Appl.* (4) **126** (1980), 187-207 (1981). (Jarosław Jeleń) **82**j:**76007** 76A99
- Stability of uniform equilibrium states of a nematic liquid crystal. (French su J. Mécanique 19 (1980), no. 4, 629-638. (Author's summary) 824:76052 76E99
- (with Fosdick, R. L.) Catastrophic instabilities and related results in a fluid of third grade. (German summary) Internat. J. Non-Linear Mech. 16 (1981), no. 2, 191-198. (Authors' summary) 82i:76003 76A10 (73B30)

- nn, N. (with Schweizer, M.; Wipf, A.) Post-Newtonian generation of gravitational
- waves in a theory of gravity with torsion. Gen. Relativity Gravitation 12 (1980), no. 11, 951-961. (Authors' summary) 82h:83063 83D05 (83C25, 83C35)

 nume, Eldar J. Dihedral transformation groups of homology spheres. J. Pure Appl. Algebra 21 (1981), no. 1, 51-74. (Allan Edmonds) 82h:57035 57825
- The topological version of groups generated by reflections. Math. Z. 176 (1981), no. 3, 429–446. (A. O. Morris) 82d:20047 20H15

 Straus, A. V. See Functional analysis, 82h:47001

 Straus, Ernst G. (with Goldberg, Moshe S.) Combinatorial inequalities, matrix norms, and

- generalized numerical radii. General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978), pp. 37-46, Birkhäuser, Basel, 1980. (Abbas A. El Gamal) 82e:05024 05A20 (15A03, 47A12)
- (with Bethe, Hans; Hoffmann, Banesh; Bargmann, Valentine; Bergmann, Peter G.) Working with Einstein. Some strangeness in the proportion (Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 475-489, Addison-Wesley, Reading, Mass., 1980. (See 82d:83002) 01A70 (01A60, 83-03)
- (with Kolesnik, G.) On the distribution of integers with a given number of prime factors. Acta Arith. 37 (1980), 181-199. (Friedrich Roesler) 82c:10054 10H15
- (with Arkin, Joseph; Hoggatt, Verner E., Jr.) On Euler's solution to a problem of hantus. II. Fibonacci Quart. 18 (1980), no. 2, 170-176. (Maurice Craig) 82b:10015
 - (with Arkin, Joseph) Orthogonal Latin systems. Fibonacci Quart. 19 (1981), no. 4, 289-293. (R. C. Mullin) 82m:05033 05B99 (05B15)
- 289-293 (R. C. Mullin) 82m:05033 05B99 (05B15)

 aus, L. A. Orthogonal extensions and the characteristic function of an isometric operator. (Russian) Functional analysis, No. 14 (Russian), pp. 190-197, Ul' janovsk. Gos. Ped. Inst., Ul' yanovsk, 1980. (E. Durszt) 82i:47008 47A20 (47A45)
 - On the spectrum of an orthogonal extension of an isometric operator. (Russian) Functional analysis, No. 15, pp. 180–187, Ul' janousk. Gos. Ped. Inst., Ul' yanousk, 1980. (E. Durszt) 82m:47009 47A45 (47A10, 47A20)
- Huss, David Some results on random utility models. J. Math. Psych. 20 (1979), no. 1, 35-52. (Fred W. Roush) 82i:92042 92A25 (62E10)
- Straub, Hans Uniqueness in L_1 -approximation for continuous functions. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 865-870, Academic Press,
 - New York, 1980. (R. Smarzewski) 82f-41035 41A52
 Eindeutigkeit in der L₁-Approximation. Math. Z. 176 (1981), no. 1, 63-74. (Dietrich Braess) 82e-41042 41A52 (41A15) Braess) 82e:41042 41A52 (41A15) nuss, Karl Die Stabilität der Strömung einer einfachen viskoelastischen Flüssigkeit in
- einem konvergenten Kanal gegen stationäre und periodische Störungen. Recent developments in theoretical and experimental fluid mechanics, pp. 396-406, Springer, Berlin, 1979. (See 82c:76004) 76A10
- mass, M. J. (with Hunt, L. R.; Murray, John) Liouville's theorem for first-order partial differential operators. Colloq. Math. 41 (1979), no. 1, 117–121. (J. Kajiwara) 82f:35028 35B60 (32F20)
- auss, Walter A. Everywhere defined wave operators. Nonlinear evolution equations (Proc. Sympos., Univ. Wisconsin, Madison, Wis., 1977), pp. 85-102, Publ. Math. Res. Center Univ. Wisconsin, 40, Academic Press, New York, 1978. (From the introduction) 47H15 (35P25, 47A40)
 - (with Cooper, Jeffery) Representations of the scattering operator for moving obstacles. Indiana Univ. Math. J. 28 (1979), no. 4, 643-671. (Boris Pavlov) 82e:35055 35P25 (47F05, 78A45)
 - (with Cooper, Jeffery) Holomorphic extension of the scattering amplitude for moving obstacles. Indiana Univ. Math. J. 29 (1980), no. 4, 597-607. (Teruo Ikebe)
- 35P25 (35L05) (with Marshall, Bernard; Wainger, Stephen) $L^p - L^q$ estimates for the Klein-Gordon
- quation. J. Math. Pures Appl. (9) 59 (1980), no. 4, 417-440. (M. H. Protter) 82j:35133 35Q20 (35L15, 81C05) (with Vázquez, Luis) Existence of localized solutions for certain model field theories
- J. Math. Phys. 22 (1981), no. 5, 1005-1009. (Hideo Soga) 82m:35050 35J60 (81E10)
 Strauß. Werner (with Babiker, A. G. A. G.) Measure spaces in which every lifting is an most 3C-lifting. (Arabic summary) Arab J. Math. 1 (1980), no. 1, 11-21. (V. Losert)
- 28A51 (46G15) Strawderman, William E. (with Brown, L. D.; Cohen, Arthur) Monotonicity of Bayes sequential tests. Ann. Statist. 7 (1979), no. 6, 1222-1230. (Shelemyahu Zacks) 82a:62128
 - 62L10 (62C10, 62H15) (with Casella, George) Confidence bands for linear regression with restricted predictor variables. J. Amer. Statist. Assoc. 75 (1980), no. 372, 862-868. (I. S. Alalouf)
- 62J05 (62F25) Stray, Arne Vitushkin's method and some problems in approximation theory. Aspects of contemporary complex analysis (Proc. NATO Adv. Study Inst., Univ. Durham, Durham, 1979), pp. 351–365, Academic Press, London, 1980. (T. W. Gamelin) 82g:30070
- 30E10 (30H05, 46J15)
- Two applications of the Schur-Nevanlinna algorithm. Pacific J. Math. 91 (1980), no. 1, 223-232. (A. B. Aleksandrov) 82g:30062 30E05 (30D50) Stratev, V. I. (with Pletjuhov, V. A.) Additional invariance of the theory of particles with
- multi-spin 1/2, 2. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 1, 84-89, 140, (Authors' summary) 82c:81069 81D25 (22F70.
- (with Pletjuhov, V. A.) Additional invariance for relativistic wave equations (Russian) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981. no. 2, 103-108, 143. (Authors' summary) 82g:81041 81D25
- ter, R. F. Infrared bound for the massless propagator in a Yang-Mills field. J. Phys. A 13 (1980), no. 5, 1557-1562. (Author's summary) 82c:81094 81E10 (53C05, 58G25) (with Kraus, Karl) Some covariant representations of massless Fermi fields. J. Phys.
 - A 14 (1981), no. 9, 2467-2478. (Wolfgang Lücke) 82k:81033 81D05 (46L60, 81E05) (with Polley, L.; Reents, G.) Some covariant representations of massless bos fields. J. Phys. A 14 (1981), no. 9, 2479-2488. (Wolfgang Lücke) 82k:81034 81D
- Streb, Walter Lie structure in semiprime rings with involution. J. Algebra 70 (1981), no. 2, 480-492. (Susan Montgomery) 82;16059 16A68

 Strebel, Kurt *Vorlesungen über Riemannsche Flächen. (German) [Lectures on

Riemannian surfaces] Studia Mathematica: Skript, 5. Vandenhoeck & Ruprecht, Göttingen, 1980. 120 pp. ISBN 3-525-40145-0 (Jürgen Elstrodt) 82c:30002 3 (30F10, 30F15)

bel, Ralph On one-relator soluble groups. Comment. Math. Helo. 56 (1981), no. 1, 123-131. (D. L. Johnson) 82e:20041 20F05 (57N05)

(with Bieri, Robert) A geometric invariant for modules over an abelian group. Reine Angew. Math. 322 (1981), 170-189. (D. E. Cohen) 82f:20017 20C07 (16A27) (with Meier, Willi) Homotopy groups of acyclic spaces. Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 125, 81-95. (Jean-Claude Hausmann) 82h:55007 55P15 (55Q52)

Strecker, George E. (with Herrlich, Horst) Semi-universal maps and universal initial completions. Structure of tonological contents of the con completions. Structure of topological categories (Proc. Conf., Univ. Bremen, 1978), pp. 75-108, Math.—Arbeitspapiere, 18, Univ. Bremen, Bremen, 1979, (Jiří Adámek) 82h:18004 18A99 (18B15, 54B30)
Streclas, A. (with Sourlas, D.; Jannussis, A. D.) The Lie algebra of Wigner operators of

lar momentum. Hadronic J. 3 (1979/80), no. 5, 1431-1445. (Authors' summary)

81C40 (17B10, 22E70)

1982

Adulasky, E. W. Higher integrability from reverse Hölder inequalities. Indiana Univ. Math. J. 29 (1980), no. 3, 407–413. (José Garcia-Cuerva) 82m:26024 26D15 (42B25) et, Anne Penfold Some designs with block size three. Combinatorial mathe

(Proc. Seventh Australian Conf., Univ. Newcastle, Newcastle, 1979), pp. 224-237, Lecture Notes in Math., 829, Springer, Berlin, 1980. (R. G. Stanton) 82f:05014 05B05 Street, Deborah J. (with Rodger, Christopher A.) Some results on Bhaskar Rao designs. Combinatorial mathematics, VII (Proc. Seventh Australian Conf., Univ. Newcastle, Newcastle, 1979), pp. 238-245, Lecture Notes in Math., 829, Springer, Berlin, 1980. (R. G. Stanton) 82:05915 05B05

(with Seberry, Jennifer) All DBIBDs with block size four exist. Utilitas Math. 18

(1980), 27-34. (H. Hanani) 82a:05019 05B05 (62K10)

Street, Ross Cosmoi of internal categories. Trans. Amer. Math. Soc. 258 (1980), no. 2,

Street, Ross Cosmo of internal categories. Irans. Amer. Main. Soc. 258 (1901), no. 2, 271–318. (G. M. Kelly) 82a:18007 18D35 (18C10, 18F20)

Strehl, Reinhard (with Mitschka, Arno) *Einführung in die Geometrie. (German)

[Introduction to geometry] Kongruenz- und Ähnlichkeitsabbildungen in der Ebene. [Congruence and similarity mappings in the plane]. Second edition. Studienbücher Mathematik. [Textbooks for mathematics] Verlag Herder, Freiburg, 1979. 271 pp. 15D31 (1982). 275104. 51. 51. 600.0005 ISBN 3-451-16881-2 (J. C. Fisher) 82c:51004 51-01 (00A05)

Strehl, Volker (with Beth, Thomas) Materialien zur Codierungstheorie. Arbeitsber. Inst.

Math. Masch. Datenverarb. (Inform.) 11 (1978), no. 14, iii + 172 pp. (Z. Takeda)

82e:94056a 94R05

Strehmel, Karl Näherungsmethoden zur Ermittlung von transsonischen Profilströmungen mit Verdichtungsstössen. Abh. Sächs. Akad. Wiss. Leipzig Math.-Natur. Kl. 53 (1978), no. 4, 78 pp. (Silvio Nocilla) 82a:76050 76H05 (65E05, 65P05)

(with Peper, C.) Numerische Lösung von Anfangswertaufgaben gewöhnlicher Differentialgleichungen n-ter Ordnung mittels Einschrittverfahren. (English summary) Computing 22 (1979), no. 2, 125-139. (Authors' summary) 82f:65083

Stabilitätseigenschaften adaptiver Runge-Kutta-Verfahren. (English and Russian summaries) [Stability properties of adaptive Runge-Kutta methods] Z. Angew. Math. Mech. 61 (1981), no. 6, 253-260. (Author's summary) 82m:65077 65L20

Strehó, Mária Studies of numerical solutions of initial value problems. (Hungarian. English and Russian summaries) Tanulmányok—MTA Számitástech. Automat. Kutató Int. lapest No. 121 (1981), 67 pp. (From the summary) 82j:65062 65L99

Streit, F. Correction: "Multivariate linear discrimination when the covariance matrix is unknown" [South African Statist. J. 13 (1979), no. 2, 93-101; MR 81d:62058]. South African Statist. J. 14 (1980), no. 1, 76. (Editors) 82b:62076 62H30

Streit, Ludwig White noise analysis and the Feynman integral. Functional integration theory and applications (Proc. Colloq., Louvain-la-Neuve, 1979), pp. 43-52, Plenum, New York, 1980. (T. Hida) 82d:81042 81C20 (60H05, 81C35)

See also Quantum fields—algebras, processes, 82b.81006
Streit, Uwe Zur iterativen Lösung nichtlinearer Differenzenschemata für eindimen Stefan-Aufgaben. Wiss. Z. Tech. Hochsch. Karl-Marx-Stadt 22 (1980), no. 4, 347-353. (Author's summary) 82b:80015 80A20 (65M99) J. IFAC 16 (1980), no. 5,

Strejc, Vladimir Least squares parameter estimation. Automatica—J. IF 535–550. (Author's summary) 82b:93038 93E10 (62L12, 65U05)

★State space theory of discrete linear control. Translated from the Czech by R. Major. A Wiley-Interscience Publication. John Wiley & Sons, Ltd., Chichester, 1981. 426 pp. ISBN 0-471-27594-8 (Editors) 82k:93001 93-02

Trends in identification. Automatica-J. IFAC 17 (1981), no. 1, 7-21. (Author's

mary) 82a:93023 93B30

rekolovskaja, N. S. On 0-perfect irreducible pre-images of Hausdorff spaces. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1980, no. 5, 54–57, 85. (N. Hadžiivanov) 82d:54030 54E05 (54C10)

Strel'cov, S. V. On the problem of inversion of necessary conditions for optimality of singular controls. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 6, 29-32, 141. (Rolf Klötzler) 82i:49024 49B36

Strelcyn, J.-M. (with Galgani, Luigi; Giorgilli, A.) Chaotic motions and transition to stochasticity in the classical problem of the heavy rigid body with a fixed point. (Italian and Russian summaries) Nuovo Cimento B (11) 61 (1981), no. 1, 1-20. (Robert Faure) 70E99 (58F13, 70K50)

elec, H. Über die Approximation von Wahrscheinlichkeitsverteilungen durch

Grenzverteilungen. (English summary) Metrika 27 (1980), no. 3, 171-187. (Reinhard Michel) 82a:62035 62E20 mo On the growth of solutions of second order algebraic differential eq

 J. Math. Anal. Appl. 78 (1980), no. 2, 497–521. (T. Čanturija) 82d:34045
 A remark on the growth of solutions of first order algebraic differential equations.
 Proc. Amer. Math. Soc. 78 (1980), no. 4, 509–513. (D. V. V. Wend) 82a:34005
 34A2 (34C11)

On meromorphic solutions of algebraic differential equations. Trans. Amer. Math. Soc. 258 (1980), no. 2, 431-440. (D. V. V. Wend) 82a:34006 34A20 (30D30)

(with Weit, Vitzhak) Asymptotic behavior of Dirichlet series. J. Math. Anal. Appl. 80 (1981), no. 1, 150-155. (R. S. L. Srivastava) 82g:30008 30B50

Streller, Arnfried Stationary interval reliability of a redundant system with renewal and preventive maintenance. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 3, 98-103, 221 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 3, 72-77 (1980). (Peter Franken) 824:60173 60K10 (90B25)

(with Franken, Peter) On the stationary interval reliability of repairable systems Proceedings of the Sixth Conference on Probability Theory (Brazov, 1979), pp. 413-416, Ed. Acad. R.S. România, Bucharest, 1981. (From the introduction) 82m:60110

eppel, Dieter *Entwurf von Schaltnetzen und asynchronen Schaltwerken mit Hilfe der Partitionentheorie. (German) [Design of switching networks and asynchronous circuits using partition theory] Schriftenreihe des Lehrstuhls für Meß- und Regelungstechnik [Series of the Department of Measure and Control], 13. Ruhr-Universität, Boch 209 pp. (not consecutively paged). (Wolfgang Feitscher) 82a:68111

Stretch, C. T. (with Segal, Graeme) Characteristic classes for permutation representations. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 2, 265-272. (T. tom Dieck) 82h:55020

55R40 (57S17)

Stable cohomotopy and cobordism of abelian groups. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 2, 273–278. (T. tom Dieck) 82h:55015 55Q55 (55N22, 55R35)

Streubel, Michael (with Schattner, Ruprecht) Properties of extended bodies in spacetimes admitting isometries. (French summary) Ann. Inst. H. Poincaré Sect. A (N.S.) 34 (1981). no. 2, 117-143. (Authors' summary) 82c:83051a 83C99 (83C40)

(with Schattner, Ruprecht) The connection between local and asymptotic structures for isolated gravitating systems with isometries. (French summary) Ann. Inst. H. Poincaré Sect. A (N.S.) 34 (1981), no. 2, 145-152. (Authors' summary) 82c:83051b 83C99 (83C30)

(with Ashtekar, Abhay) Symplectic geometry of radiative modes and conserved quantities at null infinity. Proc. Roy. Soc. London Ser. A 376 (1981), no. 1767, 585-607. (Richard Hansen) 82h:83023 83C30 (58F06, 83C40)

Strichartz, Robert S. Bounded mean oscillation and Sobolev spaces. Indiana Univ. Math. J. 29 (1980), no. 4, 539-558. (David A. Stegenga) 82f:46040 46E35 (42B10)

Errata: "Fourier transforms and noncompact rotation groups" [Indiana Univ. Math. J. 24 (1974/75), 499-526; MR 52 #1178]. Indiana Univ. Math. J. 30 (1981), no. 3, 479-480. (Editors) 82c:43015 43A90

Asymptotic behavior of waves. J. Funct. Anal. 40 (1981), no. 3, 341-357. (Philip

Brenner) 82j:35020 35B40 (35L05, 81C05)

Stricker, Christophe Encore une remarque sur la "formule de balayage". Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), p. 610, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Jacques Azéma) 82f:60118d

Sur la p-variation des surmartingales. Séminaire de Probabilités, XIII (Univ Strasbourg, Strasbourg, 1977/78), pp. 233-237, Lecture Notes in Math., 721, Springer, 60G44

Berlin, 1979. (Dominique Lépingle) 82a:60066 Une remarque sur l'exposé précédent. Séminaire de Probabilités, XIII (Univ

Strasbourg, Strasbourg, 1977/78), pp. 238-239, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Dominique Lépingle) 82a:60067 60G44

Semimartingales et valeur absolue. Séminaire de Probabilités, XIII (Univ. Strasbourg

Strasbourg, 1977/78), pp. 472-477, Lecture Notes in Math., 721, Springer, Berlin, 1979. Azéma) 82f:60118b 60G48 (60H05)

(Jacques Azema) 847691180 (with Meyer, Paul-André; Yor, Marc) Sur une formule de la théorie du balayage. Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 478-487, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Jacques Azema) 82f:60118c 60G48 (60H05, 60J45)

Prolongement des semimartingales. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 104-111, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Michael Sharpe) 82f:60117 60G48 (60G40, 60G46)

Projection optionnelle et semimartingales. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 112–115, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Nicole El Karoui) 82g:60062 60G48 (60G44)

Sur deux questions posées par L. Schwartz. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 490-492, Lecture Notes in Math., 850, Springer, Berlin, 1981. (R. J. Tomkins) 82j:60086 60G48

Quasimartingales et variations. Seminar on Probability, XV (Univ. Strasbo Strasbourg, 1979/1980) (French), pp. 493-498, Lecture Notes in Math., 850, Springer, Berlin, 1981. (R. J. Tomkins) 82j:60087 60G48

Quelques remarques sur la topologie des semimartingales. Applications aux intégrales stochastiques. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 499-522, Lecture Notes in Math., 850, Springer, Berlin, 1981. (R. J. 60G48 (60H05)

Sur la caractérisation des semimartingales. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 523-525, Lecture Notes in Math., 850,

Springer, Berlin, 1981. (R. J. Tomkins) 82;60089 60C48 (60H05)

Strickland, Elisabetta (with De Concini, Corrado) Traceless tensors and the symmetric group. J. Algebra 61 (1979), no. 1, 112-128. (M. E. Keating) 82a:15025 (16A26)

(with De Concini, Corrado) On the variety of complexes. Adv. in Math. 41 (1981),

no. 1, 57-77. (Jürgen Herzog) 82m:14032 14M99 (13D25)

No. 1, 51-11. (ungen retroit) came track biological response curves in systems dependent upon secondary mediators of hormone action. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 3, part 2, 1366-1370. (Authors' summary) 82d:92011 92A09

Strikwerda, John (with Geer, James F.) A numerical method for computing the shape of a vertical slender jet. SIAM J. Sci. Statist. Comput. 1 (1980), no. 4, 449-466. (Murli M. Gupta) 82i:76032 76D25 (65P05, 76A60) Gupta) 82k76032

inga, Silvana The relativistic motion of elastic bodies. (Italian. English summ Lombardo Accad. Sci. Lett. Rend. A 112 (1978), no. 1, 163-168 (1979). (Author's summary) 82j:83004 83A05 (73C99)

Stringer, John Operational research and public policy. Formal methods in policy

ulation, pp. 212–237, Interdisciplinary Systems Res., 49, Birkhäuser, Basel, 1978. (See 90009) 90A30 (58C28, 90A17) 82k-90009)

Stringer, L. M. (with Parlett, B. N.; Simon, H.) On estimating the largest eigenvalue with the Lanczos algorithm. Math. Comp. 38 (1982), no. 157, 153-165. (Authors' summary)

- Strip, David R. (with Engelbrecht-Wiggans, Richard) The design of distributed service systems. Oper. Res. 29 (1981), no. 5, 983-994. (Authors' summary) 82i:90035
 Strižak, T. G. (with Mitropol'skii, Ju. A.) On the motions of a mathematical pendulum. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 37, 44 pp. (V. G. 34C15 (58F21)
 - On the stability of the solutions of some Hamiltonian systems. (Russian. Kazakh mmary) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 3, 26–32, 91. (Author's ry) 82j:58049 58F05 (34C25, 70H99)
- Strillerskä, V. L. (with Čepilko, N. M.) A problem of boundary conditions in electrodynamics of finite media with spatial dispersion. (Russian. English summ
- Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 4, 65-69. (From the text) 82m:78008 78A25
- nad, Janez Galileo Galilei and the experiments on free fall. (Slovenian. English summary) Obzornik Mat. Fiz. 27 (1980), no. 5, 137-145. (Editors) 82i:01016 (01A70)
- obet, George L. Ground states of a few gravitating neutrons. Collect. Phenom. 3 (1980), no. 2, 55-65. (Author's summary) 82;81670
 81H10
 nechi, F. (with Fröhlich, Jürg; Morchio, G.) Higgs phenomenon without a symmetry
- breaking order parameter. Phys. Lett. B 97 (1980), no. 2, 249-252. (Authors' summary) 81E10 (58E20, 81D20)
 - Gauss' law in local quantum field theory. Field theory, quantization and statistical physics, pp. 227-236, Math. Phys. Appl. Math., 6, Reidel, Dordrecht, 1981. (Author's mary) 824:81087 81E10
- (with Fröhlich, Jürg; Morchio, G.) Higgs phenomenon without symmetry breaking ar Phys. B 190 (1981), no. 3, FS 3, 553-582. (Authors' summary) 82i:81081 81E10 (81D20)
- idiot, J.-J. (with Nguyen, V. Hien; Mifflin, Robert) On conditions to have bounded
- multipliers in locally Lipschitz programming. Math. Programming 18 (1980), no. 1, 100-106. (Authors' summary) 82:90097 90C30 oeker, R. J. The Diophantine equation $(x^2+y)(x+y^2)=N(x-y)^3$. Simon Stevin 54 (1980), no. 3-4, 151-163. (David Lee Hilliker) 82x:10019 10B10
- On the Diophantine equation $(2y^2-3)^2=x^2(3x^2-2)$ in connection with the existence of nontrivial tight 4-designs. Nederl. Akad. Wetensch. Indag. Math. 43 (1981), no. 3, 353–358. (Andrew Bremner) 82j:10032 10B10 (05B05, 12A45) noganov, Ju. G. A new calculation method for partition functions in some lattice models.
- Phys. Lett. A 74 (1979), no. 1-2, 116–118. (Author's summary) 82b:82090 82A67

 Shmer, Gerhard Instabile Flächen vorgeschriebener mittlerer Krümmung. Math. Z. 174 (1980), no. 2, 119-133. (Helmut Kaul) 82k:53010 53A10 (58G12)
- ik, D. Ja. See Struik, D. J.
- ojnowski, Andrzej A note on u.p. groups. Comm. Algebra 8 (1980), no. 3, 231-234.
 (Editors) 82k:20058 20E99 ok, V. V. The distribution of random matrices of certain special types. (Russian)
- Analytical methods of probability theory (Russian), pp. 141-146, 156, "Naukova Dumka", Kiev, 1979. (S. G. Maloševskii) 82c:60020 60C05 (60E99)
 - On k-derivative graphs and the enumeration of their original graphs. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1981, no. 15 Kombinaton Issled. Grafov i Setei, 34-39. (Andrzej Proskurowski) 82j:05069 05C30
- röm, Staffan (with Kristensson, Gerhard) The T-matrix approach to scattering from buried inhomogeneities. Acoustic, electromagnetic and elastic wave scattering—focus on the T-matrix approach (Proc. Internat. Sympos., Ohio State Univ., Columbus, Ohio, 1979), pp. 135–167, Pergamon, Oxford, 1980. (See 82h:78002) 76Q05
 6mberg, Jan-Olov Weak type L¹ estimates for maximal functions on noncompact
- etric spaces. Ann. of Math. (2) 114 (1981), no. 1, 115-126. (Alladi Sitaram) 43A85 (22E30)
- erg, Karl R. *Introduction to classical real analysis. Wadsworth International Mathematics Series. Wadsworth International, Belmont, Calif., 1981. ix+575 pp ISBN 0-534-98012-0 (R. P. Boas, Jr.) 82c:26002 26-01 (26A42, 42-01)
- ger, Andrew (with Jackiw, R.) Wave function(al)s in the large-N limit. Phys. Lett. B
- positions, America (with Jackiw, R.) wave function(an)s in the large-N mint. Phys. Lett. B 99 (1981), no. 2, 133–140. (Authors' summary) 82p;81082 81E99 (81C9) Inverse-dimensional expansion in quantum gravity. Phys. Rev. D (3) 24 (1981), no. 12, 3082–3093, (Author's summary) 82m;83021 83C45 (58G40, 81G25) summe, Stein Arild (with Ellingsrud, Geir) Stable rank-2 vector bundles on \mathbf{P}^3 with c_1 =0 and c_2 =3. Math. Ann. 255 (1981), no. 1, 123–135. (M. Schneider) 82e:14023 14F05 (81E10)
- ist, Walt m to: "How to cut a cake fairly" [Amer. Math. Monthly 87 (1980), no. 8, 640-644; MR 81m:05016]. Amer. Math. Monthly 88 (1981), no. 8, 613-614. (Editors) 82j:05019 05A17
- oe, K. A. (with Filanovsky, I. M.; Saraga, W.; Talbot, A.) Property of analytic functions related to band-pass transformation. Proc. IEE-G 127 (1980), no. 4, 176. (A. A. Peryozyanskii) 824-94055 94C05
- Strongin, R. G. (with Kononenko, A. F.) Analysis of stable situations in recurring esses. (Russian) Current state of the theory of operations research (Russian),
- pp. 173–196, "Nauka", Moscow, 1979. (See 82:59002)

 90D20

 roock, Daniel W. (with Holley, Richard A.) Generalized Ornstein-Uhlenbeck processes and infinite particle branching Brownian motions. Publ. Res. Inst. Math. Sci. 14 (1978), no. 3, 741–788. (Klaus Fleischmann) 82g:60108

 60J80 (60G20, 60K35)
 - (with Holley, Richard A.) Central limit phenomena of various interacting systems. 4nn. of Math. (2) 110 (1979), no. 2, 333-393. (Maury D. Bramson) 82e:60163 (60J25, 60J80)
 - (with Yor, Marc) On extremal solutions of martingale problems. Ann. Sci. École Norm. Sup. (4) 13 (1980), no. 1, 95-164. (Robert Kertz) 82b:60051 60G44 (60H05, 60J60)
 - (with Holley, Richard A.) The D.L.R. conditions for translation invariant Gaussian measures on S(R*). Z. Wahrsch. Verw. Gebiete 53 (1980), no. 3, 293-304. (Robert J. Adler) 82g:60066 60G60 (60K35, 82A05) (with Yor, Marc) Some remarkable martingales. Seminar on Probability, XV (Univ.
 - (with Yor, Marc) Some remarkable martingales. Seminar on Probability, XV (Unio. Strasbourg, Strasbourg, 1979/1980) (French), pp. 590-603, Lecture Notes in Math., 850, Springer, Berlin, 1981. (B. Marchal) 82i:60085 60G44 (60H05, 60I65)
 The Malliavin calculus and its applications. Stochastic integrals (Proc. Sympos., Unio. Durham, Durham, 1980), pp. 394-432, Lecture Notes in Math., 851, Springer,

- Berlin, 1981. (Halim Doss) 82k:60092 60G30 (35H05, 58G32, 60H05, 60J65) (with Holley, Richard A.) Diffusions on an infinite-dimensional torus. J. Funct.
- d. 42 (1981), no. 1, 29-63. (Jean-Louis Ducourtioux) 82k:60152 82A05)
- oscher, Christoph Reduktion von Punktspiegelungsprodukten in der ebenen metrischen Geometrie. Arch. Math. (Basel) 33 (1979/80), no. 2, 183-192. (Frieder Knüppel) 92a:51008 51F15
- Stroth, Gernot Groups having a self-centralizing elementary abelian subgroup of order 16.

 The Santa Cruz Conference on Finite Groups (Unio. California, Santa Cruz, Calif., 1979), pp. 127–129, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (Editors) 82e:20021 20D05
 - (with Reifart, Arthur) Some simple groups with 2-local 3-rank at most 3. J. Algebra 64 (1980), no. 1, 102-139. (Stephen D. Smith) 82d:20019 20D05 (20D08)
 - A general characterization of the Tits simple group. J. Algebra 64 (1980), no. 1, 140–147. (Philip J. Greenberg) 82a:20027 20D05 On standard subgroups of type ${}^2E_6(2)$. Proc. Amer. Math. Soc. 81 (1981), no. 3,
 - 365-368. (Gary M. Seitz) 82j:20039 20D05
- oup, Alice Christiaan Huygens & the development of the air pump. Janus 68 (1981), no. 1-3, 129-158. (J. Z. Buchwald) 82j:01037 01A45
- e, Irene Beiträge des Karl-Sudhoff-Instituts zur Entwicklung einer marxistischen
- Geschichte der Naturwissenschaften. Wiss. Z. Karl-Marx-Univ. Leipzig Ges. Sprachwiss. Reihe 29 (1980), no. 6, 547-564. (D. J. Struik) 82m:01078 01A74 (01A65, 01A80) e, R. (with Holsztyński, Włodzimierz) Universal maps of Cartesian products.
- Math. 105 (1979/80), no. 3, 171-178. (Authors' summary) 82k:54023
- ond A. Functions which are Fourier transforms of distributions. Collog. Math. 44 (1981), no. 1, 143-144. (J. N. Pandey) 82m:46046 46F10
- Struik, D. J. **Краткий очерк истории математики. (Russian) [A short outline of the history of mathematics] Translated from the German and with a supplement by I. B. Pogrebysskii. Third edition. "Nauka", Moscow, 1978. 335 pp. (Translator's preface) 01-01
 - ★Historia concisa de las matematicas. (Spanish) [A concise history of mathematics] Translated from the third English edition by Pedro Lezama y Noriega. Serie Ciencia y Técnica [Science and Technology Series], 5. Instituto Politéce ico Nacional, Mexico City, 1980. xxvi+278 pp. (loose errata). (Editors) 82c:01003 01-01
 - The historiography of mathematics from Proklos to Cantor. NTM Schr. Geschichte Natur. Tech. Medizin 17 (1980), no. 2, 1-22. (M. Folkerts) 82h:01005
- uik, Ruth Rebekka Partial converses to Lagrange's theorem. II. Comm. Algebra 9 (1981), no. 1, 1-22. (John F. Humphreys) 82i:20033 20D10
- Strumia, Alberto (with Ruggeri, Tommaso) Main field and convex covariant density for quasilinear hyperbolic systems. Relativistic fluid dynamics. Ann. Inst. H. Poincaré Sect. A (N.S.) 34 (1981), no. 1, 65-84. (Gérard A. Maugin) 82b:76077 76Y05 (35L65.
 - (with Ruggeri, Tommaso) Convex covariant entropy density, symmetric conservative form, and shock waves in relativistic magnetohydrodynamics. J. Math. Phys. 22 (1981), no. 8, 1824–1827. (Alan Jeffrey) 82m:76070 76Y05 (83C55)
- ninskii, V. V. (with Skobelev, B. Ju.) A nonlinear neutral curve for Poiseuille flow. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 3, 566-570. (C. Fetecău) 82i:76038
 - On the theory of systems of equal particles. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 6, 1345-1349. (R. A. Minlos) 82c:82116 82A77 (82A05)
- nkov, S. P. See Aschbacher, Michael, 82e:20015
- Struppa, Daniele (with Lanteri, Antonio) Degenerations of compact orientable surfaces and eir classification. (Italian summary) Proceedings of the Brescia Mathematical Ser Vol. 3 (Italian), pp. 119-141, Univ. Cattolica Sacro Cuore, Milan, 1979. (Lê Düng Tráng)
- 82i:57008 57N05 (14J17)
 Strusevič, V. A. On the Bellman-Johnson problem. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 6, 518-521, 573. (Author's summary) 82j:90034 90B10 (65K10)
- Struwe, Michael Multiple solutions of anticoercive boundary value problems for a class of ordinary differential equations of second order. J. Differential Equ 285-295. (Joachim A. Hempel) 82a:34056 34C25 (34B15, 58E05)
 - Infinitely many critical points for functionals which are not even and applications to superlinear boundary value problems. Manuscripta Math. 32 (1980), no. 3-4, 335-364. (U. D'Ambrosio) 82e:58030 58E05 (35B99)
 - Infinitely many solutions of superlinear boundary value problems with rotational symmetry. Arch. Math. (Basel) 36 (1981), no. 4, 360–369. (Themistocles M. Rassias) 35J65 (58E05)
 - On the solvability of ordinary differential equations with only partially continuous right-hand side by difference methods. (German summary) Computing 27 (1981), no. 2, 165-167. (Author's summary) 82m:65067 65L05
 - Three nontrivial solutions of anticoercive boundary value problems for the pseudo-Laplace operator. J. Reine Angew. Math. 325 (1981), 68-74. (D. E. Edmunds)
 - A counterexample in elliptic regularity theory. Manuscripta Math. 34 (1981), no. 1, 35J60 (53C45) 85-92. (K. Schmitt) 82j:35058
- Strygin, V. V. (with Strygina, S. O.) *Алгебранческое интерполирование. (Russian) [Algebraic interpolation] Kuibyšev. Gos. Univ., Kuybyshev, 1980. 51 pp. (N. A. Nazarenko) 82f:41009 41A05 (41A15, 65D05)
- Strygina, S. O. (with Strygin, V. V.) *Алгебравческое интернолирование. (Russian) [Algebraic interpolation] Kuibyšev. Gos. Univ., Kuybyshev, 1980. 51 pp. (N. A. Nazarenko) 82f:41009 41A05 (41A15, 65D05)
- Stuart, Allan E. G. (with Osborne, Anthony D.) Separable solutions of the two-dimensional sine-Gordon equation. *Phys. Lett. A* 67 (1978), no. 5-6, 328–330. (A. Degasperis) 82h-35090 35Q20 (81C05)
 - (with Osborne, Anthony D.) On the separability of the sine-Gordon equation and similar quasilinear partial differential equations. II. Dependent- and
 - independent-variable transformations. J. Math. Phys. 21 (1980), no. 4, 726-734.
 - (Authors' summary) 82g:35109 35020 (with Bryan, A. C.; Haines, C. R.) A classification of the separable solutions of the

- two-dimensional sine-Gordon equation and of its Laplacian variant. (Italian and Russian aries) Nuovo Cimento B (11) 58 (1980), no. 1, 1-33. (Eugene Gutkin) 82a:58054 58G35 (35O20, 81C05)
- Stuart, C. A. Bifurcation for variational problems when the linearisation has no eigenvalues. J. Funct. Anal. 38 (1980), no. 2, 169-187. (M. Shearer) 82c:58015 58E07 (47H15
- Stuart, J. T. (with DiPrima, R. C.) On the mathematics of Taylor-vortex flows in cylinders of finite length. Proc. Roy. Soc. London Ser. A 372 (1980), no. 1750, 357-365. (Jacob 76C05 (76E10)

Instability and transition in pipes and channels. Transition and turbulence (Madison, Wis., 1980), pp. 77–94, Publ. Math. Res. Center Univ. Wisconsin, 46, Academic Press, New York, 1981. (See 82k:76002) 76E05 (S8F13, 76F10).

Stuart, Michael Components of X^2 for testing distributional assumptions against certain

restricted alternatives. J. Amer. Statist. Assoc. 75 (1980), no. 371, 625-633. (Gavin G. Gregory) 82g:62070 62G10 (62E20)

art, S. N. Nonclassical integrals of Bessel functions. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 3, 368-378. (B. R. Bhonsle) 82g:33021 33A40 (33A45, 46F10) Table errata: Higher transcendental functions, Vol. II [McGraw-Hill, New York, 1953; MR 15, 419] by A. Erdélyi, W. Magnus, F. Oberhettinger and F. G. Tricomi. Math.

 Comp. 36 (1981), no. 153, 315. (Editors) 82g:65007b 65A05
 Table errata: A course of modern analysis [fourth edition, Cambridge Univ. Press,
 Cambridge, 1927; Jbuch 53, 180] by E. T. Whittaker and G. N. Watson. Math. Comp. 36 (1981), no. 153, 319. (Editors) 82b:33001 33-01

(1981), no. 153, 319. (Editors) 82b:33001 33-01
bblebine, John B. (with Moore, David S.) Chi-square tests for multivariate normality
with application to common stock prices. Comm. Statist. A—Theory Methods 10 (1981),
no. 8, 713-738. (Authors' summary) 82f:62100 62H15 (62G10)
schlik, Z. The radial motion of photons in Kerr metric. (Russian summary) Bull.
Astronom. Inst. Czechaslovakia 32 (1981), no. 1, 40-52. (J. D. McCrea) 82d:83012

Evolution of Kerr naked singularities. (Russian. English summary) Bull. Astro Inst. Czechoslovakia 32 (1981), no. 2, 68-72. (Author's summary) 82d:83070 8 (85A40)

Stückrad, Jürgen Über die kohomologische Charakterisierung von Buchsbaum-Moduln.

Math. Nachr. 95 (1980), 265-272. (Chr. U. Jensen) 82c:13032 13H15

Stucky, W. (with Ottmann, Thomas) Higher order analysis of random 1-2 brother trees.

BIT 20 (1980), no. 3, 302-314. (G. Berman) 82c:68040 68E05 (68E10) (with Pahnke, K.) A procedure for the common estimation of parameter

corresponding to several treatment groups. (German summary) Biometrical J. 23 (1981), no. 6, 573–579. (Authors' summary) 82ms2065 62F10
Studden, W. J. Designs for large degree polynomial regression. Optimal design theory.
Comm. Statist. A—Theory Methods 7 (1978), no. 14, 1391–1397. (See 82g:62106)

62K05 (62J02)

D_s-optimal designs for polynomial regression using continued fractions. Ann. Statist.

8 (1980), no. 5, 1132–1141. (B. C. Gupta) 82x62115 62K05 (62105)
On a problem of Chebyshev. J. Approx. Theory 29 (1980), no. 3, 253–260. (V. N. Malozemov) 82b:41026 41A50
ubiková-Studenovská, Danica See Jakubiková-Studenovská, Danica

Studer, R. See Pritchard, Paul, 82j:68008 Stuewer, Roger H. Erwin N. Hiebert. Historia Math. 7 (1980), no. 3, 229-233. (Editors) 01A70

Stuhler, Ulrich Normen und Spuren in assoziativen Algebren. With supplements by Peter Draxl and Martin Kneser. SK₁ of division algebras (Sem., Bielefeld/Göttingen, 1976) (German), pp. 21–32, Lecture Notes in Math., 778, Springer, Berlin, 1980. (See 82b:16014) 16A46 (12E15, 16A39)

On the connection between Brauer group and Tate-Shafarewich group. J. Algebra On the connection detween braiding group and rate-standarding group. 3. Argenta. 70 (1981), no. 1, 141–155. (Manuel Ojanguren) 82k:14027 14H25 (12B20) Stulajter, František Locally best unbiased estimates of functionals of covariance functions.

of a Gaussian stochastic process. Kybernetika (Prague) 16 (1980), no. 3, 248-262. (David J. Scott) 82e:62140 62M09 (62G15)

Štulić, Predrag A discovery of Euler and some of its consequences. (Serbo-Croatian) atika (Belgrade) 5 (1976), no. 2, 84-93. (Editors) 82f:01041 01A50 (05A19. 40-03)

Stuller, John A. Generalized running discrete transforms. IEEE Trans. Acoust. Speech Signal Process. 30 (1982), no. 1, 60-68. (Author's summary) 82m:94017 94A05

Stuller, R. L. SU(2) Yang-Mills Coulomb Green's functions in the presence of a generalized Wu-Yang configuration. Phys. Rev. D (3) 22 (1980), no. 10, 2510-2517. (E. Wieczorek) 81E99 (81C05)

 mbles, Sian M. Hypersurfaces of constant mean extrinsic curvature. Ann. Physics 133 (1981), no. 1, 28-56. (Kotik K. Lee) 82g:83007
 83C30 (53C50, 58D25, 58E17)

nel, F. Perturbation theory for evaluation algorithms of arithmetic expressions. Math.

Stummet, F. Perturbation timeby for evaluation algorithms of arithmic expressions. *Main. Comp.* 37 (1981), no. 156, 435–473. (Author's summary) 22:65032 65C99

Stump, Daniel R. Soluble model of the phase transition of the XY model. *Phys. Rev. D* (3) 22 (1980), no. 10, 2490–2495. (Author's summary) 32:e32039 82A25

Stumpf, F. B. ★Analytical acoustics. *Am Arbor Science Publishers*, *Inc.*, *Ann Arbor*, *Mich.*, 1980. xiii + 290 pp. *ISBN* 0-250-40302-1 (From the preface) 32:r56077 76Q05 (76–01)

Stumpf, Harald (with Kleih, W.) Quantum statistical derivation of rate equations for electronic processes in polar crystals with external electric field. Z. Naturforsch. A 35

(1980), no. 11, 1121-1135. (Authors' summary) 82a:82040 82A60 (81G55) Stupelis, L. A nonstationary problem of magnetohydrodynamics for the case of two space variables. (Russian) Boundary value problems of mathematical physics, 10. Trudy Mat.

Inst. Steklov. 147 (1980), 156-168, 204. (M. Drăganu) 82a:76092a Inst. Stekkov. 147 (1980), 136-168, 204. (M. Draganu) 82a: 16092a / 16003 A boundary value problem for a stationary system of equations of magnetohydrodynamics. (Russian) Boundary value problems of mathematical physics, 10. Trudy Mat. Inst. Steklov. 147 (1980), 169-193, 204. (M. Drăganu) 82a:76092b

76W05

76W05 Sturm, Jacob Special values of zeta functions, and Eisenstein series of half integral weight.
Amer. J. Math. 102 (1980), no. 2, 219-240. (Wen Ch'ing Winnie Li) 82b:10033a 10D24 (10D12, 10H08)

Addendum to: "Special values of zeta functions, and Eisenstein series of half integral weight" [Amer. J. Math. 102 (1980), no. 2, 219-240]. Amer. J. Math. 102 (1980), no. 4, 781-783. (Wen Ch'ing Winnie Li) 82b:10033b 10D24 (10D12, 10H08)

Sturm, Teo (with Fábera, Jiří) Embedding of semilattices into distributive lattices. Czechoslovak Math. J. 29(104) (1979), no. 2, 232-245. (From the introduction) 82j:06011 06A12 (06D99, 28A05)

Universal coretracts in some categories of chains and Boolean algebras Demonstratio Math. 13 (1980), no. 3, 693-702. (Sabine Koppelberg) 82&06002 06A05 (03C65, 06E05, 18B99)

Sturm, Terry W. Laminar gravitational convection of heat in dead-end channels. J. Fluid Mech. 110 (1981), 97–113. (Author's summary) 82±76078 76R10

Sturtevant, Dean (with Griggs, Jerrold R.; Saks, Michael E.) On chains and Sperner k-families in ranked posets. II. J. Combin. Theory Ser. A 29 (1980), no. 3, 391–394. (D. J. Kleitman) 82±05004 05A05 (06A10)

Styan, George P. H. (with Alalouf, I. S.) Estimability and testability in restricted linear models. (French, German and Russian summaries) Math. Operationsforsch. Statist. Ser. Statist. 10 (1979), no. 2, 189-201. (J. K. Baksalary) 82g:62088 62J05

On Lavoie's determinantal inequality. Linear Algebra Appl. 37 (1981), 77-80. (Author's summary) 82k:15009 15A15
Styblińska, Bogumila (with Biernacki, Radosław M.) A new approach to synthesis of active

filters in multiloop structures. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Tech. 27 (1979), no. 7, 619-631. (R. K. Appiah) 82j:94023 94C05

Styer, D. (with Wright, Donald J.) Results on bi-univalent functions. Proc. Amer. Math. Soc. 82 (1981), no. 2, 243-248. (T. J. Suffridge) 82c:30018 30C45 (30C75)

Stygar, Danuta (with Bieszk, Leon) On the transitive fibres of tensors of second order in the two-dimensional space X2. Demonstratio Math. 13 (1980), no. 1, 147-163. (D. I. Papuc) 53A55

Transitive fibres of the antisymmetic tensor T_{ij}^{c} in the three-dimensional space X^3 . Demonstratio Math. 13 (1980), no. 2, 383–391. (P. G. Walczak) 82g:53019 53A55

Transitive fibres of the tensor t_{1/1} in the three-dimensional space X² Demonstratio Math. 13 (1980), no. 4, 839–859. (D. I. Papuc) 82e:53030 53A55 (15A21)

Stynes, Martin An algorithm for numerical calculation of topological degree. Applicable

Anal. 9 (1979), no. 1, 63-77. (T. Y. Li) 82g:55001 55-04 (55M25)

An N-dimensional bisection method for solving systems of N equations in N unknowns. Applicable Anal. 9 (1979), no. 4, 295-296. (T. Y. Li) 82f:65062a 65H10

An N-dimensional bisection method for solving systems of N equations in Nunknowns. Numerical solution of highly nonlinear problems (Sympos. Fixed Point Algorithms and Complementarity Problems, Univ. Southampton, Southampton, 1979), pp. 93–111, North-Holland, Amsterdam, 1980. (T. Y. Li) 821:65062b 65H10 (55M20) On the construction of sufficient refinements for computation of topological degree.

Numer. Math. 37 (1981), no. 3, 453–462. (Author's summary) 82i:55001

55–04 (54H25, 55M25, 65D99, 65H10)

Stys, Tadeusz The method of collocation by cubic splines for nonlinear parabolic equations. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 29 (1981), no. 1-2, 91-98. (Author's summary) 82m:65109 65N35

A discrete maximum principle. Dissertationes Math. (Rozprawy Mat.) 183 (1981), 41 pp. (Rolf Rannacher) 82hc65072 65N15 (35B50, 39A12)

Su, Bu Qing Some intrinsic invariants of a parametric curve in affine hyperspace. (Chinese nary) Chinese Ann. Math. 1 (1980), no. 2, 199-206. (Toru Ishihara) 82g:53011

On affine invariants of a Bézier curve. (Chinese. English summary) Math. Nur

 Sinica 2 (1980), no. 4, 289-298. (Author's summary) 82g:51031
 Su, Chun (with Bai, Zhi Dong) On the Lebesgue decomposition of the multidimensional infinitely divisible distributions. (Chinese. English summary) J. Math. Res. Exposition 1981, First Issue, 31-34. (Authors' summary) 82i:60032 60E07 1981, First Issue, 31-34. (Authors summary) 82:000032 00:207 (with Bai, Zhi Dong; Xu, Da Ming) A note on U-statistics. (Chinese. English summary) J. Math. Res. Exposition 1981, no. 1, First Issue, 29-30. (Authors' summary)

82g:62032 62E10 (62G99)

Su, J. C. (with Chang, C. N.) A theorem on Poincaré algebras. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 2-3, part 2, 417–438. (Jacques Emsalem) 82e:13001 13A15

Su, Ru Keng (with Ni, Guang Jiong) Vacuum spontaneously broken symmetry of Higgs field and Bose condensation. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 1, 9-12. Kexue Tongbao (English) 25 (1980), no. 1, 26-30. (From the text) 82k:81074 81E99 (81D20, 81J05)

Stephen Y. H. (with Karpovsky, Mark) Correction to: "Detection and location of input and feedback bridging faults among input and output lines" [IEEE Trans. Comput. 29 (1980), no. 6, 523-527; MR 81g:94076]. IEEE Trans. Comput. 30 (1981), no. 1, 86. (Editors) 82a:94131 94C99
Su, Yu Cheng Asymptotic solution of mixed singular perturbation problems for

second-order quasilinear hyperbolic partial differential equations. (Chinese. English summary) Nanjing Daxue Xuebao 1980, no. 1, 19-30. (Tai Ping Liu) 82c:35040

Su, Zhao Bing (with Zhou, Guang Zhao) On the Goldstone mode in the stationary state of a nonequilibrium dissipative system. (Chinese: English summary) Acta Phys. Sinica 29 (1980), no. 5, 618–634. (Tuan W. Chen) 82he81165 81K05 (81D20, 82A35) 82. Zhe The significance of the "street vendor's load" problem. (Chinese) Knowledge Practice Math. No. 2 (1980), 33–36. (Editors) 82j-68025 68C25 (03D15, 90C05)

ng Suan Dyk Ha See Cyong Suan Dyk Ha le Suan Kan See Le Suan Kan

nguen Suan Nguen See Nguen Suan Nguen Subbaiah, Perla (with Krishnaiah, P. R.; Mudholkar, Govind S.) Simultaneous test procedures for mean vectors and covariance matrices. Analysis of variance, pp. 631-671, Handbook of Statistics, 1, North-Holland, Amsterdam, 1980. (See 82f:62102) (with Mudholkar, Govind S.) A review of step-down procedures for multivariate analysis of variance. Multivariate statistical analysis (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1979), pp. 161-178, North-Holland, Amsterdam, 1980. (M. S. Srivastava)

82;62039 62H15
Subba Rao, B. V. Lattice ordered autometrized algebras. Math. Sem. Notes Kobe Univ. 6 (1978), no. 3, 429–448. (From the introduction) 82a:06029a 06F05 Lattice ordered autometrized algebras. II. Math. Sem. Notes Kobe Univ. 7 (1979),

no. 2. 193-210. (From the introduction) 82a:060296 06F05

Lattice ordered autometrized algebras. III. Math. Sem. Notes Kobe Univ. 7 (1979), no. 3, 441–455. (From the introduction) 82a:06029c 06F05

Representation of lattice ordered autometrized algebras by sheaves. Math. Sem. Notes Kobe Univ. 8 (1980), no. 1, 37–55. (From the introduction) 82a:06029d 06F05

ttice ordered autometrized algebras. Math. Sem. Notes Kobe Univ. 8

(1980), no. 2, 241–257. (From the introduction) 82f:6629 06F25 (with Swamy, K. L. N.) Isometries in dually residuated lattice-ordered semigroup Math. Sem. Notes Kobe Univ. 8 (1980), no. 2, 369–380. (R. McFadden) 82c:96029

Centrality in lattice ordered autometrized algebras. Math. Sem. Notes Kobe Univ. 9 (1981), no. 1, 151-157. (From the text) 82m:96021 06F25

(1961), no. 1, 131-137. (From the text) 82m:80021 106723

bha Rao, Gita (with Tyagi, R. S.; Mishra, R. K.) Calculation of the minimum energy conformation of biomolecules using a global optimization technique. I. Methodology and application to a model molecular fragment (normal pentane). J. Theoret. Biol. 90 (1981), no. 3, 377-389. (Authors' summary) 82e-92859a 92A40 (81G55, 90C30)

(with Tyagi, R. S.; Mishra, R. K.) Calculation of the minimum energy conformation of biomolecules using a clobal confining term of the conformation of the minimum energy conformation of the m

of biomolecules using a global optimization technique. II. Conformation of N-acetylglycine N-methyl amide, a model dipeptide unit. J. Theoret. Biol. 90 (1981),

no. 3, 391-395. (Authors' summary) 82e92059b 92A40 (81G55, 90C30)
barso, M. V. (with Suryanarayana, D.) Almost and nearly 4-free integers.
Math. 15 (1973), no. 3, 163-169. (Jean-Marie De Koninck) 821:10055a 101

(with Suryanarayana, D.) On the set of integers of the form p'mk. Indian J. Math. 15 (1973), no. 3, 179-184. (Editors) 82h:10054 10H20 (with Suryanarayana, D.) Corrections to: "Almost and nearly k-free integers". Indian J. Math. 17 (1975), no. 3, 171. (Jean-Marie De Koninck) 82f:10055b

(with Suryanarayana, D.) Corrections and additions to: "On the set of integers of the form p'm^k" [Indian J. Math. 15 (1973), no. 3, 179–184; MR 82b:10054]. Indian J. Math. 17 (1975), no. 3, 172. (From the text) 82m:10067 10H20

(with Erdős, Paul; Hardy, G. E.) On the Schnirelmann density of k-free integers.

dian J. Math. 20 (1978), no. 1, 45-56. (Carl Pomerance) 82j:10089

(with Ramanathan, K. G.) Some generalizations of Ramanujan's sum. Canad. J. Math. 32 (1980), no. 5, 1250-1260. (V. C. Harris) 82e:10067 10G05 (10H99, 15A36) (with Smith, Robert Arnold) The average number of divisors in an arithmetic progression. Canad. Math. Bull. 24 (1981), no. 1, 37-41. (Matti Jutila) 82i:10063 10H25 (10G15)

(with Harris, V. C.) A transformation formula for a class of arithmetic sums. Canad. Math. Bull. 24 (1981), no. 1, 73-77. (H. Gupta) 82e:10015 10A20 (10A22) ba Rao, S. (with Oral, Muhittin) An objective function for inventory control models.

Stochastic programming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 403-426, Academic Press, London, 1980. (Kailash C. Kapur) 82e:90037 90B05

ha Rao, T. (with Gabr, M. M.) A test for linearity of stationary time series. J. Time Ser. Anal. 1 (1980), no. 2, 145-158. (Authors' summary) 82f:62158 62M07 (with Gabr, M. M.) The estimation and prediction of subset bilinear time series

models with applications. J. Time Ser. Anal. 2 (1981), no. 3, 155-171. (Authors' summary) 82m:62201 62M10

high, S. (with Magill, K. D., Jr.) Semigroups whose regular \(\)-classes form well-ordered ns. Semigroup Forum 22 (1981), no. 1, 89-91. (Bernard L. Madison) 82b:20100 20M20 (54C40)

(with Magill, K. D., Jr.) Regular \(\frac{1}{2} \cdot \)-classes of semigroups of continua. Semigroup \(Forum \) 22 (1981), no. 2, 159-179. (Bernard L. Madison) 82i:54031 54C35 (20M20,

A. I. (with Gabrieljan, M. S.) Game problems on encounter with m target sets. (Russian) Prikl. Mat. Meh. 43 (1979), no. 2, 204-208 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 2, 222-226 (1980). (Authors' summary) 82i:90129 (with Kreknin, A. A.) A game theory problem of pursuit under conditions of incomplete phase information on the pursued system. (Russian) Trudy Inst. Mat. i Meh.

čn. Centr Akad. Nauk SSSR No. 26 Differencial. Sistemy Upravlen. (1979), 21-33, 95. (O. Hájek) 82c:90113 90D26

Generalization of the fundamental equation of the theory of differential games. assian) Dokl. Akad. Nauk SSSR 254 (1980), no. 2, 293-297. (J. M. Skowroński) 90D05 (90D25)

See also Optimal control of systems with uncertain information, 82g-49002 botin, Î. Ja. Periodic solvable groups with quasicentralizer condition for normal subgroups. (Russian) Groups defined by properties of a system of subgroups (Russian), pp. 106-126, 155, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1979. (Ja. P. Sysak) 82c:20071

Infinite groups in which every subgroup of the commutant is invariant. (Russian) Constructive description of groups with properties prescribed on their subgroups (Russian), pp. 92–107, 146, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1980. (Richard E. Phillips) 82h:20049 20F99 (20E15) 82h:20049 20F99 (20E15) botin, Ju. N. One-sided approximations by splines with additional restriction

reconstruction of functions and derivatives. (Russian) Mat. Zametki 28 (1980), no. 2, 223-238, 318. (A. S. Cavaretta) 82i:41016 41A15

bin, M. A. (with Dedik, P. E.) Elliptic operators in spaces of homogeneous random fields and the stabilization of solutions to parabolic equations with random coefficients. (Russian) Dokl. Akad. Nauk SSSR 249 (1979), no. 5, 1043-1046. (D. Surgailis) 82b-60123 60H25 (58G32)

(with Dedik, P. E.) Random pseudodifferential operators and stabilization of the tions of parabolic equations with random coefficients. (Russian) Mat. Sb. (N.S.) 155) (1980), no. 1(9), 41-64, 175. (M. S. Agranovič) 82f:35190 35R60 (35S99, 113(155) (1980), no. 1(9), 41-64, 175. (M. S. Agranovič) 82f:35190 47G05, 58G15, 60H25)

The spectrum and its distribution function for a transversally elliptic operator. (Russian) Funkcional. Anal. i Priložei 221-58050 58G15 (35P10, 46L99) al. Anal. i Priložen. 15 (1981), no. 1, 90-91. (Hubert Gollek)

idze, N. I. (with Džibuti, R. I.) On the application of the method of hyperspherical

harmonics to the many-body problem. Jadernaja Fiz. 32 (1980), no. 4, 940-944

(Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 4, 940-944 (Authors' summary) 82g:81121 81H05

ockina, T. A. (with Il'in, V. P.) Some imbedding theorems of the function sp

ocusina, 1. A. (wim Irin, V. P.) Some imbocoding theorems of the function spaces $W_{p,\bar{q},s}(G)$ (Russian) $2g_p$ Nauko. Sem. Leningrad. Oidel. Mat. Inst. Steklov. (LOMI) 102 (1980), 27–41, 191–192. (H. Triebel) 82b:46041 46E35 (65199) wor, V. I. Finding, N-soliton solutions of multidimensional nonlinear equations by means of Hirota's method. (Russian. English summary) Teoret. Mat. Fiz. 41 (1979), no. 1, 69–76. (Peter Holod) 82b:35145 35Q20 (58A15)

On existence and uniqueness of solutions of the Cauchy problem for equations of discrete multidimensional chiral fields assuming their values on the unit sphere. (Russian. English summary) Problems of the theory of probability distributions, VI. Zap. Naukn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 97 (1980), 217–224, 232, 237–238. (Author's summary) 82f:81066 81E99 (82A67)

nanyam, P. (with Suryanarayana, D.) The maximal k-full divisor of an integer. Indian J. Pure Appl. Math. 12 (1981), no. 2, 175-190. (Don Redmond) 82g:10062 10H15 (10H25)

anyam, P. A. Nondeterminism in abstract data types. Automata, languages and ning (Akko, 1981), pp. 148-164, Lecture Notes in Comput. Sci., 115, Springer, rlin. 1981. (See 82i:68003) 68R15

anyam, P. V. (with Reilly, I. L.) Fixed point theorems in Tychonoff spaces. Indian J. Pure Appl. Math. 11 (1980), no. 5, 565-571. (Alessio Volčič) 82c:54042

anyan, M. G. See Kreps, David M.; et al., 82a:90033

bramanian, A. (with Eagambaram, N.) A single unit cumulative damage model with correlated damage and repair time. (German and Russian summaries) Math perationsforsch. Statist. Ser. Optim. 11 (1980), no. 4, 623-628. (Authors' summary) 82k:60176 60K10 (90B25)

dran (with Ravichandran, N.) An n-unit priority redundant system. m. Ramachan J. Math. Phys. Sci. 14 (1980), no. 1, 85-94. (H. Taylor) 82g:90054 90B25)

(with Natarajan, R.) Two-unit system with imperfect switch. J. Math. Phys. Sci. 14 (1980), no. 3, 205-224. (Authors' summary) 82k:62190 62N05 (90B25)

(with Natarajan, R.) A 2-unit system with "imperfect" repair. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 11 (1980), no. 4, 617-622. (Authors' summary) 82k:60175 60K10 (90B25)

(with Ravichandran, N.) Probabilistic analysis of a two-unit standby redundant system with finite repair capacity. Opsearch 17 (1980), no. 2-3, 71-80. (Masafumi Sasaki) 824:60174 60K10 (62N05, 90B25)

(with Ravichandran, N.) A redundant system with bulk replacement. Z. Angew. Math. Mech. 60 (1980), no. 11, 632-634. (Authors' introduction) 82i:60147

ramanian, S. (with Singh, Y. P.) Frequency-response identification of structure of nonlinear systems. *Proc. IEE-D* 127 (1980), no. 3, 77–82. (Authors' summary) 82e:93014a 93B30

(with Singh, Y. P.) Errata: "Frequency-response identification of structure of

nonlinear systems". Proc. IEE-D 127 (1980), no. 4, 187. (Editors) 82g:93014b ramanyam, P. (with Suryanarayana, D.) The maximal k-full divisor of an integer. Proceedings of the Conference on Number Theory (Mysore, 1979), pp. 131–156, Matscience Rep., 101, Inst. Math. Sci., Madras, 1980. (R. A. Rankin) 821:10058 10H25

Succi Cruciani, Rosanna Sheaves over a regular category. (Italian. French summary) Rend. Mat. (6) 13 (1980), no. 2, 187-198. (Marta C. Bunge) 82h:18007 18F20 (18B10)

 Suchan, Gerald E. Concerning the minimum of permanents on doubly stochastic circulants.
 Pacific J. Math. 95 (1981), no. 1, 213-217. (D. London) 82m:15012
 Suchanecki, Zdzisław (with Kozek, Andrzej) Conditional expectations of selectors and Jensen's inequality. Mathematical statistics and probability theory (Proc. Sixth Internat. Conf., Wisla, 1978), pp. 247-265, Lecture Notes in Statist., 2, Springer, New York, 1980. (M. M. Rao) 82m:60005 60A10 (28B20, 60D05)

(with Rosinski, Jan) On the space of vector-valued functions integrable with respect to the white noise. Collog. Math. 43 (1980), no. 1, 183-201 (1981). (Gilles Pisier) 60B11 (46B20, 46E40)

(with Kozek, Andrzej) Multifunctions of faces for conditional expectations of selectors and Jensen's inequality. J. Multivariate Anal. 10 (1980), no. 4, 579-598. (M. M. Rao) 82c:28021 28B20 (52A40, 62B20)

chanek, Ana M. (with Stanojević, Časlav V.) Integral identities of norms and characterization of inner product spaces. Proc. Amer. Math. Soc. 81 (1981), no. 1, 101-103. (B. R. Gelbaum) 82i:46036 46C05

heston, Louis (with Millet, Annie) On covering conditions and convergence. Measure theory, Oberwolfach 1979 (Proc. Conf., Oberwolfach, 1979), pp. 431–454, Lecture Notes in Math., 794, Springer, Berlin, 1980. (Ju. M. Kabanov) 821:60111 60G46 (28B05, 60G48)

(with Millet, Annie) Convergence et régularité des martingales à indices multiples. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A147-A150. (Authors' summary) 82b:60049 60G44

(with Millet, Annie) On convergence of L_1 -bounded martingales indexed by directed s. Probab. Math. Statist. 1 (1980), no. 2, 151–169 (1981). (W. A. Woyczyński) 82k:60016 60B12 (60G42)

(with Edgar, Gerald A.) Démonstrations de lois des grands nombres par les sous-martingales descendantes. (English summary) [Demonstrations of the laws of large numbers by descending submartingales] C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 22, 967-969. (Authors' summary) 82i:60087 60G48 (60F15)

(with Millet, Annie) Demi-convergence des processus à deux indices. (English summary) [Demiconvergence of two-parameter processes] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 8, 435-438. (Authors' summary) 82m:60053 60G48

(with Krengel, Ulrich) Stopping rules and tactics for processes indexed by a directed J. Multivariate Anal. 11 (1981), no. 2, 199-229. (Jean-Michel Bismut) 82i:60079 60G40 (62L10)

(with Millet, Annie) On regularity of multiparameter amarts and martingales. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 1, 21-45. (Allan Gut) 82f:60120

Suciu, Ion (with Valusescu, Ilie) Fatou and Szegő theorems for operator-valued functions.

Romanian-Finnish Seminar on Complex Analysis (Proc., Bucharest, 1976), pp. 656-673, Lecture Notes in Math., 743, Springer, Berlin, 1979. (Dumitru Gaspar) 82b:47017 47A68 (30D55, 47A45)

Nonbounded intertwining operators of bundle shifts. An. Şiiini. Univ. "Al. I. Cuza Iaşi Secţ. I a Mat. (N.S.) 25 (1979), suppl., 171-178. (R. G. Douglas) 82c:47028 47B20

(with Ando, T.; Timotin, D.) Characterization of some Harnack parts of contractions. J. Operator Theory 2 (1979), no. 2, 233-245. (E. Durszt) 82a:47014 47A60

Factorization theorems for operator-valued functions on multiply connected domains. Rev. Roumaine Math. Pures Appl. 24 (1979), no. 8, 1251-1269. (R. G. Douglas) 82c:47020 47A68

ciu, Nicolae On Harnack ordering of contractions. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 6, 467-471. (E. Durszt) 82a:47015 47A60 Absolutely continuous semispectral measures for pairs of commuting contractions. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 4, 653-657. (Arthur Lubin) 82m:47010 47A45

Rkov, A. P. (with Tynjanskii, N. T.) Existence of a solution in linear differential games with general constraints on controls. (Russian) Existence of solutions, stability and informedness in game theory (Russian), pp. 104-109, 112, Kalinin. Gos. Univ., Kalinin, 1979. (F. M. Kirillova) 82a:90188 90D25

Sučkov, M. V. Uniform equiconvergence on any compactum of an expansion in a Fourier integral and of a spectral expansion corresponding to a nonselfadjoint differential operator on a semi-axis. (Russian) Differencial'nye Uravnenija 15 (1979), no. 12, 2161-2167, 2299. (M. Otelbaev) 82a:34024 34B25

The localization principle for the Laplace operator with piecewise constant coefficients on the surface of discontinuity of coefficients. (Russian) Differencial'nye Uravnenija 16 (1980), no. 11, 2050-2061, 2110. (E. M. Saak) 82c:35051

N. M. Automorphically factorizable groups. (Russian) Algebra i Logika 18 (1979), no. 4, 481–487, 509. (N. S. Černikov) 82h:20056 20F99
 Suda, Nobuhide (with Fujii, Takao) The optimality property of an optimal regulator

incorporating an observer. Internat. J. Control 33 (1981), no. 4, 617-647. (Authors' summary) 82f:49022 49B10

akov, G. G. Asymptotic solution of the problem of detached flow around a triangular airfoil under a small angle of incidence. (Russian) *Učen. Zap. CAGI* 11 (1980), no. 2, 10-18. (Author's summary) 82c:76045 76D15 (76B05) lakov, S. N. (with Pozdnjakovič, E. V.) Necessary and sufficient conditions for stability

of uniform rotations of a gyrostat with a rotor that has a vortex filling. (Russian) Meh. Tverd. Tela No. 12 (1980), 67-72, 119. (Q. K. Ghori) 82d:70007 70E05 lakov, V. N. On the limit distribution "in the large" of linear functionals over a random

process of the second order. (Russian. English summary) Problems of the theory of probability distributions, VI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 97 (1980), 199–202, 231, 238. (Franz Schmidt) 82e:60012 60B12 (60F17)

See also Problems of the theory of probability distributions, 82c60025 darkin, A. N. (with Zel'dovič, Ja. B.; Pilipeckii, N. F.; Škunov, V. V.) Wave front reversal by a surface. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 1, 92-95. (From the text) 82c:78027 78A55

darshan, E. C. G. (with Sherry, T. N.; Gautam, S. R.) An approach to measurement in quantum mechanics. Particles and fields (Proc. Barlf Summer Inst., Barlf, Alta., 1977), pp. 289–304, Plenum, New York, 1978. (Authors' summary) 82h81013 81B05

Pencils of rays in wave optics. Phys. Lett. A 73 (1979), no. 4, 269-272. (I. Kay) 82b:78001 78A05

(with Sharma, J. K.; Mehta, C. L.; Mukunda, N.) Representation and properties of para-Bose oscillator operators. II. Coherent states and the minimum uncerta J. Math. Phys. 22 (1981), no. 1, 78-90. (F. R. Halpern) 82g:81043 81D30 (17A70,

Quantum theory of radiative transfer. Phys. Rev. A (3) 23 (1981), no. 6, 2802-2809.

(Author's summary) 82h:81164 81K05 (81B05, 85A25)

Borough, Ivan Hal (with Monien, Burkhard) Bounding the bandwidth of NP-complete problems. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 279-292, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Authors' summary) 82h:68067 68C25 (03D15, 68E10)

bury, Aidan The expected population size in a cell-size-dependent branching process. J. Appl. Probab. 18 (1981), no. 1, 65-75. (I. W. Saunders) 82h:60109 60J80 (92A15) (with Clifford, Peter) The determination of the age of a clone from characteristics of its geographical distribution. J. Appl. Probab. 18 (1981), no. 3, 725-731. (P. Laurie

Davies) 82j:60162 60J85 (92A15) dderth, William D. (with Hill, Bruce M.; Lane, David A.) A strong law for some generalized urn processes. Ann. Probab. 8 (1980), no. 2, 214-226. (J. R. Blum) 82h:60029

Finitely additive priors, coherence and the marginalization paradox. J. Roy. Statist. Soc. Ser. B 42 (1980), no. 3, 339-341. (A. P. Dawid) 82d:62008 62A15 (60A05) Countably additive gambling with a general expected reward. Z. Wahrsch. Verw.

Gebiete 54 (1980), no. 2, 221–225. (Nagata Furukawa) 82c:60078 60G40 (90D15) dou, Kouzou (with Tomita, Yukio; Takami, Toshihiro; Oushima, Shuzou) Pulsating flow of liquid metals in a circular pipe under a transverse magnetic field. Bull. JSME 24

(1981), no. 187, 90–98. (Authors' summary) 82d*76991 76W05

upe, A. M. (with Alvarez-Estrada, R. F.) Nonlinear Fokker-Planck equations:
characteristics of eigenfunctions. Systems far from equilibrium (Conf., Sitges/Barcelona,
1980), pp. 314–319, Lecture Notes in Phys., 132, Springer, Berlin, 1980. (See 82g;82004)

oka, Atsuo (with Tamura, Hideyuki; Tsuda, Yoshihiro) Higher approximation of steady oscillations in nonlinear systems with single degree of freedom (suggested multiharmonic balance method). Bull. JSME 24 (1981), no. 195, 1616-1625. (Authors' summary) 82f:70013 70K99

Suetin, S. P. The Montessus de Bollore theorem for rational approximations of orthogonal expansions. (Russian) Mat. Sb. (N.S.) 114(156) (1981), no. 3, 451-464, 480. (Paul Nevai) 82g:42020 42C05 (41A21)

Suffezyński, M. (with Kunert, H.) Vector-coupling coefficients for space groups based on simple cubic lattices. (French summary) J. Physique 41 (1980), no. 11, 1361–1370. (Nigel B. Backhouse) 82b:82063 82A60 (20C35)
 Suffet, C. L. (with Boesch, Frank) Realizability of p-point graphs with prescribed minimum degree, maximum degree, and line connectivity. J. Graph Theory 4 (1980), no. 4, 363–370. (S. L. Hakimi) 82e:05056 05C35 (94C15)
 (with Bauer, D.; Boesch, Frank; Tindell, Ralph) Connectivity extremal problems

and the design of reliable probabilistic networks. The theory and applications of graphs (Kalamazoo, Mich., 1980), pp. 45-54, Wiley, New York, 1981. (Geoffrey Exoo) 82m:05063 05C40 (05C35, 94C15)

(with Boesch, Frank) Realizability of p-point graphs with prescribed minima degree, maximum degree, and point-connectivity. Discrete Appl. Math. 3 (1981), no. 1, 9-18. (S. L. Hakimi) 82h:05046 05C75 (05C99) 9-18 (S. I. Hakimi) 82h:05040

Suffridge, T. J. (with Heath, L. F.) Starlike, convex, close-to-convex, spiral-like, and Φ -like maps in a commutative Banach algebra with identity. Trans. Amer. Math. Soc. 250 (1979), 195-212. (J. Benko) 82m:46056 46J15 (30C45, 46G99) (with Heath, L. F.) Holomorphic retracts in complex n-space. Illinois J. Math. 25

(1981), no. 1, 125-135. (B. Gilligan) 82e:32003 32A10 (32H99)

ahara, Kunio On the diameter of compact homogeneous Riemannian manifolds. Publ. Res. Inst. Math. Sci. 16 (1980), no. 3, 835-847. (O. Kowalski) 82c:53034 53C30

The sectional curvature and the diameter estimate for the left invariant metrics on SU(2, C) and SO(3, R). Math. Japon. 26 (1981), no. 2, 153-159. (R. J. Crittender.) 53C20

Sugano, Kozo On a special type of Galois extensions. Hokkaido Math. J. 9 (1980), no. 2, 123-128. (Susan Montgomery) 82c:16036 16A74 (16A16) Note on automorphisms in separable extension of noncor

stative ring. Hokkaido Math. J. 9 (1980), no. 2, 268-274. (Susan Montgomery) 82c:16035 16A74 (16A16) On automorphisms in separable extensions of rings. Proceedings of the 13th

Symposium on Ring Theory (Okayama Univ., Okayama, 1980), pp. 44-55, Okayama Univ., Okayama, 1981. (From the introduction) 82k:16022 16A56

Note on cyclic Galois extensions. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 1, 60-63. (Lindsay N. Childs) 82j:16015 16A16
Sugano, Reiji (with Kamo, Hideki) Necessary and sufficient conditions for the existence of

an. The case of quasilinear field equations. Ann. Physics 128 (1980), no. 2, 298-313. (H. Rund) 82c:49018 49B99 (81E99)
Sugar, R. L. (with Cardy, John L.) Directed percolation and Reggeon field theory. J. Phys.

A 13 (1980), no. 12, L423-L427. (Authors' summary) 82h:82049 81E99)

(with Bronzan, J. B.) Generalized moment method for eigenvalues. Phys. Rev. D (3) 23 (1981), no. 8, 1806-1810. (Authors' summary) 82d:81029 81C12

(with Scalapino, D. J.) Method for performing Monte Carlo calculations for systems with fermions. Phys. Rev. Lett. 46 (1981), no. 8, 519-521. (Authors' summary) 81F99 (65C05)

agatani, Takasi Rings of convergent power series and Weierstrass preparation theorem. Nagoya Math. J. 81 (1981), 73-78. (W. Bartenwerfer) 82i:32021 32B05 (13J05,

wa, Kazuaki (with Ingarden, Roman Stanislaw; Sato, Yoshiharu; Kawaguchi, Michiaki) Information thermodynamics and differential geometry. Tensor (N.S.) 33 (1979), no. 3, 347–353. (M. E. Mayer) 82g82024 82A30 (53B50)

gawara, Masahiro (with Fujii, Kensô) The order of the canonical element in the J-group of the lens space. Hiroshima Math. J. 10 (1980), no. 2, 369-374. (Peter J. Eccles) 82f:55025 55R 50

Sugawara, Tamio Matrices giving relations among symi metric functions. Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 1, 87-98. (David M. Bressoud) 82j:05009 (14F15)

Sugie, Tohru (with Miyanishi, Masayoshi) Generically rational polynomials. Osaka J. Math. 17 (1980), no. 2, 339-362. (M. H. Gizatullin) 82e:14019 14M20)

On a characterization of surfaces containing cylinderlike open sets. Osaka J. Math. 17 (1980), no. 2, 363-376. (M. H. Gizatullin) 82e:14026 14J10 (14E05, 14J25)

(with Miyanishi, Masayoshi) On a projective plane curve whose complement has logarithmic Kodaira dimension - co. Osaka J. Math. 18 (1981), no. 1, 1-11. (M. H. Gizatullin) 82k:14013 14E05 (14C20)

Sugie, Toshiharu (with Yoshikawa, Tsuneo) Inverse systems for reproducing linear functions of inputs. Automatica—J. IFAC 17 (1981), no. 5, 763-'/69. (Authors' summary) 82k:93025 93B15

Sugihara, George Minimal community structure: an explanation of species abundan patterns. Amer. Natur. 116 (1980), no. 6, 770-787. (Author's summary) 82m:92078

ara, Soulchi Statistical estimation of the multivariate distributed lag model with VARMA errors. Kwansei Gakuin Univ. Annual Stud. 29 (1980), 185-188. (Peter M. 62M10 Robinson) 82h:62164

Sugimoto, Daiichiro (with Eriguchi, Yoshiharu) Another equilibrium sequence of self-gravitating and rotating incompressible fluid. Progr. Theoret. Phys. 65 (1981), no. 6, 1870-1875. (Authors' summary) 82i:76094 76U05 (76E20, 85A30)
Sugitani, Sadao On the limit distributions of decomposable Galton-Watson processes with

the Perron-Frobenius root 1. Osaka J. Math. 18 (1981), no. 1, 175-224. (P. E. Ney)

82:c60138 60J80

Sugiura, Katsuo A mixed problem for an infinite elastic medium containing a circular inclusion and a circular hole. Sci. Rep. Fac. Ed. Fukushima Univ. No. 30 (1980), 83-92. (R. Muki) 82f:73015 73C35 (30E99)

glyama, Hiroshi (with Morita, Yoji) Moment behavior of solution processes for strongly Sugyama, Farosan (with mornia, voji) monimen benavior of solution processor to strongly nonlinear stochastic differential equations. Tech. Rep. Osaka Unio. 30 (1980), no. 1517-1550, 21-28. (Toshio Yamada) 821-601.38 60H10
Sugyama, Kozo (with Tagawa, Shōjirō; Toda, Mitsuhiko) Methods for visual understanding of hierarchical system structures. IEEE Trans. Systems Man Cybernet. 11

(1981), no. 2, 109–125. (Authors' summary) 824:92035 92A20 (93A13) iyama, Takakazu (with Ushizawa, Kenji) Distribution of smaller latent root on bivariate normal distribution and its numerical calculations. Bull. Fac. Sci. Engrg. Chuo Univ. 23

- (1980), 73-81. (Nariaki Sugiura) 822e62083 62H10
 (with Konishi, Sadanori) Improved approximations to distributions of the largest and the smallest latent roots of a Wishart matrix. Ann. Inst. Statist. Math. 33 (1981), no. 1, 27-33. (Minoru Siotani) 82f:62091 62H10
- frama, Yasuo (with Hirasawa, Shigeichi; Kasahara, Masao; Namekawa, Toshihiko)
 Certain generalizations of concatenated codes—exponential error bounds and decoding complexity. IEEE Trans. Inform. Theory 26 (1980), no. 5, 527–534. (Authors' sur 822-9068
 - (with Hirasawa, Shigeichi; Kasahara, Masao; Namekawa, Toshihiko) An
- improvement of error exponents at low rates for the generalized version of concatenated codes. *IEEE Trans. Inform. Theory* 27 (1981), no. 3, 350-352. (Authors' summary) 82e:94040 94A24 (94A40, 94B05)
- irald, Y. (with Fujisawa, T.) Steady-state solution of a single server queue with Poisson arrivals and multiple transaction. (German and Russian summaries) Math. msforsch. Statist. Ser. Statist. 12 (1981), no. 2, 233-241. (William Henderson) Operation: 82:60153 60K25
- prin, S. M. Strong and weak extensions of differential operators. II. (Russian) Differencial nye Uravnenija 15 (1979), no. 11, 2071–2084, 2111. (P. Szeptycki) 82f:35052
- Galilean systems of differential equations. (Russian) Differencial nye Uravnenija 16 (1980), no. 12, 2205-2218, 2302. (N. V. Mickevič) 82h:35064 35L65 (35F20, 76A02,
- h, Sungwoo The space of real parts of algebras of Fourier transforms. Pacific J. Math. 95 (1981), no. 2, 461-465. (R. H. Cox) 82j:46068 46J30 (43A25)
- w, E. V. (with Sapir, M. V.) Varieties of periodic semigroups. (Russian) Izv. Vysš. Učebn. Zaved. Maten natika 1981, no. 4, 48-55. (Anna Ja. Aizenštat) 82j:20108 20M07
- rev, A. G. (with Fedorov, V. V.) Optimal search for the maximum of a min function with connected variables. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1981, no. 1, 45-50, 87. (Authors' summary) 82j:90068 90C30 (65K05) in, S. A. (with Klimontovič, Ju. L.) Kinetic theory for broadening spectral lines in
- nary) Teoret. Mat. Fiz. 47 (1981), no. 1, 89-95. (Authors' summary) 82g:82043 82A45
- nin, M. F. An inverse function theorem in locally convex spaces. (Russian) Mat. Zametki 27 (1980), no. 5, 741-749, 830. (M. Craioveanu) 82a:58008 58C15 (26E15, 46G05)
- hman, I. G. (with Poljačenko, V. L.; Čurilov, S. M.) The nonlinear stage of gravitational instability in flat gaseous systems. (Russian) Astronom. Ž. 57 (1980), no. 3, 497-504 ted as Soviet Astronom. 24 (1980), no. 3, 287-291. (Authors' sum Russian); translat 85A30
- 82c85005 85A30
 100050N, V. I. Existence of a general solution of the atmospheric dynamics equations.
 (Russian) Dinamika Splošn. Sredy No. 42 Dinamika Neodnorod. Židkosti (1979), 52-68, 129. (Author's summary) 82c86003 86A10 (76B15)
 Well-posedness of the initial-boundary value problem for two-dimensional equations of atmospheric dynamics. (Russian) Dinamika Splošn. Sredy No. 43 Mat. Problemy Meh. (1979), 108-140, 186. (Adelina Georgescu) 82c86004 86A10 (35Q10)
- (1979), 108-140, 186. (Adeina Georgescu) 322:36000 SoA 10 (35Q10) oorukov, V. A. (with Marčuk, G. I.; Kočergin, V. P.; Sarkisjan, A. S.; Bubnov, M. A.; Zalesnyi, V. B.; Klimok, V. I.; Kordzadze, A. A.; Kuzin, V. I.; Protasov, A. V.; Cvetova, E. A.; Sčerbakov, A. V.) * Marchathiveckie Mogezin паркуляция в okeane. (Russian) [Mathematical models of circulation in the ocean] "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. 288 pp. (Jiří Nedoma) 82e:86002 86A05 (76V05)
- ov, A. G. The entropy invariant of automorphisms of W*-algebras. (Ru Funkcional. Anal. i Priložen. 15 (1981), no. 2, 94-95. (G. A. Elliott) 82j:46083 (82A15)
- ai, T. K. (with Leondes, Cornelius T.) Payoff sensitivity of linear quadratic differential games to parameter change. Trans. ASME Ser. G. J. Dynamic Systems Measurement Control 103 (1981), no. 1, 36–38. (Authors' summary) 82m:90174 90D25 ita, Nobuyuki (with Niinō, Kiyoshi) Growth of a composite function of entire functions.
- Kodai Math. J. 3 (1980), no. 3, 374-379. (Chung-Chun Yang) 82b:30023 (30D20)
 - (with Kobayashi, Shōji) On analytic diameters and analytic centers of compact sets. Trans. Amer. Math. Soc. 267 (1981), no. 1, 219-228. (J. Siciak) 82k:30027
- ian, Štefan Channels with additive asymptotically mean stationary noise. Kybernetika (Prague) 17 (1981), no. 1, 1-15. (Author's summary) 82h:94020 94A40
- ev, N. H. A problem of the theory of elasticity of finite deformations (exact solution). (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 5, 24-28. (V. T. Golovchan) 82b:73016 73C50 (73G05)
- time, B. V. (with Grimes, J. E.) A regression-type estimator based on preliminary test of significance. J. Amer. Statist. Assoc. 75 (1980), no. 372, 957-962. (Chien-Pai Han) 82g:62049 62F10 (62J05)
- thatme, Shashikala Bahadur efficiencies of Cramér-Smirnov-von Mises tests. Professor arbazar felicitation volume. J. Indian Statist. Assoc. 17 (1979), 161-171. (J. S. Rao) 62G20
- Sukiasjan, G. S. Combinatorial properties of random triangles. (Russian) Combinatory principles in stochastic geometry (Russian), pp. 57–80, Akad. Nauk Armjan. SSR, Erevan, 1980. (See 82k:60027) 60D05
 - Processes of chords on lines intersecting random circle fields on a plane. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 5, 297–300. (W. J. Firey) 82f:60039 60D05 (52A22, 60G55)
- Appl. Math. 12 (1981), no. 1, 95-102. (John A. Fridy) 82i:40007 40F05 (40G05)
- n, A. P. (with Karas', V. I.; Moiseev, S. S.) Universal nonequilibrium particle distributions in finite energy intervals. (Russian. English summary) U (1980), no. 5, 820–825, 875. (Authors' summary) 82b:82015 82A05 mary) Ukrain. Fiz. Ž. 25
- turjan, Ju. G. (with Ter-Akopov, A. K.) Table programs and discrete transformers. I. (Russian. English summary) Kibernetika (Kiev) 1978, no. 3, 8–14. (Sorin Istrail) 824-68008a 68B05 (68C40, 68D05)
 - Table programs and discrete transformers. II. (Russian. English summary) etika (Kiev) 1978, no. 6, 27-32. (Sorin Istrail) 82d:68008b 68B05 (68C40.

- Sukurov, A. M. (with Ruzmaikin, A. A.; Sokolov, D. D.) A disk dynamo with concentrated spirality. Magnit. Gidrodinamika No. 1 (1980), 20-26 (Russian); translated as Magnetohydrodynamics 16 (1980), no. 1, 15-20. (From the introduction) 82a:85003
- Sulakvelidre, L. A. Representation of numbers by positive ternary quadratic forms. I. (Russian. Georgian and English summaries) Trudy Tbiliss. Univ. 185 (1977), 5-42. (J. S. Joel) 82;10039a 10C15 (10J10)
 - Representation of numbers by positive ternary quadratic forms. II. (Russian. Georgian and English summaries) Trudy Tbiliss. Univ. 189 (1977), 29-52. (J. S. Joel) 10C15 (10J10)
- ert A. A generalized q-multinomial Vandermo nde convolution.
- Theory Ser. A 31 (1981), no. 1, 33-42. (H. Gupta) 82;65010 05A10 (05C20)
 Sulanke, Rolf (with Schiemagk, Christina) Submanifolds of the Möbius space. Math.
 Nachr. 96 (1980), 165-183. (Leopold Verstraelen) 82d:53017 53A30 (53C40, 53C42)
 Sulanke, S. (with Friedrich, Thomas) Ein Kriterium für die formale Selbstadjungiertheit
- des Dirac-Operators. Colloq. Math. 40 (1978/79), no. 2, 239-247. (M. F. Atiyah) 82h:58083 58G05 (53C05)
- Šul'ce, M. Difference schemes for a quasilinear heat equation. (Russian) Difference Uravnenija 16 (1980), no. 9, 1698-1709, 1727. (I. N. Molčanov) 82b:65100 65N
- Sul'desov, G. A. (with Petunin, Ju. I.) Pattern recognition with Fisher linear discriminant functions. Kibernetika (Kiev) 1979, no. 6, 134-137 (Russian); translated as Cybernetics 68G10 (62H30) 15 (1979), no. 6, 926-930 (1980). (G. Della Riccia) 82a:68172
- eiman, S. Š. (with Zubov, V. I.) Equations of state for strongly anharmonic crystals with a complex lattice. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1979, no. 11, 40-44. (Authors' summary) 82g:82051 82A60
- nov, N. M. A probability method for estimating solutions of an evolution equation. elmanov, N. M. A proozonity incurou to cantilating someone of the Resident (Russian, Azerbaijani and English summaries) Izo. Akad. Nauk Azerbaijatian. SSR Ser. 7. h. Mar. Nauk 1970. no. 5. 68–73. (Author's summary) 82b:34082 34G10 Theorems of Wiman-Valiron type for solutions of inverse-parabolic equations
 - (Russian) Differencial'nye Uravnenija 16 (1980), no. 10, 1816-1825, 1916. (M. A. Atahodžaev) 82c:30037 30D05 (35R30)
- mov, S. P. Almost periodic functions of several variables with respect to Hausdorff metrics and some of their properties. (Russian. Azerbaijani and English summaries)

 Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 9, 8-11. (Bolis Basit) 82e:42019
- Sulem, Catherine (with Sulem, Pierre-Louis; Bardos, Claude; Frisch, Uriel) Sur Finstabilité de Kelvin-Helmholtz à trois dimensions. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 13, A677-A679. (Authors' summary) 82b:76022 76C05
- Sulem, Pierre-Louis (with Sulem, Catherine; Bardos, Claude; Frisch, Uriel) Sur l'instabilité de Kelvin-Helmholtz à trois dimensions. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 13, A677-A679. (Authors' summary) 82b:76022
 - (with Garnier, M.; Alemany, A.; Pouquet, A.) Influence of an external magnetic field on large scale low magnetic Reynolds number MHD turbulence. (French summary) J. Mécanique 20 (1981), no. 2, 233-251. (Authors' summary) 82j:76053 (76W05)
- Sulenin, V. P. Some properties of an a-reduced Hodges-Lehmann estimate. (Russian) Stochastic control systems (Russian), pp. 54-62, 102, "Nauka" Sibirsk. Otdel., Novosibirsk, 1979. (Jana Jurečková) 82e:62060 62G05
- Šul'ga, D. D. Continuity of o-bounded mappings. (Russian) Taškent. Gas. Univ. Sb. Naučn. Trudov No. 573 Funkcional. Anal. (1978), 102-106, 112-113. (Author's summary)
- 82b;47047 47B55 (46A40)

 Sulikašvili, R. S. (with Osipov, V. Z.) Stability of steady-state motions of a balanced gyrostat. (Russian) Theory of stability and its applications (Russian), pp. 200-206, 302, Nauka" Sibirsk. Otdel., Novosibirsk, 1979. (Q. K. Ghori) 824:70006
- Sulimov, M. G. Nonsmooth terms in the asymptotics of the solution of a biharmonic equation in the neighborhood of a corner point of the boundary. (Russian) Čisl. Metody Meh. Splošn. Sredy 10 (1979), no. 6 Mat. Modelirovanie, 118-127. (From the text) 82i-35025 35C20
- Suljagić, Salih On contractions on a quaternionic Hilbert space. (Serbo-Croatian summary) Glas. Mat. Ser. III 15(35) (1980), no. 1, 87-96. (P. Miličić) 82c:47011 47A45 Quaternionic Beurling's theorem. (Serbo-Croatian summary) Glas. Mat. Ser. III 15(35) (1980), no. 2, 327-339. (P. Miličić) 82i:47007 47A15
- Sulley, L. J. (with Dodson, C. T. J.; Williams, P. M.) An acceleration condition for b-incomplete timelike curves. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 1, 191–193. (Editors) 82i:83051 83C99 (53C50)
- Sullivan, B. T. (with Israel, Werner) The third law of black hole mechanics: what is it? Phys. Lett. A 79 (1980), no. 5-6, 371-372. (Authors' summary) 82b:83055
- Sullivan, Dennis For n > 3 there is only one finitely additive rotationally invariant measure on the n-sphere defined on all Lebesgue measurable subsets. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 1, 121-123. (Peter Walters) 82b:28035 28D10 (28A75) (with Phillips, Anthony) Geometry of leaves. Topology 20 (1981), no. 2, 209-218.
- (John Cantwell) 82t:57021 57R30
 Sullivan, Francis Nearly smooth norms on Banach spaces. Rev. Roumaine Math. Pures
 Appl. 26 (1981), no. 7, 1053–1057. (John R. Giles) 82i:46031 46B20
- John Brendan Frobenius operations on Hochschild cohomology. Amer. J. Math. 102 (1980), no. 4, 765-780. (Edward Cline) 82e:20054 20G10 (14F99, 14L17) The second Lie algebra cohomology group and Weyl modules. Pacific J. Math. 86
- (1980), no. 1, 321-326. (E. M. Luks) 82g:17013 17B56 (17B50, 20G10) Sullivan, P. J. (with Chatwin, P. C.) The basic structure of clouds of diffusing contaminant. Mathematical modelling of turbulent diffusion in the environment (Proc. Conf., Univ. Liverpool, Liverpool, 1978), pp. 3-32, Academic Press, London, 1979. (Authors' summary)
- 82a:76074 76R99 (76F99, 80A20)

 Sullivan, R. P. Regular power semigroups. Publ. Math. Debrecen 27 (1980), no. 3-4, 289-290. (From the text) 82c:20109 20M10
- Sul'man, E. I. Existence of a countable set of motion integrals for a system of three three-dimensional wave packets with resonance interaction. (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 2, 224-228. (G. W. Hedstrom) 82i:35160 (58F07, 81C05)

- Sul'man, V. S. Fixed points of linear-fractional transformations. (Russian) Funkcion Anal. i Priložen. 14 (1980), no. 2, 93-94. (Roman Mańka) 82d:47065 47H10 (54H25,
 - (with Fainštein, A. S.) Fredholm complexes of Banach spaces. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 4, 87-88. (F.-H. Vasilescu) 82c:47015 47A53 (47A55, 58B15)
- Sul'man, Z. P. (with Benderskaja, S. L.; Husid, B. M.) Nonisothermal flow of -Newtonian fluids in a channel. Izv. Akad. Nauk SSSR Meh. Židk. Gaza 1980, no. 3, 3-10 (Russian); translated as Fluid Dynamics 15 (1980), no. 3, 325-330. (From the summary) 82a:76003 76A05 (76R05)
- nan, George) On regular extensions of measures. Pacific J. Math. tan, Alan (with Bachi Some recent measure extension procedures and applications. Measure theory and its applications (Proc. Conf., Northern Illinois Univ., De Kalb, Ill., 1980), pp. 269–275,
- nois Univ., DeKalb, Ill., 1981. (See 82g:28002) 28A12
- altanaev, Ja. T. (with Murtazin, H. H.) On formulas for distribution of eigenvalues of a nonsemibounded Sturm-Liouville operator. (Russian) Mat. Zametki 28 (1980), no. 4, 545-553, 635. (M. Otelbaev) 824:34033 34B25 (47E05)
- (Russian) Constructive theory of functions and functional analysis, No. 2 (Russian), pp. 88-92, Kazan. Gos. Unio., Kazan, 1979. (S. G. Maloševskii) 82c:46046 46E40 (60G20)
 - Random functionals on the space of strongly measurable functions. (Russian) Issled. Prikl. Mat. No. 6 (1979), 74-82. (Ju. S. Mišura) 82i:60007 60B05 (46G99)
 - A class of triangle functions in an axiomatic system of random metric spaces. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 3, 60-66. (M. S. Burgin) 08A02 (54E35)
- Itangazin, U. M. (with Geveiler, G. N.) Improvement of the convergence and exactness of the solution of the spherical harmonics method in the neighborhood of a singular point. (Russian. Kazakh summary) Izo. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1980, no. 3, 50-55, 89. (Authors' summary) 82c:82061 82A40 (76P05)
 - (with Rahimberdiev, M. I.) Stability of the equilibrium state of a discrete Boltzmann equation. (Russian. Kazakh summary) *Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.* 1981, no. 1, 42–46, 86. (Authors' summary) 82d:82050 82A40 (34C10)
- See also Differential equations and their applications, 82k:93003 w, A. H. (with Bakirov, N. K.) On the probability that a level will not be exceeded by the trajectory of a random process. Radiotehn. i Elektron. 25 (1980), no. 1, 93-95 (Russian); translated as Radio Engrg. Electron. Phys. 25 (1980), no. 1, 66-69 (1981).
- (Authors' summary) 82;60128 60125 (65C05)
 Sultanov, G. F. (with Mamedov, N. S.) On the triple resonance case of the perturbed motion of a satellite of a spheroidal planet. (Russian, Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 4, 50-54.
- (Authors' summary) 82e-70013 70F15
 mafov, M. M. Construction of Ljapunov functions for some second-order nonlinear stochastic differential equations and questions of stability. (Russian) Differencial nye Uravnenija 17 (1981), no. 6, 1143-1145, 1152. (Friedrich Liese) 82h:60118
- nbatjan, M. A. (with Aleksandrov, V. M.) Asymptotic solution of convolution-type integral equations with a logarithmic singularity of the transform of the kernel, and cations in problems of mechanics. Izv. Akad. Nauk SSSR Meh. Tverd. Tela 15 (1980), no. 2, 80-88 (Russian); translated as Mech. Solids 15 (1980), no. 2, 63-70. (From the summary) 82k:45004 45E10 (73T05)
- hatov, A. S. On the problem of determining the existence of ignorable coordinates in conservative dynamic systems. *Prikl. Mat. Meh.* 42 (1978), no. 1, 43–51 (*Russian*); translated as J. Appl. Math. Mech. 42 (1978), no. 1, 42–50 (1979). (Author's summary) 70G10 (58F05, 58F35)
- Solution of one of Birkhoff's problems. Prikl. Mat. Meh. 42 (1978), no. 6, 1136-1141 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 6, 1248-1254 (1980). (Clark Robinson) 82i:58031 58F05 (70G05, 70M99)
- batyan, M. A. See Sumbatjan, M. A. Sumi, Y. (with Nemat-Nasser, S.; Keer, L. M.) On stability and postcritical behavior of interactive tension cracks in brittle solids. (German summary) Z. Angew. Math. Phys. 31 (1980), no. 6, 673-690. (Authors' introduction) 82f:73042 73M05 (58E07) (1980), no. 6, 673-690. (Authors' introduction) 82f:73042
- nihin, S. A. Approximate solution of a problem of elasticity theory. (Russian)
 Approximate solution of some problems for differential and integral equations of applied character (Russian), pp. 25–29, 47, Preprint 80, 17, Akad. Nauk Ukrain. SSR, Inst.
- kibernet, Kiev, 1980. (See 82g:65004) 73E10
 nilov, B. M. Local approximation by bilinear splines. (Russian) Vyčisl. Sistemy No. 81
 Metody Splain-Funkciī (1979), 42–47, 102–103. (S. D. Riemenschneider) 82f:41018
 - Local approximation by parabolic splines. (Russian) Vyčisl. Sistemy No. 81 Metody Splain-Funkcii (1979), 48-54, 103. (S. D. Riemenschneider) 82f:41019 41A15
- nita, U. (with Keilson, Julian; Nunn, W.) The bilateral Laguerre transform. Appl. Math. Comput. 8 (1981), no. 2, 137-174. (N. C. Jain) 82h:44004 44A15
- nitomo, Takeshi (with Tandai, Kwoichi) Killing tensor fields of degree 2 and spectrum of SO(n+1)/SO(n-1)×SO(2). Osaka J. Math. 17 (1980), no. 3, 649-675. (O. Kowalski) 82f:53062 53C35 (58G99)
- nkov, Ju. M. (with Berezko, L. A.) An approach to symbolic analysis of linear electronic circuits. (Russian) Teoret. Elektrotehn. No. 29 (1980), 3-12, 171. (Authors' summary) 82m:94044 94C05
- ers, Stephen J. A new proof of the asymptotic nature of perturbation theory in $P(\varphi)_2$ models. Helv. Phys. Acta 53 (1980), no. 1, 1-30. (John L. Challifour) 82f:81053
 - On the phase diagram of a $P(\varphi)_2$ quantum field model. (French summary) Ann. Inst. H. Poincaré Sect. A (N.S.) 34 (1981), no. 2, 173–229. (Author's summary) 81E10 (82A25)
- nmers, W. H. Weighted approximation and localization. Approximation theory, III
 (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 871-876, Academic Press, New York,
 1980. (D. E. Wulbert) 82d:41051 41A65
- ner, David (with Harary, Frank) The dichromatic number of an oriented tree. J.

- Combin. Inform. System Sci. 5 (1980), no. 3, 184-187. (Lars Dovling Andersen)
- 82f:05040 05C15 (05C05, 05C20)
 mers, D. W. (with Hitt, L. R.) Many different disk knots with the same exterior. Comment. Math. Helv. 56 (1981), no. 1, 142-147. (C. Kearton) 82j:57016
- ovskii, A. S. On the dynamics of a classical model in the theory of magnetism Lett. A 68 (1978), no. 5-6, 424-426. (From the text) 824:82025 (with Kurbatov, A. M.) The problems of the model approach in statistical mechanics. (Russian. English summary) History and methodology of the natural sciences,
- No. XXI (Russian), pp. 27-38, Moskov. Gos. Univ., Moscow, 1979. (Authors' summary) 82b:82016 82A05 Sun, Geng (with Mao, Zu Fan) Two classes of linearly implicit methods. (Chinese. English
- ary) Math. Numer. Sinica 3 (1981), no. 2, 169-174. (Authors' sum 651.05 Sun, He Sheng On the problems of the infinitesimal deformation of the surfaces of
- revolution with mixed curvature. (Chinese. English summary) Chinese Ann. Math. 2 (1981), no. 2, 187-199. (Author's summary) 82h:35038 35J65 (53C45)
- Sun, Hong Zhou On the irreducible representations of the compact simple Lie groups of rank 2. I. (Chinese. English summary) Phys. Energi. Fort. Phys. Nuclear. 4 (1980), no. 1,
- 73-92. (Yang Hua) 82g:22018 22E70 (81C40)

 an, Hugo S. On groups whose squares form a group. Bull. Inst. Math. Acad. Sinica 9 (1981), no. 3, 381-388. (Author's introduction) 82m:20042 20F99
 - (with Cohen, M. E.) On generating functions and double series expans
 - Fibonacci Quart. 19 (1981), no. 1, 69-73. (M. S. Cheema) 82e:05013 05A15 (05A19, (with Cohen, M. E.) Further generalizations of the Brock-Carlitz identity. J. Math.
- Anal. Appl. 82 (1981), no. 2, 346-360. (C. L. Parihar) 82m:05009 05A15 (05A19, 33A99)
- m, Hui Cheng (with Ni, Jin; Chen, Guang Di) Spanning balanced bipartite subgraphs of regular graphs: on R. Häggkvist's conjecture. (Chinese. English summary) Nanjing Daxue Xuebao 1980, no. 4, 16-20. (Authors' summary) 82i:05061
- Sun, Hung Zhou See Sun, Hong Zhou n, Ji Guang Regularization of singular integral equations on a complex hypersphere.
- (Chinese) Acta Math. Sinica 20 (1977), no. 4, 287-290. (From the text) 82e:42017 42B20 (32M15, 45E99)
 - (with Zhang, Chun Yuan; Qing, Cheng Rui) Calculation of the current needed to maintain an equilibrium field in a toroidal plasma. (Chinese. English summary) Acta Phys. Sinica 29 (1980), no. 9, 1110-1120. (From the summary) 82e:76078
 - Invariant subspaces and generalized invariant subspaces. II. Perturbation theorems (Chinese English summary) Math. Numer. Sinica 2 (1980), no. 2, 113-123. (Author's summary) 82:47011 47A15 (65J10)
- m, Ji Sui See Sun, Yi Sui n, Jia Chang Variational properties of cubic splines in local coordinates. (Chinese) Acta Math. Appl. Sinica 1 (1978), no. 2, 115-122. (From the introduction) 82j:65004
 - (with Zheng, Quan Lin) On arc and bi-arc curve approximation. (Chinese. English summary) Math. Numer. Sinica 3 (1981), no. 2, 97-112. (Authors' summary) 82k:65008 65D15
- Sun, Qi (with Ke, Zhao) On the Diophantine equation $x^4 Dy^2 = 1$. (Chinese) Acta Math.
- Sinica 23 (1980), no. 6, 922-926. (Jau-Shyong Shiue) 82:10018 10810 Sun, S. R. (with Lindner, C. C.; Mendelsohn, N. S.) On the construction of Schroeder quasigroups. Discrete Math. 32 (1980), no. 3, 271-280. (V. Havel) 82b:20104 (05B15)
- Sun, Tze Chien A finite element method for random differential equations. Approximate solution of random equations, pp. 223-237, North-Holland, New York, 1979. (J. D. Atkinson) 82g-60084 60H10 (65N30)
 Sun, Xia (with Wu, F. Y.) The critical isotherm of the modified F model. (French summary) Statphys 14 (Proc. Fourteenth Internat. Conf. Thermodynamics and Statist.
- Mech., Univ. Alberta, Edmonton, Alta., 1980). Phys. A 106 (1981), no. 1-2, 292-300. (See 824:82003) 82A25
- Sun, Y. Y. See Sun, Yü I
- Sun, Yi Sui (with Chen, Xiang Yan; Luo, Ding Jun) On the H. Poincaré fixed-point theorem (Chinese English summary) Nanjing Duxue Xuebao No. 3 (1978), 32–37. (Authors' summary) 82j:70007 70F07 (58F05)
- Sun, Yong Sheng Mean approximation of a periodic function by the partial sums of its Fourier series. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 2, 273–282. (Yung-Ming Chen) 82h:42004 42A10 (41A50)
- Sun, Yu I Solution of convolution integrals and correlation functions via block pulse functions. (Chinese summary) J. Chinese Inst. Engrs. 4 (1981), no. 1, 31-38. (Authors' mary) 82e:94020 94A11
- ada, Toshikazu Spherical means and geodesic chains on a Riemannian manifold. Trans.

 Amer. Math. Soc. 267 (1981), no. 2, 483-501. (Mark. Pinsky) 82k:58088 58G15
- ahara, Yoshifumi (with Morita, Yoji) An approximate method for nonlinear filtering problems via maximal likelihood principle. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. 11, pp. 431-442,
- Reidel, Dordrecht, 1980. (Authors' summary) 82f:93077 93E11
 Sunčeleev, R. R. s-numbers of a completely continuous operator. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 4, 34-38, 104. (T. T. Raghunathan) 46P05 (12B40, 47B05) 82a:46082
- meev, V. N. Synthesis of discrete linear systems with feedback with incomplete information and a problem on stabilizability. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1981, no. 9, 28 pp. (Publisher's description) 82k:93047
- nd, T. (with Evans, David E.) Spectral subspaces for compact actions. Rep. Math. Phys. 17 (1980), no. 2, 299–308. (H. Araki) 82j:46086 46L55 (47D10)
- nn, D. Moduli, deformations and classifications of compact complex manifolds. Research Notes in Mathematics, 45. Pitman (Advanced Publishing Prog Boston, Mass.-London, 1980. iv + 261 pp. ISBN 0-273-08458-5 (R. R. Simha) 82e:32001 32-02 (32G05, 32G13)
- san, K. (with Woyczyński, Wojbor A.) Laws of large numbers and Beck convexity

82h:60018 60B12
 adherg, Carl (with Casazza, P. G.; Pengra, R. W.) Complemented ideals in the disk algebra. Israel J. Math. 37 (1980), no. 1-2, 76-83. (V. P. Havin) 82a:50029 30D55
 A note on algebras between L** and H**. Rocky Mountain J. Math. 11 (1981), no. 2, 333-335. (Sheldon Axler) 82a:56093 46J15
 adherg, Carl-Erik W. (with Aulin, Tor) Continuous phase modulation. I. Full response signaling. IEEE Trans. Comm. 29 (1981), no. 3, 196-209. (Authors' summary)

 82a:24019a 94A14

 (with Aulin, Tor; Rydbeck, Nils) Continuous phase modulation. II. Partial response cinceline. IEEE Trans. Comm. 29 (1981), no. 3, 210-225. (Authors' summary)

ng. IEEE Trans. Comm. 29 (1981), no. 3, 210-225. (Authors' sum

(with Cedervall, Mats) A class of perfect block codes for the binary channel associated with differentially encoded PSK signals with coherent detection. IEEE Trans. Inform. Theory 27 (1981), no. 2, 250–254. (Authors' summary) 82:94026 94B15

Mellus, Björn Reflection of rarefaction wave in one-dimensional gas flow.

Phys. 48 (1980), no. 10, 850-854. (J. F. Clarke) 82c:76083 76N15 (26A33)

n, Bengt A coupled conduction-convection problem at low Reynolds num Numerical methods in thermal problems (Proc. First Internat. Conf., Unio. College, Swansea, 1979), pp. 412-422, Pineridge, Swansea, 1979. (See 82g:80001) 76R99 nder, V. S. Unitary equivalence to integral operators. Pacific J. Math. 92 (1981), no. 1, 211-215. (Richard E. Frankfurt) 82ts/7045 47B38 (47G05)

1-215. (Richard E. Frankfurt) 82:47045 47B38 (47G05)
rji, B. (with Owen, David Rudyard; Clarke, S.) An inverse method for the mapping of curves onto the real axis. Pure Appl. Math. Sci. 13 (1981), no. 1-2, 15-23. (Jacob Burbea) 82e:30007 30C20 (76S05)

A, Bjern (with Jewell, William S.) Further results on recursive evaluation of con stributions. Astin Bull. 12 (1981), no. 1, 27-39. (Authors' summary) 82m:62235 62P05

edibility estimation. Scand. Actuar. J. 1981, no. 1, 3-21. (Fl. De Vylder)

82k-62193 62P05
ng, Chen Ham Defect relations of holomorphic curves and their associated curves in CP^m.
Complex analysis Joensuu 1978 (Proc. Colloq., Univ. Joensuu, Joensuu, 1978),
pp. 398-404, Lecture Notes in Math., 747, Springer, Berlin, 1979. (N. Toda) 82a:36039 30D35 (32H30)

On the deficiencies of holomorphic curves in complex projective space. J. Analyse Math. 39 (1981), 116–130. (W. H. J. Fuchs) 82k:30032 30D35 (32A22)

kurki Suonio, Kaarle See Kurki Suonio, Kaarle Šupp, P. See Schupp, Paul E. Supran, V. M. (with Surenkov, V. M.) The state of a homogeneous process with

independent increments and jumps of one sign at the time of exit from an interval (the critical case). (Russian) Analytical methods of probability theory (Russian), pp. 146-147, 156, "Naukova Dumka", Kiev, 1979. (A. A. Novikov) 824:60140 60330 (with Surenkov, V. M.) Limit distribution of the position at the time of exit from an

interval of a semicontinuous process with independent increments with zero mean and infinite variance. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 2, 262-264, 287. (O. A. Voina) 82b:60095 60130

(with Surenkov, V. M.) On the limit distribution of the position at the time of exit from an interval of a complex Poisson process with zero mean and infinite variar (Russian) Ukrain. Mat. Z. 33 (1981), no. 4, 552-557. (Gh. Oprişan) 82k:60163 60

run, V. P. On the implementation of a fundamental symmetrical multiport. Automat. i Vyčisl. Tehn. (Riga) 1979, no. 5, 22-23, 91 (Russian); translated as Automat. Control Comput. Sci. 13 (1979), no. 5, 21-23. (Author's summary) 82h:94027 94C05 (94C10)

runenko, D. A. Equivalence of (0, 1)-matrices. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 5, 5-9, 139. (Rudolf Mathon) 82c:05028 05B20

nko, I. D. Subgroups of $GL(n,p^m)$ containing SL(2,p) in an irreducible representation of degree n. I. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1979, no. 1, 18-24, 138. (S. I. Gel'fand) 82e:20053a 20G05

Subgroups of GL(n,p^m) containing SL(2,p) in an irreducible representation of degree n. II. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1979, no. 2, 11-16, 138. (S. I. Gel'fand) 82e:20053b 20G05

Finite irreducible groups of degree 4 over fields of characteristic 3 and 5. (Russian. mary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 3, 16-22, 139. (G. A. Soifer) 82h:20057 20G40

uet, Pierre-M. Fonctions à variation bornée sur un ouvert de R. Travaux Sém. Anal. Convexe 8 (1978), no. 1, Exp. No. 4, 17 pp. (G. Geymonat) 82f:46032 Un espace fonctionnel pour les équations de la plasticité. (English summary) Ann Fac. Sci. Toulouse Math. (5) 1 (1979), no. 1, 77-87. (G. Geymonat) 82f:46041 46E3: (73E99)

Une méthode duale en homogénéisation. Application aux milieux élastiques périodiques. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A181-A184. (Author's summary) 82b:73018 73C99 (49D50, 73C50)

Sur l'homogénéisation de la loi de comportement d'une classe de matériaux

dissipatifs non lineaires (English summary) C.R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 3, A231-A234. (Author's summary) 82a:73006 73B99 (35B40) with Mignot, Fulbert; Puel, Jean-Pierre) Flambage des plaques élastiques multiperforèes. Publ. U.E.R. Math. Pures Appl. IRMA 2 (1980), no. 2, exp. no. II, 69 pp. (Jesús Hernández) 82i:73016 73C40 (35B32, 58E30)

Incremental perfect plasticity and connected problems. Nonlin

analysis in geometry and mechanics (Proc. Sympos., Univ. Paul Sabatier, Toulouse, 1979), pp. 184-197, Res. Notes in Math., 46, Pitman, Boston, Mass., 1981. (Z. Mróz) 82h:73038

(with Mignot, Fulbert; Puel, Jean-Pierre) Flambage des plaques élastiques multiperforces. (English summary) Ann. Fac. Sci. Toulouse Math. (5) 3 (1981), no. 1, 1-57. (P. G. Ciarlet) 82m:73050 73K10 (35B32, 58E07, 73H99)

éisation d'une forme d'endommagement. (English summary) Approche par homogén C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci. Univers Sci. Terre 292 (1981), no. 11, 809-812. (Author's summary) 82i:73048 73S99

Prévision par homogénéisation du flambement de plaques élastiques renforcées. (English summary) Translated as Rech. Aérospat. (English) 1981, no. 2, 35-43. Rech.
 Aérospat. 1981, no. 2, 99-107. (Author's summary) 82:73035 73K12 (73H05, 73K20)
 Sur, M. G. Asymptotic behavior of multistep transition probabilities. (Russian. Lithuanian and English summaries) Litousk. Mat. Sb. 20 (1980), no. 4, 201-207, 211. (È. I. Kistauri)

Continuity criteria for Markov processes. (Russian. English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 1, 142-149. (D. A. Darling) 82d:60135

uraj, Zhigniew A resource allocation problem. Mathematical foundations of compu science, 1980 (Proc. Ninth Sympos., Rydzyna, 1980), pp. 627-642, Lecture Notes in Comput. Sci., 88, Springer, Berlin, 1980. (Author's summary) 82a:68047 68B20 (68C15, 68D90)

ranyi, Janos A divisibility property concerning binomial coefficients. A collection of manuscripts related to the Fibonacci sequence, pp. 189-192, Fibonacci Assoc., Santa Clara, Calif., 1980. (Heiko Harborth) 82;:10026 10A40 (05A10)

Surányi, L. (with Pach, J.) On graphs of diameter 2. Ars Combin. 11 (1981), 61-78. (S. F. Kapoor) 824:08071 05C35 (05C38)

reau, Yves Hypergroupes operant transitivement sur un ensemble. Ann. Sci. Univ. Clermont Math. No. 18 (1979), 83-96. (Editors) 82f:08009 08A99

kov, V. M. (with Suprun, V. M.) The state of a homogeneous process with

independent increments and jumps of one sign at the time of exit from an interval (the critical case). (Russian) Analytical methods of probability theory (Russian), pp. 146-147, 156, "Naukova Dumka", Kieo, 1979. (A. A. Novikov) 82d:60140 60J30

(with Aliev, S. A.) Transition phenomena in branching processes. (Russian) Theory of random processes, No. 7 (Russian), pp. 3-6, 130, "Naukova Dumka", Kiev, 1979. (G. A. Skorobogatov) 82e:60136 60180

(with Suprun, V. M.) Limit distribution of the position at the time of exit from an interval of a semicontinuous process with independent increments with zero mean and infinite variance. (Russian) Ukrain. Mat. Z. 32 (1980), no. 2, 262-264, 287. (O. A. 60J30

Random walks on the half line. I. Boundary problems and the ergodic theorem. (Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 1, 45-58. (M. A. Maher) 82j:60134a 60J25 (60J35)

Random walks on the half line. II. Limit distributions of boundary functionals. (Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 3, 464–479. (M. A. Maher) 82j:60134b 60J25 (60J35)

(with Suprun, V. M.) On the limit distribution of the position at the time of exit from an interval of a complex Poisson process with zero mean and infinite variance. (Russian) Ukrain. Mat. Z. 33 (1981), no. 4, 552-557. (Gh. Oprişan) 82k:60163 60J75

rgailis, D. Convergence of sums of nonlinear functions of moving averages to self-similar processes. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 1, 51-54. (Serban

Grigorescu) 82k:60071 60F17 (60G50, 60K99)
(with Bentkus, V.) Some classes of self-similar random fields. (Russian. Lithuanian and English summaries) Litovsk. Mat. Sb. 21 (1981), no. 2, 53-66. (J. Fritz) 82m:60060

Šurgaja, A. V. Method of collective variables and generalized Hamiltonian formalism. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 1, 46-53. (Author's

summary) 82h:81149 81H10 (49C10, 58D30, 81C35)

Suria, Giuseppe Vigna See Vigna Suria, Giuseppe

Suria, Dušan (with Ušan, Janez; Tošić, Ratko) A method for constructing a system of orthogonal Latin squares, codes and k-seminets. (Russian. Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 191-197 (1980). (J. Dénes) 05B15 (20N05, 94B25) 824:05036

rma, Stanisław J. The growth of logic out of the foundational research in mathematics. Modern logic-a survey, pp. 15-33, Synthese Library, 149, Reidel, Dordrecht, 1981. (See 82f:03002) 03A05

nt, J. (with Dehan, M.) Characterization of 5-designs on the one-dimensional projective geometry of 24 points. Ann. Fac. Sci. Univ. Nat. Zaïre (Kinshasa) Sect. Math.-Phys. 5 (1979), no. 1-2, 109-141. (K. T. Phelps) 82e-05031 05B07 (05B25)

Surry, C. (with Mignot, A. L.) A mixed finite element family in plane elasticity. Appl.

Math. Modelling 5 (1981), no. 4, 259-262. (Authors' summary) 82m:73055 (73C99)

rsock, Jean-Pierre Mathematical properties of ordered amplitude graphs. Nuclear Phys. Sock, sear-riere maintainata proportion of the state of t

rvila, P. Exponential rate of convergence in the law of large nu Lithuanian and German summaries) Litovsk. Mat. Sb. 20 (1980), no. 2, 175-184, 211. (G. K. Eagleson) 82d:60056 60F15

The rate of convergence in the law of large numbers with normalization by sums of ments. (Russian. Lithuanian and German summaries) Litousk. Mat. Sb. 21 (1981), mo. 1, 191-202 (H.-J. Roßberg) 821-60056 60F15

Suryanarayana, D. (with Subbarao, M. V.) Almost and nearly k-free integers. Indian J.

Math. 15 (1973), no. 3, 163-169. (Jean-Marie De Koninck) 82f:10055a 10H15 (10H25)

(with Subbarao, M. V.) On the set of integers of the form $p'm^k$. Indian J. Math. 15 (1973), no. 3, 179-184. (Editors) 82h:10054 10H20 (with Subbarao, M. V.) Corrections to: "Almost and nearly k-free integers". India

J. Math. 17 (1975), no. 3, 171. (Jean-Marie De Koninck) 821:10055b 10H15 (10H25) (with Subbarao, M. V.) Corrections and additions to: "On the set of integers of the p'mk" [Indian J. Math. 15 (1973), no. 3, 179-184; MR 82b:10054]. Indian J. Math. 17 (1975), no. 3, 172. (From the text) 82m:10067 10H20

(with Sitaramachandra Rao, R.) On an identity of Eckford Cohen. II. Indian J. Math. 18 (1976), no. 3, 171-176. (From the introduction) 82b:10008

An upper bound for σ(N)/N. Math. Student 45 (1977), no. 4, 68-73 (1979). (Péter Kiss) 824:10012 10A20

(with Sita Ramaiah, V.) Sums of reciprocals of some multiplicative functions. Math. J. Okayama Univ. 21 (1979), no. 2, 155-164. (Jean-Marie De Koninck) 82d:10064a

(with Sita Ramaiah, V.) On certain divisor sums over square-full integers.

Proceedings of the Conference on Number Theory (Mysore, 1979), pp. 98-109, Matscience Rep., 101, Inst. Math. Sci., Madras, 1980. (T. M. Apostol) 82f:10007 10A20

(with Subramanyam, P.) The maximal k-full divisor of an integer. Proceedings of the Conference on Number Theory (Mysore, 1979), pp. 131-156, Matscience Rep., 101, Inst. Math. Sci., Madras, 1980. (R. A. Rankin) 821:10058 10H25

On the orders of the error functions of the (k,r) and r-free integers. Proceedings of the Conference on Number Theory (Mysore, 1979), pp. 157-204, Matscience Rep., 101, Inst. Math. Sci., Madras, 1980. (W. Schwarz) 82j:10073 10H15 (10H25)

(with Sita Ramaiah, V.) Generalization of a problem of Evelyn-Linfoot and Page in additive number theory. Ann. Mat. Pura Appl. (4) 126 (1980), 1–17 (1981). (Karl-Heinz Indiekofer) 82i:10056 10H15 (10H25, 10J20)

(with Sita Amaniah, V.) Sums of reciprocals of some multiplicative functions. II. lian J. Pure Appl. Math. 11 (1980), no. 10, 1334–1355. (Jean-Marie De Koninck) 82d:10064b

(with Subrahamanyam, P.) The maximal k-full divisor of an integer. Indian J. Pure (with Subranamanyam, r.) the maximal r-tun divisor of an integer. Finding of Papil, Math. 12 (1981), no. 2, 175-190. (Don Redmond) 82g:10062 10H5 (10H25) (with Sita Ramaiah, V.) An order result involving the o-function. Indian J. Pun.

Appl. Math. 12 (1981), no. 10, 1192-1200. (D. R. Heath-Brown) 82k:10056 10H25 Some more remarks on uniform O-estimate for k-free integers. Indian J. Pure Appl. Math. 12 (1981), no. 12, 1420-1424. (T. M. Apostol) 82m:10069 10H25

Surgin, A. Estimates of parameters of a normal distribution with exponential weighting of observations: asymptotic theory. (Russian) Algorithms and software for applied statistical analysis. Učen. Zap. Statist. 36 (1980), 241-259. (B. Ja. Levit) 82k:62070 62F35 (62F12)

rygin, V. V. Special connections on surfaces of a space over an algebra. (Russian) Izo. Vysš. Učebn. Zaved. Matematika 1979, no. 7, 83-87. (J. Vanžura) 82b:53045

Analytic manifolds over algebras and their submanifolds. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 11 (1979), 115-119. (I. Kolář) 82k:53045 53B99 (53B25,

Generalization of a theorem. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 11 (1979), 120-124. (L. Tamássy) 82i:53018 53B05

A generalization of flat connections in spaces over algebras. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 12 (1980), 118-127. (Kazimierz Cegielka) 82j:53060 (53B15)

sarla, V. (with Blum, J. R.) Maximal deviation theory of density and failure rate function estimates based on censored data. Multivariate analysis, V (Proc. Fifth Internat. Sympos., Univ. Pittsburgh, Pittsburgh, Pa., 1978), pp. 213–222, North-Holland, Amsterdam, 1980. (L. Rejto) 82x62057 62G05

(with Koul, Hira L.) Testing for new better than used in expectation with incomplet data. J. Amer. Statist. Assoc. 75 (1980), no. 372, 952-956. (A. C. Cohen) 82d:62152

(with Walter, G. G.) Estimation of a multivariate density function using delta nces. Ann. Statist. 9 (1981), no. 2, 347-355. (Vladimir Katkovnik) 82f:62076

(with Koul, Hira L.; Van Ryzin, John) Regression analysis with random right-censored data. Ann. Statist. 9 (1981), no. 6, 1276-1288. (Eswar G. Phadia) 82k:62132 62305

ev, S. Š. Extrema of five-dimensional Epstein zeta functions. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 12, 60-66. (A. I. Vinogradov) 824:10058

On the Rankin-Sobolev problem of the multidimensional zeta function (estimate of the origin of the ray of extremality of the principal perfect form). (Russian) Geometry of positive quadratic forms. Trudy Mat. Inst. Steklov. 152 (1980), 232-235, 238. (R. A. Rankin) 82f:10041 10E25 (10H10)

čans'kii, V. I. (with Bodnarčuk, Ju. V.) Calculation in Sylow 2-subgroups of a symmetric group of degree 2". (Russian) Computations in algebra and combinatorial analysis (Russian), pp. 87–101, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1978. (V. D. Mazurov) 82g:20008 20B35 (05C25)

(with Kalužnin, L. A.; Klin, M. H.) Exponentiation of permutation groups. I. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1979, no. 8, 26-33. (Ja. G. Berkovič) 20B30

(with Kalužnin, L. A.) Applied problems in the theory of permutation groups. I. nber theory and comb 85, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (J. L. Brenner) 82g:20004

(with Ustimenko-Bakumovskii, V. A.) Characterization of types of Boolean functions. (Russian). Computations in algebra, number theory and combinatorics (Russian), pp. 47-59, 86-87, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (Jürgen Dassow) 82h:94029 94C10

(with Kalužnin, L. A.; Ustimenko-Bakumovskii, V. A.) Operation of exponentiation in the theory of permutation groups and its applications. (Russian) Sixth All-Union Symposium on Group Theory (Čerkassy, 1978) (Russian), pp. 135-146, 222, "Naukova nka", Kiev, 1980. (V. D. Mazurov) 82g:20003 20B07

(with Vaideman, A. A.) Cortege operations on permutation groups. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 10, 19-21, 93. (Authors' summary) 82m:20004 20B99

(with Dmitruk, Ju. V.) Construction of Sylow 2-subgroups of alternating groups and normalizers of Sylow subgroups in symmetric and alternating groups. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 3, 304–312. (N. D. Podufalov) 82k:20007 20B35 (20D20)

erent methods of investigation of physical systems. ščinskii, M. M. See Statistical and cohe 82m:82004

slin, A. A. On the equivalence of K-theories. Comm. Algebra 9 (1981), no. 15, 1559-1566.

(Jean-Louis Loday) 82m:18008 18F25 slov, S. I. Convexity of attainable sets of a class of dynamical systems. (Russian) Upranijaemye Sistemy No. 18 (1979), 59-64, 77. (A. D. Ioffe) 82h:49059 49E15

kin, V. I. Existence of a solution of a nonlinear integral equation of the first kind (Russian) Differencial nye Uravnenija (Ryazan) No. 15 (1980), 150-153. (C. Avramescu) 82k:45009 45G10 (34H05, 49A10)

Süss, Irmeard Origin of the Mathematical Research Institute Oberwolfach at the country

seat "Lorenzenhof". General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfoch, 1978), pp. 3–13, Birkhäuser, Basel, 1980. (Joong Fang) 82g:01088 01A74 (01A80)

(with Oelschlägel, D.) Interval analytic treatment of convex programs problems. (German summary) Computing 24 (1980), no. 2-3, 213-225. (Authors summary) 82f:90080 90C25 nmary) 82f:90080

(with Oelschlägel, D.) Optimierung mit Hilfe des Intervall-Newton-Verfahrens. (English and Russian summaries) [Optimization by means of the interval Newton method] Z. Angew. Math. Mech. 61 (1981), no. 6, 243-251. (Authors' summary) 65G10

sich, Joseph F. (with Bloom, Walter R.) Positive linear operators and the approximation of continuous functions on locally compact abelian groups. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 2, 180–186. (Walter Schempp) 82e:43004 43A40 (41A36)

d, Leonard (with Srednicki, Mark) Colored monopoles on the lattice. Nuclear Phys. B 179 (1981), no. 2, 239-252. (Authors' summary) 82a:81052 81G20 (81E99)

sman, M. M. A self-correcting scheme for evolution equations. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 298-303, IMACS, New Brunswick, N.J., 1979. (Author's summary) 82a:65049 65L05

n-Fort, Stephen E. Inductor-capacitor one-ports and inverse eigenvalue problems. IEEE Trans. Circuits and Systems 28 (1981), no. 8, 850-853. (Author's summary) 94C05 (15A18, 65F15)

nn, H. J. (with Bumby, Richard T.; Sontag, Eduardo D.; Vasconcelos, Wolmer V.)

semann, H. J. (wilm butnoy, Richard 1., souring, Educated D., Vasconicios, Volunt 1., Remarks on the pole-shifting problem over rings. J. Pure Appl. Algebra 20 (1981), no. 2, 113–127. (Valeriu Prepeliță) 821:93006 93805 (93855, 93015) teliffe, B. T. The Eckart Hamiltonian for molecules—a critical exposition. Quantum dynamics of molecules (Proc. NATO Adv. Study Inst., Univ. Cambridge, Cambridge, 1979), pp. 1-37, NATO Adv. Study Inst. Ser., Ser. B: Physics, 57, Plenum, New York, 1980. (See 82d:81175) 81G50

Suter, U. (with Mahammed, N.; Piccinini, Renzo) *Some applications of topological K-theory. North-Holland Mathematics Studies, 45. Notas de Matemática [Mathematics Studies] Notesj, 74. North-Holland Publishing Co., Amsterdam-New York, 1980. ix + 317 pp. ISBN 0-444-86113-0 (J. M. Boardman) 82i:55009 55N15 (58Gxx)

tera, Allonso (with Benzi, Roberto; Vulpiani, Angelo) The mechanism of stochastic resonance. J. Phys. A 14 (1981), no. 11, L453-L457. (From the text) 82k:70027 70I.05 (58F14)

herland, Bill (with Mattis, Daniel C.) Strange solutions to field theories in one spatial dimension. J. Math. Phys. 22 (1981), no. 8, 1692-1695. (P. Mitra) 82k:81073 81E99 Sutherland, Colin (with Nakagami, Yoshiomi) Takesaki's duality for regular extensions of

von Neumann algebras. Pacific J. Math. 83 (1979), no. 1, 221-229. (E. T. Kehlet) 82e:46080 46L10 Sutti, C. Superlinear convergence of Sutti's nongradient minimization algorithm. Numerical

optimisation of dynamic systems, pp. 309-324, North-Holland, Amsterdam, 1980. (Author's summary) 82i:90101 90C30 (65K05)

tton, G. R. Application of a stochastic waveguide propagation model to ocean acoustics. J. Math. Phys. 22 (1981), no. 12, 2974-2976. (Author's summary) 82m:76057 76Q0: (86A05)

Sutyrin, V. G. On equations of the theory of springs. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 1, 60-64. (Z. Kączkowski) 82e:73032. 73D25 (73K12)
Suvar, B. A. (with Kurpel', M. S.) ★Двусторовине операторные перавенства и их применения. (Russian) [Two-sided operator inequalities and their applications]
"Naukova Dumka", Kiev., 1980. 268 pp. (M. M. Konstantinov) 82j:47002 47-02 (26D10, 34Axx, 45J05, 47Hxx, 65-02)

(with Dudka, N. A.) Two-sided differential inequalities with deviating argument. (Russian) Analytic methods for investigating nonlinear oscillations (Russian), pp. 35-179, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (R. R. Ahmerov) 82h:3408 34K05 (34A45, 34K30)

(with Dudka, N. A.) Two-sided estimates of solutions of integro-differential equations with partial derivatives of parabolic and elliptic type. (Russian) Qualitative investigations of functional-differential equations (Russian), pp. 47-50, 183, "Naukova Dumka", Kiev, 1980. (Włodzimierz Proskurowski) 821:45011 45K05

Systems of two-sided integro-differential inequalities of neutral type. (Russian) Qualitative investigations of functional differential equations (Russian), pp. 171-177, 188, Naukova Dumka", Kiev, 1980. (Józef Kalinowski) 82i:34090

(with Dudka, N. A.) On bilateral differential inequalities for differential equations with deviating argument. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 11, 15-17. (Erwin Kozakiewicz) 82e:34078 34K15

velka, I. V. On Green functions of fundamental boundary value problems for the Helmholtz equation in the exterior of a compact domain. (Russian) Boundary value problems for partial differential equations. Mat. Issled. No. 63 (1981), 142-150, 184. (A. S. Alekseev) 82i:35048 35J05

See also Linear operators and integral equations, 82e:47001 worčenkova, G. A. Asymptotic behavior of a spectral function of a first-order differential equation with operator coefficients. (Russian) Trudy Moskov. Mat. Obšč. 41 (1980), 145–161. (Snežana Hristova) 82f:35147 35P20 vorov, G. D. See Belinskii, P. P.; et al., 82g:01040 and Birthday: Suvorov, G. D.

rorov, S. G. Critical sets of mappings of Banach spaces into Euclidean spaces. (Russian) Mathematical analysis and probability theory (Russian), pp. 165-168, 221, "Naukova Dumka", Kiev, 1978. (Christian Fenske) 82b:58025 58E05

Einstein: the creation of the theory of relativity and some gnosiological lessor Uspehi Fiz. Nauk 128 (1979), no. 3, 459-501 (Russian); translated as Soviet Phys. Uspekhi 22 (1979), no. 7, 528-554 (1980). (C. B. Collins) 82a:00014 00A25 (01A70, 83-03)

The existence of an optimal control in the case when the domain serves as the control. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 193-200, 255, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Ascn. L. Dončev) 82e:49011 49A22

Letter to the editors: "On the Ljusternik-Šnirei'man theory" [Sibirsk. Mat. Ž. 19 (1978), no. 3, 670–684; MR 81j:58027]. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 4, 234. (Editors) 82c:58012 58E05 (58C30)

Suvorova, Ju. V. (with Osokin, A. E.) Nonlinear governing equation of a hereditary media

- and a methodology of determining its parameters. Prikl. Mat. Meh. 42 (1978), no. 6, 1107-1114 (Russian); translated as J. Appl. Math. Mach. 42 (1978). ian); translated as J. Appl. Math. Mech. 42 (1978), no. 6, 1214-1222 (1980). (Authors' summary) 82h:73040 73F20 (45G10, 73E99)

 Tatsuo Deformations of holomorphic Seifert fiber spaces. Invent. Math. 51 (1979),
- - no. 1, 77–102. (Andrew J. Sommese) 82m:32024 32L05 (32G05, 57825)
 Deformations of holomorphic group actions. Math. Ann. 240 (1979), no. 3, 281–286.
 (Andrew J. Sommese) 82m:32028 32M99 (32G13, 57825)
 - Deformations of complex analytic Seifert fibre spaces. (Japanese) Sûgaku 31 (1979), no. 3, 193-206. (Yusuke Sakane) 82m:32017 32G05 (32L05, 57S25) anala, Hendra (with Gonnet, Gaston H.; Munro, J. Ian) Exegesis of self-organizing
- ar search. SIAM J. Comput. 10 (1981), no. 3, 613-637. (Authors' summary) 68E05 (68C25)
- xia, Zhao See Zhao, Su Xia yama, Hiromi Searching for prime factors of Fermat numbers with a microcompute (Japanese) BIT (Tokyo) 13 (1981), no. 3, 240-245. (Samuel S. Wagstaff, Jr.) 82c:10012 10A25 (10-04)
- urko, A. A. See Chadan, K.; et al., 82c:81121
- haki, Gittire G-empirical Bayes solution: unifying compound decision and empirical Bayes procedure. Essays in probability and statistics, pp. 675-695, Shinko Tsusho, Tokyo, 1976. (Author's introduction) 82h:62013 62C12 (62C25)
- Modified empirical Bayes solutions for the two-way classification problem. Recent ents in statistical inference and data analysis (Proc. Internat. Conf., Inst. Statist. Math., Tokyo, 1979), pp. 259-267, North-Holland, Amsterdam, 1980. (Françoise Garcia-Schaeffer) 82f:62022 62C12
- aki, Haruo Construction of transverse projectable connections in some foliated bundles. Publ. Res. Inst. Math. Sci. 17 (1981), no. 1, 215-233. (Masahisa Adachi) 82k:57019
- uki, Kanzi Representation groups of the group Z_p .× Z_p . Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 1, 28–33. (Author's introduction) 82k:20021 20C30
- ruki, Katsuyoshi (with Takahashi, Shin; Yamaguchi, Takeshi) Vibrations of Mindlin's circular plates with thickness varied along rad 18. Bull. JSME 24 (1981), no. 187, 229-235. (Authors' summary) 824:73047 73K12
- ruki, Masaaki The holomorphic curvature of intrinsic metrics. Math. Rep. Toyama Univ. 4 (1981), 107-114. (Shoshichi Kobayashi) 82k:32057 32H15 (53C60)
- hiko Normal forms of quasihomogeneous functions with inner me to five. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 3, 160-163. (G. N. Himšiašvili) 82h:32018 32C40 (58C27)
- nuki, Masakazu (with Nishino, Toshio) Sur les singularités essentielles et isolées des applications holomorphes à valeurs dans une surface complexe. Publ. Res. Inst. Math. Sci. 16 (1980), no. 2, 461-497. (A. Hirschowitz) 82c:32024 32H25
- ruki, Masayuki Composite controls for singularly perturbed systems. Automat. Control 26 (1981), no. 2, 505-507. (Author's summary) 82e-93014 93B05 (with Ogata, Shigeo) On iterated maps of the interval. Res. Rep. Nagaoka Tech. College 17 (1981), no. 2, 25-30. (Frederick R. Marotto) 82i:58056 58F20 (28D20)
- uki, Masao Theory of instability, nonlinear Brownian motion and formation of macroscopic order. 82a:82028 82A35 Phys. Lett. A 67 (1978), no. 5-6, 339-341. (Author's sun
 - (with Takano, Hiroshi) Migdal renormalization group approach to quantum spin Phys. Lett. A 69 (1978/79), no. 6, 426-428. (Authors' summary) 82i:82030
 - 82A25 (82A67) Microscopic theory of formation of macroscopic order. Phys. Lett. A 75 (1979/80), no. 5, 331–332. (Author's summary) 82c:82040 82A25
 - Fluctuation and relaxation in stochastic systems. Progr. Theoret. Phys. Suppl. No. 69 (1980), 160-173 (1981), (From the text) 82i:82019 82A05 (60H10)
 - (with Sasagawa, Fumiyoshi; Kaneko, Kunihiko; Fang, Fu Kang) The variational theory and rate equation method with applications to relaxation near the instability point. Phys. A 105 (1981), no. 3, 631-641. (Authors' summary) 82d:82044
 - (with Kaneko, Kunihiko; Sasagawa, Fumiyoshi) Phase transition and slowing down quilibrium stochastic processes. Progr. Theoret. Phys. 65 (1981), no. 3, 828-849. (Ronald F. Fox) 82k:60073 60G07 (82A35)
- (Ronaid F. Fox) **322-2001** 30000 (32A55) with, Michio ★Gun ron. Vol. 1. Japanese) [Group theory. Vol. 1] Gendai Sügaku [Modern Mathematics], 18. *Iwanami Shoten, Tokyo*, 1977. xii+408 pp. (*loose errata*). (B.
- Chang) 82k:20001a 20-01

 ★Gun ron. Vol. 2. (Japanese) [Group theory. Vol. 2] Gendai Sügaku [Modern Mathematics], 19. Iwanami Shoten, Tokyo, 1978. pp. i-vi and 409-951. (B. Chang) 82k:20001b 20-01
- Finite groups with a split BN-pair of rank one. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 139-147, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (From the introduction) 82c:20035 20D05 (20D40)
- ★Group theory. I. Translated from the Japanese by the author. Grundlehren der ematischen Wissenschaften [Fundamental Principles of Mathematical Sciences], 247. Springer-Verlag, Berlin-New York, 1982. xiv + 434 pp. ISBN 3-540-10915-3 (B. Chang) 82k;20001c 20-01
- oriaki (with Itô, Masayuki) Completely superharmonic measures for the infinitesimal generator A of a diffusion semigroup and positive eigenelements of A. Nagoya Math. J. 83 (1981), 53-106. (Francis Hirsch) 82k:31009 31C05 (47D0: 31C05 (47D05.
- ruki, Ryoji (with Kawato, Mitsuo) Analysis of entrainment of circadian oscillators by skeleton photoperiods using phase transition curves. Biol. Cybernet. 40 (1981), no. 2, 139-149. (Authors' summary) 824:92007 92A09
- naki, Satoshi Some types of derivations and their applications to field theory. J. Math. Kyoto Univ. 21 (1981), no. 2, 375-382. (James K. Deveney) 82k:12026 12F15 (12F20) zuki, Takashi (with Murayama, Reiji) A uniqueness theorem in an identification problem
- for coefficients of parabolic equations. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 6, 259–263. (J. R. Cannon) 82c-35080 35R30 (35K10)

 uzuki, Tōru (with Kuratsuji, Hiroshi) Path integral approach to many-nucleon systems and time-dependent Hartree-Fock. Phys. Lett. B 92 (1980), no. 1-2, 19–22. (D. B. Fairlie)
- 82d:81048 81C35 (81H10)

 aki, Toshiaki Weil-type representations and automorphic forms. Nagoya Math. J. 77

- (1980), 145-166. (A. B. Venkov) 82e:10052 10D40 (22E45)
- unki, Tsuneo (with Hirshfeld, Allen C.; Leschke, Hajo) Canonical versus functional methods in quantum mechanics and field theory. Functional integration theory and applications (Proc. Colloq., Louvain-la-Neuve, 1979), pp. 151-162, Plenum, New York, 81C35 (81E99) 1980. (See 82b:81005)
- ra, Kotaro Liberal paradox and the voluntary exchange of rights-exercising. J. m. Theory 22 (1980), no. 3, 407-422. (Maurice Salles) 82x:90019
 - On the possibility of "fair" collective choice rule. *Internat. Econom. Rev.* 22 (1981), no. 2, 351–364. (O. N. Bondareva) 82j:90007 90A08 (90A06) rumura, Nobuo (with Ishii, Naohiro; Iwata, Akira) Bilateral exponential smoothing of
- time series. Internat. J. Systems Sci. 12 (1981), no. 8, 977-988. (Authors' summary) 93E14 (62M15, 92A07)
- Švačka, A. B. (with Grišin, V. E.; Katyšev, Ju. V.; Mahaldiani, N. V.) Interaction dynamics and nontopological soliton stability in an essentially nonlinear model of a nplex scalar field. Phys. Lett. A 78 (1980), no. 5-6, 423-428. (Authors' summary) 81-04 (81C99)
 - (with Mahan'kov, V. G.; Litvinenko, E. I.) Numerical investigation of the
- (with sealant Roy, V., Edvincero, E. J.) Venterical investigation of the Kadomtsev-Petviashvili soliton stability. Comput. Phys. Comm. 23 (1981), no. 3, 223–232. (Authors' summary) 82j:76020 76B25 (76X05)

 Śvaiko, N. Ju. The concept of slipping and smooth loading surfaces in the theory of plasticity. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 10, 58–63, 95. (Author's summary) 82b:73025 73E05
 - (with Černjakov, Ju. A.) Bifurcation of the deformation process and a criterion for the uniqueness of the solution of a boundary value problem of the theory of plasticity in speed. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 1,
- 54-58, 92. (L. Jentsch) 82f:73023 73E99 (73G99) Svalov, A. M. (with Levin, V. A.) Propagation of detonation waves. A translation of Some questions of the mechanics of a solid medium (Russian), pp. 194-203, Moskov. Gos. Univ., Moscow, 1978. Fluid Mech.—Soviet Res. 9 (1980), no. 1, 47-57. (Tommaso Ruggeri) 35L67 (76L05)
- adze, M. Ž. Asymptotic estimates for integrals of potential type on infinite manifolds. (Russian, Georgian and English summaries) Some problems of the theory of elasticity (Russian), pp. 114-128, Tbilis. Gos. Univ., Inst. Prikl. Mat., Tbilisi, 1980. (L. P. Lebedev) 73C02 (31A99, 45E05)
- nidze, N. V. Small perturbations of an integrable dynamical system with an integral invariant. (Russian) Boundary value problems of mathematical physics, 10. Trudy Mat. Inst. Steklov. 147 (1980), 124-146, 204. (Jürgen Pöschel) 824:58060 58F05 (58F30)
- Svare, A. S. On quantum fluctuations of instantons. Lett. Math. Phys. 2 (1977/78), no. 3, 201-205. (P. D. F. Ion) 82g:81064 81E10 (58G11)
 - (with Fateev, V. A.; Frolov, I. V.) Quantum fluctuations of instantons in a
 - two-dimensional nonlinear anisotropic sigma-model. Jadernaja Fiz. 32 (1980), no. 1, 299-300 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 1, 153-154 (1981).
 - (Authors' summary) 821-81050 81E10 (58G10)

 (with Romanov, V. N.; Fateev, V. A.) Magnetic monopoles in unified theories of electromagnetic, weak, and strong interactions. Jadernaja Fiz. 32 (1980), no. 4,
 - 1138-1141 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 4, 587-589 (1981). (Authors' summary) 82h:81141 81G20 (53C05) (with Gaïduk, A. I.; Romanov, V. N.) Supergravity and field space democracy.
 - n. Math. Phys. 79 (1981), no. 4, 507-528. (W. Cox) 82j:81049 (with Hudaverdjan, O. M.) Multiplicative functionals and gauge fields. (Russian.
- English summary) Teoret. Mat. Fiz. 46 (1981), no. 2, 187-198. (B. Geyer) 82f:81063 81E99 (55M25, 58E20)
- Svarc, G. F. See Schwarz, G. F.
- Švarcman, M. I. Generalized approach to minimization of Boolean functions. Automat. i Vyčisl. Tehn. (Riga) 1979, no. 6, 11–14, 91 (Russian); translated as Automat. Control Comput. Sci. 13 (1979), no. 6, 9–12. (Author's summary) 82h:94030 94C10
- Svareman, P. A. An extension theorem for a class of spaces defined by local approximations. (Russian) Studies in the theory of functions of several real variables, No. 2 (Russian), pp. 215-242, Jaroslav. Gos. Univ., Yaroslavl', 1978. (From the text) 82d:46057 46E35 (41A30, 42B30)
- Extension theorems with preservation of local approximation properties of functions in the nonisotropic case. (Russian. English summary) Investigations on linear operators and the theory of functions, XI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 113 (1981), 247-252, 270. (Author's summary) 82k:46055
- man, S. A. A method of parallel syntactical analysis. (Russian) Design of interpreters. Mat. Issled. No. 59 (1980), 107-114, 157. (Author's summary) 82a:68048
- Svarcman, V. F. (with Bernstein, I. N.) On the connection between the size of the Universe and its curvature. Ž. Eksper. Teoret. Fiz. 79 (1980), no. 5, 1617-1628 (Russian); translated as Soviet Phys. JETP 52 (1980), no. 5, 814-820 (1981). (Authors' summary) 83F05 (53C50)
- Svaričevskaja, N. A. Approximate solution of a nonlinear problem with a parameter through a combination of the Newton-Kantorovič method and the method of averaging functional corrections. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1978, no. 1, 56-64.
- (N. Tija) 82f:47077 47H17 (58C15, 65J15, 92A09) Švec, A. Ju. (with Mitropol'skii, Ju. A.) The effect of lag on the stability of a pendulum with a vibrating point of suspension. (Russian) Analytic methods for investigating nonlinear oscillations (Russian), pp. 115-120, 182, Akad. Nauk Ukrain. SSR, Inst. Mat.,
 - Kiep. 1980. (J. Daneš) 82k:70020a 70J99 (34K20, 70K20) (with Mitropol'skii, Ju. A.) Oscillations of a pendulum with a vibrating point of suspension in the presence of lag. (Russian) Analytic methods for investigating no oscillations (Russian), pp. 120-128, 183, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1980. (J. Daneš) 82k:70020b 70J99 (34K20, 70K20)
- Svec, Alois On 3-dimensional CR-manifolds. (Czech and Russian summaries) Sb. Praci Přírodověd. Fak. Univ. Palackého v Olomouci Mat. 18 (1979), 135-144. (Toru Ishihara) 82a:53029 53B35 (32F25)
 - On eigenforms on the 2-sphere. (Arabic summary) J. Univ. Kuwait Sci. 7 (1980), 53-58. (R. S. Millman) 82c:58058 58G25
- Svec, Marko Behavior of nonoscillatory solutions of some nonlinear differential equations

(Slovak and Russian summaries) Acta Math. Univ. Comenian. 39 (1980), 115-130. (Uri 34C10

See also Seda, Valter, 82h:01060 and Kurzweil, Jaroslav, 82h:01061

Švec', R. M. A variational theorem for an interconnected problem of the thermoelasticity of thin shells. (Russian) Mat. Fiz. No. 28 (1980), 104-108, 124. (Author's summary) 73U05 (49H05)

Svec, V. F. (with Ivanov, M. F.) A stochastic differential equation method for calc the kinetics of a plasma with collision. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 3, 682-690, 813. (A. A. Arsen'ev) 82f:82048 82A45 (35Q20, 60H15)

Sved, J. A. (with Latter, B. D. H.) Migration amd mutation in stochastic models of ge frequency change. I. The island model. J. Math. Biol. 5 (1977/78), no. 1, 61-73. (Authors' summary) 82m:92053 92A10

Sved, Marta Tales from the "county club". Combinatorial mathematics, VII (Proc. Seventh Australian Conf., Univ. Newcastle, Newcastle, 1979), pp. 246-256, Lecture Notes in Math., 829, Springer, Berlin, 1980. (Author's summary) 82c-95015 05A19 (05-01) Svedov, A. M. (with Smidt, A. A.; Jakubovič, V. A.) Invariant systems of features in

pattern recognition. Aviomat. i Telemeh. 1979, no. 3, 131-142 (Russian. English summary); translated as Automat. Remote Control 40 (1979), no. 3, part 2, 430-441. (Authors' summary) 82g:68087 68G10

Švedov, A. S. Orders of coapproximations of functions by algebraic polynomials. (Russia Mat. Zametki 29 (1981), no. 1, 117-130, 156. (J. Szabados) 82c:41009 41A10 (41A29) Švejdarová, H. (with Plátek, M.) Dependency grammars with non-context-free rules.

Prague Bull. Math. Linguist. No. 34 (1980), 65-71. (From the text) 82g:68074 Svendsen, E. C. The effect of submanifolds upon essential selfadjointness and deficiency indices. J. Math. Anal. Appl. 80 (1981), no. 2, 551-565. (B. Hellwig) 82i:47082 47F05 (35P05, 81C05)

on, Erik A note on: "Power bounded restrictions of Fourier-Stieltjes transforms" Math. Scand. 46 (1980), no. 1, 129–153] by R. Andersson. Math. Scand. 46 (1980), no. 1, 154–156. (C. McGehee) 82d:43003b 43A25 (42A38)

on, Lars E. O. Efficiency and speculation in a model with price-contingent contracts.

Econometrica 49 (1981), no. 1, 131-151. (Author's summary) 82b:90031 90A14

Svensson, S. Leif Singular differential operators and distributions. Israel J. Math. 38

(1981), no. 1-2, 131-153. (R. C. Gilbert) 824-47050 47F05 (34E05, 35H05, 46F10)

Sverdlik, M. B. (with Mazurkov, M. I.) Evaluation of the effectiveness of the fast method of directly calculating circular convolution and correlation. Radiotehn. i Elektron. 24 (1979), no. 11, 2212-2221 (Russian); translated as Radio Engrg. Electron. Phys. 24 (1979), no. 11, 34-42 (1980). (Kenneth N. Berk) 82e:62147 62M10 (65U05)

Sverdrup, Erling The logic of statistical inference: significance testing and decison theory. (French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 1. With discussion. Bull. Inst. Internat. Statist. 47 (1977), no. 1, 573-606, 607-614. (Author's summary) 82i:62007 62A20

Sverdrup, Keith A. (with Jordan, Thomas H.) Teleseismic location techniques and their rdrup, Keith A. (with Jordan, Hounas L.) Libertain Scientific, Bull, Seismol, Soc. Amer. application to earthquake clusters in the south-central Pacific, Bull, Seismol, Soc. Amer. 21 (1981), no. 4, 1105–1130. (From the summary) 82m:62251 62P99 (86A15)

Sverdrup-Thygeson, Harald Strong law of large numbers for measures of central tendency and dispersion of random variables in compact metric spaces. Ann. Statist. 9 (1981), no. 1, 141-145. (Evarist Gine) 82b:60031 60F15 (60B05)

Svešnikov, A. G. (with Tihonov, A. N.; Bicadze, A. V.; Erugin, N. P.; Arsen'ev, A. A.; Il'in, V. A.; Popov, Ju. P.) Aleksandr Andreevič Samarskii (on the occasion of his 60th birthday). (Russian) Differencial'nye Uravnenija 15 (1979), no. 7, 1155-1163. (Editors)

(with Tihonov, A. N.; Il'inskii, A. S.) Mathematical models of electrodynamic radiative systems. (Russian) Problems of numerical mathematics (Russian), pp. 82-108, Moskov. Gos. Univ., Moscow, 1980. (A. S. Silbergleit) 82j:78009 78A45

(with Voevodin, V. V.; Tyrtyšnikov, E. E.) An effective numerical method for solving an integral equation of the second kind in problems of electrodynamics. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1980, no. 1, 14-26, 72. (R. Smarzewski) 82e:65136 65R20 (78A45)

(with Gabov, S. A.) Long-wave asymptotic behavior of the Green function of a wave problem on the surface of a stratified fluid. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 6, 1564-1579, 1631. (Authors' summary) 82d:76088 76V05 (35L05)

(with Gabov, S. A.; Šatov, A. K.) On the theory of steady waves on the surface of a spherical layer of a stratified liquid. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 2, 343-346. (A. S. Alekseev) 82f:76007 76B15 (35C20, 86A99)

Svešnikova, V. A. On the question of the axiom of the parallelogram of forces. (Russian. English summary) History and methodology of the natural sciences, No. XX (Russian), pp. 179-186, Moskov. Gos. Univ., Moscow, 1978. (Rudolf Veselkov) 82a:70002 70A05 (70-03)

Svinnerton-Daier, H. P. F. See Swinnerton-Dyer, H. P. F.

Svirčevs'ka, Ž. S. (with Lisevič, L. M.) Existence of an almost periodic solution of a oundary value problem for the wave equation. (Ukrainian. Russian summary) Visnik L'viv. Derž. Univ. Ser. Meh.-Mat. No. 13 (1978), 24-28, 122. (Authors' summary) 35L05 (35B15)

Svirežev, Ju. M. (with Timofeev, N. N.) The theory of trophic chains and related optimization problems. (Russian) Control and optimization in ecological systems. Voprosy Kibernet. (Moscow) No. 52 (1979), 5-17. (Authors' summary) 82i:92036

nization in ecological systems, 82f:92001 See also Control and optin Sviridov, V. V. (with Samsa, B. V.) Choice of essential variables in identification problems. (Russian) Mathematical methods in cybernetics (Russian), pp. 40-42, 84, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Authors' summary) 82b:93047 93E12 Svirlova, A. K. New facts on fractions in the Old Russian "books of land-tax". (Russian)

Voprosy Istor. Estestvoznan. i Tehn. 1981, no. 3, 85-90. (E. Stipanić) 82m:01023 01A35

Svirskaja, I. G. See Asynchronous motors and their optimization, 82g:93001
Svirskii, E. A. (with Martynenko, M. D.; Šipka, İ. G.) General representation of the solutions of static equations of the moment theory of elasticity. (Russian. English summary) Dokl. Akad. Nauk BSSR 24 (1980), no. 10, 880-883, 956. (M. O. Bašeleišvili) 73B99 (35J99)

Svitra, Donatas On the localization of the roots of a quasipolynomial. (Russian. Lithus

and English summaries) Differencial'nye Uraonenija i Primenen.-Trudy Sem. Proce Optimal. Upravlenija I Sekcija No. 27 (1980), 109-114, 147. (V. Šeda) 824:34100

boda, Karel Characterizations of the sphere in E^4 by means of the pseudoparallel mea curvature vector field. (Czech summary) Časopis Pest. Mat. 105 (1980), no. 3, 266-277, 316. (H. Jacobowitz) 82e:53008 53A07 316. (H. Jacobowitz) 82c:53008

rakić, N. M. Critical temperatures of Ising models. Phys. Lett. A 80 (1980), no. 1, 43-44. (Author's summary) 82f:82021 82A25 (82A67, 82A68)

(Author's summary) 843:8401 82A26 (82A6), 82A66)

Swain, Philip H. Bayesian classification in a time-varying environment. IEEE Trans.

Systems Man Cybernet. 8 (1978), no. 12, 879–883. (Manabu Ichino) 82a:68175 68G10

Swain, S. Master equation derivation of quantum regression theorem. J. Phys. A 14 (1981),
no. 10, 2577–2580. (Author's summary) 82i:81177 81K05 (82A35)

, William H. Variances of locally minimum variance quadratic unbiased estimators ("MIVQUE's") of variance components. Technometrics 23 (1981), no. 3, 271-283. (Author's summary) 82i:62105 62J10 (62F10)

athan, V. On the (S, f, α_n) method of summability. Bull. Calcutta Math. Soc. 71 (1979), no. 6, 388-395. (Amnon Jakimovski) **82i:40010** 40G99 (40A30, 40C05)

A note on the [\Im , f(x)] means. Mat. Vesnik **3(16)(31)** (1979), no. 2, 233-239. (Amnon Jakimovski) **82i:40012a** 40G99 (30B40, 33A45)

On Foster's Boolean-like rings. Math. Sem. Notes Kobe Univ. 8 (1980), no. 2, 347-367. (R. A. Melter) 82b:06014 06E20 (16A32, 16A38) (with Ganapathy, M. K.) [J,f(x)] summability of Legendre series. Indian J. Pure Appl. Math. 12 (1981), no. 1, 88-94. (Amnon Jakimovski) 82h:40012b

33A45) Swamy, B. L. N. (with Naik, N.; Misra, S. S.) Lattice-ordered commutative loops. Math.

Sem. Notes Kobe Univ. 8 (1980), no. 1, 57-71. (D. A. Robinson) 82a:06033 (20N05)

(with Naik, N.) Ideal theory in lattice ordered commutative Moufang loops. Math. Sem. Notes Kobe Univ. 8 (1980), no. 3, 443-453. (Orin Chein) 82h:20087 (with Naik, N.; Misra, S. S.) Ideals in a representable dually residuated

lattice-ordered semigroup. Bull. Inst. Math. Acad. Sinica 9 (1981), no. 1, 101-110. (Marlow Anderson) 82i:06021 06F05

Swamy, K. L. N. (with Subba Rao, B. V.) Isometries in dually residuated lattice-ordered semigroups. Math. Sem. Notes Kobe Univ. 8 (1980), no. 2, 369-380. (R. McFadden) 06F05

Swamy, M. N. S. (with Ahmad, M. O.; Reddy, C. H.; Ramachandran, Venkat) A class of multivariable positive real functions realizable by resistively-terminated lossless ladder networks. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 322-325, IEEE, New York, 1979. (See 82e:94002) 94C10

94C10 (with Thulasiraman, K.) *Graphs, networks, and algorithms. A Wiley Interscience

Publication. John Wiley & Sons, Inc., New York, 1981. xviii + 592 pp.

ISBN 0-471-03503-3 (Narsingh Deo) 82i:94030 94C15 (05B35, 05Cxx, 68E10, 90B10. ISBN 0-471-03503-3 (Narsingh Deo) 82j:94030

(with Reddy, C. H.; Rajan. P. K.; Reddy, C. P.) Simplified testing procedure for very strict Hurwitz polynomials-some applications. Fourteenth Asilomar Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 124-127, IEEE, New

York, 1981. (See 82d:93001) 93D05 Swamy, P. A. V. B. (with Tinsley, P. A.) Linear prediction and estimation methods for regression models with stationary stochastic coefficients. J. Econometrics 12 (1980), no. 2, 103-142. (Authors' summary) 82k:62179 62M20

(with Mehta, J. S.) On the existence of moments of partially restricted reduced form coefficients. J. Econometrics 14 (1980), no. 2, 183-194. (A. L. Nagar) 82g:62141

(with Havenner, A.) A random coefficient approach to seasonal adjustment of economic time series. J. Econometrics 15 (1981), no. 2, 177-209. (Authors' summary) 62P20

vamy, R. J. R. (with Adke, S. R.) Some problems of inference about Markov sequences with exponential type transition densities. Professor Huzurbazar felicitation volume. J. Indian Statist. Assoc. 17 (1979), 173-188. (Mark Brown) 821:62154 62M05

ramy, S. R. (with Bhoosnurmath, Subhas S.) Analytic functions with negative coefficients. Indian J. Pure Appl. Math. 12 (1981), no. 6, 738-742. (Herb Silverman) 30C45 82g:30019

vamy, U. Madda ana (with Murti, G. Suryanarayana) Lattices with sufficiently large central elements. Math. Sem. Notes Kobe Univ. 7 (1979), no. 3, 457-475. (From the introduction) 82k:06006 06B15

(with Rao, G. C.; Manikyamba, P.) Prime ideal characterization of chain based lattices. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 1, 98-106. (Mary Katherine Bennett) 82h:06017 06D99

(with Luther, B. Martin) Central idempotents of Baer-Stone semigroups. Math. Sem. Notes Kobe Univ. 8 (1980), no. 3, 491-503. (Mohan S. Putcha) 82f:20089 20M10 (06D15)

(with Rao, G. C.) Almost distributive lattices. J. Austral. Math. Soc. Ser. A 31 (1981), no. 1, 77-91. (R. Beazer) 82g:06022 06D99

(with Murti, G. Suryanarayana) Boolean centre of a semigroup. Pure Appl. Math. Sci. 13 (1981), no. 1-2, 5-6. (Bernard L. Madison) 82g:20105 20M30 (06E20) Swan, George W. Optimal control applications in biomedical engineering—a survey.

timal Control Appl. Methods 2 (1981), no. 4, 311-334. (Author's summary) 82m:92016 92A07 (49C20)

Swan, Richard G. On seminormality. J. Algebra 67 (1980), no. 1, 210-229. (J. W. Brewer) 824:13006 13B25 (14C22)

Swanson, Laif (with Rahe, Maurice) Loose block independence. Israel J. Math. 38 (1981), no. 1-2, 100-106. (Nathaniel Friedman) 82d:28015 28D05

on, Leonard W. *Linear programming. Basic theory and applications. McGraw-Hill Series in Quantitative Methods for Management. McGraw-Hill Book Co., New York, 1980. xii + 218 pp. ISBN 0-07-062580-8 (A. C. Williams) 82b:90076 90C05 (90-01)

The path integral formulation of the dynamical map. J. Math. Phys. 22 (1981), no. 4, 777-784. (Brian DeFacio) 82i:81050 81C35 (58D30, 81E99)
Swanson, R. C. (with Chicone, Carmen) Spectral theory for linearizations of dynam

systems. J. Differential Equations 40 (1981), no. 2, 155-167. (G. R. Sell) 82h:58039 58F15 (34C40)

- amoon, Robert (with Terras, Riho) Image methods for constructing Green's functions and eigenfunctions for domains with plane boundaries. J. Math. Phys. 21 (1980), no. 8, 2140-2153. (J. Donig) 82a:31905 31A35 31
- ology Proc. 4 (1979), no. 2, 601-608 (1980). (J. M. Aarts) 82i:54015 (54A35)
- de Swart, H. See de Swart, Henricus Cornelius Maria Swart, Henda (with Entringer, Roger C.) Spanning cycles of nearly cubic graphs. Combin. Theory Ser. B 29 (1980), no. 3, 303-309. (A. G. Thomason) 82e:05093 05C45 (05C38)
- Swart, Henricus Cornelius Maria (with Posy, C. J.) Validity and quantification in intuitionism. J. Philos. Logic 10 (1981), no. 1, 117-126. (Authors' summary) 82a:03059 03F55 (03B20)
 - (with Gielen, W.; Veldman, W.) The contin um hypothesis in intuitionism. J. with Chelen, W.; Veldman, W.) The continuum hypothesis in intu-plic Logic 46 (1981), no. 1, 121–136. (D. Nelson) 82i:03070 03F55
- rtz, Blair (with Efroym Blair (with Efroymson, Gustave A.; Wendroff, Burton) A new inequality for netric functions. Adv. in Math. 38 (1980), no. 2, 109-127. (J. Bochnak) 82e:58018
 - (with de Boor, Carl) Collocation approximation to eigenvalues of an ordinary differential equation: numerical illustrations. Math. Comp. 36 (1981), no. 153, 1–19. (Steven M. Serbin) 82c65053 65L15
 - (with de Boor, Carl) Local piecewise polynomial projection methods for an O.D.E.
- (with de Boor, Carl) Local piecewise polynomial projection methods for an O.D.E. which give high-order convergence at knots. Math. Comp. 36 (1981), no. 153, 21-33. (Steven M. Serbin) 827:65091 651.15

 artz, Charles Integrability for the Dobrakov integral. With a loose Russian summary. Czechoslooak Math. J. 30(105) (1980), no. 4, 640-646. (Ralph Henstock) 82b:28015 28B05 (28C05, 46G10)
 - Weak Fubini theorems for the Dobrakov integral. With a loose Russian summar Czechoslovak Math. J. 30(105) (1980), no. 4, 647-654. (Ralph Henstock) 82b:28016 28B05 (28A35, 28C05, 46G10)
 - A control problem of Rogak and Scott-Thomas. J. Math. Anal. Appl. 79 (1981), no. 1, 218-223. (Bruce D. Craven) 82k:49036 49B27 (90C48)
 - (with Dierolf, Peter) Subfamily-summability for precompact operators and continuous vector-valued functions. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 5, 731–735. (N. Dinculcanu) 321:46008 46A20 (46B20, 47D15)
- nder, Earl E., Jr. See Computer arithmetic, 82c:68003
- varup, G. Ananda Two reductions of the Poincaré conjecture. Bull. Amer. Math. Soc. (N.S.) 1 (1979), no. 5, 774-777. (Author's summary) 82j:57005 57M40
- Two finiteness properties in 3-manifolds. Bull. London Math. Soc. 12 (1980), no. 4, 296-302. (John Hempel) 82c:57007 57N10
- arup, K. (with Garg, K. C.) The use of cuts in linear fractional functional complementary Z. Angew. Math. Mech. 60 (1980), no. 1, 53-54. (Walter Habenicht) 90C32 (90C33)
- ayne, D. A. (with Wagner, R. S.) Some experimental results concerning generalized splitting of ADI type. Proceedings of the Ninth Manitoba Conference on Numerical Mathematics and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 399–409, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (F. M. Pascal) £65085 65N20 (65F10)
- More experimental results concerning generalized splitting of ADI type. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. II sipeg, Man., 1980). Congr. Numer. 31 (1981), 259-265. (Author's summary) 82 65M05 (65F10)
- edler, Moss E. (with Newman, Kenneth) A realization of the additive Witt group Proc. Amer. Math. Soc. 76 (1979), no. 1, 39-42. (Authors' introduction) 82g:16016 16A24 (14F30, 14L05)
 - Tensor products of division rings and finite generation of subdivision rings. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 2-3, part 2, 385-387. (Jean-Pierre van Deuren) 16A39 (16A33)
- ency, Dennis J. (with Murphy, Richard A.) Branch and bound methods for multi-item scheduling. Oper. Res. 29 (1981), no. 5, 853-864. (Authors' summary) 82i:90065 90B35 (90C05)
- et, Arnold L. (with Sadagopan, S.) On a model for random phenomena described by discrete and continuous variables. IEEE Trans. Systems Man Cybernet. 10 (1980), no. 12, 936-938. (Authors' summary) 82a:94043 94A17
- eting, Trevor Uniform asymptotic normality of the maximum likelihood estimator. Ann. Statist. 8 (1980), no. 6, 1375-1381. (A. N. Philippou) 82c:62034 62E20 Scale parameters: a Bayesian treatment. J. Roy. Statist. Soc. Ser. B 43 (1981), no. 3,
 - 333-338. (Author's summary) 82k:62065 62F15 Corrections: "Uniform asymptotic normality of the maximum likelihood estimator" [Ann. Statist. 8 (1980), no. 6, 1375–1381; MR 82c:62034]. Ann. Statist. 10 (1982), no. 1,
- 320. (Editors) 82m:62049 62E20 n, Robert H. Dynamics of random sequential adsorption. Phys. Rev. A (3) 24 (1981), no. 1, 504-508. (Author's summary) 82g:60025 60D05 (58F12, 60K35,
- n, Anders Rygh Deficiencies between linear normal experiments. Ann. Statist. 8
- (1980), no. 5, 1142-1155. (Prem K. Goel) 82es62009 62B15 (62K99) enson, R. E. Bibliography of recent works of H. G. Forder. H. G. Forder 90th birthday volume. Math. Chronicle 9 (1980), 3-4. (Editors) 82f:01148 01A70
- rdlow, Noel M. A summary of the derivation of the parameters in the Con from the Alfonsine tables with an appendix on the length of the tropical year in Abraham Zacuto's Almanach perpetuum. Centaurus 21 (1977), no. 3-4, 201-213. (J. Vernet) 82e:01028 01A40
 - Hipparchus's determination of the length of the tropical year and the rate of precession. Arch. Hist. Exact Sci. 21 (1979/80), no. 4, 291-309. (Kristian Peder Moesgaard) 82j:01013 01A20 (85-03)
 - Long-period motions of the earth in De recolutionibus. Special issue dedicated to

- Olaf Pedersen on his sixtieth birthday. Centaurus 24 (1980), 212-245. (Kristian Peder Moesgaard) 82e:01029 01A40 (85-03)
- recessions of the description of demic Press, New York, 1980. (Martin Bartelt) 82g:41026 41A50 (41A10)
- (with Henry, Myron S.; Weinstein, Stanley E.) Lebesgue and strong unicity ion theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), nts. Approxima pp. 507-512, Academic Press, New York, 1980. (Martin Bartelt) 82g:41007 (41A50)
- (with Wood, Bruce) L_p saturation of positive convolution operators. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 877–880, Academic Press, New York, 1980. (Z. Ditzian) 82e:41035 41A40
- (with Wood, Bruce) A note on the degree of approximation with an optimal, discrete polynomial. J. Approx. Theory 28 (1980), no. 4, 293-298. (J. Szabados) 82a:41020 41A40 (41A35, 65D15)
- (with Henry, Myron S.; Weinstein, Stanley E.) Orders of strong unicity constants J. Approx. Theory 31 (1981), no. 2, 175-187. (Martin Bartelt) 82k:41016 41A5
- tz, Frank (with Yu, Ying King) Mathematical olympiads in the People's Republic of China. Ed. Stud. Math. 10 (1979), no. 4, 435-442. (Stephen H. Y. Hung) 82j:00006
- nisława See Błaszczyk-Świątkiewicz, Bronisława zczyk-Świątkiewicz, Br
- Swiatkowski, Tadeusz (with Mańk, Tadeusz) On some class of functions with Darboux's characteristic. (Polish and Russian summaries) Zeszyty Nauk. Politech. Lódz. Mat. No. 11 (1978), 5-10. (Richard J. O'Malley) 82k:26002 26A21 (26A30)
- Swick, K. E. Periodic solutions of a nonlinear age-dependent model of single species population dynamics. SIAM J. Math. Anal. 11 (1980), no. 5, 901-910. (Brian D. Sleeman) 82b:92036 92A15 (34K15)
 - A nonlinear model for human population dynamics. SIAM J. Appl. Math. 40 (1981), no. 2, 266–278. (Curtis C. Travis) 82g-92043 92A15 (34K15)
- anna Faithfully flat descent of linear actions of affine group schemes. Święcicka, Jos nt. Math. Prace Mat. 21 (1980), no. 1, 253-256. (Hans-Jürgen Schn 82a:14022 14L30
- Swiercz, S. (with Lam, C. W. H.; Thiel, L.; Regener, E.) A computer search for (α,ω)-graphs. Proceedings of the Ninth Manitoba Conference on Numerical Mathematical uting (Univ. Manitoba, Winnipeg, Man., 1979), pp. 285-289, Congress. Numer.,
- XXVII, Utilitus Math., Winnipeg, Man., 1980. (Editors) 828-05002 05-04 (05C99) nnerton-Dyer, H. P. F. (with Cartwright, Mary L.) Boundedness theorems for some second-order differential equations. IV. (Russian) Differencial'nye Uravnenija 14 (1978), no. 11, 1941-1979, 2166. (From the introduction) 82g:34041 34C11
 - no. 11, 1941–1979, 2100. (Prom the introduction) adjacement of the method of averaging for some almost-conservative differential equations. J. London Math. Soc. (2) 22 (1980), no. 3, 534–542. (V. G. Zadorožnii) 82b:34058
 - Universal equivalence for cubic surfaces over finite and local fields. Symposia Mathematica, Vol. XXIV (Sympos., INDAM, Rome, 1979), pp. 111-143, Academic Press, London, 1981. (Daniel Coray) 82k:14019 14G15 (05A15, 10C10, 14G20, 20N05) inney, Harry L. (with Gorman, M.; Rand, David A.) Doubly periodic circular Couette
- flow: experiments compared with predictions from dynamics and symmetry. Phys. Rev. Lett. 46 (1981), no. 15, 992-995. (Authors' summary) 82f:58061 58F13 (76F30 76U05)
- Świsterski, W. (with Życzkowski, M.) Optimal structural design of flexible beams with respect to creep rupture time. Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 795-810, North-Holland, Amsterdam, 1980. (See 73K40 (73K05)
- Syčev, Viktor V. (with Syčev, Vladimir V.) Turbulent separation. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 6, 1500-1512, 1630. (J. F. Heyda) 82j:76032 76D10 (76F05)
- Syèev, Vjačeslav Vladimirovič ★Пространственные квазиконформные отображения.

 (Russian) [Three-dimensional quasiconformal mappings] Novosibirsk. Gos. Univ., Novosibirsk, 1975. 98 pp. (TITLE) 82c:30030
- Syčev, Vladimir V. (with Syčev, Viktor V.) Turbulent separation. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 6, 1500-1512, 1630. (J. F. Heyda) 82i:76032 76D10 (76F05)
- Sydow, A. (with Straubel, R.) Distributed system simulation by multilevel optimal control. on of systems '79 (Proc. Ninth IMACS Congress, Sorrento, 1979), pp. 923-931,
 - North-Holland, Amsterdam, 1980. (Authors' summary) 82a:49037 49D15 (93A13)
 Mathematical and simulation models in systems analysis (examples and experiences of ZKI). Systems analysis and simulation, 1980 (Proc. Internat. Sympos., Berlin, 1980), pp. 36-47, Math. Research, 5, Akademie-Verlag, Berlin, 1980. (Editors) 82f:00021 00A69 (01A73, 90C31, 92A17, 93A10)
- saeter, Knut Optimal control theory—a mathematical discipline with classical roots and many applications. I. (Norwegian. English summary) Normat 28 (1980), no. 2, 61-65, 87. (Author's summary) 82b:49001 49-03 (01A55)
- Optimal control theory-a mathematical discipline with classical roots and many applications. II. (Norwegian. English summary) Normat 28 (1980), no. 3, 95–103, 132. (Author's summary) 82n:49001 49–03 (01A60)

 Syed, Ansaruddin An algorithm for extraction of cube roots. Islamahad J. Sci. 5 (1978), no. 1-2, 59–63. (Author's summary) 82n:65025 65D99
- The diffraction of electromagnetic waves by a finite perfectly conducting Natur. Sci. Math. 19 (1979), no. 1, 1-28. (I. Kay) 82b:78021 78A45 (35J05, 35L50) Sygurova, O. L. (with Bykovcev, G. I.) Construction of the theory of the flow of
- elastoplastic media under finite deformations. (Russian) *Dokl. Akad. Nauk UzSSR* 1980, no. 4, 18-21. (V. T. Golovchan) 82b:73002 73B05 (73G05)

 Sykes, R. I. An asymptotic theory of incompressible turbulent boundary-layer flow over a
- np. J. Fluid Mech. 101 (1980), no. 3, 647-670. (Author's summary) 82a:76048 76F99 (76G99)
- On three-dimensional boundary layer flow over surface irregularities. Proc. Roy. Soc. London Ser. A 373 (1980), no. 1754, 311-329. (A. K. Singh) 82i:76031 76D10 (65P05)
- Sylvain, M. (with Zerner, M.) Équations d'évolution quasi-linéaires du premier ordre: le cas lipschitzien. (Italian summary) [First-order quasilinear evolution equations: the Lipschitz case] Boll. Un. Mat. Ital. B (5) 18 (1981), no. 2, 495-516. (Wolf von Wahl) 82m:35072 35K22 (35F30)

AUTHOR INDEX

- Vester, Garrett S. The Ginibre inequality. Comm. Math. Phys. 73 (1980), no. 2, 105–114.
 (From the summary) 824:82089 82A67 (05C99, 82A05, 82A68)
 A note on the Lee-Yang theorem. J. Math. Anal. Appl. 81 (1981), no. 1, 88–91. (J.
- Fernando Perez) 82g.82012 82A05 (82A25)

 Sym, Antoni New nonlinear systems exhibiting solitons. Phys. Lett. A 65 (1978), no. 5-6, 383-384. (Editors) 82e:35075 35Q20
 - (with Corones, James) The resolvent of the linear problem of the inverse m
- Phys. Lett. A 68 (1978), no. 3-4, 305-307. (David J. Kaup) 82i:58036 58F07 (35Q99)
 Symauzik, K. (with Lüscher, M.; Weisz, Peter) Anomalies of the free loop wave equation in the WKB approximation. Nuclear Phys. B 173 (1980), no. 3, 365-396. (B. Geyer) 82a:81035 81E99 (81G05)
 - Schrödinger representation and Casimir effect in renormalizable quantum field theory. Nuclear Phys. B 190 (1981), no. 1, FS 3, 1-44. (R. Delbourgo) 82h:81114 81F99
- neonidis, Sp. (with Argyris, J. H.) Nonlinear finite element analysis of elastic systems under nonconservative loading—natural formulation. I. Quasistatic problems. Comput. Methods Appl. Mech. Engrg. 26 (1981), no. 1, 75-123. (Authors' summary) 82j:73050 73K25
- es, W. W. Inverse boundary value problems and a theorem of Gel'fand and Levitan. J. Math. Anal. Appl. 71 (1979), no. 2, 379-402. (Author's summary) 82j:34024 34B25
 - Addendum: "Systems of Toda type, inverse spectral problems, and representation theory" [Invent. Math. 59 (1980), no. 1, 13-51; MR 81g:58019]. Invent. Math. 63 (1981), no. 3, 519. (Editors) 82f:58048 58F07
 - Stable solution of the inverse reflection problem for a smoothly stratified elastic medium. SIAM J. Math. Anal. 12 (1981), no. 3, 421-453. (Author's summary) 73D99 (35R30)
 - Erratum: "Numerical stability in an inverse scattering problem" [SIAM J. Numer. Anal. 17 (1980), no. 5, 707-732; MR 81k:65135]. SIAM J. Numer. Anal. 18 (1981), no. 4, 751-752. (Editors) 82e:65123 65N99
- Symm, G. T. (with Bhattacharya, P. K.) A novel formulation and solution of the plane elastostatic displacement problem. Comput. Math. Appl. 6 (1980), no. 4, 443-448. (Authors' summary) 82c:73008 73C03
- Symm, Hil ary J. (with Wilkinson, J. H.) Almost defective matrices. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. I (Winnipeg, Man., 1980). Congr. Numer. 30 (1981), 89-131. (Alan L. Andrew) 82m:15009
- 15A12 (65F15)
- Synge, J. L. On the vibrations of a heterogeneous string. Quart. Appl. Math. 39 (1981/82), no. 2, 292-297. (L. R. Bragg) 82m:35991
 35L05 (73K03)
 Synnatzschke, J. Über einige verbandstheoretische Eigenschaften der Multiplikation von Operatoren in Vektorverbänden. Math. Nachr. 95 (1980), 273-292. (S. J. Bernau) 82b:47048 47B55 (46B30)
- Syozi, Itiro (with Kasai, Yasuhiro; Okiji, Ayao) The ground state of a replicated Ising system. Progr. Theoret. Phys. 65 (1981), no. 4, 1439–1442. (Authors' summary) 82h-82030 82A42
- Syroid, I.-P. P. See Sirold, I. P.
- Syros, C. Uncertainty and entropy-quantum information systems. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. I,
- pp. 30-38, Reidel, Dordrecht, 1980. (Author's summary) 82e:92058 92A27 (94A17)
 Sysak, Ja. P. ABA-factorizable groups. (Russian) Constructive description of groups with properties prescribed on their subgroups (Russian), pp. 41-55, 144, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (Ju. I. Merzljakov) 82e:20038 20E15
- Syskin, S. A. Operation of the group L₂(q) on a 2-group. (Russian) Algebra i Logika 18 (1979), no. 2, 224-231, 254. (Ja. G. Berkovič) 82a:20036 20E07
 - 2-local subgroups of finite groups. (Russian) Sixth All-Union Symposium on Group Theory (Čerkassy, 1978) (Russian), pp. 209–217, 224, "Naukoca Dumka", Kiev, 1980. (B. Hartley) 82h:20019 20D05
- Some characterization theorems. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 121–122, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R. I., 1980. (Editors) 82b:20024 20D05
- Math. Soc., Providence, R.I., 1980. (Editors) 82b:20024 20D05 3-characterization of the O'Nan-Sims group. (Russian) Mat. Sb. (N.S.) 114(156) (1981), no. 3, 471-478, 480. (M. Herzog) 82f:20036 20D08
- Syslo, Maciej M. Linear time algorithm for coding outerplanar graphs. Contributions to graph theory and its applications (Internat. Colloq., Oberhof, 1977) (German), pp. 259-269, Tech. Hochschule Ilmenau, Ilmenau, 1977. (Author's summary) 82g:68064 68E10 (05C99, 68C05)
 - (with Iri, Masao) Efficient outerplanarity testing. Fund. Inform. (4) 2 (1978/79), no. 3, 261-275. (Narsingh Deo) 82d:05057 05C10 (68C25)
 - Errata: "Outerplanar graphs: characterizations, testing, coding, and counting" [Bull. Acad. Polon. Sci. Sér. Sci. Math. Astronom. Phys. 26 (1978), no. 8, 675-684; MR 80a:05130]. Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 3-4, loose errata. (Narsingh Deo) 82d:05058 05C10
 - Generalizations of the standard travelling salesman problem. (Polish sur Zastos. Mat. 16 (1980), no. 4, 621-629. (E. Ja. Gabovič) 82e:90058 90008
- Sysoev, V. M. (with Calyi, A. V.) Integral equations for a radial distribution function with effective allowance for long-range effects. (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 2, 251-262. (E. E. Tareeva) 82h:82059 82A50 (82A25)
- Sytaja, G. N. On the problem of the asymptotic behavior of a Wiener measure of small spheres in the uniform metric. (Russian) Analytical methods of probability theory (Russian), pp. 95-98, 153, "Naukova Dumka", Kiev, 1979. (R. M. Kadobjans'kii) 60B11 (60J65)
- s, József (with Varma, A. K.) Inequalities for derivatives of polynomials having real zeros. Approximation theory, III (Proc. Conf., Unit. Texas, Austin. Tex., 1980)
 pp. 881–887, Academic Press, New York, 1980. (William N. Everitt) 82b:26017 26CO: (26D10, 41A17)
- owski, Pawel J. Application of the generalized strong laws of large numbers to the proper choice of the amplification coefficients in stochastic approximation with Conf., Part A, Univ. Rhode Island, Kingston, R.I., 1978), pp. 223-244, Lecture Notes in Pure and Appl. Math., 44, Dekker, New York, 1979. (S. Csibi) 82hc62139 62L2 Szabo, Attila (with Schulten, Klaus; Schulten, Zan) Dynamics of reactions involving 621.20

- diffusive barrier crossing. J. Chem. Phys. 74 (1981), no. 8, 4426-4432. (Auth summary) 82d:80035 80A30
- Szabo, B. A. (with Babuška, Ivo: Katz, I. Norman: Greensfelder, A. P.) Hierarchic families for the p-version of the finite element method. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos Bethlehem, Pa., 1979), pp. 278-286, IMACS, New Brunswick, N.J., 1979. (Authors' 65N30
- (with Babuška, Ivo; Katz, I. Norman) The p-version of the finite element method. SIAM J. Numer. Anal. 18 (1981), no. 3, 515-545. (P. G. Ciarlet) 82j:65081 65N30
- 6, I. Rees matrix semigroups with 4-dimensional sandwich matrices. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 3-4, 339-350. (J. B. Kim) 82c:20112 20M15
- Szabó, Sándor Finite abelian groups and n-dimensional mosaics. (Hungarian) Mat. Lapok. 28 (1977/80), no. 4, 305-318. (J. Strommer) 82i:20065 20K01 (05B40, 52A25) On decomposing finite abclian groups. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 105-114. (Manfred Dugas) 82c:52017 52A45 (20K01)
- A remark on regular polygons. (Hungarian) Mat. Lapok 28 (1980), no. 1-3, 199–202. ván Hortobágyi) 82j:52018 52A37 (István Hortobágyi) 82j:52018
- Szabó, Z. I. Relative Krümmungstheorie der Finslerschen Räume. I. Period. Math. Hungar. 10 (1979), no. 4, 293–299. (H. Rund) 82c–53025 53B40 (53C60) Finslersche Projektivgeometrie. I. Eine globale Begründung der Finslerschen
- Acta Math. Acad. Sci. Hungar. 35 (1980), no. 1-2, 79-96.
- Projektivzusammenhänge. Acta Math. Acad (Makoto Matsumoto) 82h:53081a 53C60 Finslersche Projektivgeometrie. II. Über Finslersche Projektivbündel mit Weylscher
- Projektivkrümmung Null. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 1-2, 97-108.
- (Makoto Matsumoto) 82a:53081b 53C60 Über Zusammenhänge vom Finsler-Typ. Publ. Math. Debrecen 27 (1980), no. 1-2, 77–88. (Makoto Matsumoto) 82c:53047 53C60
- Generalized spaces with many isometries. Geom. Dedicata 11 (1981), no. 3, 369-383. (Makoto Matsumoto) 82i:53112 53C60
- Positive definite Berwald spaces. Structure theorems on Berwald spaces. Tensor
- (N.S.) 35 (1981), no. 1, 25-39. (H. Rund) 82f:53043 53B40
 Szafirski, Bolesław (with Capiński, Marek) Statistical solutions of differential equations in turbulent heat transfer. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 3-4, 117-123 (1981). (Authors' summary) 82m:80001 80A20 (35Q20, 58D25, 60H99)
- Szafraniec, Franciszek Hugon (with Mlak, W.) Dilations with operator multipliers. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Błażejewko, 1979), . 208-214, Lecture Notes in Math., 828, Springer, Berlin, 1980. (Boris Pavlov) 82i:47010 47A20
 - Sur les fonctions admettant une extension de type positif. (English summary). C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 8, 431–432. (Author's summary) 82c:46075 46L05 (47D25)
- Szafrański, Zdzisław On some oscillation criteria for difference equations of second order. Fasc. Math. No. 11 (1979), 135-142. (André Hautot) 82e:39003 39A10
- Szałajko, Krystyna A certain boundary value problem for the equation Δ²u(X)=f(X) in an angle domain of the Euclidean n-space for n≥5. Fasc. Math. No. 12 (1980), 55-63. (J. Hersch) 82f:35042 35C15 (35J40)
- On the maximal order in S_n and S_n^* . Acta Arith. 37 (1980), 321-331. (Hugo S. Sun) 82c:20008 20B30 (20D60)
- nkolowicz, Lucjan A class of hypergraphs of maximal chains of trees. (Russian) Contributions to graph theory and its applications (Internat. Collog., Oberhof, 1977) (German), pp. 270–274, Tech. Hochschule Ilmenau, Ilmenau, 1977. (E. Jucoviè) 05C65
 - On problems related to characteristic vertices of graphs. Colloq. Math. 42 (1979),
 - 367-375. (Zevi Miller) 82a:05060 05C35
 Some remarks on hypergraphs of vertex coverings for simple graphs without loops. (Italian summary) Rend. Mat. (6) 12 (1979), no. 3-4, 501-510 (1980). (J. Mitchem) 82a:05069 05C65 (05C70)
- Szamosi, G. (with Kent, R. D.) Spinor equations of motion in curved space-time. (Italian and Russian summaries) Nuovo Cimento B (11) 64 (1981), no. 1, 67-80. (J. D. Zund) 82k:81064 81E20 (83C10)
- Szapiel, Maria Sur la subordination dans la classe des fonctions typiquement réelles Demonstratio Math. 13 (1980), no. 2, 461-467. (M. S. Robertson) 82a:30019 30C4 (30C80)
- Szapiro, T. Geodesic fields in the calculus of variations of multiple integrals depending on derivatives of higher order. Differential geometrical methods in mathematical physics (Proc. Conf., Aix-en-Provence/Salamanca, 1979), pp. 504-511, Lecture Notes in Math., 836, Springer, Berlin, 1980. (J. Kolomý) 82e:49015 49A27 (58E30)
- arek, Stanisław Bases and biorthogonal systems in the spaces C and L¹. Ark. Mat. 17 (1979), no. 2, 255–271. (Y. Benyamini) 82m:46018 46B25 (42C99, 46E15) Biorthogonal systems in function spaces. (Polish) Wiadom. Mat. (2) 22, no. 1, 35-38
 - (1979). (M. Bożejko) 82b:42020 42C15 (46A35) Bases in the spaces C and L¹. Seminar on Functional Analysis, 1979–1980 (French), Exp. No. 23, 8 pp., École Polytech., Palaiseau, 1980. (Bor-Luh Lin) 82d:46035
 - Volume estimates and nearly Euclidean decompositions for normed spaces. Seminar Volume estimates and nearly Eucusean teconiposation of the open on Functional Analysis, 1979–1980 (French), Exp. No. 25, 8 pp. Ecole Polytech., Palaiseau. 1980. (N. Tomczak-Jaegermann) 82g:46041 46B20
 - (with Tomczak-Jaegermann, Nicole) On nearly Euclidean decomposition for some classes of Banach spaces. Compositio Math. 40 (1980), no. 3, 367-385. (A. C. Thompson) 46B20 (52A07)
- Szarski, J. Infinite systems of first-order partial-differential functional inequalities. General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978), pp. 121-126, Birkhäuser, Basel, 1980. (Bhagat Singh) 82h:34087 34K05
- okos (with Major, Péter) On the effect of collisions on the motion of an atom in R1. Ann. Probab. 8 (1980), no. 6, 1068-1078. (F. L. Spitzer) 82:82012 . 82A05 (60K35)
- Szász, Ferenc A. (with Hué, Tran Trong) On the radical classes and the transfree images of rings. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 3-4, 399-402. (N. Divinaky) 82a:16011 16A21

ned by regularities. Acta Sci. 82k:16006 16A21 (16A05) (with Hué, Tran Trong) On the radical classes determ th. (Szeged) 43 (1981), no. 1-2, 131-139. (N. Divinsky) 82k:16006 16A21 (with Amin, Ismail A.) On extensions of nilpotent torsion rings by semisimp 16A21 (16A05) Bull. Austral. Math. Soc. 24 (1981), no. 1, 149-152. (R. L. Kruse) 82m:16011

sz, Pil See Obituary: Szász, Pil, 82e:01111

d Discrete Fourier analysis for qu 233-238. (R. A. Struble) 82a:43005 43A22 (46H30)

(with Luong, N. C.) Remarks on a functional calculus based on Fourier series. Publ. h. Debrecen 26 (1979), no. 3-4, 167-172. (R. A. Struble) 82ac43004 (42A38, 42A45, 44A40, 46H30)

(with Száz, G.) Linear relations. Publ. Math. Debrecen 27 (1980), no. 3-4, 219-227. (Pl. Kannappan) 82h:15021 15A99 (15A04, 39B99) Inversion in the multiplier extension of admissible vector modules. Acta Math. Acad.

Sci. Hungar. 37 (1981), no. 1-3, 263-267. (R. A. Struble) 82k:46060 46F10 (32A40.

(with Száz, Árpád) Linear relations. Publ. Math. Debrecen 27 (1980), no. 3-4,

219-227. (Pl. Kannappan) 82b:15021 15A99 (15A04, 39B99)
zepanek, Wojciech (with Jakubowicz, Antoni; Lizak, Jadwiga; Zandecka-Perl, Urszula) Application of a certain Diophantine equation to the construction of algebraical scalar omitants of a given tensor field. Fasc. Math. No. 11 (1979), 213-216. (J. K. Beem) 82h:53021 53A45

repanik, Lucyna On WR-equivalence of quadratic extensi (Polish summary) Uniw. Slaski in Francisco ons of WR-equivalent fields (Polish summary) Uniw. Slaski w Katowicach Prace Nauk.-Prace Mat. No. 10 (1980), 17-22. (A. Pfister) 82::10023 10C05

Quadratic forms over quadratic extensions of some fields. (Polish summary) Uniw. Śląski w Katowicach Prace Nauk.-Prace Mat. No. 10 (1980), 23-30. (Thomas C. Craven) 82c:12018 12D15 (10C04)

82c:12018 12D15 (10C04)
Szczepankiewicz, Eugeniusz (with Duczmal, Marian; Wnuk, Henryk) Moments of some random quasi-isotropic variables. (Polish. English summary) Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. 22 (1981), 27-50. (Authors' summary) 82i:60031 60E05 Some economic applications of isotropic and quasi-isotropic random fields. (Polish. English summary) Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. 22 (1981), 51-62. (Author's summary) 82i:60102 60G60 (86A60, 90A99)
Szczerba, Lesław W. *O micrze Jordana. (Polish) [Jordan content] Biblioteczka

Matematyczna [Mathematics Library], 37. Wydawnictwa Szkolne i Pedagogiczne, Warsaw, 1977. 116 pp. (J. Král) 82m:28008 28A12 (51-01)

Stability criterion for two classes of nonlinear automatic control systems. II. Systems with dead zone. (Polish. Russian and English summaries) Prace Inst. Maszyn Przepł ywowych 79 (1980), 67-83. (Author's summary) 82h:93058

resny, W. (with Dabrowska, D.; Pleszczyńska, E.) Remarks on multivariate analogues of Kendall's tau. Comm. Statist. A—Theory Methods 10 (1981), no. 23, 2435–2445. (Authors' summary) 82k:62106 62H20

czotka, Władysław A characterization of the distribution of an exchangeable rando vector. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 7-8, 411-414 (1981). (J. Galambos) 82j:60030 60E99 (62E10)

iski, Tomasz (with Kozłowski, Wojciech M.) A note on the Hammerstein operat in Köthe spaces. Zeszyty Nauk. Uniw. Jagiellon. Prace Mat. No. 22 (1981), 147-150. (Authors' introduction) 82:47082 47H99 (46E30)

Szczyrba, Igor On the calculation of multiplicities for representations of SU(n). Lett. Math. Phys. 4 (1980), no. 3, 249-256. (Etang Chen) 82b:81040 81C40 (22E70)

On the mass operators for multiquark systems. J. Math. Phys. 22 (1981), no. 6, 1289–1298. (Etang Chen) 82k81143 81G20 (22E70)

A normal integral basis theorem. J. Algebra 66 (1980), no. 2, 544-549. (Jack

Sonn) 82h:12009 12A35 (12A57) Szebehely, Victor (with McKenzie, R.) Deformation of a line-element in the phase space at the triangular libration point. Celestial Mech. 23 (1981), no. 2, 131-137. (Authors' summary) 82b:58058 58F13 (58F40, 70F07)

(with McKenzie, R.) Nonlinear stability around the triangular libration points. Celestial Mech. 23 (1981), no. 3, 223-229. (Authors' summary) 824:70015 (with Broucke, R.) Determination of the potential in a synodic system. Celestial

Mech. 24 (1981), no. 1, 23-26. (Authors' summary) 82g:70026 70F15 (with Markellos, V. V.) Approximations of satellite stability. Celestial Mech. 24

(1981), no. 2, 183-184. (Authors' summary) 82h:70014 70F15

Szefer, G. A unified approach to optimal control and mechanics of constrained continua.

Structural control (Proc. Internat. 1UTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 739-755, North-Holland, Amsterdam, 1980. (See 82g:93003) 49F105 (90C25)

Szegő, G. P. (with Archetti, Francesco) Global optimization algorithms. Nonlinear ion (Proc. Internat. Summer School, Univ. Bergamo, Bergamo, 1979),

pp. 429-469, Birkhäuser, Boston, Mass., 1980. (J. Mockus) 82a:90129 90C30 (65K05) (with Treccani, Giulio) What you should know about real-valued functions but were ion (Proc. Internat. Sum mer School, Univ. Berg Bergamo, 1979), pp. 471–486, Birkhäuser, Boston, Mass., 1980. (T. Y. Li) 82e:58019 58C25 (26B05, 90C30)

(with Dixon, L. C. W.) The numerical optimisation of dynamic systems: a survey. Numerical optimisation of dynamic systems, pp. 3-28, North-Holland, Amsterdam, 1980. (G. D. Maistrovskii) 82k:49019 49C20 (49D35, 65K10, 90C39)

ation of dynamic systems, 82a:49004 See also No nerical opti

gő, Gábor (with Pólya, G.) *Задачи и теоремы из анализа. Часть вторая. (Russian) [Problems and theorems in analysis. Part Two] Теория функций (специальная часть). Распределение пулей. Полиномы. Определителы. Теория чисел [The theory of functions (a special section). Distribution of zeros. Polynomials. Determinants. Number theory] Translated from the German by D. A. Raikov. Third Russian edition. "Nauka". Moscow, 1978. 431 pp. (Editors) 82c:26001 26-01 (00A07)

Rate of approach to a steady state in queueing systems of type G/G/m/0. (Russian) Problems of stability of stochastic models (Proc. Fourth All-Union Sem., Palanga, 1979) (Russian), pp. 94–107, 124, "Vsesojuz. Nauč.-Issled. Inst. Sistem. Issled.", Moscow, 1980. (M. A. Fedotkin) 82k:60203 60K25

Székely, G. J. (with Ruzsa, I. Z.) An extension of expectation. Z. Wahrsch. Verw. Gebiete

ketyhidi, Laszló Functional equations on abelian groups. Acta Math. Acad. Sci. Hungar.
 37 (1981), no. 1-3, 235–243. (Pl. Kannappan) 82f:39010 39B50
 The stability of linear functional equations. C. R. Math. Rep. Acad. Sci. Canada 3

(1981), no. 2, 63-67. (J. Matkowski) 82e:39007 39B50 An extension theorem for a functional equation. Publ. Math. Debrecen 28 (1981), no. 3-4, 275-279. (F. J. Papp) 82k:39005 39B20 (39B05)

Szekeres, G. (with Richmond, L. Bruce) On the transformation equation for the partition mes Math. 21 (1980), no. 1, 44-48. (M. D. Hirschhorn) 82i:10081 10J20 (05A15)

Szemerédi, Endre (with Ajtai, Miklós; Komlós, János) A note on Ramsey numbers. J. Combin. Theory Ser. A 29 (1980), no. 3, 354-360. (J. E. Graver) 82a:05064 (05C35)

(with Erdős, Paul) Remarks on a problem of the American Mathematical Monthly. (Hungarian) Mat. Lapok 28 (1980), no. 1-3, 121-124. (T. Šalát) 82c:10066 10L10 (10L02)

(with Erdős, Paul; Sárközy, A.) On some extremal properties of sequences of integers. II. Publ. Math. Debrecen 27 (1980), no. 1-2, 117-125. (Ernst Heppner) 10L99

(with Ajtai, Miklós; Komlós, János) The longest path in a random graph

Combinatorica 1 (1981), no. 1, 1-12. (Selim G. Akl) 82d:05074 05C38 (05C35, 60C05) (with Chvátal, Václav) On the Erdős-Stone theorem. J. London Math. Soc. (2) 23 (1981), no. 2, 207-214. (Š. Znám) 82f:05057 05C35

(with Komlós, János; Pintz, János) On Heilbronn's triangle problem. J. London Math. Soc. (2) 24 (1981), no. 3, 385-396. (W. W. Adams) 82m:10051 10E30

Szénássy, Barna Remarks on Gauss's work on non-Euclidean geometry. (Hungarian) Mat. Lapok 28 (1980), no. 1-3, 133-140. 82m:01049 01A55 (51-03, 51M10)

Szendrei, Ágnes On closed classes of quasilinear functions. With a loose Russian summary. Czechoslovak Math. J. 30(105) (1980), no. 3, 498-509. (János Bagyinszki) 82h:03053 03B50 (08A40)

Identities satisfied by convex linear forms. Algebra Universalis 12 (1981), no. 1, 103-122. (W. Taylor) 82g:98011a 08B05

Identities in idempotent affine algebras. Algebra Universalis 12 (1981), no. 2,

172-199. (W. Taylor) 82g:08011b 08B05

A new proof of the McKenzie-Gumm theorem. Algebra Universalis 13 (1981), no. 1, 133-135. (From the text) 82j:08010 08B10

(with Pollak, G.) Independent basis for the identities of entropic groupoids Comment. Math. Univ. Carolin. 22 (1981), no. 1, 71-85. (Jaroslav Ježek) 82e:08009 08B05 (20L05)

Szendrei, Maria B. Strong subband-separating extensions of orthodox semigroups. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 3-4, 437-450. (J. L. Chrislock) 82d:20059 20M10

On closed sets of term functions on bands. Semigroups (Proc. Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 156-181, Lecture Notes in Math., 855, Springer, Berlin,

1981. (Václav Koubek) 82g.08008 08A40 (20M99)
Szenthe, J. On maximal invariant neighborhoods of orbits. Topology, Vol. II (Proc. Fourth Collog., Budapest, 1978), pp. 1127-1137, Colloq. Math. Soc. János Bolyai, 23. North-Holland, Amsterdam, 1980. (R. Schultz) 82c:57021 57S10 (57S25)

Szépfalusy, P. (with Tél, T.) The dynamic renormalisation group in the large-n limit. J. Phys. A 12 (1979), no. 11, 2141-2149. (Authors' summary) 82c:82052

Szeptycki, P. On some problems related to the extended domain of the Fourier transform. Rocky Mountain J. Math. 10 (1980), no. 1, 99-103. (Jean Lavoine) 82a:42012 Szeto, George On a commutative diagram of group ring homomorphisms.

(Chij) 21(44) (1979), no. 2, 195-198. (M. M. Parmenter) 82d:16009 16A26 (16A70) (with To, T. O.) The p.p. ring and the Pierce sheaf representation of noncommutative gs. (Russian summary) Math. Slovaca 30 (1980), no. 4, 337-343. (A. Verschoren) rings. (Russian summary) 82a:16004 16A04 (16A65)

On projective modules over a central quotient ring. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 4, 391-393. (Louis Rowen) 82j:13008 13C05

to, Mabel On maximal measures with respect to a lattice. Measure theory a applications (Proc. Conf., Northern Illinois Univ., De Kalb, Ill., 1980), pp. 277-282, Northern Illinois Univ., DeKalb, Ill., 1981. (See 82g:28002) 28C15

Szeto, R. K.-H. (with Keller, Herbert B.) Calculation of flows between rotating disks. Computing methods in applied sciences and engineering (Proc. Fourth Internat. Sympos., Versailles, 1979), pp. 51-61, North-Holland, Amsterdam, 1980. (William H. H. Banks) 82h:76024 76D05 (65L10)

(with Saffman, Philip G.) Equilibrium shapes of a pair of equal uniform vortices Phys. Fluids 23 (1980), no. 12, 2339-2342. (L. Debnath) 82a:76020

(with Rosenblat, S.) Multiple solutions of nonlinear boundary value problems. Stud. Appl. Math. 63 (1980), no. 2, 99-117. (A. Haimovici) 82a:34016 34B15 (65L10) ewc, Bolesław (with Misiurewicz, Michal) Existence of a homoclinic point for the Hénon

map. Comm. Math. Phys. 75 (1980), no. 3, 285-291. (D. L. Rod) 82d:58046 (651.99)
lágyi, P. Boundary value problems for a nonlinear elliptic equation. Mathematica (Chij)

21(44) (1979), no. 1, 101-109. (R. Kent Nagle) 82c:35028 35J65 (47H15)

Solvability of the Dirichlet problem for an elliptic equation with a singularity. (Romanian. English summary) Studia Univ. Babeş-Bolyai Math. 25 (1980), no. 2, 72-78. (V.-V. Olariu) 82k:35036 35J25

agyné Szilvási, Márta See Nagyné Szilvási, Márta

mmat, J. (with Argyris, J. H.; Doltsinis, J. St.; Knudson, W. C.; Willam, K. J.;

Wüstenberg, H.) Eulerian and Lagrangian techniques for elastic and inelastic large deformation processes. Computational methods in nonlinear mechanics (Proc. Second Internat. Conf., Univ. Texas, Austin, Tex., 1979), pp. 13-66, North-Holland, Amsterdam, 1980. (Authors' summary) 82c:73024 73E99

jew, A. N. See Širjaev, A. N.

Szlenk, W. (with Misiurewicz, Michal) Entropy of piecewise monotone mappings. Studia

Math. 67 (1980), no. 1, 45-63. (Carmen Chicone) 82a:58030 58F11 (28D20, 54C70,

nanda, Blazej Oscillation of solutions of second order difference equations. Portugal. Math. 37 (1978), no. 3-4, 251-254 (1981). (Shigeru Haruki) 82j:39004 39A10 Oscillation of solutions of second order difference equations. Publ. Inst. Math. (Beograd) (N.S.) 27(41) (1980), 237-239. (I. M. Sheffer) 82g:39003 39A10

Oscillation theorems for nonlinear second-order difference equations. J. Math. Anal. Appl. 79 (1981), no. 1, 90-95. (B. G. Pachpatte) 82c:39001 39A10

elter, Jan (with Wieczorek, Mieczysław) An improved method for graphic representation of the results of computations of the finite element method. (Polish English and Russian summaries) Mechanics and computers, Vol. 2 (Polish), pp. 45-65, PWN, Warsaw, 1980. (Authors' summary) 82a:65093 65N30 (65S05)

(with Kurowski, Zdzisław) An algorithm for solving a system of linear partial differential equations with arbitrary domain discretization. (Polish. English and Russian

summaries) Mechanics and computers, Vol. 2 (Polish), pp. 67–87, PWN, Warsaw, 1980.

(Authors' summary) 82a:65094 65N30

milew, Wanda Concerning the order and the semi-order of n-dimensional Euclidean space. Fund. Math. 107 (1980), no. 1, 47–56. (L. W. Szczerba) 82d:51008 51G05

ksta, Maria (with Jakubowicz, Antoni) Necessary and sufficient conditions for the derivation in the tensor space of type (p,q), $p+q \le 4$, over two-dimensional vector space [to] be the automorphism. Fasc. Math. No. 11 (1979), 223-229. (Jean Pradines) :15031 15A69 (17B40)

Szmydt, Zofia (with Ziemian, Bogdan) Special solutions of the equations $P\tilde{u}=0$, $Pu=\delta$ for invariant linear differential operators with polynomial coefficients. J. Differential Equations 39 (1981), no. 2, 226-256. (C. Avramescu) 82f:35038 35C05 (35D99)

-Nagy, Bela (with Foias, Ciprian) The function model of a contraction and the space L^{1}/H_{0}^{1} . Acta Sci. Math. (Szeged) 41 (1979), no. 3-4, 403-410. (J. William Helton) 47A45 (47A15)

A brief review of my work in mathematics. (Russian) Vestnik Akad. Nauk SSSR 1980, no. 6, 50-56. (F. Smithies) 82b:01061 01A70 (47-03)

(with Bercovici, Hari, Foias, Ciprian) Reflexive and hyper-reflexive operators of class C_0 . Acta Sci. Math. (Szeged) 43 (1981), no. 1-2, 5–13. (Eric Nordgren) 82k:47017 47A45 (47A15, 47D25)

See also Langer, Heinz, 82e:01095

Sznajd, Józef (with Klamut, Jan; Durczewski, Krzysztof) ★Wstęp do fizyki przejść fazowych. (Polish) [Introduction to physics of phase transitions] Zakład Narodowy im. Ossolińskich-Wydawnictwo Polskiej Akademii Nauk (Ossolineum), Wrocław, 1979. 239 pp. (loose errata). (Robert Alicki) 82g:82001 82-01 (82A25, 82A77)

itko, Wanda On nonlinear Carleman boundary problem with an infinite index. Demonstratio Math. 13 (1980), no. 1, 301-311. (Martin Costabel) 82b:30053

Sznitman, Alain-Sol Perturbations ponctuelles d'évolutions: construction d'espaces stationnaires. (English summary) Ann. Inst. H. Poincaré Sect. B (N.S.) 16 (1980), no. 4, 299-326 (1981). (Masakiyo Miyazawa) 82d:60066 60G10 (60G55, 60K25) (with Lions, Pierre-Louis; Menaldi, José-Luis) Construction de processus de diffusion réfléchis par pénalisation du domaine. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 11, 559-562. (Authors' summary) 82f:60172

Martingales dépendant d'un paramètre: une formule d'Itô. (English summary) [Martingales depending on a parameter: an Itô formula] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 8, 431-434. (Author's summary) 82m:60072 60H10 (60G44)

Szociński, Brunon The orientation of doubly pseudostochastic geometry. (Polish. Russian and English summaries) Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 34 (1979), 57-67. (Author's summary) 82g:53020 53A99

Szőkefalvi-Nagy, Béla See Sz.-Nagy, Béla Szopa, J. The analysis of dynamic systems of variable inertia described by the nonlinear stochastic differential equations. Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. II (Prague, 1978), pp. 677-682, Academia, Prague, 1979. (See 70D05

Szpirglas, A. Platitude des revêtements ramifiés. Functions of several complex variables, IV (Sem. François Norguet, 1977–1979) (French), pp. 167–179, Lecture Notes in Math., 807, Springer, Berlin, 1980. (D. Lieberman) 82:32041 32H99 (14E40)

Szpirger, Szemin, 1980. De Leccinian of Szpirger, Szpirg 89-119. (A. N. Al-Hussaini) 82h:60073 60G35 (60G60, 93E11)

(with Mazziotto, Gérald) Un exemple de processus à deux indices sans l'hypothèse Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 673-688, Lecture Notes in Math., 850, Springer, Berlin, 1981. (B. Marchal) 82i:60055 60G07 (60G48)

(with Mazziotto, Gérald; Merzbach, Ely) Discontinuités des processus croissants et martingales à variation intégrable. [Discontinuities of increasing processes and martingales with integrable variation] Two-index random processes (Paris, 1980),

pp. 59-83, Lecture Notes in Math., 863, Springer, Berlin, 1981. (Xavier Guyon) 82m:60038 60G07 (60G44) 60G07 (60G44)

(with Mazziotto, Gérald) Sur les discontinuités d'un processus CAD-LAG à deux indices. [On the discontinuities of a two-index CAD-LAG process] Two-index rando processes (Paris, 1980), pp. 84-90, Lecture Notes in Math., 863, Springer, Berlin, 1981. (Xavier Guvon) 82m:60039 60G07 (60G40)

(with Mazziotto, Gérald) Résolution du problème d'arrêt optimal sur N². (English ummary) [Solution of the optimal stopping-time problem on N²] C. R. Acad. Sci. Paris Ser. I Math. 293 (1981), no. 1, 87-90. (Authors' summary) 82i:60080

See also Two-index random processes, 82:66004

Szpiro, L. Le théorème de la régularité de l'adjointe de Gorenstein à Kodaira. Proceedi

of the International Symposium on Algebraic Geometry (Kyoto Univ., Kyoto, 1977), pp. 93–102, Kinokuniya Book Store, Tokyo, 1978. (Fabrizio Catanese) 82c:14020

★Lectures on equations defining space curves. Notes by N. Mohan Kumar. Published for the Tata Institute of Fundamental Research, Bombay; by Springer-Verlag, Berlin-New York, 1979. v+81 pp. ISBN 3-540-09544-6 (Enrico Arbarello) 82d:14017

Sztaba, Urszula Note on: "On oscillatory behavior of even order delay equations" [J. Math. Anal. Appl. 42 (1973), 183-190; MR 48 #2524] by R. S. Dahiya and B. Singh. J. Math. Anal. Appl. 63 (1978), no. 2, 313-318. (B. Singh (Zbl 398:34030)) 82f:34094

Sztencel, Rafal A probabilistic characterization of unconditionally summing operators. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Blażejewko, 1979), pp. 274-276, Lecture Notes in Math., 828, Springer, Berlin, 1980. (D. J. H. Garling) 82i:47033 47B10 (60B11)

Sztyren, Malgorzata (with Rogula, Dominik) On one-dimensional models in nonlocal elasticity. Bull. Acad. Polon. Sci. Sér. Sci. Tech. 26 (1978), no. 7, 631-635. (Authors' summary) 82b:73004 73B99 (35J20, 49A50)

Szücs, András Cobordism of maps with simplest singularities. Topology Symposium, Siegen 1979 (Proc. Sympos., Univ. Siegen, Siegen, 1979), pp. 223-244, Lecture Notes in Math., 788, Springer, Berlin, 1980. (Ulrich Koschorke) 82b:57025 57R45 (57R90)

(with Bárány, Imre; Šlosman, S. B.) On a topological generalization of a theorem of Tverberg. J. London Math. Soc. (2) 23 (1981), no. 1, 158-164. (David Handel) 824:55001 55M20 (52A35)

Szűcs, J. See American Mathematical Society Translations, Ser. 2, 82f:00004
Szufla, Stanisław On infinite systems of Volterra integral equations in Banach spaces. Ann. Polon. Math. 38 (1980), no. 2, 187-194. (Philippe Clément) 82b:45021 45N05 (45D05)

Szulga, Jerzy Regularity of Banach lattice valued martingales. Collog. Math. 41 (1979),

On 0, 2, 303–312. (S. D. Chatterji) 82d:60082 60C42 (46B30, 60B11)
On operator characterization of AM- and AL-spaces. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Blatejewko, 1979), pp. 277–282, Lecture Notes in Math., 828, Springer, Berlin, 1980. (Author's summary) 82m:46019 46B30 (46A40) 47R55)

Lattice moments of random vectors. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 1-2, 87-93 (1981). (David J. Scott) 82k:60013

Szulkin, Andrzej Local structure of the zero-sets of differentiable mappings and application to bifurcation theory. Math. Scand. 45 (1979), no. 2, 232-242. (G. R. Belickii) 824:58014 58C27 (26B05, 58E07)

vicz, Romuald See Kafarov, V. V., 82j:80006

Szüsz, P. See Turán, Pál, 82e:41003

Szwarc, Włodzimierz Extreme solutions of the two machine flow-shop problem. Naval Res. Logist. Quart. 28 (1981), no. 1, 103-114. (Author's summary) 82h:90068 90B35

Szyld, Daniel B. (with Widlund, Olof B.) Applications of conjugate gradient type methods to eigenvalue calculations. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 167–173, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82b:65026

wski, Jacek (with Findeisen, Władysław; Wierzbicki, Andrzej P.) *Teoria i metody obliczeniowe optymalizacji. (Polish) [Theory and numerical methods of optimization] Biblioteka Naukowa Inżyniera. [Science Library for Engineers] Państwo Wydawnictwo Naukowe (PWN), Warsaw, 1980. 708 pp. ISBN 83-01-00976-4 (Editors) 49-01 (65Kxx)

Szymański, Andrzej (with Błaszczyk, Aleksander) Concerning Parovičenko's theorem (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 7-8, 311-314 (1981). (W. W. Comfort) 82j:54042 54D40 (54F65)

54D40 (54F65)

Undecidability of the existence of regular extremally disconnected S-spaces. Colloq. Math. 43 (1980), no. 1, 61-67, 210 (1981). (J. E. Vaughan) 82i:54016 54A25 (54G05) Szymański, Bogusław (with Kwapień, Stanisław) Some remarks on Gaussian measures in

Banach spaces. Probab. Math. Statist. 1 (1980), no. 1, 59-65. (S. A. Cobanjan) 82h:60010 60B11 (28C20)

Szymanski, Thomas G. Assembling code for machines with span-dependent instructions Comm. ACM 21 (1978), no. 4, 300-308. (R. K. Shyamasundar) 82g:68015 68B0

(with Aho, A. V.; Sagiv, Yehoshua; Ullman, Jeffrey D.) Inferring a tree from lowest common ancestors with an application to the optimization of relational expression SIAM J. Comput. 10 (1981), no. 3, 405-421. (Authors' summary) 82h:68015 (68C05)

Szymański, Wacław (with Hunt, John H. V.) e-ultrafilters and the Stone-Čech compactification. Bol. Soc. Mat. Mexicana (2) 23 (1978), no. 2, 48-60. (Aleksan Błaszczyk) 82a:54041 54D35 (54C40)

Antisymmetry in the WOT-closed algebra generated by an isometry. (Russian mary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 3-4, 137-142 (1981). (Robert L. Moore) 82g:47035 47D25

(with Conway, John B.) Singly generated antisymmetric operator algebras. Pacific J. Math. 89 (1980), no. 2, 269-277. (Lawrence Williams) 82c:47048 47D25

Szymborski, K. See Cassidy, David C., 82k:01031

Szymiczek, Kazimierz On GR-equivalence of fields. (Polish summers) Katowicach Prace Nauk.-Prace Mat. No. 10 (1980), 12-16. (A. Pfister) 82e:10022

Szynal, Anna (with Szynal, Jan; Wajler, Stanisław) On the Gronwall's problem for some classes of univalent functions. Analytic functions, Kozubnik 1979 (Proc. Seventh Conf., Kozubnik, 1979), pp. 429-434, Lecture Notes in Math., 798, Springer, Berlin, 1980. (K. S. Padmanabhan) 82a:30020 30C45

Szynal, Dominik (with Kubacki, Krzysztof S.) Bernstein's inequality for a class of asymptotic martingales. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 1-2, 77-80 (1981). (I. Cuculescu) 82g:60060 60G48 (60E15)

A remark on the strong law of large numbers for random index sums. The First Pannonian Symposium on Mathematical Statistics (Bad Tatzmannsdorf, 1979),

pp. 266-276, Lecture Notes in Statist., 8, Springer, New York, 1981. (W. L. Steiger) 82h:66048 60F05

Szynal, Jan (with Szynal, Anna; Wajler, Stanisław) On the Gronwall's problem for some classes of univalent functions. Analytic functions, Kozubnik 1979 (Proc. Seventh Conf., Kozubnik, 1979), pp. 429-434, Lecture Notes in Math., 798, Springer, Berlin, 1980. (K. S. Padmanabhan) 82a:30020 30C45

(with Prohorov, D. V.) Coefficient estimates for bounded nonvanishing function (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 29 (1981), no. 5-6, 223-230. (Ved Parkash Gupta) 82m:30024 30C50

Mohamed Corps lineairement compacts. (English summary) C. R. Acad. Sci. Paris Ser. A-B 290 (1980), no. 12, A531-A532. (Niel Shell) 82c:12023 12J10

- T -

- wa, S. S. On the oscillatory viscous flow past two spheres perpendicular to the line of atres. C. R. Acad. Bulgare Sci. 33 (1980), no. 9, 1183-1186. (From the text) 82j:76029

As, D. See Nair, G. Gopalakrishnan, 82h:49004

abari, *Umar Ibn al-Farrakhiin See Pingree, David, 82d:01008

arrok, B. See Theoretical and applied mechanics, 82d:00008

arry, F. (with Landau, Mayer; Valentini, Françoise A.) Un modèle mathématique pour l'évaluation des commandes nerveuses des muscles dans la marche normale. (English uary) Rev. CETHEDEC No. 59 (1979), 11-36. (H. A. Lauwerier) 82a:92014 92A09 (70B99)

ahisa Conservative upwind finite element approximation and its application Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ. Nijmegen, Nijmegen, 1980), pp. 369–381, North-Holland Math. Studies, 47,

Nijmegen, Nijmegen, 1980), pp. 369–381, North-Hotlana mun. Suuues, 77, North-Holland, Amsterdam, 1981. (Author's summary) 822c65140 65N30 Approximations monotones de problèmes de perturbations singulières. (English ry) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 9, 495-497. (Author's summary) 824:65066 65N10 (35B25)

Tabb, Charles H. (with Harrington, Barry J.) Generalized ghost-free gauges. Phys. Lett. B 96 (1980), no. 1-2, 132–136. (Authors' summary) 82a:81032 81E99

Tabe, Tsutomu (with Muramatsu, Rintaro) A structural analysis of the in-shop time and the

in-process inventory in a production ordering system for a two-stage assembly type production process. (Japanese: English summary) Bull. Sci. Engrg. Res. Lab. Waseda Univ. No. 91 (1980), 31-50. (From the summary) Bull. Sci. Engrg. Res. Lab. waseda Univ. No. 91 (with Chabrerie, J. P.) Magnetohydrodynamics flows through ducts with thin

walls of arbitrary conductivities at high Hartmann number. (French summary) J.

Mécanique 19 (1980), no. 4, 601-627. (Authors' summary) 82d:76092 76W05
erski, Roman Integral formulae for trigonometric polynomials with applications. Funct.
Approx. Comment. Math. 8 (1980), 89-97. (R. N. Mohapatra) 82b:42002 42A10

Approximation by entire functions of exponential type. Demonstratio Math. 14 (1981), no. 1, 151-181. (S. Fisher) 82f:41027 41A30 (41A25) hidze, G. S. (with Schter, B. L.) Some boundary value problems for second-order difference equations. (Russian. Georgian and English summaries) Proceedings of the 1. N. Vekua Institute of Applied Mathematics, 8 (Russian), pp. 50-67, 164, Tbilis. Gos. Univ., Tbilisi, 1980. (I. M. Sheffer) 82g:39004 39A10

isz, Krzysztof On a kind of the Stefan problem. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 11-12, 847-852 (1981). (Antonio Fasano) 82i:35170 35R35 (35K20)

Local and global solutions of the Stefan-type problem. J. Math. Anal. Appl. 82 (1981), no. 2, 306-316. (Emmanuele di Benedetto) 82k:35103 35R35

as. Plácido Z. (with Hale, Jack K.) Bifurcation near degenerate families. Applicable Anal. 11 (1980/81), no. 1, 21-37. (B. V. Loginov) 82b:59027

Tabor, M. (with Noid, D. W.; Koszykowski, M. L.; Marcus, R. A.) Properties of vibrational energy levels in the quasiperiodic and stochastic regimes. J. Chem (1980), no. 11, 6169-6175. (Authors' summary) 82d:81174 81G55 (58F14) J Chem Phys 72 (with Koszykowski, M. L.; Noid, D. W.; Marcus, R. A.) On correlation fu

and the onset of chaotic motion. J. Chem. Phys. 74 (1981), no. 4, 2530-2535. (Authors' summary) 82g:82007 82A05 (58F13) rda Duarte, J. (with Vilela Mendes, R.) Decomposition of vector fields and mixed nics. J. Math. Phys. 22 (1981), no. 7, 1420-1422. (Manfred Andrié) 82h:58016

58F05 (70G35) detto Taccola, Maria

no di Jacopo See Knobloch, Eberhard, 82m:01027 Representations of trivial extensions of hereditary algebras. chikawa, Hiroyuki Represen on theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 579-599, Lecture Notes in Math., 832, Springer, Berlin, 1980. (Sheila Brenner) 16A64 (16A52)

Tacii, R. M. On the order of growth of a characteristic series. (Russian) Mat. Metody i Fiz.-Meh. Polja No. 13 (1981), 38-40, 113. (C. Tanaka) 82;30036 30D15 (34A20,

onet, B. A new method for asynchronous sequential systems design: synthesis by partition of the states graph. (French and German summaries) Digital Process. 6 (1980), no. 4, 271-289. (Author's summary) 82m:94068 94C15 (05C99)

Tada, Yukio (with Hamada, Minoru; Seguchi, Yasuyuki) Shape determination problems of structures by the inverse variational principle. II. Buckling and vibration problems. Bull. JSME 23 (1980), no. 184, 1581-1588. (Authors' summary) 82m:73058 73K40 (49H05, 73H05, 73K12)

eusiewicz, Michal On the solvability and computation of D.C. transistor networks. Internat. J. Circuit Theory Appl. 9 (1981), no. 3, 251-267. (François Aribaud) 82j:94027

likamalla, Pandu R. A look at the Burr and related distributions. (French summa Internat. Statist. Rev. 48 (1980), no. 3, 337–344. (M. L. Tiku) 82e:62021 62E10 ev, A. Flow of a fluid out of a semiconical vessel. (Russian) Motion of single- and

use media (Russian), pp. 94-98, 115, "Fan", Tashkent, 1980. (Author's summary) 82c:76025 76B99

Tafel, J. A kinetic model of dipole particles in curved space-time. Gen. Relativity ation 12 (1980), no. 12, 1035-1041 (1981). (Author's summary) 82d:83013 83C10 (83C50)

(with Harnad, John; Shnider, Steven) Canonical connections on Riemannian netric spaces and solutions to the Einstein-Yang-Mills equations. J. Math. Phys. 21), no. 8, 2236–2240. (Andrzej Trautman) 82j:53055 53C05 (81E10, 83C20) (1980), no. 8, 2236-2240. (Andrzej Trautman) 82j:53055

Taft, Earl J. (with Green, James A.; Nichols, Warren D.) Left Hopf algebras. J. Algebra 65 (1980), no. 2, 399-411. (David E. Radford) 82d:16007

Tagawa, Shôjirô (with Sugiyama, Kozo; Toda, Mitsuhiko) Methods for visual understanding of hierarchical system structures. IEEE Trans. Systems Man Cybernet. 11 (1981), no. 2, 109-125. (Authors' summary) 82d:92035 92A20 (93A13)

- Tagiev, R. K. (with Iskenderov, A. D.) Optimization problems with controls in the coefficients of nonstationary quasilinear equations. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 8, 8–12. (Erich
- Miersemann) 82m:49005 49A22 (35B37, 49B22)
 Tagirov, R. R. (with Arslanov, F. H.) Optimization with respect to order of the rate of convergence of a modification of the Newton method. (Russian) Issled. Prikl. Mat. No. 7 (1979), 75-77. (B. T. Poljak) 821:65056 65H05

 Tagi-Zade, A. T. (with Stepin, A. M.) Variational characterization of topological pres

the amenable groups of transformations. (P.ussian) Dokl. Akad. Na uk SSSR 254 (1980), no. 3, 545-549. (Radu Nicolae Gologan) 82a:28016 28D15 (22D40)

Tagliani, A. (with Butera, P.; Galgani, Luigi; Giorgilli, A.; Sabata, Hideki) Stochasticity thresholds in a lattice field theory. (Italian and Russian summaries) Nuovo Cimento B (11) 59 (1980), no. 1, 81-86. (Authors' summary) 82a:81030 81E99 (58F13, 70K99, 82A05)

Tagliasco, V. (with Benati, M.; Gaglio, S.; Morasso, P.; Zaccaria, R.) Anthropomorphic masco, v. (with Beliaut, R.) Gagas, v. (with Beliaut, R.) Gagas, v. (with Beliaut, R.) Gagas, v. (with Beliaut, R.) Gagas, v. (1980), no. 3, 125–140. (M. Junusov) 82i-92004a 92A05 (70B99)

(with Benati, M.; Gaglio, S.; Morasso, P.; Zaccaria, R.) Anthropomorphic robotics. II. Analysis of manipulator dynamics and the output motor impedance. Biol. Cybernet. 38 (1980), no. 3, 141-150. (M. Junusov) 82f:92004b 92A05 (70B99)

Taglienti, B. (with Falcioni, M.; Marinari, E.; Paciello, M. L.; Parisi, Giorgio) Phase transition analysis in Z₂ and U(1) lattice gauge theories. Phys. Lett. B 105 (1981), no. 1, 51–54. (Authors' summary) 82j-82027 82A25 (81E25)

51-54. (Authors' summary) 82;82027 82A25 (81E25)

Taguchi, Yoshiko The Bochner integral for functions with values in the union of ranked vector spaces. TRU Math. 15 (1979), no. 2, 55-62. (Ralph Henstock) 82c:28019 28B05 (46G10)

Taguchi, Yukio (with Tanaka, Azuma; Yamamoto, Kunio) A solvable model for spontaneous symmetry breaking. Nuovo Cimento A (11) 62 (1981), no. 3, 186-195. (G. 81D20 (81E99)

Taguri, Masaaki (with Hashimoto, Akihiro; Honda, Masayuki; Inoue, Takakatsu) Selection of regression models by several information criterions. Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs. 28 (1981), no. 2, 1-16. (Authors' introduction) 828:52128

a El-Shirbeeny, El-Hosseiny (with El-Din Zakzouk, Ezz) Design of stable suboptimal controller using regression models. (French summary) Data analysis and informatics (Proc. Second Internat. Sympos., Versailles, 1979), pp. 727–735, North-Holland, Taha El-Shirbe Imsterdam, 1980. (See 82f:62004) 93F25

bani Tahir, Muzahim See Bani Tahir, Muzahim

irov, A. Joint distributions of certain characteristics of a single-line queueing system with bounded queue. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 3, 84 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 3, 62 (1981). (Dietrich Stoyan) 82k:60204 60K25

Tahirov, B. O. (with Hudaverdiev, K. I.) Investigation of a weakly generalized solution of a multidimensional mixed problem with general boundary conditions for hyperbolic equations with a nonlinear operator right-hand side. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1979, no. 6,

29-36. (Editors) 82g-35068 35L35 (35R20)

(with Hudaverdiev, K. I.) Investigation of a strongly generalized solution of a multidimensional mixed problem with general boundary conditions for hyperbolic equations with a nonlinear operator right-hand side. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 2, 61–68. (Alexander Doktor) 82k:35079 35L75 (35L35)

Tahirov, D. M. (with Maksudov, F. G.; Aliev, A. B.) A one-sided problem for a quasilinear equation of hyperbolic type. (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 4, 789-791. (R. G. Airapetjan) 82i:35122 351.70

Tahtadžjan, L. A. (with Manakov, S. V.; Santini, P. M.) Asymptotic behavior of the

solutions of the Kadomtsev-Pyatviashvili equation (two-dimensional Korteweg-de Vries equation). Phys. Lett. A 75 (1979/80), no. 6, 451-454. (Hans Kaper) 82c:35072

(with Skljanin, E. K.; Faddeev, L. D.) Quantum inverse problem method. I.

(Russian. English summary) Teoret. Mat. Fiz. 40 (1979), no. 2, 194–220. (Woodford W. Zachary) 82g:81087 81E99 (35Q20, 58F07)

Asymptotic formula for the sum of the lengths of the periods of the quadratic irrationalities of discriminant D. (Russian. English summary) Analytic number theory and the theory of functions, 2. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov (LOMI) 91 (1979), 134-144, 182. (W. Narkiewicz) 82d:10047. 10F20 (10C02, 12A25 10F20 (10C02, 12A25) (with Vinogradov, A. I.) Linnik-Skubenko asymptotics. (Russian) Dokl. Akad. Nauk

SSSR 253 (1980), no. 4, 777-780. (H. Iwaniec) 82j:10083 10J25 (10E25, 10G20) (with Vinogradov, A. I.) On analogues of the Gauss-Vinogradov formula. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1298-1301. (S. A. Stepanov) 82b:10050 10H08 (10C15, 12A70)

(with Vinogradov, A. I.) On the Gauss-Hasse hypothesis for real quadratic fields. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 6, 1306-1309. (Paul Ponomarev) 824-1003R 12A50 (12A70)

nguen f'en Tai See Nguen T'en Tai
Tai, N. D. (with Gössel, Michael; Straubel, R.) On decomposition methods of large-scale systems for optimization problems. Systems analysis and simulation, 1980 (Proc. Internat. Sympos., Berlin, 1980), pp. 135-139, Math. Research, 5, Akademie-Verlag, Berlin, 1980. (Authors' summary) 82b:49047 49D27 (93A10)

Talani, Geraldine (with Primicerio, Angela Selvaggi) Families of analytic discs with boundary on a nongeneric CR submanifold. (Italian. English summary) Ann. Mat. Pura Appl. (4) 126 (1980), 233–251 (1981). (Claudio Rea) 82j:32047 32F25 (32A17) Appl. (4) 126 (1980), 233-251 (1981). (Claudio Rea) 82j:32047 (with Hill, C. Denson) Global uniqueness in the disc lifting problem. J. Differential Geom. 15 (1980), no. 2, 217-223 (1981). (Ingo Lieb) 82i:32038 32D15

Geom. 15 (1980), no. 2, 217-223 (1981). (Ingo Lieb) 82i:32038 32D15

Taibleson, Mitchell H. Majorization of functions in H¹(K"), K a local field. (Russian mmary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 10, 789-791. (James E. Daly) 82m:43005 43A15 (12B40, 43A70)

(with Coifman, R. R.; Rochberg, R. H.; Weiss, Guido) Introduction.

Representation theorems for Hardy spaces, pp. 1-9, Astérisque, 77, Soc. Math. France, Paris, 1980. (Sun Yung A. Chang) 82g:32010 32A35 (42B30, 43A85, 46J15, 47B99)

Taïclin, M. A. A description of algebraic systems in weak logic of order ω and in program logic. (Russian) The theory of nonregular curves in various geometric spaces (Russian), pp. 91–98, Kazah. Gos. Univ., Alma-Ata, 1979. (E. B. Kinber) 82e:68031 68C01 (03B15)

(with Beljaev, V. Ja.) Elementary properties of existentially closed systems. (Russian)
Uspehi Mat. Nauk 34 (1979), no. 2(206), 39–94. (O. V. Belegradek) \$2a:03028 03C60 (03Cxx)

The isomorphism problem for commutative semigroups solved affirmatively. (Russian) Theory of models and its applications (Russian), pp. 75-81, Kazah. Gos. Univ., Alma-Ata, 1980. (L. Bokut') 82h:20079 20M14

Taillie, C. (with Patil, Ganapati P.) Diversity as a concept and its implications for random communities. (French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 2. With discussion. Bull. Inst. Internat. Statist. 47 (1977), no. 2, 497–515, 551–558. (Howard B. Stauffer) 821:92066 92A17 (with Patil, Ganapati P.) On a variant of the Rao-Rubin theorem. Sankhyā Ser. A 41 (1979), no. 1-2, 129-132. (A. N. Philippou) 82k:62037 62E10

manov, A. D. (with Paljutin, E. A.; Seese, Detlef G.) A remark on the topologization of algebraic structures. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 4, 617-618. (Authors' summary) 82i:54083 54H99 (08A99)

u-Tair, Ibrahim Alyan Youcif See Abou-Tair, Ibrahim Alyan Youcif

Taira, Kazuaki Sur le problème de la dérivée oblique. II. Ark. Mat. 17 (1979), no. 2, 177-191. (J. Kačur) 82f:35069 35J25

rov, S. On an application of a regenerative process. (Russian) Izv. Akad. Nauk UzSSR

Ser. Fiz.-Mat. Nauk 1981, no. 4, 38-41, 101. (M. Skalsky) 82k:60170 60K05
Taisbak, Chr. M. Errata: "An Archimedean proof of Heron's formula for the area of a triangle; reconstructed" [Centaurus 24 (1980), 110-116; MR 81m:01002]. Centaurus 25

(1981), no. 1-2, 160. (Editors) 82k:01010 01A20
Tait, R. J. (with Moodie, T. Bryant; Haddow, J. B.) Wave propagation in a fluid-filled elastic tube. Acta Mech. 38 (1981), no. 1-2, 71-83. (Authors' summary) 82k:73037 73J06 (76Z05)

(with Moodie, T. Bryant) On a problem in the dynamic theory of cracks. Quart. Appl. Math. 39 (1981/82), no. 3, 419-423. (Authors' summary) 82k:73070 73M05

Taj, Shahadat Ali (with Ahmad, M. Iftikhar) Elliptic functions of hyperbolic character. Karachi Math. Assoc. Riazi (Souvenir) 3 (1980), 19-24. (R. G. Langebartel) 82f:14039 14K25 (33A25)

Tajima, Nobuki On a nonlocal stability of self-gravitating stellar systems. Progr. Theoret. Phys. 65 (1981), no. 4, 1264–1280. (Author's summary) 82g:85005
 Tajima, T. (with Brunel, F.; Leboeuf, J. N.; Dawson, J. M.; Makino, M.; Kamimura, T.)

Magnetohydrodynamic particle code: Lax-Wendroff algorithm with finer grid interpolations. J. Comput. Phys. 43 (1981), no. 2, 268-288. (Authors' sun 82k:65047 65M05 (76W05) 82k-65047

Taivari, A. (with Shieh, Leang San) Analysis and synthesis of matrix transfer functions using the new block-state equations in block-tridiagonal forms. Proc. IEE-D 127 (1980), no. 1, 19-31. (Authors' summary) 82d:94061a 94C05

(with Shieh, Leang San) Errata: "Analysis and synthesis of matrix transfer functions using the new block-state equations in block-tridiagonal forms". Proc. IEE-D 127 (1980), no. 4, 187. (Editors) 82d:94061b 94C05

Takači, Arpad On the Abelian theorems for the distributional Laplace transformation. (Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 83–90 (1980). (R. S. Dahiya) 82j:44001 44A10

Takaci, D. (with Stankovic, B.) Linear differential equations with coefficients in a field. II. (Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979),

9-17 (1980). (John S. Lew) 82:35181 35R10 (34K30, 44A40)

Takács, Judit (with Recski, András) On the combinatorial sufficient conditions for linear network solvability. Internat. J. Circuit Theory Appl. 9 (1981), no. 3, 351-354. (András

Frank) 82k:94027 94C05 (05B35, 68C25) Frank, Bax99021 590,000 (1995), voc. 27]
Takács, Lajos The problem of coincidences. Arch. Hist. Exact Sci. 21 (1979/80), no. 3, 229–244. (William J. Adams) 82c01025 01A50 (60–03)

(with Letac, G.) Random walks on a dodecahedron. J. Appl. Probab. 17 (1980),

no. 2, 373–384. (Peter R. Nelson) 824:60121 60J10 (60J15) On a theorem of Gy. Hajós. Period. Math. Hungar. 11 (1980), no. 2, 159–160. (I.

Vincze) 82ce95019 OSA15 (60C05)
The arc sine law of Paul Lévy. Contributions to probability, pp. 49–63, Academic Press, New York, 1981. (Terence P. Speed) 82h:60049 60F05 (60I15)
Random flights on regular polytopes. SIAM J. Algebraic Discrete Methods 2 (1981), no. 2, 153–171. (Gedalia Ailam) 82f:60159 60I15

Takada, Satoshi (with Sakaguchi, Toshifumi; Misawa, Susumu) The Kosterlitz-Thouless transition in the quantum sine-Gordon model and the corresponding classical film system. Progr. Theoret. Phys. 66 (1981), no. 3, 820-830. (Authors' summary) 82k:82021

Takada, Yoshikazu The shortest invariant prediction interval for the largest observation from the exponential distribution. J. Japan Statist. Soc. 9 (1979), no. 2, 87-91. (G. S. Lingappaiah) 82f:62065 62F25

Inadmissibility of preliminary test estimators for the regression coefficients of a multivariate normal distribution. J. Japan Statist. Soc. 9 (1979), no. 2, 109-113. (Chien-Pai Han) 82e:62018 62C15 (62H12)

Takagi, Hitoshi Notes on the cancellation of Riemani mian manifolds. Tõhoku Math. J. (2) 32 (1980), no. 3, 411-417. (Author's introduction) 82g:53048 53C20

Takagi, Shunsuke Influence-function approach to the solution of the deflection of a floating elastic plate and nonuniqueness of the solutions. Transactions of the Twenty-Sixth Conference of Army Mathematicians (Hanover, N.H., 1980), pp. 199–227, ARO Rep. 81, 1, U. S. Army Res. Office, Research Triangle Park, N.C., 1981. (Author's summary) 82h:73036 73K10

Takaguchi, Makoto (with Chō, Muneo) On the joint Weyl spectrum. Sci. Rep. Hirosaki

Univ. 27 (1980), no. 2, 47-49. (F.-H. Vasilescu) 82f:47005 47A10
(with Chō, Muneo) Joint normaloid operator-family. Sci. Rep. Hirosaki Univ. 27

(1980), no. 2, 50-59. (A. T. Dash) 82j:47036 47B20 (47A10) (with Chō, Munco) Boundary points of joint numerical ranges. Pacific J. Math. 95 (1981), no. 1, 27-35. (B. L. Wadhwa) 82k:47011 47A12

(with Cho, Muneo) Boundary of Taylor's joint spectrum for two commuting

operators. Sci. Rep. Hirosaki Univ. 28 (1981), no. 1, 1-4. (Mihai Putinar) \$2m:47002

Takahara, Yasuhiko (with Nakano, Bumpei; Kijima, Kyoichi) A unified theory of decision principles. Internat. J. Systems Sci. 11 (1980), no. 11, 1295-1314. (J. H. Blau) 82k:90008

(with Nakano, Bumpei) A characterization of interactions.

7 (1981), no. 2, 109-122. (Authors' summary) 82j:93005
 93A15
 (with Nakano, Bumpei; Kijima, Kyoichi) A structure of rational decision principles.
 Internat. J. Gen. Systems 7 (1981), no. 3, 175-188. (Authors' summary) 82j:90003

Takahashi, Hajime (with Woodroofe, Michael) Asymptotic expansions in nonlinear renewal theory. Comm. Statist. A—Theory Methods 10 (1981), no. 21, 2113–2135. (D. Siegmund) 82m:62186 621.10

Adabashi, Harahisa (with Akimaru, Haruo) Asymptotic expansion for Erlang loss function and its derivative. IEEE Trans. Comm. 29 (1981), no. 9, 1257-1260. (Authors' summary)

Rag;33037 33A70 (94C10)

Takahashi, Katsutoshi (with Nakazi, Takahiko) Prediction n units of time ahead. Proc. Amer. Math. Soc. 80 (1980), no. 4, 658-659. (S. V. Hruščev) Rab:60041 60G25 (30D55)

On the converse of the Fuglede-Putnam theorem. Acta Sci. Math. (Szeged) 43 (1981), no. 1-2, 123-125. (C. R. Putnam) 82g:47018 47B20 (47B15)

ashi, Koichi See Takahasi, Koiti

Takahashi, Makoto Topological powers and reduced powers. Tokyo J. Math. 3 (1980), no. 1, 141-147. (S. R. Kogalovskii) 82c:03040 03C20 (03C40, 54B10)

cahashi, Masako On classification by latent trait levels. Rep. Statist. Appl. Res. Un.

 Japan. Sci. Engrs. 26 (1979), no. 2, 37-43. (Author's summary) 824:62163
 62P15

 sahashi, Michihiro
 On the bordism categories. I. Math. Sem. Notes Kobe Univ. 8 (1980), no. 3, 527-546. (Harvey Margolis) 821:55013
 55N99

Takahashi, Moto-o (with Homma, Tatsuo; Ochiai, Mitsuyuki) An algorithm for recognizing S³ in 3-manifolds with Heegaard splittings of genus two. Osaka J. Math. 17 (1980), no. 3, 625–648. (John Hempel) 82i:57013 57N12 (57M40)

Two-bridge knots have property P. Mem. Amer. Math. Soc. 29 (1981), no. 239, iii+104 pp. (Kazuaki Kobayashi) 82:57010 57N10 (57M25)

Takahashi, Rinya Stabilizing constants and asymptotic behaviors of the extreme statistic. J.

Japan Statist. Soc. 8 (1978), no. 2, 77-82. (Author's summary) 82 :62067 62G30

Remark on stabilizing constants of the extreme statistic. J. Japan Statist. Soc. 9 (1979), no. 2, 79-86. (W. Dziubdziela) 82c:62070 62G30 (60F05)

Takahashi, S. The functional central limit theorem for lacunary trigonometric series. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 1-2, 185-192. (Anthony G. Pakes)

82d:60061 60F17 (42A55)

Takahashi, Shin (with Suzuki, Katsuyoshi; Yamaguchi, Takeshi) Vibrations of Mindlin's

circular plates with thickness varied along radius. Bull. JSME 24 (1981), no. 187, 229-235. (Authors' summary) 824:73047 73K12

Takahashi, Tadayasu On the pseudoparabolic regularization of the generalized Korteweg-de Vries equation. Proc. Japan Acad. Ser. A Math. Sci. 55 (1979), no. 8, 290-292. (From the introduction) 82g:35114 35020 (58D25)

Takahashi, Toyofumi On automorphism groups of global fields. (Japanese) Sûgaku 32 (1980), no. 2, 159-160. (H. Yokoi) 82f:12029 12F05

Takahashi, Wataru (with Hirano, Norimichi) Existence theorems on unbounded sets in Banach spaces. Proc. Amer. Math. Soc. 80 (1980), no. 4, 647-650. (E. Lami Dozo)

A nonlinear ergodic theorem for an amenable semigroup of nonexpan in a Hilbert space. Proc. Amer. Math. Soc. 81 (1981), no. 2, 253-256. (Lynn R. Williams) 47H20 (47H09, 47H10)

(with Hirano, Norimichi) Recent topics in nonlinear functional analysis. On nonlinear ergodic theorems. (Japanese) Sùgaku 33 (1981), no. 1, 50-65. (Sehie Park) 82m:47037 47Hxx (47H05, 47H10, 47H20) 82m:47037

Takahashi, Yasushi (with Mathews, P. M.; Seetharaman, M.) On the degree of the mi equation of the matrices in first-order relativistic wave equations. J. Phys. A 13 (1980), no. 9, 2863-2872. (Authors' summary) 82g:81037 81D25 (22E43, 58D25)

(with Mathews, P. M.; Vijayalakshmi, B.; Seetharaman, M.) On the admissibility of repeated irreducible repres ations in barnacle-free unique-spin unique-mass relativistic wave equations. J. Phys. A 14 (1981), no. 5, 1193-1204. (N. D. Sengupta) 82g:81038 81D25 (22E70)

(with Aurilia, A.) Relativistic wave equations for antisymmetric tensor gauge fields Phys. Rev. D (3) 23 (1981), no. 8, 1752–1755. (Authors' summary) 82d:81061 81D25
 Takahashi, Yöichirö (with Oono, Yoshitsugu) Chaos, external noise and Fredholm theory.
 Progr. Theoret. Phys. 63 (1980), no. 5, 1804–1807. (Richard C. Churchill) 82g:58073 81D25

58F20 (58-04, 58F11)

A formula for topological entropy of one-dimensional dynamics. Sci. Papers College Gen. Ed. Univ. Tokyo 30 (1980), no. 1, 11-22. (Leo Jonker) 82i:58057 58F20 (28D20,

(with Watanabe, Shinzo) The probability functionals (Onsager-Machlup functions) of diffusion processes. Stochastic integrals (Proc. Sympos., Univ. Durham, Durham, 1980), pp. 433-463, Lecture Notes in Math., 851, Springer, Berlin, 1981. (M. Fukushima) 82i:58075 58G32 (60J60, 82A35)
Takahashi, Yoshitaka (with Taniguti, Masataka; Abe, Hiroshi) On the asymptotic behavior

of asymptotically nonexpansive semigroups in Banach spaces. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 3, 171–175. (Simeon Reich) 821:47080 47H20 (47H06)

Takahashi, Yukio Asymptotic exponentiality of the tail of the waiting-time distribution in a PH/PH/c queue. Adv. in Appl. Probab. 13 (1981), no. 3, 619-630. (Asha Seth Kapadia) 60K25

Takahasi, Koiti On the stability of a classical field in the SU(2) Yang-Mills theory. Pro Theoret. Phys. 64 (1980), no. 3, 1038-1044. (José M. Cerveró) 82b:81074

Takahasi, Sin Ei An extension of Müntz-Szasz theorem and Hwang-Pan-Wu theorem. Soochow J. Math. 6 (1980), 129-136. (J. A. Siddiqi) 82m:41008 41A10

nta, Hiroshi Almost sure convergence of density estimators for weakly dependent nary processes. Bull. Tokyo Gakugei Univ. (4) 32 (1980), 11-32. (T. J. Sweeting) 62G05 (62F15)

- Math. J. 28 (1980), no. 1-2, 119-124. (Sándor Csörgő) 82k:60061 60F17 (60F05)
- L, bound for asymptotic normality of weakly dependent sur nands using Stein's t. Ann. Probab. 9 (1981), no. 4, 676-683. (T. Kawata) 82k:60081
- sai, Hiroshi On a problem of Sakai in unbounded derivations. J. Funct. Anal. 43 (1981), no. 2, 202–208. (C. J. K. Batty) 82k:46097 46L55
- Takama, Northiro (with Loucks, Daniel P.) Multivel optimization for multi-objective problems. Appl. Math. Modelling 5 (1981), no. 3, 173–178. (Authors' summary) 824-90109 90C31
- tsu, Shunro Reliability analysis for a 2-out-of-m system of dissimilar units. Essays in probability and statistics, pp. 66 summary) 82e:62138 62N05 nd statistics, pp. 667-674, Shinko Tsusho, Tokyo, 1976. (Author's
- Takami, Toshihiro (with Sudou, Kouzou; Tomita, Yukio; Oushima, Shuzou) Pulsating
- Cassili Tosshihiro (with Sudou, Kouzou; Tomita, Yukio; Ousnima, Snizou) Fuisanng
 Flow of liquid metals in a circular pipe under a transverse magnetic field. Bull. JSME 24 (1981), no. 187, 90–98. (Authors' summary) 82d-76091
 Cassizawa, K. (with Nishizzki, Takao; Saito, Nobuji) An O(p³) algorithm for finding Hamiltonian cycles in certain digraphs. J. Inform. Process. 3 (1980/81), no. 2, 68–72.
 Catalogo', Summary) 82d-82d-86. 68E10 (05C9) 05C45 (82C) 68E10 (05C20, 05C45, 68C25)
 - (with Nishizeki, Takao; Saito, Nobuji) Combinatorial problems on series-parallel graphs. Discrete Appl. Math. 3 (1981), no. 1, 75-76. (Authors' summary) 82e:05085
- ii, Itsuo (with Inoue, Katsushi; Taniguchi, Hiroshi) Two-dimensional automata with rotated inputs. Inform. Sci. 21 (1980), no. 3, 221-240. (Authors' summary) 68D35
 - (with Inoue, Katsushi) Erratum: "Cyclic closure properties of automata on a two-dimensional tape" [Inform. Sci. 15 (1978), no. 3, 229-242; MR 80e:68144]. Inform. Sci. 21 (1980), no. 3, 261. (Editors) 82e:68051 68D20
 - (with Inoue, Katushi) Erratum: "A note on deterministic three-way tape-bounded two-dimensional Turing machines" [Inform. Sci. 20 (1980), no. 1, 41-55; MR 80i:68039]. Inform. Sci. 21 (1980), no. 3, 261-262. (Editors) 822:68023 68240 (68D05) at a constant for a functional formal state of the
- 82A42 (82A67)
 - Phase transition of random Ising model. Comparison of glass like phase and random ordered phase. *Progr. Theoret. Phys. Suppl. No.* 69 (1980), 174–184 (1981). (Author's
- summary) 82:82060 82A57 (82A25, 82A42)
 Takano, Hiroshi (with Suzuki, Masuo) Migdal renormalization group approach to quantum spin systems. Phys. Lett. A 69 (1978/79), no. 6, 426–428. (Authors' summary) 82:82030 82A25 (82A67)
- Takano, Katsuo One-parameter semigroups with infinitesimal generators of fractional wers of the Laplacian on weighted LP-spaces. Bull. Fac. Sci. Ibaraki Univ. Ser. A No. 13 (1981), 45-55. (Alberto Guzman) 82g:47031 47D05 (46E35)
- Takano, Kyoichi Monodromy group of the system for Appell's F₄. Funkcial. Ekvac. 23 (1980), no. 1, 97–122. (H. M. Srivastava) 82a:33008 33A35 (14D05, 32C40) (with Sasaki, Takeshi) On Appell's systems of hypergeometric differential equations
 - Recent developments in several complex variables (Proc. Conf., Princeton Univ., Princeton, N. J., 1979), pp. 345-356, Ann. of Math. Studies, 100, Princeton Univ. Press, Princeton, N.J., 1981. (D. A. Lutz) 82i:35030 35C15 (14D05, 32C40, 35C05)
- Takano, Michio On Gödel's primitive recursive functionals. (Japanese) Sügaku 29 (1977), no. 4, 289-298 (1978). (Editors) 82j:03074 03F10 (03D65)
- no. 4, 289–298 (1978). (Editors) 82j-03074 U3F10 (U3DOS)

 Takano, Mitio Valid sequents in many-valued logics. Ann. Japan Assoc. Philos. Sci. 5, no. 5, 245–260 (1980). (Audrey McKinney) 82c-03030 U3B50

 Takano, Takehiko (with Ikeda, Kazuyosi) Statistical mechanics of one-dimensional systems.

 I. Phase transition of a van der Waals gas. Progr. Theoret. Phys. 65 (1981), no. 5, 1542–1564. (H. N. V. Temperley) 82h-82005 82A05
- Takaoka, Tadao (with Moffat, Alistair) An $O(n^2 \log n \log \log n)$ expected time algorithm for the all shortest distance problem. Mathematical foundations of computer science, 1980 (Proc. Ninth Sympos., Rydzyna, 1980), pp. 643-655, Lecture Notes in Comput. Sci., 88,
- Springer, Berlin, 1980. (Authors' summary) 82a:69087 68C25 (68E10)

 Takase, Masahito Sur les domaines intérieurement ramifiés (C)-pseudoconvexes. Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 1, 45-52. (Paolo de Bartolomeis) 82f:32031 32F15 (32D05)
- Sur les G-enveloppes des espaces analytiques (K)-complets. Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 1, 53-63. (Paolo de Bartolomeis) 82m:32013 32D05
- ency of exceptional growth of the N-parameter Wiener process. Osaka J. Math. 18 (1981), no. 1, 225-247. (S. J. Taylor) 82i:60156 60J65 (60G17)
- asu, Satoru (with Kawabata, Sukemitsu) A logical basis for programming methodology. nut. Sci. 16 (1981), no. 1, 43-60. (Authors' summary) 82i:68009
- Takasugi, E. (with Ne'eman, Yuval; Thierry-Mieg, Jean) Soft-group-manifold Beechi-Rouet-Stora transformations and unitarity for gravity, supergravity, and Phys. Rev. D (3) 22 (1980), no. 10, 2371-2379. (W. Cox) 82b:83071
- 83E99 (22E70, 53C05, 81G20)
 Takata, Masaru (with Fukata, Satoru; Mohri, Akira) Determination of the feedback gains of sampled-data linear systems with integral control using time-weighted quadratic performance indices. *Internat. J. Control* 34 (1981), no. 4, 765-779. (Authors' summary) 82m:93049 93C05
- Takatsu, Shinzo Decomposition of satisficing decision problems. Inform. Sci. 22 (1980),
- no. 2, 139-148. (V. D. Dimitrov) 82a:90010 90A05

 Takatsuka, Kazuo (with McKoy, Vincent) Schwinger variational principle for multichannel scattering. Phys. Rev. Lett. 45 (1980), no. 17, 1396-1399. (Authors' summary) 82d:81129
- Takayama, Hajime (with Maki, Kazumi) Breathers in the sine-Gordon system at finite temperatures. Phys. Rev. B (3) 22 (1980), no. 11, 5302-5307. (V. Z. Enol'skii) 82b:82075 82A67 (35O20, 81E99)
- Takayama, T. A differential game theoretic approach to economics of renewable resources. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 420-423, IEEE, New York, 1979. (See **82e:94002**) 90A14 (90A16, 92A15)
- Takebe, Katahiro See Murata, Tamotsu, 82e:01043
 Takeba, Minoru (with Yokoyama, Kan-ichi; Monda, Minoru) Gauge covariance in

- nonabelian gauge theories. Progr. Theoret. Phys. 64 (1980), no. 4, 1412-1424. (Tuan W. Chen) 82k81096 81E10 (81E15)
- Chen) 82h:81096 81E10 (81E15) tegoshi, Kenshō Weak and strong pseudoconvexities. Sci. Rep. Kanazawa Univ. 23 (1978), no. 1, 7–15. (Editors) 82i:32030 32E05 (32E10, 32L15)

 A generalization of vanishing theorems for weakly 1-complete manifolds. Publ. Res. Inst. Math. Sci. 17 (1981), no. 1, 311–330. (Gary A. Harris) 82i:32046 32L20 (32C10) techana, Hiroaki (with Enomoto, Masatoshi; Watatani, Yasuo) C*-algebras on free semigroups as extensions of Cuntz algebras. Math. Japon. 24 (1979/80), no. 5, 527–531. (William Paschke) 82b:46070 46L05
- (with Choda, Hisashi) Correspondences between subgroups and subalgebras in ed products. Math. Japon. 26 (1981), no. 2, 161-170. (Elliot C. Gootman) 82k:46096 461.55
- na, Yasuhiko A preradical which satisfies the property that every weakly divisible module is divisible. Tsukuba J. Math. 5 (1981), no. 1, 153-163. (John A. Beachy) 82m:16025 16A63
- Takemoto, Hideo Approximate innerness of positive linear maps of factors of type II. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 9, 417–421. (Man-Duen Choi) 82e:46085
- Takemoto, Yoshio (with Yamaguchi, Satoru) Affine structures of maximal solvable subalgebras of noncompact semisimple Lie algebras. Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 1, 39-44. (L. Corwin) 82m:17003 17B30
- Takenaka, Takashi (with Kakeya, Masao; Fukumitsu, Otozo) Asymptotic representation of the boundary diffraction wave for a Gaussian beam incident on a circular aperture. J. Opt. Soc. Amer. 70 (1980), no. 11, 1323-1328. (E. Lüneburg) 82d:78020 (58G25)
- Takenawa, T. (with Sebald, A. V.) Optimal state estimation in the presence of deterministic perturbations of uncertain structure occurring at unknown times. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 488-493, IEEE, New York, 1979. (Authors' summary) 82a:93057
- no, Hyôitirô (with Kitamura, Shin-ichi) On plane symmetric space-times of Kerr-Schild type. Math. Japon. 26 (1981), no. 2, 233-243. (K. L. Duggal) 82j:83013
 - 83C20 (53C50, 83C40) On the theory of plane symmetric space-times. IV. Tensor (N.S.) 35 (1981), no. 1, 1-7. (Shin-ichi Kitamura) 82k:83022a 83C40 (53B30)
 - On the theory of plane symmetric space-times. V. Tensor (N.S.) 35 (1981), no. 1, 51-57. (Shin-ichi Kitamura) 82k:83022b 83C40 (53B30)
- Takeno, Shozo (with Homma, Shigeo) Classical spin systems, nonlinear evolution equations and nonlinear excitations. Progr. Theoret. Phys. 64 (1980), no. 4, 1193-1211. (H. N. V. Temperley) 82h:82091 82A67 (35Q20, 58F07, 82A05)
- (with Homma, Shigeo) Stationary solutions to nonlinear partial differential tions for the classical continuous isotropic Heisenberg model. Progr. Theoret. Phys. 65 (1981), no. 6, 1844-1857. (Gheorghe Nenciu) 82k:82012 82A05 (35Q20, 81E99)
- Takens, Floris Characterization of a differentiable structure by its group of diffeomorphisms. Bol. Soc. Brasil. Mat. 10 (1979), no. 1, 17-25. (Alexandre M. Rodrigues) 82e:58027 58D05 (58H05)
 - Motion under the influence of a strong constraining force. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 425–445, Lecture Notes in Math., 819, Springer, Berlin, 1980. (Frans Cantrijn) 82g:3406 34C35 (58F25, 70H35)
- Takeo. Fukiko Reduction of a positive operator in a separable simplex space. J. Fac. Sci. Univ. Tokyo Sect. IA Math. 27 (1980), no. 3, 509-520. (A. V. Buhvalov) 82c:47008 47A35 (47B55)
- Takesaki, Masamichi (with Connes, Alain) The flow of weights on factors of type III. Tôhoku Math. J. (2) 29 (1977), no. 4, 473-575. (M. Walter (Zbl 408:46047)) 82a: 46L10 (46L35, 46L55)
- (with Connes, Alain) Errata: "The flow of weights on factors of type III". Tohoku Math. J. (2) 30 (1978), no. 4, 653-655. (Editors) 82a:46069b 46L10 (46L35, 46L55)
- Fourier analysis of compact automorphism groups. (French summary) An application of Tannaka duality theorem. Algèbres d'opérateurs et leurs applications en physique mathématique (Proc. Colloq., Marseille, 1977), pp. 361-372, Colloq CNRS, 274, CNRS, Paris, 1979. (A. T.-M. Lau) **82a:46076** 46L40 (22D: ues Internat. 46L40 (22D30)
- mutative group duality and the Kubo-Martin-Schwinger condition. Quantum fields—algebras, processes (Proc. Sympos., Univ. Bielefeld, Bielefeld, 1978), pp. 197-205, Springer, Vienna, 1980. (Gerald A. Goldin) 82h:82013 82A15 (22D35, 46L30)
- Takeuchi, Akira Nonimmersiblity of P" S into C". Math. Japon. 25 (1980), no. 6, 697-701. (S. M. Webster) 82b:32041 32H99 (53C40)
- Takeuchi, Hiroshi On the class number of the maximal real subfield of a cyclotomic field. Canad. J. Math. 33 (1981), no. 1, 55-58. (T. Metsänkylä) 82f:12011
- Takeuchi, Kazuhiro Comparison theorems for solutions of stochastic differential equations. Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 1, 174-184. (R. Š. Lipcer) 82g:60085 60H10
- Takeuchi, Kei (with Akahira, Masafumi) On the second order asymptotic efficiency of unbiased confidence intervals. Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs. 26 (1979), no. 3, 29-40. (Mir Maswood Ali) 82e:62050 62F11
 - (with Akahira, Masafumi) A note on prediction sufficiency (adequacy) and sufficiency. Austral. J. Statist. 22 (1980), no. 3, 332-335. (M. Skibinsky) 82m:62005
- Takeuchi, Masaru (with Sakane, Yusuke) Einstein hypersurfaces of Kählerian C-spaces. Nagoya Math. J. 78 (1980), 153-175. (Jarolim Bureš) 82f:53077 53C55
- (with Sakane, Yusuke) On defining equations of symmetric submanifolds in complex J. Math. Soc. Japan 33 (1981), no. 2, 267-279. (Takao Fujita) ective spaces. 32M10 (14M17, 53C30)
- Takeuchi, Masashi (with Kishi, Genya) On the number of peripheral trees of a graph of complementary-tree structure. Fourteenth Asilomar Conference on Circuits, Systems as Computers (Pacific Grove, Calif., 1980), pp. 178-188, IEEE, New York, 1981. (See 05C30 (05C05)
- Takeuchi, Mitsuhiro Relative Hopf modules—equivalences and freeness criteria. J. Algebra 60 (1979), no. 2, 452-471. (R. G. Larson) 82m:16006 16A24
 - $\text{Ext}_{\text{ad}}(\text{Sp }R,\mu^A) \simeq \hat{\text{Br}}(A/k)$. J. Algebra 67 (1980), no. 2, 436-475. (E. J. Taft)

- Takeuchi, Shigeru Equivariant complexifications of Cauchy-Riemann actions. Sci. Rep. Fac. Ed. Gifu Univ. Natur. Sci. 6 (1980), no. 4, 577-582 (1981). (Gregory Fredricks) 821:32047 32M05 (32C25)
- Takeuchi, Yasuhiro (with Adachi, Norihiko) The existence of globally stable equilibria of ecosystems of the generalized Volterra type. J. Math. Biol. 10 (1980), no. 4, 401-415. (J. M. Cushing) 82e:92048 92A17 (34D05, 90C33)

(with Adachi, Norihiko) Existence of stable equilibrium point for dynamical systems of Volterra type. J. Math. Anal. Appl. 79 (1981), no. 1, 141–162. (A. F. Izè) 82c:34063 34D20 (903.0, 92A15)

Takeuti, Gaisi Logic and set theory. Modern logic—a survey, pp. 167-171, Synthese Library, 149, Reidel, Dordrecht, 1981. (See 82f:05002) 03A05 (03E40, 03G12) (with Yasugi, Mariko) An accessibility proof of ordinal diagrams. J. Math. Soc. Japan 33 (1981), no. 1, 1-21. (Jane E. Kister) 82d:03092 03F15

Takhirov, A. See Tahirov, A. Takhtajan, L. A. See Tahtadžjan, L. A.

Takigawa, Nobumasa Weierstrass points and the vector of Riemann constants. (Japanese summary) Acta Human. Sci. Univ. Sangio Kyotien. Natur. Sci. Ser. No. 8 (1978), 50-78. (C. Maclachlan) 82a:14019 14K25 (14F07, 30F10)

Weierstrass points on compact Riemann surfaces with nontrivial automorphisms. J Math. Soc. Japan 33 (1981), no. 2, 235-246. (R. F. Lax) 82f:14018 14F07 (14H05)

Takiyama, Ryuzo A relationship between the cascaded network and the two-layer network of threshold logic units. Inform. and Control 47 (1980), no. 2, 113–121. (Author's summary) 82d:94082 94C10

A two-level committee machine: a representation and a learning procedure for general piecewise linear discriminant functions. Pattern Recognition 13 (1981), no. 3, 269-274. (Author's summary) 82g:58083 68:G05 (68:G10, 90A05)
Takizawa, Kiyoshi Some E*-separating extension of regular semigroups. Proceedings of the

- Takizawa, Kiyoshi Some E*-separating extension of regular semigroups. Proceedings of the 4th Symposium on Semigroups (Yamaguchi Univ., Yamaguchi, 1980), pp. 86–96, Yamaguchi Univ., Yamaguchi, 1980. (Author's introduction) 82;20119 20M10
- Taksar, M. I. Regenerative sets on real line. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 437-474, Lecture Notes in Math., 784, Springer, Berlin, 1980.
 (J. Hüsler) 82d:60141 60J30 (60D05, 60K05)

(J. Hüsler) 82d:60141 60130 (60D05, 60K05) Subprocesses of stationary Markov processes. Z. Wahrsch. Verw. Gebiete 55 (1981), no. 3, 275-296. (M. Iosifescu) 82d:60136 60125 (60G10)

- Taktarov, N. G. (with Martynov, S. I.) Parametric instability and stabilization of a jet of a magnetizable liquid. Magnit. Gidrodinamika No. 2 (1980), 27–30 (Russian); translated as Magnetohydrodynamics 16 (1980), no. 2, 131–133. (Magdi M. Shoucri) 82c:76111
- Taku, V. D. Centroaffine invariants of a three-dimensional system with quadratic nonlinearities. (Russian) Algebraic invariants of dynamic systems. *Mat. Issled. No.* 55 (1980), 88-106, 150. (V. G. Kolomicc) 82b:34048 34C20 (15A72)

Comitants of a three-dimensional differential system with quadratic nonlinearities.

(Russian) Algebraic invariants of dynamical systems. *Mai. Issled. No.* 55 (1980),

(107–117, 150, (N. A. Sidoroy) **82:3-4006** 34A25 (15A72, 53A55)

pen-Tal, Aharon See Ben-Tal, Aharon

Tal, Yoram (with Bader, Richard F. W.; Nguyen-Dang, T. Tung) Quantum topology of molecular charge distributions. II. Molecular structure and its change. J. Chem. Phys. 70 (1979), no. 9, 4316-4329. (From the summary) 82h:81149b 81G55 (58C28, 92A40) (with Biegler-König, Friedrich W.; Nguyen-Dang, T. Tung; Bader, Richard F. W.; Duke, A. J.) Calculation of the average properties of atoms in molecules. J. Phys. B 14 (1981), no. 16, 2739-2751. (Authors' summary) 82:81166 81G55

Talabani, M. M. Semiradial Banach algebras (Arabic summary) *Libyan J. Sci.* 8 (1978), no. 9998, 71–74. (Author's summary) **82k:46075** 46H20 (46K05)

- Talaga, Paul C. The Hukuhara-Kneser property for parabolic systems with nonlinear boundary conditions. J. Math. Anal. Appl. 79 (1981), no. 2, 461–488. (K. Schmitt) 82:35068 35K60
- Talagrand, Michel Sur la %-analyticité de certains espaces d'opérateurs. (English summary)

 Israel J. Math. 32 (1979), no. 2-3, 124-130. (J. Diestel) 82a:47042 47D15 (47A62)

 (with Goldman, André) Propriétés de Radon-Nikodým pour les cônes positifs de mesures. Math. Scand. 44 (1979), no. 2, 345-356. (J. B. Cooper (Zbl 453:28009))

 82k:28016 28C15 (46E99)

82k:28016 28C15 (46E99)

Non-existence de certaines sections measurables et contre-exemples en théorie du rélèvement. Measure theory, Oberwolfach 1979 (Proc. Conf., Oberwolfach, 1979), pp. 166-175. Lecture Notes in Math. 704. Springer Barlin, 1980 (V. Logar), \$70-28016.

pp. 166–175, Lecture Notes in Math., 794, Springer, Berlin, 1980. (V. Losert) 82g;28010 28A51 (28B20, 46G15) (with Fremlin, D. H.) A Gaussian measure on I[∞]. Ann. Probab. 8 (1980), no.

1192–1193. (Evarist Giné) **82i:60011** 60B11 (28C20, 60G15)
Sur la mesure de la projection d'un compact et certaines familles de cercles. (English summary) *Bull. Sci. Math.* (2) **104** (1980), *no.* 3, 225–231. (B. Rodriguez-Salinas) **82b:28004** 28A05 (28A35)

82b:28004 28A05 (28A35) (with Friedman, Harvey) Un ensemble singulier. (English summary) Bull. Sci. Math. (2) 104 (1980), no. 4, 337–340. (Ryszard Frankiewicz) 82d:28002 28A05

(03E15, 03E50, 04A15)
Sur les mesures vectorielles définies par une application Pettis-intégrable. (English summary) Bull. Soc. Math. France 108 (1980), no. 4, 475–483. (C. W. Swartz) 82f:46051 46G10 (28B05)

Hyperplans universellement mesurables. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 8, A501–A502. (Andreas Blass) 82x-46023 46B20 (03E50) Moyennes invariantes s'annulant sur des idéaux. Compositio Math. 42 (1980/81), no. 2, 213–216. (Joseph Max Rosenblatt) 82x-43003 43A07

Separabilité vague dans l'espace des mesures sur un compact. (English summary) Israel J. Math. 37 (1980), no. 1-2, 171-180. (Richard Haydon) 82g:46062 46E27 Un nouveau C(K) qui possède la propriété de Grothendieck. (English summary) Israel J. Math. 37 (1980), no. 1-2, 181-191. (Richard Haydon) 82g:46029 46B10

Compacts de fonctions mesurables et filtres non mesurables. *Studia Math.* **67** (1980), no.], 13–43. (J. D. Knowles) **82e:28009** 28A20 (46E27, 54C50)

no. 1, 13–43. (J. D. Knowles) 82e:28009 28A20 (46E27, 54C50) (with Godefroy, Gilles) Classes d'espaces de Banach à prédual unique. (English summary) C. R. Acad. Sci. Paris Sér. 1 Math. 292 (1981), no. 5, 323–325. (Authors' summary) 82b:46020 46B10)

- Dual Banach lattices and Banach lattices with the Radon-Nikodým property. Israel J. Math. 38 (1981), no. 1-2, 46-50. (Constantin Niculescu) 82::46028 46B30
- Non existence de relèvement pour certaines mesures finiement additives et retractés de βN. Math. Ann. 256 (1981), no. 1, 63-66. (V. K. Zaharov) 82i:28010 28A51 (04A30)

(with Bourgain, Jean) Dans un espace de Banach reticulé solide, la propriété de Radon-Nikodyn et celle de Krein-Mil'man sont équivalentes. Proc. Amer. Math. Soc. 81 (1981), no. 1, 93-96. (P. D. Morris) 82d-46032 46822 (46830)

- (1981), no. 1, 93-96. (P. D. Morris) 82d:46032 46B22 (46B30)

 [Talagrand, Olivier On the mathematics of data assimilation. (Russian summary) Tellus 33 (1981), no. 4, 321-339. (Author's summary) 82j:86001 86A10 (58F10)
- Talahadze, M. V. Estimates of linear regression coefficients with a finite number of parameters. (Russian). Mathematical methods in economic research (Russian), pp. 130-140, "Mecniereba", Tbilisi, 1979. (Valery Fedorov) 821:62128 62J05 (62M10, 62P20)

Spectral analysis of an estimate of the unobservable component in a partially observable process. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk

- Gruzin. SSR 100 (1980), no. 3, 529-532. (J. Bulatović) 82e:62158 62M20 (60G35)
 Talaljan, F. A. Invariant measures on homogeneous spaces. (Russian. Armenian summary)
 Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 1, 16-20. (P. Wintgen) 82a:53068
 53C65 (52A40)
- Talalov, S. V. (with Sirokov, Ju. M.) Interaction of a charged particle with an external electromagnetic field in the presence of a strongly singular potential. (Russian. English summary) Teoret. Mat. Fiz. 46 (1981), no. 3, 316-320. (Authors' summary) 82h:81025 81C05 (78A35)
- 81CU5 (18A35)
 Talamo, Rodolfo (with Alò, Richard A.) Realcomplete and k-complete proximity. Portugal.
 Math. 37 (1978), no. 3-4, 223-226 (1981). (Olav Njåstad) 82j:54043
 54D60 (54E05)
 On realcompletions of Tychonoff spaces. Topology, Vol. II (Proc. Fourth Colloq.
 Budapest, 1978), pp. 1153-1159, Colloq. Math. Soc. János Bolyai, 23, North-Holland,
 Amsterdam, 1980. (J. van der Slot) 82e:54031
 54D60 (54D30)

(with Alò, Richard A.) Compactifications, realcompletions and spectral structures.

Ann. Mat. Pura Appl. (4) 124 (1980), 127-137. (J. van der Slot) 824:54028 54D60

(54C45, 54D30)

Talapin, V. S. Vector fields in two-dimensional Riemannian manifolds over algebras. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 12 (1980), 85–96. (Adrian C. Albu) 82h:53061 53C21 (53C15)

82h:53061 53C21 (53C15)
Talapov, V. V. Solvable Lie algebras with one defining relation. (Russian) Sibirsk. Mat. Ž. 22 (1981), no. 4, 176–181, 232. (B. Hartley) 82h:17008 17B30 (17B65)

Talati, Kirit (with Stein, William E.) Convex fuzzy random variables. Fuzzy Sets and Systems 6 (1981), no. 3, 271–283. (Authors' summary) 82k:60041 60E99 (03E72, 60E05)

- Talavage, Joseph (with Musselman, K.) A tradeoff cut approach to multiple objective optimization. Oper. Res. 28 (1980), no. 6, 1424-1435. (Authors' summary) 82b:90112 90C31
- Talbot, A. (with Filanovsky, I. M.; Stromsmoe, K. A.; Saraga, W.) Property of analytic functions related to band-pass transformation. Proc. IEE-G 127 (1980), no. 4, 176. (A. A. Pervozvanskii) 824:94055
- Talbot, D. R. S. (with Willis, J. R.) The effective sink strength of a random array of voids in irradiated material. Proc. Roy. Soc. London Ser. A 370 (1980), no. 1742, 351-374. (A. J. M. Spencer) 824:82070 82A55 (73S99)
- Talbot, Walter R. Fundamental regions in S₆ for the simple quaternary G₆₀. Black mathematicians and their works, pp. 225-239, Dorrance, Ardmore, Pa., 1980. (Author's introduction) 82b:20007 20B25 (20F32)
- Taleng, F. (with Bochi, S.; Brossier, G.; Celeux, Gilles; Charles, Christian; Chifflet, R.; Darcos, J.; Diday, E.; Diebolt, J.; Fevre, P.; Govaert, G.; Hanani, O.; Jacquet, D.; Lechevallier, Yves; Lemaire, Jacques; Lemoine, Y.; Molliere, J. L.; Morisset, G.; Ok-Sakun, Y.; Rousseau, P.; Sankoff, D.; Schroeder, A.; Sidi, J.) & Optimisation en classification automatique. Tome 1, 2. (French) [Optimization in automatic classification. Vol. 1, 2] Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. viii +896 pp. ISBN 2-7261-0219-0 (A. Aiello) 82k:62116 62H30 (92A05)
- Talenti, Giorgio Some estimates of solutions to Monge-Ampère type equations in dimension two. Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4) 8 (1981), no. 2, 183–230. (V. T. Fomenko) 821-53077 53C45 (35160)

(with de Mottoni, Piero) Stabilization and error bounds for the inverse Laplace transform. Numer. Funct. Anal. Optim. 3 (1981), no. 3, 265-283. (Authors' summary) 82h:65093 65R10 (44A10)

- Taliaferro, Steven D. Asymptotic behavior of solutions of y"=φ(t)f(y). SIAM J. Math. Anal. 12 (1981), no. 6, 853–865. (J. S. W. Wong) 82m:34034 34C11
- Anal. 12 (1981), no. 0, 833–805. (J. S. W. Wong) 82m3-94034
 Talis, A. L. (with Cuprunov, E. V.; Tarhova, T. N.; Belov, N. V.) Special positions in Fedorov groups. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1131–1133. (From the text) 82g:20074
 20H15 (82A60)
- Tal'Janskaja, O. I. (with Kożevnikova, G. P.; Kostyrko, V. S.; Melen', L. M.) A method of computer modeling of the analysis of algorithm complexity (Russian) Questions of the computational complexity of algorithms (Russian), pp. 3-13, 46, Preprint 79, 14, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. (Authors' summary) 82e:68040 68C25 (68B10)
- Talkner, P. (with Grabert, Hermann; Hanggi, Peter) Non-Markovian equilibrium dynamics and fluctuation-dissipation theorem. Phys. Lett. A 66 (1978), no. 4, 255-257. (Panal E. Ecv.) 32-2346.
 - (Ronald F. Fox) 82e:82049 82A35 (with Bez, W.) A new variational method to calculate escape rates in bistable systems. Phys. Lett. A 82 (1981), no. 7, 313-316. (Authors' summary) 82d:82092 82A70 (47F05)
 - Gauss Markov process of a quantum oscillator. Z. Phys. B 41 (1981), no. 4, 365-374. (Francesco Guerra) 82k:82016 82A15 (46L60)
- Tall, David The calculus of Leibniz—an alternative modern approach. Math. Intelligencer 2 (1979/80), no. 1, 54–55. (Peter W. Day) 82l:26022 26E35 (03H05)

The notion of infinite measuring number and its relevance in the intuition of infinity. Ed. Stud. Math. 11 (1980), no. 3, 271–284. (Author's summary) 82e:03011 03A0: 00A25. 03H20)

Tall, Franklin D. Witnessing normality. General topology and modern analysis (Proc. Conf.,

- Univ. California, Riverside, Calif., 1980), pp. 309-315, Academic Press, New York, 1981. (Editors) 82m.54024 54E30 (54D15, 54E35)
- Mec, P. See Le Tallec, P.
- Talkai, Ghuseppe In memory of Beniamino Segre. (Italian) Rend. Mat. (7) 1 (1981), no. 1, 1-29 (1 plate). (Editors) 82f-01149 01A70
- afati, Maria The k-sets of type (m,n) of an affine space $A_{r,q}$. (Italian. English ary) Rend. Mat. (7) 1 (1981), no. 1, 63–80. (Marilena Barnabei) 82h:51020 51E20 (05B25)
- Tallis, Péter On Nashlis, Péter On Nash-equilibrium trajectories of multivalued differential equations. Ann. Unio. Sci. Budapest. Eōtrōs Sect. Math. 22/23 (1979/80), 235-242. (J. Jarnik) 82g:34017 34A60 (90D25)
 - A relaxation problem for multivalued differential equations. Selected papers on thematics, pp. 45-50, DM 80, 1, Karl Marx Univ. Econom., Budapest, 1980. (O. Hájek) 90D25
- Tallur, B. (with Lerman, I. C.) Classification des éléments constitutifs d'une juxtaposition ngence. Rev. Statist. Appl. 28 (1980), no. 3, 5-28. (Erling Sverdrup) 24:62098 62H17 an, A. J. J. *Variable dimen
- man, A. J. J.

 **Wariable dimension fixed point algorithms and triangulations. With the collaboration of G. van der Laan. Mathematical Centre Tracts, 128. Mathematisch Centrum, Amsterdam, 1980. iv + 172 pp. (Eugene Allgower) 82m:90149a 90033 (55M20, 65H10)
 - (with van der Laan, Gerard) Convergence and properties of recent variable
 - dimension algorithms. Numerical solution of highly nonlinear problems (Sympos. Fixed Point Algorithms and Complementarity Problems, Unio. Southampton, Southampton, 1979), pp. 3-36, North-Holland, Amsterdam, 1980. (Authors' summary) 82e:65057 65H05 (55-04, 55M99)
 - (with van der Laan, Gerard) A class of simplicial restart fixed point algorithms hout an extra dimension. Math. Programming 20 (1981), no. 1, 33-48. (Kurt Georg) 90C30 (55M20, 65H10)
 - See also van der Laan, Gerard, 82mc90149b and Kolima, Masakazu, (See
- ni Sur les éléments de S∩[1,2]. Séminaire Delange-Pisot-Poitou, 20 e année: 1978/1979. Théorie des nombres, Fasc. ((French), Exp. No. 3, 6 pp., Secrétariat Math., Paris, 1980. (D. Boyd) 82a:12001 12A15
- akdar, B. Interpolating amplitude equations from an embeddin A 80 (1980), no. 5-6, 365-366. (Author's summary) 82d:81147 edding techn 81F99
- (with Sen, M.; Sen, D.) Quantum tachyons in Schwarzschild space-time. J. Math. s. 22 (1981), no. 2, 377–379. (B. K. Datta) 82:83038 83C47 (65L15, 83F05) Phys. 22 (1981), no. 2, 377-379. (B. K. Datta) 82i:83038
- Talukder, M. A. H. General block designs with a heteroscedastic model. Sankhyā Ser. B 40 (1978/79), no. 3-4, 217-226. (B. C. Gupta) 82m:62179 62K10
- Analysis of row-and-column designs with a heteroscedastic model. Sankhvä Ser. B 42 (1980), no. 1-2, 70-80. (Author's summary) 82k-62139 62105

 Talybov, M. A. (with Calenko, M. Š.) Classification of ordered categories with involution,
- generated by functional morphisms. (Russian) Special questions of algebra and topology (Russian), pp. 66-90, "Elm", Baku, 1980. (Václav Koubek) 82d:18007 18B99 (18A32)
- Talyšev, A. A. The method of differential constraints and invariant solutions of strictly hyperbolic systems with two independent variables. (Russian) Čisl. Metody Meh. Splošn. Sredy 11 (1980), no. 6 Mat. Modelirovanie, 130–134. (J. Chrastina) 82m:58059 58H15 (35A30, 58A15)
- bùi thể Tâm See Bùi Thế Tâm
- Tam, K. C. (with Perez-Mendez, V.) Tomographical imaging with limited-angle input. J. Opt. Soc. Amer. 71 (1981), no. 5, 582-592. (Brian DeFacio) 82i:78017 78A35
- Tam, K. Kuen Initial data and criticality for a problem in combustion theory. J. Math. Anal. Appl. 77 (1980), no. 2, 626-634. (V. L. Roytburd) 82k:80005 80A25 (35K55) (with Kiang, M. T.) The response to a hot spot in a combustion problem. J. Austral. Math. Soc. Ser. B 23 (1981/82), no. 1, 95-102. (Authors' summary) 82h:80006
- naki, Mitsushi Optimal selection with two choices-full inform 25 (1980), no. 4, 359-368. (G. Duru) 82h:93035 93E05 (62L05, 90C40) (with Sakaguchi, Minoru) Optimal stopping problems associated with a nhomogeneous Markov process. Math. Jap m. 25 (1980), no. 6, 681-696. (P. Neumann) 82f:60094 60G40 (60J25, 62L15)
- naki, Shirou (with Ohmatsu, Shigeru; Kikuchi, Akira; Soeda, Takashi) Design of a crete adaptive observer based on Lyapunov's direct method. Internat. J. Systems Sci. 12 (1981), no. 4, 473-484. (Authors' summary) 82d:93047 93D05
- nanjan, G. Ju. The Sturm-Liouville equation with periodic potential. (Russian. Armenian ary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 3, 156-159. (M. Otelbaev) 34B25 82-34028
- Tamari, Fumikazu (with Hamada, Noboru) Construction of maximal t-linearly independent sets. Essays in probability and statistics, pp. 41-55, Shinko Tsusho, Tokyo, 1976. (From the introduction) 82g:05027 05B25 (51D20, 94B99)
 - (with Yamamoto, Sumiyasu) An existence condition for multidimensional partially balanced association schemes. Essays in probability and statistics, pp. 65-71, Shinko Tsusho, Tokyo, 1976. (From the introduction) 82e:05049 05B30 (62K10)
 - (with Hamada, Noboru) On a geometrical method of construction of maximal t-linearly independent sets. J. Combin. Theory Ser. A 25 (1978), no. 1, 14-28. (Joseph A. 05B25 (51D20, 94B99)
 - (with Hamada, Noboru) Construction of optimal codes and optimal fractional factorial designs using linear programming. Combinatorial mathematics, optimal designs and their applications (Proc. Sympos. Combin. Math. and Optimal Design, Colorado State Univ., Fort Collins, Colo., 1978). Ann. Discrete Math. 6 (1980), 175-188. (Manohar Lal Kaushik) 82i:94019 94B05 (62K15, 90C10)
- uchi, Tsuguh iro (with Takano, Fumihiko) Concentration expansion for random Progr. Theoret. Phys. 64 (1980), no. 4, 1212-1232. (Authors' summary) 82h-82055 82A42 (82A67)
- ssy, Lajos (with Matsumoto, Makoto) Scalar and gradient vector fields of Finsler d holonomy groups of nonlinear connections. Demonstratio Math. 13 (1980),
- no. 2, 551-564. (A. Kawaguchi) 82e:53046 53C60

 mhane, Ajit C. Ranking and selection problems for normal populations with com-

- known coefficient of variation. Sankhyā Ser. B 39 (1978), no. 4, 344-361. (Eve Bofinger) 82m62040 62F07
- (with Bechhofer, Robert E.) Incomplete block designs for comparing treatments with control: general theory. Technometrics 23 (1981), no. 1, 45-57. (S. K. Tharthare) 82h:62125 62K 10
- nir, A. (with Megiddo, N.; Zemel, Eitan; Chandrasekaran, R.) An O(nlog2n)
 - algorithm for the kth longest path in a tree with applications to local SIAM J. Comput. 10 (1981), no. 2, 328-337. (Authors' summary) 82j:60 s' summary) 82j:68063 68E10 (68C25, 90B05)
- un, Ebu A formula for transforming a multidimensional integral. (Russian) Eesti NSV ad. Akad. Toimetised Füüs.-Mat. 29 (1980), no. 3, 332-335, 348. (Hans-Jürgen Glaeske)
- 82b:26013 26B12

 Tamm, Martin Subanalytic sets in the calculus of variation. Acta Math. 146 (1981), no. 3-4,
- mm, Martin Subanayut sets in the calculus of variation. Acta Main. 140 (1981), no. 3-4, 167-199. (P. Brunovský) 82h:32012 32B20 (32C40, 49F99)

 mme, Günter *Einführung in die étale Kohomologie. (German) [Introduction to étale cohomology]

 Der Regensburger Trichter [The Regensburg Funnel], 17. Universität Regensburg, Fachbereich Mathematik, Regensburg, 1979. v+228 pp. (Gerhard Pfister) 14F20 (18F20)
- ella, J. Optimal control of production processes with a complex structure. A model with complete information. (Russian. Estonian and English summaries) Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. 29 (1980), no. 2, 201-207, 232. (Józef Grabowski) 82h:90062a 90B30 (49B60)
 - Optimal control of production processes with a complex structure. A model with ncomplete information. (Russian. Estonian and English summaries) Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. 29 (1980), no. 3, 314-322. (Jözef Grabowski) 82h:90062b 90B30 (49B60)
- nmer, K. Parametrische Optimierung und Vektoroptimierung.

 Polyoptimization—theoretic foundations and applications (Sem., Bad Stuer, 1976)

 (German), pp. 117–125, ZKI-Inform. 78, 2, Akad. Wiss. DDR, Berlin, 1978. (Editors) 90C48 (90C31)
- nrazov, P. M. (with Mitropol'skiĭ, Ju. A.; Gudz', L. A.) V. A. Zmorovič's investigations in the field of the geometric theory of functions. (Russian) Ukrain. Mat. Z. 31 (1979), no. 6, 756-760, 768. (R. P. Boas, Jr.) 82f:01123 01A70 (30-03)
- Variational problems of logarithmic potential theory. (Russian) Akad. Nauk Ukrain SSR Inst. Mat. Preprint 1980, no. 25, 3-13. (A. E. Eremenko) 82c:31002
- A. A. Gončar's extremal problem on capacities of condensers, and the method of mixing of charges. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 34, 60 pp. (A. È. Eremenko) 82i:31002 31A15 (30C85)
- (with Bilii, V. I.) Polynomial approximations and modulus of continuity of functions domains with quasiconformal boundaries. (Russian) Sibirsk. Mat. Z. 21 (1980), no. 3, 162-176, 238. (Wiesław Pleśniak) 82b:30047 30E10 (41A10)
- Tamthai, M. (with Chaiyakul, C.) The endomorphism semigroup of algebras with reflexive elements. Algebra Universalis 11 (1980), no. 2, 193-196. (Kazimierz Głazek) 82h:08004 08A35 (20M20)
- Tamura, Hideo Spectral analysis for perturbed Laplace operators in cylindrical domains.
 Integral Equations Operator Theory 2 (1979), no. 1, 69-115. (P. A. Mišnaevskii)
 82m:35113 35P05
 - The principle of limiting absorption for uniformly propagative systems with perturbations of long-range class. Nagoya Math. J. 82 (1981), 141-174. (E. Müller-Pfeiffer) 82h:35084 35P25 (47F05)
- nura, Hideyuki (with Tsuda, Yoshihiro; Sueoka, Atsuo) Higher approximation of steady oscillations in nonlinear systems with single degree of freedom (suggested multiharmonic Bull. JSME 24 (1981), no. 195, 1616-1625. (Authors' summary) alance method). 82f-70013 70K 99
- ura, Saburo On the word problem for lo-semigroups. Proceedings of the 4th Symposium on Semigroups (Yamaguchi Univ., Yamaguchi, 1980, pp. 97–102, Yamaguchi Univ., Yamaguchi, 1980. (From the introduction) 82g:06026 06F05 (03B25, 03D40, 03F05) See also Gentzen, Gerhard, 82m:01080
- Tamura, Takavuki (with Hamilton, Howard: Melcon, David) Finite inverse semigroups satisfying some conditions on congruences (abstract). Proceedings of a Symposium on Regular Semigroups (Northern Illinois Univ., De Kalb, Ill., 1979), pp. 80-82, Northern
 - Illinois Univ., DeKalb, Ill., 1979. (See 82):20120) 20M10

 Permutation groups and ideal extensions. Proceedings of the 3rd Symposium on Semigroups (Inter-Univ. Sem. House of Kansai, Kobe, 1979), pp. 83–103, Osaka Univ., ka, 1980. (C. Sri Hari Nagore) 82b:20091 20M10 (20B99) Homomorphisms of free E-n algebraic systems. Proceedings of the 4th Symposium on Osaka, 1980. (C. Sri Hari Nagore) 82b:20091
 - Semigroups (Yamaguchi Univ., Yamaguchi, 1980), pp. 103-111, Yamaguchi Univ Yamaguchi, 1980. (From the text) 82k:20110 20M99
 - (with Gale, Deborah) A theorem on commutative cancellative Archimedean
 - dempotent-free semigroups. Simon Stevin 54 (1980), no. 3-4, 233-240. (H. D'Alarcao) 20M14
- Tamvaclis, C. Filtration of separable finite discrete signals. Proc. IEE-F 128 (1981), no. 1, 1-8. (Author's summary) 82b:94006 94A05
- Tamwakis, N. K. (with Larman, D. G.) A characterization of centrally symmetric convex bodies in Eⁿ. Geom. Dedicata 10 (1981), no. 1-4, 161-176. (K. J. Falconer) 82j:52008 52A10
- vo van Tan See Vo Van Tan
- Tan, Chung I (with Brower, Richard C.; Rossi, Paolo) The external field problem for QCD. Nuclear Phys. B 190 (1981), no. 4, FS3, 699-718. (Authors' summary) 82m:81079 81G05 (81E25)
- Tan, Harry H. Another martingale bound on the waiting-time distribution in GI/G/1queues. J. Appl. Probab. 16 (1979), no. 2, 454-457. (Robert Kertz) 82c:60173
- Tan, K. C. (with Gore, A. P.) A nonparametric multiple comparison procedure for one-way layout. Bull. Malaysian Math. Soc. (2) 4 (1981), no. 1, 1-8. (Authors' summary)
- 82mc62110 62G99 (62J15)
 Tan, Soon Teck (with Carmony, Lowell A.) s-quasisymmetry. Discrete Math. 34 (1981), no. 1, 17-24. (H. Hanani) 82;05026 05B05

Tan, W. Y. (with Guttman, Irwin) On the construction of multidimensional orthogonal mials. Metron 34 (1976), no. 1-2, 37-54 (1978). (Authors' summary) 82i:6208 62H10 (33A65)

(with Wong, S. P.) On the probabilities of obtaining negative estimates of variance aponents. Metron 37 (1979), no. 1-2, 53-64 (1980). (From the introduction) 82m:62161 62110

On approximating multivariate distributions. Multivariate statistical analysis (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1979), pp. 237–249, North-Holland, Amsterdam, 1980. (M. L. Tiku) 82e:62080 62H10

(with Wong, S. P.) On approximating the null and nonnull distributions of the F ratio in unbalanced random-effect models from nonnormal universes. J. Amer. Statist. Assoc. 75 (1980), no. 371, 655-662. (M. Atiqullah) 82a:62036 62E20

The Markov process approach to survival analysis. Biometrical J. 23 (1981), no. 5, 467-475. (Lutz Edler) 82m:60101 60J70 (62P10)

The power function and an approximation for testing variance components in the resence of interaction in two-way random effects models. (French summary) Canad. J. Statist. 9 (1981), no. 1, 91-99. (Author's summary) 82k:62144 62J10

(with Cheng, Song Show) Cumulants of bilinear forms and quadratic forms and their applications. Comm. Statist. A-Theory Methods 10 (1981), no. 3, 283-298. (Authors' mary) 82d:62121 62J10

(with Bayne, C. K.) QDF misclassification probabilities for known population parameters. Comm. Statist. A-Theory Methods 10 (1981), no. 22, 2315-2326. (Authors' immary) 82k:62114 62H30

Tan, Wei Han On the exact solution of the stationary multimode laser rate equations. (Chinese. English summary) Acta Math. Appl. Sinica 4 (1981), no. 2, 99-105. (Author's immary) 82m:81093 81K05

nabe, Hiroki Remarks on the differentiability of solutions of some semilinear parabolic equations. Proc. Japan Acad. Ser. A Math. Sci. 54 (1978), no. 10, 314-317. (Antonino Maugeri) 82m:35082 35K55 (47H15)

Maugeri) 8£m:35M52 (47H15) ★Equations of evolution. Translated from the Japanese by N. Mugibayashi and H. Haneda. Monographs and Studies in Mathematics, 6. Pitman Publishing, Ltd., don-Boston, Mass., 1979. xii + 260 pp. ISBN 0-273-01137-5 (A. Pazy) 82g:47032 47D05 (34G10, 35K22, 47H05)

Differentiability of solutions of some unilateral problem of parabolic type. J. Math. Soc. Japan 33 (1981), no. 3, 367-403. (Pierre-Louis Lions) 82m:35090 35K85 (49A29) habe, Kunio A geometric method in nonlinear programming. J. Optim. Theory Appl. 30 (1980), no. 2, 181–210. (Jean-Paul Penot) 82i:65941 65K05 (58C15, 90C30) habashi, Katsumi On the Diophantine equations $x^2+7^m=2^n$ and $x^2+11^m=3^n$. J.

Predent. Fac. Gifu College Dent. 1977, no. 3, 77-79. (Author's introduction) 82j:10033 10B15

Tanaka, Azuma (with Taguchi, Yukio: Yamamoto, Kunio) A solvable model for spontaneous symmetry feaking. Nuoco Cimento A (11) 62 (1981), no. 3, 186–195. (G. Vitiello) 82j:81033 81D20 (81E99)

Tanaka, Chuji Some applications of the complex analysis to matrix functions. Mem. School Sci. Engrg. Waseda Univ. No. 41 (1977), 103-119 (1978). (Author's summary) 82k:15020

On the boundary behavior of Taylor series of the regular functions of some classes in the unit circle. Mem. School Sci. Engrg. Waseda Univ. No. 43 (1979), 171-185 (1980). 30B30 (40G99)

naka, Hiroshi (with Hitsuda, Masuyuki) Central limit theorem for a simple diffusion model of interacting particles. Hiroshima Math. J. 11 (1981), no. 2, 415–423. (Ronald F. 82A40 (60H10, 60J60)

Jun-ichi On a theorem of P. S. Muhly. Proc. Amer. Math. Soc. 77 (1979), no. 1,

119-123. (Author's summary) 82g:46092 46J10

Tanaka, Kikuaki (with Tanaka, Masataka) Time-space boundary element formulation for boundary-value problems. Appl. Math. Modelling 4 (1980), no. 6, 473-476. (R. D. Bhargava) 824:65077 65N30

(with Tanaka, Masataka) On boundary-volume element discretization of inhomogeneous elastodynamic problems. Appl. Math. Modelling 5 (1981), no. 3, 194–198. (Authors' summary) 82h:73013 73C40

(with Tanaka, Masataka) A boundary element formulation for coupled thermoelastic problems. I. Governing integral equations. Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 26 (1981), no. 1, 83-94. (Authors' summary) 82h:73081 73U05

Tanaka, Kokichi (with Fukami, Satoru; Mizumoto, Masaharu) On fuzzy reasoning. Systems-Comput.-Controls 9 (1978), no. 4, 44-53 (1980). (Editors) 82g:03039a 03B52 (03E72, 94D05)

(with Fukami, Satoru; Mizumoto, Masaharu) Some considerations on fuzzy conditional inference. Fuzzy Sets and Systems 4 (1980), no. 3, 243-273. (Editors) 03B52 (03E72, 94D05)

(with Mizumoto, Masaharu) Fuzzy sets and their operations. Inform. and Control 48

(1981), no. 1, 30-48. (John Hooley) 82k:03088 03E72 (94D05)

Tanaka, Kyoko Asymptotic analysis of odd order ordinary differential equations. Hiroshima Math. J. 10 (1980), no. 2, 391-408. (Vojislav Marić) 82a:34040

(with Kusano, Takaši; Naito, Manabu) Oscillatory and asymptotic behaviour of solutions of a class of linear ordinary differential equations. Proc. Roy. Soc. Edinburgh Sect. A 90 (1981), no. 1-2, 25–40. (R. Grimmer) 82k:34040 34C11 (34C10)

Tanaka, Masataka (with Tanaka, Kikuaki) Time-space boundary element formulation for boundary-value problems. Appl. Math. Modelling 4 (1980), no. 6, 473-476. (R. D. Bhargava) 824:65077 65N30

(with Tanaka, Kikuaki) On boundary-volume element discretization of inhomogeneous elastodynamic problems. *Appl. Math. Modelling* 5 (1981), no. 3, 194–198. (Authors' summary) 82h:73013 73C40

194-196. (Authors summary) 82E: 5913 73-40 (with Tanaka, Kikuaki) A boundary element formulation for coupled thermoelastic problems. I. Governing integral equations. Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 26 73U05 (1981), no. 1, 83-94. (Authors' summary) 82h:73081

naka, Minoru Limitation theorems for some methods of summability. Bull. Austral. Math. Soc. 22 (1980), no. 3, 373–384. (R. N. Mohapatra) 82c:40003 40C05 (40D05) Tanaka, Minoru On the Möbius and allied functions. Tokyo J. Math. 3 (1980), no. 2, 215-218. (W. A. Webb) 82e:10079 10H25 (10A20)

Tanaka, Sen-ichiro (with Ikeda, Hideo) On the general solutions of the difference eq $y_i(x+1) = \prod_{j=1}^{\infty} (y_j(x))^{\lambda_{ij}} f_i(x,y(x))$. III. Math. Rep. Toyama Univ. 4 (1981), 163-178. (Sheldon P. Gordo n) 82j:39003 39A10

taka, Shigeru (with Ito, Shunji) On a family of continued-fraction transformations and their ergodic properties. Tokyo J. Math. 4 (1981), no. 1, 153-175. (Pierre Michel) 82j:10086 10K10 (28D20, 58F11)

Tanaka, Yoshio Closed maps on metric spaces. Topology Appl. 11 (1980), no. 1, 87–92.
(Author's summary) 82k:54017 54C10 (54E35)

na, B. P. Projections of compact semilattices. (Russian) Izv. Vyaš. Učebn. Zaved. Matematika 1980, no. 9, 32-40. (E. Gedeonová) 82g:06009 06B30 (06A12 54H12)

nana, V. P. Regularization of operator equations of the first kind with an approximately given operator and choice of regularization parameter. (Russian) Ural. Gos. Univ. Mat.

 Zap. 11 (1978/79), no. 4, 94-119, 132. (I. K. Marek) 82i:47016 47A50 (65J10)
 The solution of implicit operator equations of the first kind and their application.
 (Russian) Dokl. Akad. Nauk SSSR 244 (1979), no. 5, 1085-1087. (S. G. Samko) 47H17 (65J15)

asi, Corrado On the statistical distribution of particles contained in a convex body in E (Italian) Atti Accad. Sci. Lett. Arti Palermo Parte I (4) 37 (1977/78), 85-98 (1980). (M. Stoka) 82k:60026 60D05 (52A22, 53C65)

Tancredi, Alessandro (with Nardelli, Giuliana) Holomorphically convex compact subsets of an analytic space. (Italian. English summary) Ann. Univ. Ferrara Sez. VII (N.S.) 25 (1979), 99-108. (Gerd Fischer) 82c:32014 32E05 (32E15)

Some properties of analytic manifolds with boundary. (Italian. English sum Rend. Mat. (6) 13 (1980), no. 2, 263-270. (Margherita Galbiati) 82e:32013

(with Tognoli, Alberto) On a decomposition of the points of noncoherence of a real-analytic space. (Italian. English summary) Riv. Mat. Univ. Parma (4) 6 (1980), 401–405 (1981). (V. D. Golovin) 82i:32027 32C05 (32B20)

sdai, Kwoichi (with Sumitomo, Takeshi) Killing tensor fields of degree 2 and spectrum of $SO(n+1)/SO(n-1) \times SO(2)$. Osaka J. Math. 17 (1980), no. 3, 649-675. (O. Kowalski) 82f:53062 53C35 (58G99)

Microans, Nicolae On generalized Boolean functions. I. Discrete Math. 34 (1981), no. 3, 293–299. (Claude Benzaken) 82:e66019 06E99 (03G05, 94C10) and B. P. Theorems on traces for the classes $E_{p \neq p}^{-1}$ and their application to the solution of a variational problem. (Russian) Differencial nye Uravnenija 16 (1980), no. 10,

1826–1834, 1916. (J. Albrycht) 82b:46045b 46E35 (49A29) Traces of functions of the class $W_{p\psi}'$. (Russian) Differencial'nye Uravnenija 16 (1980), no. 11, 2062–2074, 2110. (J. Musielak) 82g:46070 46E35 (35J99)

On traces of functions from weight spaces. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 4, 83–84. (J. Albrycht) 82b:46045a 46E35

Boundary properties of functions from the space $W_{p\psi}^{r,1}$ (Russian) Studies in the theory of differentiable functions of several variables and its applications, VIII. Trudy Mat. Inst. Steklov. 156 (1980), 223–232, 263. (Author's summary) 82h:46054 46E35

Tandon, O. P. Conversion formulas. J. Indian Acad. Math. 3 (1981), no. 1, 45-48. (H. M. Srivastava) 82e:33009 33A35

ndori, Károly Convergence of series of functions. (Hungarian) Mat. Lapok 28 (1980), no. 1-3, 21–25. (F. Schipp) 82d:42022 42C05 (40A30)

Über modifizierte Lebesguesche Funktionen.
no. 3-4, 269–272. (A. Peyerimhoff) 82g:40001 40A05

Über die Summierbarkeit der Orthogonalreihen. Acta Math. Acad. Sci. Hungar. 37

(1981), no. 1-3, 277-283. (M. Mikolás) 82k:42021 42C15 (42A24) Über die Größenordnung der Lebesgueschen Funktionen. Acta Math. Acad. Sci.

Hungar. 37 (1981), no. 4, 409–412. (J. J. Price) 82h:42030 42C05 neja, Inder Jeet (with Autar, Ram) On entropies of type (α, β) . J. Math. Sci. 11 (1976), 22-30 (1979). (B. D. Sharma) 82k:94009 94A17

(with Gurdial) Bounds on distortion due to erasure and error at low rates. Combin. Inform. System Sci. 5 (1980), no. 2, 152-160. (Ved Priya) 82a:94057

Taneja, Sushma (with Sen, Kanwar) Indices of returns, crossings and positive steps. Bull. Malaysian Math. Soc. (2) 3 (1980), no. 2, 111-120. (N. H. Bingham) 82e:60109
 Taneja, Vidya S. Approximations to the distribution of indefinite quadratic forms in noncentral normal variables. Metron 34 (1976), no. 3-4, 255-268 (1979). (Author's

62E15 summary) 82d:62040 (with Aroian, Leo A.) Time series in m dimensions: autoregressive models. Special

issue on time series in M dimensions. Comm. Statist. B-Simulation Comput. 9 (1980), 62M10 no. 5, 491-513. (See 82e:62150)

(with Oprian, C. A.; Voss, David A.; Aroian, Leo A.) General considerations and interrelationships between MA and AR models, time series in m dimensions, the ARMA model. Special issue on time series in M dimensions. Comm. Statist. B-Sim Comput. 9 (1980), no. 5, 515-532. (See 82e:62150) 62M10

developments in statistical inference and data analysis (Proc. Internat. Conf., Inst. Statist. Math., Tokyo, 1979), pp. 73–78, North-Holland, Amsterdam, 1980. (David J. Strauss) 92A17 (52A45)

(with Weiner, Howard J.; Pickard, David K.; Tory, E. M.; Hori, Motoo) Further ents on: "Sequential random packing in the plane" [J. Appl. Probab. 15 (1978), no. 4, 803-814; MR 80a:60015] by Weiner. J. Appl. Probab. 17 (1980), no. 3, 878-892. (Adrian Baddeley) 82m:60021 60D05

ien Tang See Nguen Tang Tang, C. Y. (with Allenby, R. B. J. T.; Tang, S. Y.) Notes on Frattini subgroups of generalized free products with cyclic amalgamation. Canad. Math. Bull. 23 (1980), no. 1, 51-59. (A. H. M. Hoare) 82h:28041 20E06 (20F26)

Tang, D. H. (with Pinder, George F.) A new algorithm for the numerical solution of nonlinear parabolic partial differential equations. Computational methods in nonlinear mechanics (Proc. Second Internat. Conf., Univ. Texas, Austin, Tex., 1979), pp. 463-473, North-Holland, Amsterdam, 1980. (J. G. Herriot) 82h:65083 65M05 (65N05)

Tang, I. (with Millett, T.) Using inners to determine multiple roots of polynomials. Second International Conference on Information Sciences and Systems (Univ. Patrus, Patrus, 1979), Vol. 11, pp. 236-246, Reidel, Dordrecht, 1980. (Editors) 82i:12021

Tang, Min Ming Travelling wave fronts for a Lotka-Volterra equation with diffusion. Differential and integral equations (Proc. Seventh Midwest Conf., Univ. Missouri, Rolla.

(with Fife, Paul C.) Propagating fronts for competing species equations with fusion. Arch. Rational Mech. Anal. 73 (1980), no. 1, 69-77. (Editors) 82h:35054 35K55 (92A09)

(with Fife, Paul C.) Comparison principles for reaction-diffusion systems: irregular comparison functions and applications to questions of stability and speed of propagation of disturbances. J. Differential Equations 40 (1981), no. 2, 168–185. (J. Smoller) 82e:35045 35K55 (35B05, 80A20, 92A09)

Tang, S. Y. (with Allenby, R. B. J. T.; Tang, C. Y.) Notes on Frattini subgroups of generalized free products with cyclic amalgamation. Canad. Math. Bull. 23 (1980), no. 1, ation. Canad. Math. Bull. 23 (1980), no. 1, 51-59. (A. H. M. Hoare) 82b:20041 20E06 (20F26)

erlini, F. R. Classical and quantum restrictions on geodesic motion near a Schwarzschild black hole. (Italian and Russian summaries) Nuovo Cimento B (11) 63 (1981), no. 2, 588-600. (Author's summary) 82h:83013 83C10 (83C47) Tangjan, A. S. Hierarchical model of coalition choice. (Russian) Ekonom. i Mat. Metody 16 (1980), no. 3, 519-534. (A. Rapoport) 82h:90014 90A08
Tani, Katsuji (with Onaga, Kenji; Chan, Shu Park) Modeling and scheduling of

resource-sharing concurrent processes in networks of recurrent multiprograms and multi-PERTS. Fourteenth Asilomar Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 168-172, IEEE, New York, 1981. (See 824:93001) 90R35

iguchi, Hiroshi (with Inoue, Katsushi; Takanami, Itsuo) Two-dimensional automata with rotated inputs. Inform. Sci. 21 (1980), no. 3, 221-240. (Authors' summary) 82i:68036 68D35

niguchi, Kenichi (with Mori, Masaaki; Kasami, Tadao; Fujii, Mamoru) Formal verification of a class of concurrent programs. Systems-Comput.-Controls 10 (1979), no. 4, 11-20 (1981). (Authors' summary) 82n:68027 68B10 (03D35)

Taniguchi, Masahiko (with Kusunoki, Yukio) Acontinuity property of holomorphic differentials under quasiconformal deformations. Ann. Acad. Sci. Fenn. Ser. A I Math. 5

(1980), no. 2, 207-226. (I. Kra) 82g-30076 30F30 (30C60, 32G15)
On the variation of periods of holomorphic $\Gamma_{\rm ho}$ -reproducing differentials. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 7, 315-317. (T. A. Metzger) 82c:30069 30F30

Remarks on topologies associated with squeezing a nondividing loop on compact Riemann surfaces. II. J. Math. Kyoto Univ. 21 (1981), no. 2, 273-281. (C. Earle) 32G15 (30F40)

nobu Regression and interpolation for time series. Recent developments in statistical inference and data analysis (Proc. Internat. Conf., Inst. Statist. Math., Tokyo, 1979), pp. 311-321, North-Holland, Amsterdam, 1980. (E. J. Hannan) 82a:62142 62M10 (62M20)

On selection of the order of the spectral density model for a stationary Inst. Statist. Math. 32 (1980), no. 3, 401-419. (Francesco Battaglia) 82f:62171 62M10 An estimation procedure of parameters of a certain spectral density model. J. Roy. Statist. Soc. Ser. B 43 (1981), no. 1, 34-40. (Author's summary) 82d:62144 62M15

Robust regression and interpolation for time series. J. Time Ser. Anal. 2 (1981), no. 1, 53-62. (Francesco Battaglia) 82m:62206 62M10

iguchi, Masaru (with Kojima, Kiyofumi) Mixed problem for hyperbolic equations in a domain with a corner. Funkcial. Ekvac. 23 (1980), no. 2, 171-195. (R. G. Airapetjan) 35L50 (35L20)

iguchi, Yoshiharu Normal homogeneous metrics and their spectra. Osaka J. Math. 18 (1981), no. 3, 555–576. (Harold Donnelly) 82j:58103 58G05 (53C30)

iguti, Masataka (with Takahashi, Yoshitaka; Abe, Hiroshi) On the asymptotic behavior of asymptotically nonexpansive semigroups in Banach spaces. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 3, 171-175. (Simeon Reich) 82f:47080 47H20 (47H06)

iikawa, Masao The spectrum of the Laplacian of a Z_3 -invariant domain. *Proc. Jap Acad. Ser. A Math. Sci.* 57 (1981), no. 1, 13–18. (H. D. Fegan) 82c:58059 58G Tanikawa, Masao

ikawa, Yasutaka Hideki Yukawa, January 23, 1907-September 8, 1981. Progr. Theoret. Phys. 66 (1981), no. 4, 1111-1128. (D. ter Haar) 82m:01069 01A70

to, Shinji Nondifferentiable mathematical program ming and convex-concave functions. J. Optim. Theory Appl. 31 (1980), no. 3, 331-342. (Szymon Dolecki) 82f:90081 90C25 (90C30)

Duality for a class of nondifferentiable mathematical programming problems. J. Math. Anal. Appl. 79 (1981), no. 2, 286-294. (V. F. Dem'janov) 82j:90069

Tanimoto, Steven L. Image data structures. Structured computer vision, pp. 31-55, Academic Press, New York, 1980. (See 82m:68009) 68G10 (68B15) (with Fowler, Robert J.; Paterson, Michael S.) Optimal packing and covering in the

plane are NP-complete. *Inform. Process. Lett.* **12** (1981), *no.* 3, 133–137. (From the introduction) **82e:05112** 05C99 (05B40, 52-04, 52A45, 68C25, 68G10)

See also Structured computer vision, 82m:68009

Tanino, Tetsuzoh (with Sawaragi, Yoshikazu) Conjugate maps and duality in multiobjective optimization. J. Optim. Theory Appl. 31 (1980), no. 4, 473–499. (J. Borwein) 82h:90091

(with Nakayama, Hirotaka; Sawaragi, Yoshikazu) Domination structures and their parametrization in group decision making. (Japanese. English summary) Systems and Control 24 (1980), no. 12, 807-815. (Authors' summary) 82m:90009 90A07

Tanisaki, Toshiyuki Foldings of root systems and Gabriel's theorem. Tsukuba J. Math. 4 (1980), no. 1, 89–97. (Idun Reiten) 82g:16031 16A64 (16A35)

ati, Tosiya (with Nagasawa, Kiyoshi; Imamura, Tsutomu) A Gaussian solution for drift wave turbulence and for Rossby wave turbulence. J. Phys. Soc. Japan 48 (1980), no. 6, 2119-2124. (Authors' summary) 82a:76045 76F99 (76C20, 76X05, 78A20) (with Doi, Masaaki; Kambe, Ryouichi; Imamura, Tsutomu) An exact Gaussian solution for the two-dimensional ideal incompressible magnetohydrodynamic turbulence.

J. Phys. Soc. Japan 49 (1980), no. 3, 1154–1156. (Authors' summary) 82a:76042 76F99 (76W05)

nenhaum, Allen Deformations of space curves. Arch. Math. (Basel) 34 (1980), no. 1, 37-42. (Ciro Ciliberto) 82k:14024 14H10 (14H45)
Families of algebraic curves with nodes. Compositio Math. 41 (1980), no. 1, 107-

126. (Takao Fujita) 82b:14017 14H10 (14D15)

Castelnuovo curves and unobstructed deformations. Math. Z. 174 (1980), no. 2.

The Brauer group and unirationality: an example of Artin-Mumford. The Bra group (Sem., Les Plans-sur-Bex, 1980), pp. 103–128, Lecture Notes in Math., 844, Springer, Berlin, 1981. (G. Horrocks) 82h:14025 14330

ier, J. M. See Goldstein, Harvey, 82j:62076

mer, Robert D. (with Crooke, Philip S.) Parameter estimation and mathematical properties of a model for batch fermentation. Appl. Math. Modelling 4 (1980), no. 5, 376-380. (Authors' summary) 82g:80016 80A30

no, Shikichi A characterization of the canonical spheres by the spectrum. Math. Z. 175 (1980), no. 3, 267-274. (R. S. Millman) 82g:58093 58G25 (53C42)

Some metrics on a (4r+3)-sphere and spectra. Tsukuba J. Math. 4 (1980), no. 1, 99-105. (N. J. Hitchin) 82d:53028 53C25 (58G25)

Tanny, David On multitype branching processes in a random environment. Adv. in Appl. Probab. 13 (1981), no. 3, 464-497. (J. D. Biggins) 82h:60162 60J80 (92A17)

 Probab.
 13 (1981), no.
 3, 464–497.
 (J. D. Biggins)
 82h:60162
 60J80 (92A17)

 Tanré, Daniel
 Modèles de Quillen d'une fibration de Serre. (English summary)
 C. R. Acad.
 Sci. Paris Sér. I Math. 292 (1981), no. 21, 941-944. (Author's summary) 82g:55012 55P62 (55R20)

(with Félix, Yves) Sur la formalité des applications. Publ. U. E. R. Math. Pures Appl. IRMA 3 (1981), no. 2, exp. no. 1, 45 pp. (Authors' summary) 82g:55022 (55P62, 55S37, 55T20)

Tansel, Barbaros C. (with Francis, Richard L.; Lowe, Timothy J.) Binding inequalities for tree network location problems with distance constraints. Transportation Sci. 14 (1980), no. 2, 107-124. (Authors' summary) 82k:90049 90B05

Tanyi, G. E. Some geometrical aspects of the master equations of growth and development. Proceedings of the Second International Conference on Mathematical Modelling (St. Louis, Mo., 1979), Vol. I, II, pp. 911-918, Univ. Missouri-Rolla, Rolla, Mo., 1980. (Author's summary) 82g:92008 92A05 (58F14)

Tanzi Cattabianchi, Luigi On some variations and generalizations of a formula of terminal ballistics due to Resal. (Italian. English summary) Riv. Mat. Univ. Parma (4) 6 (1980), 469–484 (1981). (Author's summary) 82i:70033 70N05 469-484 (1981). (Author's summary) 82i:70033

Tao, Hui Min The classification up to conjugacy of compact homogeneous spaces of real semisimple Lie groups. (Chinese) Acta Math. Sinica 23 (1980), no. 2, 313–316. (H. Wu) 82f:53061 53C30 (22E15)

Tao, K. M. (with Zunde, P.) On Levy's identification, its generalization and applications. Internat. J. Systems Sci. 12 (1981), no. 11, 1317-1334. (Authors' summary) 82m:93029

Tao, L. N. Solidification of a binary mixture with arbitrary heat flux and initial conditions. Arch. Rational Mech. Anal. 76 (1981), no. 2, 167-181. (Author's summary) 82;80003 80A20 (35R35)

Heat conduction with nonlinear boundary condition. (German summary) Z. Angew. Math. Phys. 32 (1981), no. 2, 144–155. (Author's summary) 82d-80019 80A20

Tao, Ren Ji On the computational power of automata with time or space bounded by Ackermann's or superexponential functions. *Theoret. Comput. Sci.* **16** (1981), no. 2, 115–148. (Author's summary) **82m:68093** 68C30 (03D05, 03D15, 68C25, 68D25)

Tao, Rui Bao (with Pu, Fu Ke) Absence of modulated phase transition and spin density wave phase transition in one- and two-dimensional systems. Phys. Lett. A 81 (1981), no. 1, 54-58 (I. Fernando Perez) 82a:82019 82A25

Tapaswi, P. K. (with Bhattacharya, P.) An extended mathematical model of transcription and translation during embryogenesis. Cybernetica 24 (1981), no. 1, 61-84. (From the introduction) 82j:92013 92A05 (34C15, 92A09, 92A10)

Tape, Walter Analytic foundations of halo theory. J. Opt. Soc. Amer. 70 (1980), no. 10,

1175-1192. (I. Stewart) 82b:78002 78A05 (58C27, 58C28)

Tapero, T. B. Common perpendiculars of pairs of planes in infinite-dimensional non-Euclidean spaces. (Russian) Functional analysis, No. 13 (Russian), pp. 131-143, Ul' janoosk, Gos. Ped. Inst., Ul' yanoosk, 1979. (J. Kateřiňák) 82e:51029 51M10 Ul' janovsk. Gos. Ped. Inst., Ul' yanovsk, 1979. (J. Kateřiňák) 82e:51029

Ta Phuoc Loc (with Mrabet, Kamel) Étude du décollement instationnaire dans un canal à symétrie de révolution par une méthode hermitienne compacte. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 12, B275-B278. (Authors' summary) 82e:76048 76D99

Tapi, U. (with Maheshwari, S. N.) Sur les espaces bitopologiques s-connexes. An. Ştiinţ. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 25 (1979), no. 1, 57-59. (Editors) 82i:54052 54E55 (54D05)

Tapia, Moiez A. (with Tucker, Jerry H.) Correction to: "Complete solution of Boolean equations" [IEEE Trans. Comput. 29 (1980), no. 7, 662-665; MR 81h:94036]. IEEE Trans. Comput. 30 (1981), no. 1, 87. (Editors) 82a:94121 94C10

Tapia, R. A. On the role of slack variables in quasi-Newton methods for constrained optimization. Numerical optimization of dynamic systems, pp. 235–246, North-Holland, Amsterdam, 1980. (Author's summary) 82i:90102 90C30 (65K05)

Tapiero, Charles S. (with Zuckerman, Dror) Optimum excess-loss reinsurance: a dynamic framework. Stochastic Process. Appl. 12 (1982), no. 1, 85-96. (Authors' summary) 62P05 (90B99, 90D05)

See also Applied stochastic control in econometrics and mana 82a:90001

Tappe, Jürgen Some remarks on the homology groups of wreath products. Illinois J. Math. 25 (1981), no. 2, 246-250. (Norman Blackburn) 82d:20050 20J05 (20E22)

Taqvi, Z. A. (with Bhatnagar, K. B.) Perturbations of the elements of near-circular earth satellite orbits. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 6, 432-451 (1978). (Authors' summary) 82i:70029 70M05 (70F15)

Tar, Laszlo A generalized model of the Latin square design. I. Publ. Math. Debrecen 27 (1980), no. 3-4, 309-325. (Damaraju Raghavarao) 82a:62116 62K05 (05B15)

Tarafdar, E. (with Husain, Taqdir) Fixed point theorems for multivalued mappings of nonexpansive type. Yokohama Math. J. 28 (1980), no. 1-2, 1-6. (B. E. Rhoades) 47H10 (47H09)

Taragan, D. I. (with Mereuca, I. V.) On some properties of divisors of a holomorphic operator-valued function. (Russian) Investigations in functional analysis and differentic equations, pp. 65-75, 141, "Štiinca", Kishinev, 1981. (K. S. Mamedov) 82k:47026

(with Mereuca, I. V.) Divisors of a holomorphic operator-valued function. (Russian) Linear operators and integral equations. Mat. Issled. No. 61 (1981), 130-140, 157-158. (E. R. Cekanovs'kii) 82h:47014 47A68 (E. R. Cekanovs'kii) 82h:47014

ama, Sigeo Sur le problème de Cauchy pour une classe de systèmes faiblement hyperboliques dans une classe de Gevrey. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 2, 62-66. (C. Wagschal) 82a:35065 35L45

ako, S. N. (with Pavlov, K. B.; Pokrovskii, L. D.) Temperature waves in an ideal g with nonlinear heat conduction. (Russian) Differencial nye Uravnenija 15 (1979), no. 11, 2034-2038, 2109-2110. (From the summary) 82d:76065 76N15 (65P05, 80A20)

2034-2036, 2105-2110. (From the summary) sale ready agon, I.E. (with Zakin, A. I.) Electrohydrodynamical instability of a weakly conducting fluid between two cylindrical electrodes with unipolar injection. Magnit. Gidrodinamika No. 4 (1979), 53-57 (Russian); translated as Magnetohydrodynamics 15 (1979), no. 4, 402-406 (1980). (From the introduction) 824:76043 76E25 (76W05)

Tarapova, E. I. A Sturm-Liouville boundary value problem with nonlinear boundary conditions. II. (Russian) Teor. Funkcii Funkcional, Anal. i Priložen, No. 32 (1979). 82-87, 5. (Author's summary) 82c:34029 34B25

Taraščanskii, M. T. (with Maleev, A. B.; Serečenko, A. A.) Families of probability measures that admit consistent estimates. (Russian) Probability distributions in infinite-dimensional spaces (Russian), pp. 125-134, 178, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (G. I. Ivčenko) 82a:62053 62F12

(with Demidovič, E. P.) A remark on the extension of measures. (Russian) Funkcional. Anal. i Priložen. 15 (1981), no. 3, 85-86. (D. Preiss) 82m:28012 Tarasenko, M. I. (with Gončarjuk, I. V.) Normal equation of a parabola. (Russian) Mathematical methods in cybernetics (Russian), pp. 23-30, 83, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (L. Bitay) 82m:51028 51N20

Tarasenko, V. F. (with Nazarov, N. G.) Planning of the collection and processing of observations in solution of problems of testing statistical hypotheses. (Russian) Methods in operations research and reliability theory in systems of analysis (Russian), pp. 81-88, 102-103, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. (L. B. Klebanov) 62F05

Tarasenko, V. P. (with Zabin, V. I.; Korneïčuk, V. I.; Ščerbina, A. A.) Structural method of fast solution of systems of algebraic equations with a tridiagonal matrix. Automat. i Vyčisl. Tehn. (Riga) 1979, no. 6, 73-80, 93 (Russian); translated as Automat. Control Comput. Sci. 13 (1979), no. 6, 64-70. (Authors' summary) 82h:65025

Tarasevičius, P. (with Bentkus, R.) Some estimates for the cumulants of m-dependent and p-mixing stationary processes. (Russian. Lithuanian and English summaries) Litousk. Mat. Sb. 21 (1981), no. 1, 29-39. (S. G. Kalandarišvili) 82i:60057

Taraskin, A. F. The asymptotic statistical problems for fields of diffusion type. Stochastic differential systems (Proc. IFIP-WG 7/1 Working Conf., Vilnius, 1978), pp. 276–286, Lecture Notes in Control and Information Sci., 25, Springer, Berlin, 1980. (M. Arató)

82f:62172 62M10 (62F10)

Tarasov, S. P. (with Hačijan, L. G.) Boundaries of solutions and algorithmic complexity of systems of convex Diophantine inequalities. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 2, 296-300. (V. B. Alekseev) 82f:68052 68C25 (03D15, 10B45, 90C25) (with Kozlov, M. K.; Hačijan, L. G.) The polynomial solvability of convex quadratic programming. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 5, 1319-1323, 1359.

(Joachim Hirche) 82c:90070 90C20 (68C25, 90C25) asov, V. F. Calculation of radial Slater integrals using Appell functions. (Russian. Kazakh summary) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1980. no. 6, 77-80.

81G40 (33A30)

On the properties of the solution of a higher-order elliptic equation in unbounded domains. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 100 (1980), no. 1, 37-40. (V. M. Isakov) 82h:35029 35J35

Tarbell, J. M. A two-timing formalism for autonomous oscillations. (French and German summaries) Internat. J. Non-Linear Mech. 15 (1980), no. 3, 235-250. (P. J. Holmes) 82b:34038 34C05 (70K05)

Tardif, Serge On the asymptotic distribution of a class of aligned rank order test statistics in ndomized block designs. (French summary) Canad. J. Statist. 8 (1980), no. 1, 7-25. (P. Sen) 82h:62023 62E20 (60F05, 62G10) K. Sen) 82b:62023

On the almost sure convergence of the permutation distribution for aligned rank test statistics in randomized block designs. Ann. Statist. 9 (1981), no. 1, 190-193. (P. K. Sen) 82c:62067 62G10 (60F05)

Tardy, P. See Bottazzini, Umberto, 82i:01045

Tareeva, E. E. (with Ryżov, V. N.) An equation for the radial distribution function. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 5, 1102-1104. (A. K. Vidybida) 82i:82058 82A50

Targoński, Győrgy ★Topics in iteration theory. Studia Mathematica: Skript, 6. oeck & Ruprecht, Göttingen, 1981. 292 pp. ISBN 3-525-40146-9 (H. B. Griffiths) 39-02 (26A18, 58F13, 58F14, 58F20, 92A17)

Tarhanov, N. N. Integral representation of solutions of systems of first-order linear partial differential equations and some of its applications. (Russian) Some problems of multidimensional complex analysis (Russian), pp. 147-160, 269, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Fiz., Krasnoyarsk, 1980. (A. Džuraev) 82j:35030 35F05 (

Tarhova, T. N. (with Cuprunov, E. V.; Talis, A. L.; Belov, N. V.) Special positions in Fedorov groups. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1131–1133. (From the text) 82g:20074 20H15 (82A60)

Tarieladze, V. I. (with Gorgadze, Z. G.) On geometry of Orlicz spaces. Probability theory on Nater in Math. 828. Springer, Berlin, 1980. (A. Kufner) 82h:46049 46E30 (60B1)

On nuclear covariance operators. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Blażejewko, 1979), pp. 283–285, Lecture Notes in Math., 828, Springer, Berlin, 1980. (D. J. H. Garling) 82i:60014 60B11 (47B10)

(with Linde, Werner; Cobanjan, S. A.) Characterization of certain classes of Banach spaces by properties of Gaussian measures. (Russian. English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 1, 162-167. (A. Badrikian) 82b:28027

(with Vahanija, N. N.; Tortrat, Albert) Continuity of random linear functions. (Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 1, 172–178. (D. Preiss) 82g:60010 60B11 (28C20, 46A99)

Țarină, Marian Les recherches du professeur Tiberiu Mihăilescu sur les variétés non holonomes de l'espace projectif. Proceedings of the National Conference on Nonholonomic Spaces (Iași, 1976), pp. 87-93, Ed. Acad. R.S. România, Bucharest, 1979. (Bernard 01A72 (53A40) Rouxel) 82i-01067e

(with Enghis, P.; Sandovici, P.) Sur la récurrence de la métrique de Schwartzschild. (Romanian summary) Studia Univ. Babez-Bolyai Math. 25 (1980), no. 3, 48-49. (Editors)

82k:83008 83C15 (53B50)

Tarjan, Robert Endre (with Gabow, Harold N.) Efficient algorithms for simple matroid intersection problems. 20th Annual Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 196–204, IEEE, New York, 1979. (Authors' summary) 82b:68056 68E10 (05B35, 68C25, 90C35)

(with Lengauer, Thomas) The space complexity of pebble games on trees. Inform. Process. Lett. 10 (1980), no. 4-5, 184-188. (R. E. Stearns) 82c:68023 68C25 (68E10,

(with Brown, Mark R.) Design and analysis of a data structure for representing sorted lists. SIAM J. Comput. 9 (1980), no. 3, 594-614. (Eberhard Lüdde) 82e:68101 68H05 (68C25, 68E05)

(with Lipton, Richard J.) Applications of a planar separator theorem. SIAM J. Comput. 9 (1980), no. 3, 615-627. (Eberhard Lüdde) 82e:68067 68E10 (05C10,

(with Coffman, Edward G., Jr.; Garey, M. R.; Johnson, D. S.) Performance bounds for level-oriented two-dimensional packing algorithms. SIAM J. Comput. 9 (1980), no. 4, 808–826. (Authors' summary) 82a:68068 68C25 (52A45, 90B99)

A unified approach to path problems. J. Assoc. Comput. Mach. 28 (1981), no. 3, 577–593. (Author's summary) 82m:90073 90B10 (65F05, 68C05)

Fast algorithms for solving path problems. J. Assoc. Comput. Mach. 28 (1981), no. 3, 594-614. (Author's summary) 82m:90074 90B10 (05C38, 68C05)

Tarkov, M. S. Lower bound of the probability of connectedness of functional machines of a homogeneous computer system. (Russian) Vyčisl. Sistemy No. 80 Voprosy Teorii i Postroenija Vyčisl. Sistem (1979), 36-59, 121. (Author's summary) 82g:68010

Tarn, T. J. (with Huang, Garng; Clark, John W.) Modelling of quantum mechanical control systems. Math. Modelling 1 (1980), no. 1, 109-121. (Carl W. Helstrom) 93A10 (81B99)

(with Spong, Mark W.) On the spectral controllability of delay-differential equations. IEEE Trans. Automat. Control 26 (1981), no. 2, 527-528. (Authors' sun 82e:93013

Tarnai, T. Lateral buckling analysis of beams by the theory of quadratic operator pencils. Acta Tech. Acad. Sci. Hungar. 87 (1978), no. 3-4, 233-254 (1979). (Author's summary) 73H05 (47A70, 49G10)

(with Popper, Gyorgi) Solution of flexural-torsional problem of beams by series expansion in eigenfunctions of quadratic operator pencils. Acta Tech. Acad. Sci. Hungar. 89 (1979), no. 1-2, 237-254 (1980). (From the introduction) 82c:73046 (47A70)

Tarnavskii, G. A. (with Kovenja, V. M.; Janenko, N. N.) Implicit difference scheme for a numerical solution of three-dimensional equations of gas dynamics. (Russian) Ž. Vvčisl. Mat. i Mat. Fiz. 20 (1980), no. 6, 1465-1482, 1630. (E. Schechter) 82g:65060

Tarnowski, Stanisław On a certain problem concerning the polyharmonic polynomials. Demonstratio Math. 14 (1981), no. 2, 399-403. (B. D. Agrawal) 82j:31007 31B36

Taroco, Edwardo (with Feijoo, Raúl A.) A variational formulation and a numerical solution in the theory of elasto-viscoplasticity: a unified approach to creep and plasticity problems. Seminar on Numerical Analysis and its Applications to Contin de Janeiro, 1980), pp. 163-177, Soc. Brasil. Mat., Rio de Janeiro, 1980. (S. Dost) 82a:73019 73E99 (49H05, 65N30, 73F99)

(with Feijóo, Raúl A.; Jospin, Reinaldo J.; Bevilacqua, Luiz) A curvilinear finite element for shells of revolution. Internat. J. Numer. Methods Engrg. 16 (1980), Special Issue, 19-33. (Authors' summary) 82a:73038 73K25 (65N30, 73L99)

Tarrès, R. Asymptotic evolution of a stochastic control problem when the discounvanishes. Systems analysis (Conf., Bordeaux, 1978), pp. 227-237, Astérisque, 75-76, Soc. Math. France, Paris, 1980. (Author's introduction) 82j:93059 93E20

Tarski, Alfred See Proceedings: Tarski Symposium, 82b:03006

Tarski, Jan (with Berg, H. P.) Path integrals, coherent states, and geometric quantization. Functional integration theory and applications (Proc. Colloq., Louvain-la-Newve, 1979), pp. 125-142, Plenum, New York, 1980. (Nicholas M. J. Woodhouse) 82h:81041 81C35 (58F06, 81D30)

Translational invariance in Feynman-type integrals. Functional integration theory and applications (Proc. Colloq., Louvain-la-Neuve, 1979), pp. 143-150, Plenum, New York, 1980. (Author's summary) 82h:81048 81C35

Quantized fields on the Einstein static universe and Segal's theory of the redshift. Lett. Math. Phys. 4 (1980), no. 4, 329-337. (Marcos D. Maia) 82f:83099 83F0.

Conformally flat spaces and gravitation. Lett. Math. Phys. 4 (1980), no. 4, 339-346.

(Marcos D. Maia) 82a:83047 83D05 (83C05)

Tartaglia, A. (with Negro, F.) Quantization of motion in a velocity-dependent field: the p² e. Phys. Rev. A (3) 23 (1981), no. 4, 1591-1593. (Authors' summary) 82h:81050 81D99

Tartaglia, P. (with de Pasquale, F.; Tombesi, P.) Transient behavior of nonequilibrium phase transitions. Phys. Lett. A 78 (1980), no. 2, 129-132. (Authors' summary) 82b:80022 80A30 (58F13, 92A40)

Tartakovskii, A. G. Simultaneous successive detection of signals and estimation of parameters with a priori uncertainty. Automat. i Telemeh. 1980, no. 3, 113-122 (Russian English summary); translated as Automat. Remote Control 41 (1980), no. 3, part 2, 382-389. (Author's summary) 821:93072 93E10 (94A12)

Tartar, Luc (with Foiaș, Ciprian) Opérateurs de Toeplitz généralisés et homogénéisation. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 1, A15-A18. (Sheldon Axler) 826:47035 47B35

Tarumi, Tomoyuki (with Shohoji, Takao; Yamashita, Yuji) Generalization of Fisher's z-transformation. J. Statist. Plann. Inference 5 (1981), no. 4, 347-354. (Authors' summary) 82m:62130 62H20

- runin, E. L. (with Myznikova, B. I.) Boundary conditions for the velocity vortex in problems of the dynamics of a viscous fluid. (Russian) Convective flows and hydrodynamic stability (Russian), pp. 90–101, 136–137, Akad. Nauk SSSR, Ural. Naučn. Centr., Sverdiovsk, 1979. (Authors' summary) 822-76034 761999 (65M05, 76A60) See also Convective flows and hydrodynamic stability, 82d:76041 resulter, J. Dalton (with Denman, Richard) k-arc Hamilton graphs. Theory and applications of graphs (Foc. Internat. Conf., Western Mich., Univ., Kalamazoo, Mich., 1976), pp. 545–556, Lecture Notes in Math., 642, Springer, Berlin, 1978. (Larry Basenspiler) 827:e9667 05C45 (05C38)

See also American ma matical heritage: algebra and applied ma

- Domingo Alberto Application of variational methods in the steady-state case of the
 -phase Stefan problem. (Spanish) Math. Notae 27 (1979/80), 145–156. (S. L. Kalla) 80A20 (35R35)
 - A family of prob ems which converges towards the steady-state case of the tv Stefan problem. (Spanish) Math. Notae 27 (1979/80), 157-165. (S. L. Kalla) 824:80021 80A20 (35R35)
- ka, Seiichi Stability analysis of a finite element scheme for the heat equation with a random initial condition. Comput. Methods Appl. Mech. Engrg. 29 (1981), no. 1, 109-113. (From the introduction) 82k:65071 65N30 (65U05)
- 109-113. (From the introduction) 82k:65071 65N30 (65U05)

 Tasche, Manfred (with Wrase, Burghard) Über lineare Differentialgleichungen gebrochener Ordnung und verallgemeinerte Abelsche Integralgleichungen. Demons (1979), no. 3, 803-820. (D. Przeworska-Rolewicz) 82e:44003 44A99 (26A33, 34A25) (with Reckziegel, Ingeborg) Über die Lösung entarteter Operatorgleichungen mit Matrixkoeffizienten. Rostock. Math. Kolloq. No. 13 (1980), 81–96. (D.
- Przeworska-Rolewicz) 82bc47013 47A50 Taschner, Rudolf J. Der Differenzensatz von van der Corput und gleichverteilte
- ktionen. J. Reine Angew. Math. 307/308 (1979), 325-340. (J. H. B. Kemperman) 82e:10089 10K05 (10F40)
- The discrepancy of C-uniformly distributed multidimensional functions. J. Math. Anal. Appl. 78 (1980), no. 2, 400-404. (O. P. Stackelberg) 82h:10064 10K05
- Eine Ungleichung von van der Corput und Kemperman. (English summary)
- Monatsh. Math. 91 (1981), no. 2, 139–152. (L. Kuipers) 82:10070 10K05 (43A20)
 Taščijan, G. M. Asymptotic behavior of the spectrum of elliptic differential equations with a weak polynomial degeneracy on the boundary of the domain. (Russian) Boundary value problems. Spectral theory (Russian), pp. 204-220, 245-246, Probl. Mat. Anal., 7, Leningrad. Univ., Leningrad, 1979. (Pavel Burda) 82a:35087 35P20 (35J40) 35P20 (35J40)
- Tašev, Ž. A singular operator equation with Carleman shift of order two in normed rings. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1979, no. 1, 148-153. (N. L. Vasilevskii) 82:47019 47A50 (45E99, 46H99)
- eva, Bistra E. (with Zlatev, Minčo P.) The functional linearization method. Realized possibilities. (Bulgarian. Russian and English summaries) Problemi Tehn. Kibernet. 11 (1981), 80-97. (Authors' summary) 82d:49027 49D25 hiro, Yoshihiro On conformal diffeomorphisms between complete product Riemannian
- nifolds. J. Math. Soc. Japan 32 (1980), no. 4, 639-663. (J. R. Vanstone) 82g:53053 53C25
 - On conformal diffeomorphisms between product Riemannian manifolds. Pro Japan Acad. Ser. A Math. Sci. 57 (1981), no. 1, 38-41. (J. R. Vanstone) 82i:53036
- imov, L. (with Kunicyn, A. L.) Instability of periodic motion of a multidimensional system in a case of internal resonance. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 1, 75-77. (A. Somolinos) 82i:34055 34D20
- skaraev, A. Integral curvatures of various orders for convex hypersurfaces. (Russian) Dokl. Akad. Nauk UzSSR 1979, no. 11, 8-10. (Z. Nádeník) 82c:53043 53C45
- ković, Milan R. Some results in the fixed point theory. II. Publ. Inst. Math. (Beograd)
- (N.S.) 27(41) (1980), 249-258. (From the summary) 82f:54082 54H25 (47H10) smambetov, Z. N. Construction of asymptotic representations of solutions of some systems of partial differential equations of arbitrary rank. (Russian) Qualitative theory of differential equations (Russian), pp. 50-53, Kazah. Gos. Ped. Inst., Alma-Ata, 1979. (See 35C20
- rratov, S. S. Some estimates of total mean curvature for isometric realizations of nets. (Russian) Modern geometry (Russian), pp. 76-83, Leningrad. Univ., Leningrad, 1980. (W. J. Firey) 82g:53068 53C45 (52A25)
- lov, B. Finiteness of the number of classes of positive primitive quadratic forms of Jacobi, Jacobi-Gauss and Liouville type. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 12, 7-9. (J. S. Joel) 82g:10043 10C15
- as, John L. (with Kausel, Eduardo) Transmitting boundaries: a closed-form comparison. Bull. Seismol. Soc. Amer. 71 (1981), no. 1, 143-159. (Authors' summary)
- 82m:86005 86A15 (65P05, 76D99)
 Tatarinov, Ja. V. Geometric formalism of classical dynamics. Natural integrals and reduction. (Russian. French summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1978, no. 3, 109-118. (V. Topenčarov) 82a:70012 70G05 (58F05)
 - A global view of the dynamics of a rigid body. Description of the configuration. (Russian. French summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1978, no. 4,
 - 101-109. (V. Topenčarov) 82a:70013 70E99 (58F05)

 A global view of the dynamics of a rigid body. Passage to the quotient system. (Russian. French summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1978, no. 5, 93-98.
 - (V. Topenčarov) 82x70014 70E99 (49H05, 58F05)

 Deformations of the manifold of positions, and quadratic integrals of a natural system in classical dynamics. (Russian) Uspehi Mai. Nauk 35 (1980), no. 6(216), 173-174. (A. Haimovici) 82f:70002 70D10 (58F05, 70G05)
- Tatarkiewicz, Krzysztof Sur les équations oscillantes non nécessairement linéaires. Demonstratio Math. 14 (1981), no. 1, 257-270. (V. B. Headley) 82h:34046
- Tätaru, O. L. (with Saliu, L.) General group conditions for gauge theories without anomalies. An. Univ. Craiova Mat. Fiz.-Chim. 6 (1978), 55-64. (Authors' summary) 821-81069 81E10 (22E70)
 - (with Gherman, O.) Renormalization of gauge theories with general gauge conditions. An. Univ. Craiova Mat. Fiz.-Chim. 6 (1978), 65-70. (Authors' summary) 82te81070 81E10 (22E70, 81E15)
- Tataru-Mihai, P. On the instanton solutions for the SU2 gauge field theory. (Italian and

- sian summaries) Nuovo Cimento A (11) 47 (1978), no. 3, 287-296. (Author's mary) 82e:81034 81E10 (32H99, 57S99)
- Tatjerski, Piotr (with Findeisen, Władysław; Bailey, F. N.; Brdyk, M.; Malinowski, K.; Woźniak, A.) *Control and coordination in hierarchical systems. International Series on Applied Systems Analysis, 9. Wiley-Interscience [John Wiley & Sons], Chichester-New York, 1980. x + 467 pp. ISBN 0-471-27742-8 (Tamer Başar) 82h:93001 93-02 (49D27, 90A16, 92A25, 93A13)
 - Methods of hierarchical optimization for interconnected systems. Op techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 2, pp. 123-130, Lecture Notes in Control and Information Sci., 23, Springer, Berlin, 1980. (From the introduction) 49D27 (93A13)
 - (with Brdys, M.; Findeisen, Władysław) Hierarchical control for systems operating in steady-state. Large Scale Systems 1 (1980), no. 3, 193-213. (Guy Cohen) 82k:93004 93A13
- mmir, Dorian S-matrix for the interaction between gravitational and Yang-Mills fields. (Romanian summary) An. Stiint. Univ. "Al. I. Cuza" Iași Sect. I b Fiz. (N.S.) 24 (1978), 91–100. (Gheorghe Nenciu) 82d:81133 81F15 (81E99)
 - On the electromagnetic interactions in the presence of the gravitational field. An. Stiint. Univ. "Al. I. Cuza" Iaşi Sect. I b Fiz. (N.S.) 25 (1979), 21–25. (Author's mary) 82b:83056 83C99 (83C25)
 - On the quantization of free gravitational field. (French summary) Rev. Roumaine Phys. 25 (1980), no. 3, 267–275. (Beverly K. Berger) 82d:83030 83C45
- Taton, René (with Juškevič, A. P.; Dugac, Pierre) Sur trois ouvrages soviétiques récents concernant l'histoire des mathématiques. Rev. Histoire Sci. Appl. 30 (1977), no. 4, 337-359. (Editors) 82e:01125 01A75
 - L'initiation de Leibniz à la géométrie (1672-1676). Leibniz in Paris (1672-1676) (Sympos. G. W. Leibniz Soc./CNRS, Chantilly, 1976), Vol. I (French), pp. 103-129, Leibnitiana Suppl., XVII, Steiner, Wiesbaden, 1978. (Eberhard Knobloch) 82i:01020 01A45 (51-03)
 - Inventaire des publications et des manuscrits de Nicolas-Louis Lacaille (1713-1762). Science and history, pp. 317-333, Studia Copernicana, XVI, Ossolineum, Wrocław, 1978. (See 82e:01003) 01A50
 - (with Aymerich, Guiseppe; Raggio, Andrea; Gratton, Livio) Opening session: welcoming addresses. Newton and the Enlightenment (Proc. Internat. Sympos., Cagliari, 1977). Vistas Astronom. 22 (1978), no. 4, 395–404 (1979). (Editors) 82e:00020 00A25
 - Viggo Brun (1885-1978). (French) Rev. Histoire Sci. Appl. 33 (1980), no. 3, 253-254. (Editors) 82i:01061b 01A70
 - See also Cahiers du Séminaire d'Histoire des Mathématiques, 82e:01001 and Euler, Leonhard, 82h:01075
- Tatsumi, Tomomasa Analytical theories and numerical experiments on two-dimensional turbulence. Theoretical and applied mechanics, Vol. 29 (Proc. 29th Japan Nat. Congr., Tokyo, 1979), pp. 375-393, Univ. Tokyo Press, Tokyo, 1981. (See 82e:73003) (35Q10, 58F13)
 - (with Yanase, Shinichiro) The modified cumulant expansion for two-dimensional homogeneous turbulence with a mean flow. J. Phys. Soc. Japan 50 (1981), no. 9, 3144-3153. (Authors' summary) 82m:76034 76F05
- Tatsuno, Kuniaki (with Kishi, Takashi) Adaptive search and stop with uncertain sensor capability. (Japanese summary) J. Oper. Res. Soc. Japan 24 (1981), no. 3, 189-201. (Authors' summary) 82m:90096 90B40
- Tatsuuma, Nobuhiko Duality for normal subgroup. (French summary) Algèbres d'opérateurs et leurs applications en physique mathématique (Proc. Colloq., Marseille, 1977), pp. 373-386, Colloques Internat. CNRS, 274, CNRS, Paris, 1979. (G. L. Litvinov) 22D35
- Tatuzawa, Tikao (with Mitsui, Takayoshi) Sur un problème en théorie additive des nombres. With the Japanese original. Analytic number theory (Proc. Sympos., Tokyo, 1980) (French), pp. 101-151, Monograph. Sci. Maison Franco-Japon., 3, Maison Franco-Japon., Tokyo, 1981. (Jean-Marc Deshouillers) 82m:10074 10J15 (12 10J15 (12A99)
- See also Analytic number theory, 82h:10004 Taub, A. H. High-frequency gravitational waves, two-timing, and averaged Lagrangians. General relativity and gravitation, Vol. 1, pp. 539-555, Plenum, New York, 1980. (From the introduction) 82e:83032 83C35
 - Generalised Kerr-Schild space-times. Ann. Physics 134 (1981), no. 2, 326-372. (P. C. Vaidya) 82i:83015 83C15 (53B20, 83C55)
- Tauber, G. Massive spin-two particle in a gravitational field. Gen. Relativity Gravitation 12 (1980), no. 12, 1043-1054 (1981). (Author's summary) 82d:83014 83C10
- Tauber, Selmo Time dependent solution of a pollution problem. Appl. Math. Comput. 6 (1980), no. 4, 359–367. (Christopher Caldwell) 82h:76053 76R05 (65P05)
- thert, K. (with Ansorge, Rainer) Set-valued collectively compact operators and applications to set-valued differential equations. (German summary) Computing 23 (1979), no. 4, 333-343. (J. Jarnik) 82i:34012 34A60 (65L10)
- Converging multistep methods for initial value problems involving multivalued maps. (German summary) Computing 27 (1981), no. 2, 123-136. (Author's summary) 65L05 (49D25) 82m:65068
- bes, Clifford Henry (with Jaffe, Arthur) *Vortices and monopoles. Structure of static gauge theories. Progress in Physics, 2. Birkhäuser, Boston, Mass., 1980. v+287 pp. ISBN 3-7643-3025-2 (Masatsugu Minami) 82m:81051 81E10 (53C80, 81-02)
- (with Callias, Constantine) Functional determinants in Euclidean Yang-Mills theory Comm. Math. Phys. 77 (1980), no. 3, 229-250. (J. H. Rawnsley) 82d:81074 (58G11, 81C35)
- The existence of multimonopole solutions to the nonabelian, Yang-Mills-Higgs equations for arbitrary simple gauge groups. Comm. Math. Phys. 80 (1981), no. 3,
- 343–367. (G. Vitiello) 82;81043 81E10 (53C05, 58D17)

 Surface integrals and monopole charges in nonabelian gauge theories. Con
 Phys. 81 (1981), no. 3, 299–311. (R. S. Ward) 82k:81061 81E10 (53C05)
- man, Yair Value on the space of all scalar integrable games. Game theory and related topics (Proc. Sem., Bonn and Hagen, 1978), pp. 107-115, North-Holland, Amsterdam, 1979. (Y. I. Kannai) 82i:90109 90D12 1979. (Y. I. Kannai) 82f:90109
- 1979. (Y. I. Kanna) 64:79109 70212. sech, Eggelbert The n-dimensional least area problem for boundaries on a convex cone. Arch. Rational Mech. Anal. 75 (1980/81), no. 4, 407–416. (João Lucas Marquês Barbosa)

82e:53014 53A10 (49F10, 58A25, 58E12)

(with Böhme, Reinhold; Hildebrandt, Stefan) The two-dimensional analogue of the catenary. Pacific J. Math. 88 (1980), no. 2, 247-278. (R. Osserman) 82e:49062

ussky, Olga Pairs of sums of three squares of integers whose product has the same property. General inequalities, 2 (Proc. Second Internat. Conf., Oberwolfach, 1978), pp. 29-36, Birkhäuser, Basel, 1980. (Jean-Marc Deshouillers) 82m:10073 10J05

Sets of complex matrices which can be transformed to triangular forms. Numerical methods (Third Colloq., Keszthely, 1977), pp. 579-590, Colloq. Math. Soc. János Bolyai, 22, North-Holland, Amsterdam, 1980. (Frank Uhlig) 82b:15001 15-02

Some facts concerning integral representations of the ideals in an algebraic number field. Linear Algebra Appl. 31 (1980), 245-248. (Hans Opolka) 82h:10078 (12A57)

(with Estes, Dennis R.) Remarks concerning sums of three squares and quaternion minutator identities. Linear Algebra Appl. 35 (1981), 279-285. (Authors' summary) a: 10068 10M20 (10J05) 82a:10068

Composition of binary integral quadratic forms via integral 2×2 matrices and composition of matrix classes. Linear and Multilinear Algebra 10 (1981), no. 4, 309-318. (Dennis Estes) 82m:15030 15A63 (10C05, 12A45)

Tautu, Petre See Biological growth and spread, 82c:92004

Tauvel, Patrice Sur les quotients premiers de l'algèbre enveloppante d'une algèbre de Lie résoluble. II. (English summary) Ann. Fac. Sci. Toulouse Math. (5) 1 (1979), no. 3, 257-267. (Anthony Joseph) 82h:17013 17B35 (17B30)

Sur l'application de Dixmier pour les algèbres de Lie résolubles. Seminaire d'Algèbre Paul Dubreil et Marie-Paule Malliavin, 32 ème année (Paris, 1979), pp. 161-171, Lecture Notes in Math., 795, Springer, Berlin, 1980. (Jouko Mickelsson) 82i:17017

Tavares, L. Valadares An exponential Markovian stationary process. J. Appl. Probab. 17 (1980), no. 4, 1117-1120. (Holger Rootzén) 82e:60104a 60J05 (60G17)

Letter to the editor: "An exponential Markovian stationary process". J. Appl Probab. 18 (1981), no. 4, 957. (Editors) 82e:60104b 60J05 (60G17)

Tayhelidze, A. N. (with Kvinihidze, A. N.; Magradze, B. A.; Matveev, V. A.; Mestvirišvili, M. A.) An integral equation for causal distributions and their self-similar asymptotic behavior in the ladder Φ^3 -model. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 302-312. (Authors' summary) 82c:81086 81E10 (81D15)

(with Krasnikov, N. V.; Matveev, V. A.; Rubakov, V. A.; Tokarev, V. F.) The structure of the ground state in two-dimensional massless quantum electrodynan (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 313-328. (Authors' summary) 82b:81060 81E10 (81L05)

(with Krasnikov, N. V.; Matveev, V. A.) The problem of CP invariance in quantum chromodynamics. Fiz. Elementar. Castic i Atom. Jadra 12 (1981), no. 1, 100–124 (Russian. English summary); translated as Soviet J. Particles and Nuclei 12 (1981), no. 1, 38-47. (Authors' summary) 82k:81089 81G05

Tavhelidze, D. S. (with Davitašvili, N. S.) Das Existenztheorem von Kurbeln in ebenen Siebengelenkgetrieben. Wiss. Z. Tech. Univ. Dresden 29 (1980), no. 3-4, 849-856.

(Authors' summary) 82a:70003 70B15

Tavhelidze, I. N. (with Oleïnik, O. A.; Iosif'jan, G. A.) The behavior of the solutions of the plane theory of elasticity in the neighborhood of irregular points of the boundary and at infinity. (Russian) Differential and integral equations. Boundary value problems (Russian), pp. 237-255, Tbilis. Gos. Univ., Tbilisi, 1979. (L. Jentsch) 82c:73010 Solutions of polyharmonic equations with Dirichlet boundary conditions. (Russian)
Dokl. Akad. Nauk SSSR 247 (1979), no. 2, 292–296. (Author's review (RŽMat 1980:2 B277)) 82c:31007 31B30 (35J40)

Tavkhelidze, A. N. See Tavhelidze, A. N.

Tavlalašvili, V. D. (with Mikadze, I. S.) Probability characteristic of the performance of a time-redundant technical system. Avtomat. i Vyčisl. Tehn. (Riga) 1980, no. 4, 60-64, 97 (Russian); translated as Automat. Control Comput. Sci. 14 (1980), no. 4, 56-60. (Authors' mmary) 82c:90043 90B25

Tawchelidse, D. S. See Tavhelidze, D. S.

Taxén, Lars (with Kjellström, Gregor) Stochastic optimization in system design. IEEE Trans. Circuits and Systems 28 (1981), no. 7, 702-715. (Authors' summary) 82e:93094 93E03 (90C15)

Tayal, Vrinda (with Singh, Umed) A technique for selection of variables in multiple regression. Multivariate statistical analysis (Proc. Conf., Dalhousie Univ., Halifax, N.S., te statistical analysis (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1979), pp. 207-217, North-Holland, Amsterdam, 1980. (Colin L. Mallows) 82d:62116 62105

Taylor, Alan D. On saturated sets of ideals and Ulam's problem. Fund. Math. 109 (1980), no. 1, 37-53. (J. M. Henle) 82a:03045 03E05 (03E35, 04A20)

Bounds for the disjoint unions theorem. J. Combin. Theory Ser. A 30 (1981), no. 3, 339-344. (Serban Buzejeanu) 82g:05014 05A17 (05A05) (with Mekler, Alan H.; Pelletier, Donald H.) A note on a lemma of Shelah

concerning stationary sets. Proc. Amer. Math. Soc. 83 (1981), no. 4, 764-768. (A.

Kanamori) 82k:04007 04A20 Taylor, B. A. (with Berenstein, Carlos Alberto) Interpolation problems in C" with plications to harmonic analysis. J. Analyse Math. 38 (1980), 188-254. (J. Mitchell)

32A15 (32F05, 42B99) (with Rubel, Lee A.) An example of a rigid partial differential equation. J.

Differential Equations 38 (1980), no. 1, 126-133. (L. Cattabriga) 82a:35025 35E20 (with Ramm, Alexander G.) A new proof of absence of positive discrete spectrum of

the Schrödinger operator. J. Math. Phys. 21 (1980), no. 9, 2395-2397. (Evans M. Harrell) 82b-35112 35P05 (35J10, 81C10)

Taylor, D. C. (with Lazar, Aldo J.) An example of a liminal C*-algebra. Proc. Amer. Math. Soc. 79 (1980), no. 1, 50-54. (Takateru Okayasu) 82b:46075 46L05

(with Lazar, Aldo J.) Approximately finite-dimensional C*-algebras and Bratteli diagrams. Trans. Amer. Math. Soc. 259 (1980), no. 2, 599-619. (G. A. Elliott) 82b:46076 46L05 (46L35)

Taylor, David Burt (with Currie, P. K.) The secular equation for Rayleigh waves on elastic crystals. II. Corrections and additions. Quart. J. Mech. Appl. Math. 34 (1981), no. 2, 231–234. (Authors' summary) 82f:73021 73D20

Taylor, Desmond P. (with Mazur, Brian A.) Demodulation and carrier synchronization of multi-h phase codes. IEEE Trans. Comm. 29 (1981), no. 3, 257-266. (Authors' summary) 94A14

Taylor, Donald Boggia Horseshoe periodic orbits in the restricted problem of three bodies for a Sun-Jupiter mass ratio. Astronom. and Astrophys. 103 (1981), no. 2, 288-294. (Author's summary) 82m:70006 70F07 (58F15, 70-04)

Taylor, Fredrick J. (with Huang, Chou) A comparison of DFT algorithms using a residue architecture. Comput. Electr. Engrg. 8 (1981), no. 3, 161-173. (Authors' summary) 82m:94018 94A05 (68C05)

Large moduli multipliers for signal processing. IEEE Trans. Circuits and Systems 28 (1981), no. 7, 731-736. (Author's summary) 82e:94013 94A05

(with Huang, Chao H.) A floating-point residue arithmetic unit. J. Franklin Inst.

311 (1981), no. 1, 33-53. (Authors' summary) 82a:94013 94A11 (68A05)

Taylor, G. G. The analytic and synthetic in Russell's philosophy of mathematics. *Philos. Stud.* 39 (1981), no. 1, 51-59. (Douglas Walton) 82k:00012 00A25 (01A60, 03-03, 00A25 (01A60, 03-03, 03A05)

Taylor, Gerald D. (with Chalmers, Bruce L.) On the existence of strong unicity of arbitrarily small order. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 293-298, Academic Press, New York, 1980. (Darrell Schmidt) 82d:41636

(with Kaufman, Edwin H., Jr.) Restricted-denominator rational approximation. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 555-560, Academic Press, New York, 1980. (D. J. Leeming) 82d:41016 41A20 (with Kaufman, Edwin H., Jr.; Leeming, David J.) A combined Remes-differential

correction algorithm for rational approximation: experimental results. Comput. Math. Appl. 6 (1980), no. 2, 155-160. (V. N. Malozemov) 821:65016 65D15

(with Kaufman, Edwin H., Jr.; Leeming, David J.) Uniform rational approximation by differential correction and Remes-differential correction. Internat. J. No. Engrg. 17 (1981), no. 8, 1273-1280. (Authors' summary) 82i:65011 65D15

Taylor, Herbert (with Erdős, Paul; Rubin, Arthur L.) Choosability in graphs. Proceedings of the West Coast Conference on Combinatorics, Graph Theory and Computing (Humboldt State Univ., Arcata, Calif., 1979), pp. 125-157, Congress. Numer., XXVI, Utilitas Math., Winnipeg, Man., 1980. (R. C. Entringer) 821:05038 05C15
(with Posner, Edward C.; Rubin, Arthur L.) Partitioning files into subfiles with

Utilitas Math. 17 (1980), 85-101. (James W. Snively, Jr.) 82c:68015 68B15

Bicycle tubes inside out. The mathematical Gardner, pp. 75-78, Wadsworth, Belmont, Calif., 1981. (See 82b:00003) 57N05 (57M25)

Taylor, Howard L. (with Banks, Stephen C.) A modification to the discrete I, linear

approximation algorithm of Barrodale and Roberts. SIAM J. Sci. Statist. Comput. 1 (1980), no. 2, 187-190. (Asen L. Dončev) 82a:90081 90C05 Taylor, Howard M. (with Karlin, Samuel) *A second course in stochastic processes

Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981.

xviii + 542 pp. ISBN 0-12-398650-8 (D. A. Darling) 82;60003 60-01 (60360)

Taylor, I. D. S. (with Templeton, J. G. C.) Waiting time in a multiserver cutoff-priority queue, and its application to an urban ambulance service. Oper. Res. 28 (1980), no. 5, 1168-1188. (L. M. Abol'nikov) 82b:60124 60K25

Taylor, J. C. See Taylor, John Christopher
Taylor, James G. Mathematical analysis of nonlinear Helmbold-type equations of warfare. J. Franklin Inst. 311 (1981), no. 4, 243-265. (Author's summary) 82k:90144 (93E05)

Taylor, Jean E. Surfaces minimizing the integrals of crystalline integrands. Minimal submanifolds and geodesics (Proc. Japan-United States Sem., Tokyo, 1977), pp. 229-247, North-Holland, Amsterdam, 1979. (R. Hardt (Zbl 446:49032)) 82g:49039 (53C42)

Nonexistence of F-minimizing embedded disks. Pacific J. Math. 88 (1980), no. 2, 279-283. (A. J. Tromba) 82i:49041 49F25

shawe-Taylor, John See Shawe-Taylor, John Taylor, John Christopher Fine and admissible convergence for the unit ball in C*. Potential theory, Copenhagen 1979 (Proc. Colloq., Copenhagen, 1979), pp. 299-315, Lecture Notes in Math., 787, Springer, Berlin, 1980, (J. Mitchell), 82e-32043 32M15 (31B25, 32A35) Math., 787, Springer, Berlin, 1980. (J. Mitchell) 82e:32043

Taylor, John G. Generalized groups as global or local symmetries. *J. Math. Phys.* 21 (1980), no. 12, 2715–2718. (Jules Beckers) 82b:20109 20N15 (81C40)

(with Pickup, C. D.) Gauging Lie superalgebras. J. Phys. A 13 (1980), no. 5, 150/m Fickup, C. D.) Grading Lie Superangeous. 3. Phys. A 15 (1760), no. 5,
 157-1542. (Nigel B. Backhouse) 82-81091
 81E10 (17A70, 83E99)
 (with Nouri-Moghadam, M.) On the quantization of gravity. Phys. Lett. B 94 (1980),

o. 4, 487-490. (Authors' summary) 82a:83026 83C45 (53C05, 58D30, 58F06, 58G20)

(with Pickup, C. D.) Representations of N=4 supersymmetry on superfields. Nuclear Phys. B 188 (1981), no. 3, 577-593. (Authors' summary) 82i:81148 81G20 (17A70, 17B65)

(with Moffat, J. W.) Prevention of gravitational collapse. Phys. Lett. B 99 (1981), no. 5, 396–398. (Authors' summary) 82h:83062 83D05

(with Mannion, C. L. T.) General relativity on a flat lattice. Phys. Lett. B 100 (1981), no. 3, 261-266. (Authors' summary) 82&83062 83E99 (81G05)
 Off-shell central charges and linearised N=8 supergravity. Phys. Lett. B 107 (1981),

no. 3, 217-222. (Author's summary) 82m:83056 83E50 (17A70, 81G20)

nv. 3, 217-222. (Autnor's summary) 82m:83056 83E50 (17A70, 81G20) (with Rivelles, V. O.) Linearised AP-2 superfield supergravity. J. Phys. A 15 (1982), no. 1, 163-175. (Authors' summary) 82j:83065 83E50

Taylor, Keith F. Group representations which vanish at infinity. Math. Ann. 251 (1980), no. 2, 185-190. (A. Kleppner) 82a:22006 22D10 (46L10)

Taylor, Laurence P. Or the consent form.

Taylor, Laurence R. On the genera of knots. Topology of low-dimensi Second Sussex Conf., Chelwood Gate, 1977), pp. 144–154, Lecture Notes in Math., 722, Springer, Berlin, 1979. (Editors) 82m:57011 57Q45

(with Akbulut, Selman) A topological resolution theorem. Bull. Amer. Math. Soc. (N.S.) 2 (1980), no. 1, 174-176. (P. J. Kahn) 82a:57018 57Q25 (14G30, 32C05)

(with Madsen, Ib; Williams, Bruce) Tangential homotopy equivalences. Con Math. Helv. 55 (1980), no. 3, 445-484. (Edgar H. Brown, Jr.) 82f:57015

(with Cohen, F. R.; May, J. P.) K(Z, 0) and K(Z₂, 0) as Thom spectra. Illinois J. Math. 25 (1981), no. 1, 99-106. (V. P. Snaith) 82h:55008 55P20

Taylor, M. A. P. Maximum likelihood estimation for a road traffic network model. Appl. Math. Modelling 5 (1981), no. 1, 34-38. (Author's summary) 82b:90052 90B20

Taylor, Martin J. Structure galoisienne des anneaux d'entiers des extensions de Kumm

- er on Number Theory, 1979-1980 (French), Exp. No. 8, 2 pp., Univ. Bordeaux I, re, 1980. (From the text) 82g:12007 12A55 (20C05)
- Galois module structure of rings of integers. Ann. Inst. Fourier (Grenoble) 30 (1980), no. 3, 11–48. (J. Browkin) \$2e:12008 12A55 (20C10)

 A logarithmic approach to classgroups of integeral group rings. J. Algebra 66 (1980), no. 2, 321–335. (Hans Opolka) \$2at-12011 12A57 (20C10)
- (with Fröhlich, A.) The arithmetic theory of local Galois Gauss sums for tame characters. Philos. Trans. Roy. Soc. London Ser. A 298 (1980/81), no. 1437, 141-181. (Lawrence Washington) 82h:12014 12B17
- Structure galoisienne des anneaux d'entiers. [Galois structure of rings of integers] ninar on Number Theory, Paris 1979–80, pp. 311–316, Progress in Math., 12, khäuser, Boston, Mass., 1981. (See 82:10004) 12A55
- On Fröhlich's conjecture for rings of integers of tame extensions. Invent. Math. 63 (1981), no. 1, 41-79. (Hans Opolka) 82e;12008 12A55 (12A57)

 Monomial representations and rings of integers. J. Reine Angew. Math. 324 (1981), 127-135. (Hans Opolka) 82e;12010 12A55 (12A57, 20C10)
- ylor, Michael E. (with Cahn, Robert S.) Asymptotic behavior of multiplicities of representations of compact groups. Pacific J. Math. 84 (1979), no. 1, 17–28. (A. Morimoto) 824:22013 22E46 (10J25, 22C05)
 - ★Pseudodifferential operators. Princeton Mathematical Series, 34. Princeton University Press, Princeton, N.J., 1981. xi+452 pp. ISBN 0-691-08282-0 (Vesselin M. Petkov) 82i:35172 35Sxx (35-02, 47G05, 58G15, 78A05)
 - Diffraction of waves by cones and polyhedra. Analytical and num
- asymptotic problems in analysis (Proc. Conf., Unio. Nijmegen, Nijmegen, 1980), pp. 235–248, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (From 35L05
- (with Dadok, Jiri) Local solvability of constant coefficient partial differential equations as a small divisor problem. Proc. Amer. Math. Soc. 82 (1981), no. 1, 58-60. (L. Cattabriga) 82h:35014 35E20
- Taylor, P. J. (with Openshaw, S.) A million or so correlation coefficients: three experiments on the modifiable areal unit problem. Statistical applications in the spatial sciences, pp. 127-144, Pion, London, 1979. (See 821:90003) 90A30
- (with Holland, A. S. B.; Phillips, G. M.) Generalization of a theorem of Bernštein. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 513-516, Academic Press, New York, 1980. (D. Leviatan) 82x41015 41A17
- Taylor, Peter D. (with Sauer, Ann) The selective advantage of sex-ratio homeostasis. Amer. Natur. 116 (1980), no. 2, 305-310. (Ivar Heuch) 82e:92032 92A10 (with Bulmer, M. G.) Local mate competition and the sex ratio. J. Theoret. Biol. 86 80), no. 3, 409-419. (Authors' summary) 82j:92047 92A10 (90D40, 92A15) (1980), no. 3, 409-419. (Authors' summary) 82j:92047
- Taylor, Richard A generalization of Hartogs' theorem relating to the subalgebras of tinuous functions on the n-dimensional torus. J. Funct. Anal. 43 (1981), no. 1, 52-59. 32E25 (46J15) (T. W. Gamelin) 82m:32014
- Taylor, Robert J. Ambush predation as a destabilizing influence upon prey populations. 92A15 Amer. Natur. 118 (1981), no. 1, 102-109. (Author's summary) 82m:92067
- Taylor, Robert Lee (with Cheng, K. F.) On the uniform complete convergence of estimates for multivariate density functions and regression curves. Ann. Inst. Statist. Math. 32 (1980), no. 2, 187-199. (Gérard Collomb) 82m:62088 62G05
- Taylor, Robert Leroy (with Kanokukulchai, Worsak; Hughes, Thomas J. R.) A large deformation formulation for shell analysis by the finite element method. Comput. & Structures 13 (1981), no. 1-3, 19-27. (Authors' summary) 82j:73053 73K25
- Taylor, Samuel James (with Chacon, R. V.; Le Jan, Yves; Perkins, Edwin) Generalised arc length for Brownian motion and Lévy processes. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 2, 197-211. (Mou-Hsiung Chang) 82j:60152 60J65 (60G17, 60J45)
- Taylor, W. E., Jr. On the oscillation of a fourth order differential equation and its adjoint. Portugal. Math. 37 (1978), no. 3-4, 299-305 (1981). (Uri Elias) 82j:34030 34C10
- Taylor, Walter Laws obeyed by topological algebras-extending results of Hopf and Adams. J. Pure Appl. Algebra 21 (1981), no. 1, 75-98. (R. M. Vogt) 82h:55010 Some universal sets of terms. Trans. Amer. Math. Soc. 267 (1981), no. 2, 595-607. (J. R. Isbell) 82h:08005 08A40 (03D35, 04A05)
- Tayoshi, Takao Wave operators in the scattering problem related to nonfinite obstacles Publ. Res. Inst. Math. Sci. 16 (1980), no. 3, 627-634. (P. A. Mišnaevskii) 82i:35145 35P25 (47A40)
- Tazaki, Eiichiroh (with Amagasa, Michio; Sekiguchi, Mamoru) Heuristic structure synthesis in a class of multiobjective network systems using fuzzy finite state system. (Japanese, English summary). Systems and Control 24 (1980), no. 12, 799-806. (Authors' summary) 82b:90117 90C35 (90C31)
- Tazawa, Shinsei (with Yamamoto, Sumiyasu) Hyperclaw decomposition of complete awa, Samset (with Tamamou, Samiyasu) rysperciaw accomposition of comprete hypergraphs. Combinatorial mathematics, optimal designs and their applications (Proc. Sympos. Combin. Math. and Optimal Design, Colorado State Univ., Fort Collins, Colo., 1978). Ann. Discrete Math. 6 (1980), 385-391. (Bruno D'Amore) 82b:05101
- ratov, I. The structure of solutions of a linear system of first-order partial differential equations with periodic coefficients of a special type. (Russian) Kuibyšev. Gos. Ped. Inst. Naučn. Trudy 232 (1979), Differencial. Uravnenija i Mat. Fiz. No. 1, 88-95. (From the text) 82i:35042
- text) 82i:35042 35F20
 skerian, Kerope B. See Čak"rjan, Kerope B.

 en, André H. Inequalities for distributions with given marginals. Ann. Probab. 8 (1980), no. 4, 814–827. (Giorgio Dall'Aglio) 821:60052 60E15 (62E10)
 Tchoń, Krzysztof (with Wojciechowska, Jolanta) Towards a formal theory of description.
- Internat. J. Gen. Systems 6 (1980/81), no. 4, 217-224. (Authors' summary) 82h:92005 92A05 (58C28, 93A10)
- Tehrakian, D. H. A derivation of the Prasad-Sommerfield solution. J. Phys. A 14 (1981). no. 6, 1439-1443. (Author's summary) 82f:81054 81E10 (35Q20)
- te, Maurice Sur l'élimination itérative des situations de blocage dans un système (English summary) RAIRO Inform. Théor. 14 (1980), no. 1, 57-66. (Luigia Aiello) 82g:68052 68C99
 - Sur l'auto-stabilisation dans un réseau d'ordinateurs. (English summary) RAIRO Inform. Théor. 15 (1981), no. 1, 47-66. (Author's summary) 824:68037 68D05 vil'sky, Yu. M. See Čuvil'skii, Ju. M.
- baldi, Claudio (with Franceschini, Valter) A seven-mode truncation of the plane

- incompressible Navier-Stokes equations. J. Statist. Phys. 25 (1981), no. 3, 397-417. (Authors' summary) 82i:76024 76D05 (58F13, 76F99) (Authors' summary) 82i:76024
- Teese, R. B. (with Böhm, A.) SU(3) and SU(4) as spectrum-generating groups. Differential geometric methods in mathematical physics (Proc. Internat. Conf., Tech. Univ. Clausthal, Clausthal-Zellerfeld, 1978), pp. 87-100, Lecture Notes in Phys., 139, Springer, Berlin, 1981. (Authors' summary) 82h:81066 81D20 (81C40, 81G20)
- loris-Teghem, J. See Loris-Teghem, J.
- Teghem, J., Jr. Use of discrete transforms for the study of a GI/M/S queue with impatient customer phenomena. (German summary) Z. Oper. Res. Ser. A-B 23 (1979), no. 3, 95–106. (Author's summary) 82m:60122 60K25

 Teh, H. H. (with Chen, Chuan Chong) Constructions of point-colour-symmetric graphs. J.
- Combin. Theory Ser. B 27 (1979), no. 2, 160-167. (David E. Daykin) 82b:05070
 - On symmetric universal graphs. Proceedings of the Mathematical Seminar: Singapore 1980 (Singapore, 1980), pp. 20–30, Nat. Univ. Singapore, Singapore, 1980. (W. G. Brown) 05C25 (05C20)
- Teh, Oh Kian Continued fractions and linear Diophantine equations. Menemui Mat. 1 (1979), no. 3, 37-47. (Péter Kiss) 82a:10017 10B05 (10A32)
- Teh, Rosy (with Oh, C. H.) Linearly superposable and finite-action classical Yang-Mills J. Math. Phys. 22 (1981), no. 3, 585-589. (H. R. Alagia) 82g:81061
 - (with Oh, C. H.; Koo, W. K.) Low energy static Yang-Mills configurations. Phys. Lett. B 101 (1981), no. 5, 337-340. (Authors' summary) 82f:81051 81E10
- (with Koo, W. K.; Oh, C. H.) Screening solutions to the Yang-Mills equations. Phys. Rev. D (3) 23 (1981), no. 12, 3046-3049. (Authors' summary) 82h:81115 81E99 (with Oh, C. H.; Koo, W. K.) Static Yang-Mills fields in the presence of external sources. Phys. Rev. D (3) 24 (1981), no. 8, 2305-2308. (Authors' summary) 82k:81057 81E10
- Teicher, H. (with Chow, Y. S.; Wei, C. Z.; Yu, Kai Fun) Iterated logarithm laws with random subsequences. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 2, 235-251. (Endre Csáki) 82k:60062 60F15
- Teicher, Mina Factorization of a birational morphism between 4-folds. Math. Ann. 256 (1981), no. 3, 391-399. (Allen B. Altman) 82k:14014
- nann, Jiri On the deterministic and stochastic stability of dissipative magnetohydrodynamic equilibria. (French summary) *Canad. J. Phys.* **59** (1981), *no.* 1, 82–87. (Author's summary) **82b:76069** 76W05 (60H25, 82A45)
- On the stochastic stability of systems with discrete parameters and arbitrary
- circulatory forces. (German summary) Z. Angew. Math. Phys. 32 (1981), no. 1, 110-114. (Author's summary) 82f:93084 93E15 Teissier, Bernard Variétés polaires locales et conditions de Whitney. (English summary) C.
- R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 17, A799-A802. (D. J. A. Trotman) 32B10 (32C42)
 - (with Lipman, Joseph) Pseudorational local rings and a theorem of Briançon-Skoda about integral closures of ideals. Michigan Math. J. 28 (1981), no. 1, 97-116. (Henry C. Pinkham) 82f:14004 14B05 (14D15, 32B30)
- ikham) 84:14004 14003 (14013, 24505) 82d:14021 |
 See also Seminar: Singularities of Surfaces, 82d:14021 |
 oim, Claudio The Hamiltonian structure of space-time. General relativity and Teitelboim, Claudio gravitation, Vol. 1, pp. 195-225, Plenum, New York, 1980. (Jacques Lacaze) 82i:83057 83C99 (58F05)
 - (with Galvao, Carlos A. P.) Classical supersymmetric particles. J. Math. Phys. 21 (1980), no. 7, 1863-1880. (Lawrence P. Horwitz) 82b:81129 81G20 (70A05)
 - Proper time approach to the quantization of the gravitational field. Phys. Lett. B 96 (1980), no. 1-2, 77-82. (Marc Henneaux) 82f:83047 83C45
 - (with Villarroel, D.; van Weert, Ch. G.) Classical electrodynamics of retarded fields and point particles. Riv. Nuovo Cimento (3) 3 (1980), no. 9, 64 pp. (A. H. Taub) 78A35
- Teixidor, J. Sur le calcul du nombre de Milnor. Proceedings of the IV Internatio Colloquium on Differential Geometry (Univ. Santiago de Compostela, Santiago de Compostela, 1978), pp. 267-270, Cursos Congr. Univ. Santiago de Compostela, 15, Univ. tiago de Compostela, Santiago de Compostela, 1979. (Richard Randell) 82b:32011 32B30 (14B05)
- Teiumola, Haroon O. Periodic solutions of certain third order differential equations. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 4, 243-249. (J. M. Cushing) 82j:34040 34C25
 - 243-249. (J. M. Cushing) 343-3444 Seriodic solutions of a certain fourth order differential equation. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 5, 344-350. (H. C. Howard) 82h:34053 34C25 (34A34)
- Tél, T. (with Szépfalusy, P.) The dynamic renormalisation group in the large-n limit. J. Phys. A 12 (1979), no. 11, 2141-2149. (Authors' summary) 82c:82052 82A25 (81E15)
- Telenik, S. F. (with Zaičenko, Ju. P.) Design of the structures of data bases of network type. (Russian) Data banks and information retrieval systems (Russian), pp. 77-90, 130, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (See 82g:68003) 68B15
- Telgársky, Rastislav On point-open games and their generalizations. Topology, Vol. 11 (Proc. Fourth Colloq., Budapest, 1978), pp. 1167-1172, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (M. R. Krom) 82b:54015 54A99 (04A20,
 - (with Ostaszewski, Adam J.) Topological games and analytic sets. II. The
 - Proceedings of the 1980 Topology Conference (Univ. Alabama, Birmingham, Ala., 1980). Topology Proc. 5 (1980), 147-154 (1981). (M. R. Krom) 82m:54039 54H05 (03E15. 54H05 (03E15,
- Telksnys, Laimutis (with Kaukėnas, Jonas) Estimate of the probability of error in the classification of autoregressive random sequences. (Russian. Lithuanian and English summaries) Statist. Problemy Upravlenija—Trudy Sem. Processy Optimal. Upravlenija V Sekcija No. 39 (1979), 71-107, 160. (P. S. Knopov) 82e:62090 62H30
- Teller, J. Roger (with Byrd, Richard D.; Lloyd, Justin T.; Mena, Roberto A.) Extensions of group retractions. Internat. J. Math. Math. Sci. 3 (1980), no. 4, 719-730. (L. Bican) 20E99 (20K15, 20K20)
- Teman, Roger *Navier-Stokes equations. Theory and numerical analysis. Revised edition.

 With an appendix by F. Thomasset. Studies in Mathematics and its Applications, 2.

 North-Holland Publishing Co., Amsterdam-New York, 1979. x + 519 pp.

ISBN 0-444-85307-3, 0-444-85308-1 (Editors) 82h:35133 35Q10 (49D99, 65P05,

(with Foias, Ciprian) Solutions statistiques homogènes des équations de Navier-Stokes. Séminaire Goulaouic-Schwartz (1978/1979), Exp. No. 10, 17 pp., École Polytech., Palaiseau, 1979. (Authors' introduction) 82m:35120 35Q10 (76D05)

Some properties of functional invariant sets for Navier-Stokes equations. Bifurcation phenomena in mathematical physics and related topics (Proc. NATO Advanced Study Inst. Cargèse, 1979), pp. 551–554, NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci., 54, Reidel, Dordrecht, 1980. (Author's introduction) 82b:35132 35Q10

(with Strang, Gilbert) Functions of bounded deformation. Arch. Rat

Anal. 75 (1980/81), no. 1, 7-21. (Scott J. Spector) 82c:46042 46E35 (73E99)
(with Saut, Jean-Claude) Generic properties of Navier-Stokes equations: genericity with respect to the boundary values. Indiana Univ. Math. J. 29 (1980), no. 3, 427-446. (A. A. Arsen'ev) 82g:35096 35Q10 (58D30, 76D05)

(with Foias, Ciprian) Homogeneous statistical solutions of Navier-Stokes equations, iana Univ. Math. J. 29 (1980), no. 6, 913-957. (A. A. Arsen'ev) 82g:35097 35Q1 (28C20, 58D20, 76F05)

(with Strang, Gilbert) Duality and relaxation in the variational problems of plasticity. (French summary) J. Mécanique 19 (1980), no. 3, 493–527. (Z. Mróz) 82i:73017a 73E20 (49A29, 73C60)

Some asymptotic problems in mechanics. Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ. Nijmegen, Nijmegen, 1980), pp. 249–264, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (Hélène Lanchon) 82i:49009 49A29 (73E99)

(with Foias, Ciprian) Solutions statistiques homogenes des équations de Navier-Stokes. [Homogeneous statistical solutions of Navier-Stokes equations] Nonlinear partial differential equations and their applications. Collège de France Seminar, Vol. I (Paris, 1978/1979), pp. 177-192, Res. Notes in Math., 53, Pitman, Boston, Mass., 1981. (Authors' introduction) 82i:35123 35O10 (76D05)

An existence theorem for a variational problem of plasticity. Nonlinear problems of analysis in geometry and mechanics (Proc. Sympos., Univ. Paul Sabatier, Toulo pp. 57-70, Res. Notes in Math., 46, Pitman, Boston, Mass., 1981. (N. Gass) 82m:49015

(with Foias, Ciprian; Guillopé, Colette) New a priori estimates for Navier-Stokes on 3. Comm. Partial Differential Equations 6 (1981), no. 3, 329-359. (Tai Ping Liu) 82f:35153 35010

with Gurtin, Morton E.) On the antiplane shear problem in finite elasticity. J. sticity 11 (1981), no. 2, 197–206. (Hilmi Demiray) 824:73030 73G05 (73G10) Elasticity 11 (1981), no. 2, 197-206. (Hilmi Demiray) 82d:73030

Elasticity 11 (1981), no. 2, 19/-200. Elasticity 11 (1981), no. 2, 19/

On the Cauchy problem for Einstein equations. (Russian) Izv. Vyzš. Učebn. Zaved. Fizika 1980, no. 9, 32-34. (Kishore Marathe) 82g:83001a 83C05 (65M99)

Some properties of Einstein equations. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 10, 7-9. (Author's summary) 82f:83011 83C05

On the Cauchy problem for Einstein equations. II. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 11, 58-61. (Kishore Marathe) 82g:83001b 83C05 (65M99) Gravitational and electromagnetic waves. (Russian) Izv. Vysš. Učebn. Zaved. Fizika

1981, no. 2, 46-49. (Author's summary) 82e:83017 83C35 (78A40) Temesvári, Ágota Über doppelhomogene Zerlegungen. Ann. Univ. Sci. Budapest. Eötvös Sect. Math. 22/23 (1979/80), 163–196. (H. T. Croft) 82c:52018 52A45

Temirbulatov, S. I. Two problems for the wave equation. (Russian) Inverse problems for differential equations of mathematical physics (Russian), pp. 79-86, 158, Akad. Nauk SSSR Sibirsk. Otdel., Vyčisl. Centr., Novosibirsk., 1978. (Alexander Doktor) 82b:35093

A problem with an oblique derivative for the wave equation. (Russian) Sibirsk. Mat. Z. 21 (1980), no. 5, 78-87, 190. (P. Günther) 82f:35111 35L05

Temirgaliev, N. Imbedding of certain classes of functions in $C([0, 2\pi]^m)$. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1978, no. 8, 88-90. (H. Triebel) 82c:46043 (42A10)

Temljakov, V. N. Approximation of periodic functions of several variables with a bounded mixed difference. (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 1(9), 65-80, 175. (S.

Baron) 82h:42025 42B99
Correlations between best approximations of functions of two variables. (Russian)
Mat. Zametki 29 (1981), no. 1, 95-106, 156. (Hans-Jürgen Albrand) 82e:41020

Approximation of functions from the Lipschitz class by algebraic polynomials. (Russian) Mat. Zametki 29 (1981), no. 4, 597-602, 634. (Z. Rubinstein) 82h:41011

nme, N. M. On the expansion of confluent hypergeometric functions in terms of Bessel functions. *J. Comput. Appl. Math.* 7 (1981), no. 1, 27-32. (Author's summary) 82d:65022

Table errata: Formulas and theorems for the special functions of mathematical physics [third edition, Springer, New York, 1966; MR 38 # 1291] by W. Magnus, F. Oberhettinger and R. P. Soni. Math. Comp. 36 (1981), no. 153, 315-316. (Editors)

82a:65011a 65A05

Temperley, H. N. V. (with Ashley, S. E.) Site percolation problems and multisite Potts models. J. Phys. A 15 (1982), no. 1, 215–222. (Authors' summary) 82k:82030 82A43

See also Combinatorics, 82i:05001

Temperton, Clive Very fast real Fourier transforms. Special topics of applied mathematics (Proc. Sem., Ges. Math. Datenverarb., Bonn, 1979), pp. 165–171, North-Holland,

Amsterdam, 1980. (A. D. Booth) 82d:65090 65T05
de Temple, Duane W. See De Temple, Duane W.
Temple, J. Blake Solutions in the large for the nonlinear hyperbolic conservation laws of gas dynamics. J. Differential Equations 41 (1981), no. 1, 96-161. (Tai Ping Liu) 82k:35117 35L65 (76N15)

Templeton, Alan R. (with Rothman, Edward D.) A class of models of selectively neutral alleles. Theoret. Population Biol. 18 (1980), no. 2, 135-150. (Authors' summary) 92A10

Templeton, J. G. C. (with Taylor, I. D. S.) Waiting time in a multiserver cutoff-priority queue, and its application to an urban ambulance service. Oper. Res. 28 (1980), no. 5, 1168-1188. (L. M. Abol'nikov) 82h:60124 60K25

upleton, S. (with Corrigan, E.; Goddard, P.; Osborn, Hugh) Zeta-function regularization and multi-instanton determinants. Nuclear Phys. B 159 (1979), no. 3, 469-496. (Authors' summary) 82g:81077 81E99 (47B99, 58G25, 81G20)

Ten, L. V. Rigidity of complete surfaces of negative curvature that coincide with a hyperbolic paraboloid outside a compact domain. (Russian) Uspehi Mat. Nauk 35 (1980), no. 6(216), 175-176. (A. V. Pogorelov) 82e:53094 53C45

eketzis, D. (with Javid, H.; Sridhar, B.) Operations scheduling by Markov chains with strong and weak interactions. Electric power problems: the mathematical challenge (Proc. Conf., Seattle, Wash., 1980), pp. 426-436, SIAM, Philadelphia, Pa., 1980. (Authors' summary) 82d:90066 90B35 (93E20)

enbaum, Alexander (with Benettin, Giancarlo; Lo Vecchio, Guido) Stochastic transition in two-dimensional Lennard-Jones systems. Phys. Rev. A (3) 22 (1980), no. 4, 1709-1719. (Joseph Ford) 82h:82060 82A55 (58F13)

nbaum, Gérald Sur une technique en théorie analytique des nombres. Semin Number Theory, 1979-1980 (French), Exp. No. 12, 5 pp., Univ. Bordeaux I, Talence, 1980. (Editors) 82i:10065 10H30

Sur le procédé de sommation de Borel et la répartition du nombre des facteurs miers des entiers. Enseign. Math. (2) 26 (1980), no. 3-4, 225-245 (1981). (G. Halász) 82k:10057 10H25

Sur la densité divisorielle d'une suite d'entiers. [On the divisorial density of a equence of integers] Seminar on Number Theory, 1980-1981 (Talence, 1980-1981), Exp. No. 13, 6 pp., Univ. Bordeaux I, Talence, 1981. (See 82m:19006) 10L10 (with Erdős, Paul) Sur la structure de la suite des diviseurs d'un entier. (English

ary) Ann. Inst. Fourier (Grenoble) 31 (1981), no. 1, ix, 17-37. (J. W. Porter) 10H99 (10A05, 10L20)

(with Mendes-France, Michel) Dimension des courbes planes, papiers pliés et suites Rudin-Shapiro. (English summary) Bull. Soc. Math. France 109 (1981), no. 2, 207-215. (Gérard Rauzy) 82k:10073 10K50 (28A75)

Tenenbaum, L. A. (with Gusev, L. A.; Petrov, S. V.; Smirnova, I. M.)

Collateral-hierarchical graphs and graph substitution operations. Avionat. i Telemeh. 1980, no. 6, 142–151 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 6, part 2, 854-861. (Authors' summary) 82h:68128 68H05 (05C99, 93A13)

Tenenbein, Aaron (with Johnson, Mark E.) A bivariate distribution family with specified marginals. J. Amer. Statist. Assoc. 76 (1981), no. 373, 198-201. (Authors' sur 62H10

Tenenblat, Keti On characteristic hypersurfaces of submanifolds in Euclidean space. Pacific J. Math. 74 (1978), no. 2, 507-517. (H. Jacobowitz) 821:53069 53C42 a (with Terng, Chuu Lian) Bäcklund's theorem for n-dimensional submanifolds of R²ⁿ⁻¹. Ann. of Math. (2) 111 (1980), no. 3, 477-490. (Ngô Van Què) 821:58068 58F07 (35O20, 53A05)

haus, Michel La régression qualitative. Rev. Statist. Appl. 27 (1979), no. 2, 5-21. (I. S. Alalouf and George P. H. Styan) 82i:62097 62305

(with Bouroche, J.-M.; Dupont-Gatelmand, C.) L'analyse canonique des préférences. (English summary) Data analysis and informatics (Proc. Second Internat. Sympos., Versailles, 1979), pp. 631-643, North-Holland, Amsterdam, 1980. (See 92A25 (90A06)

Teneva, S. G. Directed orders in Lie algebras. (Bulgarian. Russian and English su Godišnik Visš. Učebn. Zaved. Priložna Mat. 14 (1978), no. 1, 27-34. (A. P. Popov) 82h:17012 17B99 (06F25)

Teng, Li Bang Qualitative analysis of a differential equation with two nonelementary singular points on a torus. (Chinese. English summary) Nanjing Daxue Xuebao 1980, Special Issue on Mathematics, 59-70. (J. S. W. Wong) 82c:34033 34C05 Teng, Nai Yang See Deng, Nai Yang

Teng, Zhen Huan (with Huang, Lu Ping) The design of an optimal array by mathematical programming. (Chinese. English summary) Numer. Math. J. Chinese Univ. 1 (1979), no. 1, 31-39. (Authors' summary) 82d:90114 90C30

Ten Hoopen, J. See ten Hoopen, J.

Tennant, Neil La barre de Scheffer dans la logique des sequents et des syllogismes. Logique et Anal. (N.S.) 22 (1979), no. 88, 505-514. (Ignacio Angelelli) 82c:03013 03B1

mey, Robert R. (with Sandell, Nils R., Jr.) Detection with distributed sensors. IEEE Trans. Aerospace Electron. Systems 17 (1981), no. 4, 501-510. (Authors' summary) 82k:93071 93E10

ha T'en Ngoan See Ha T'en Ngoar

Tennyson, Jeffrey The instability threshold for bunched beams in ISABELLE. Nonlinear dynamics and the beam-beam interaction (Sympos., Brookhaven Nat. Lab., New York, 1979), pp. 158-193, AIP Conf. Proc., 57, Amer. Inst. Physics, New York, 1980. (See 78A55

(with Lieberman, M. A.; Lichtenberg, A. J.) Diffusion in near-integrable Hamiltonian systems with three degrees of freedom. Nonlinear dynamics and the beam-beam interaction (Sympos., Brookhaven Nat. Lab., New York, 1979), pp. 272-301, AIP Conf. Proc., 57, Amer. Inst. Physics, New York, 1980. (James A. Murdock) 82j:58050 58F05 (58F13, 70K50)

T'en Tai See Nguen T'en Tai

Teo, H. K. (with Delorme, Charles; Maheo, Maryvonne; Thuillier, H.; Koh, K. M.) Cycles with a chord are graceful. J. Graph Theory 4 (1980), no. 4, 409-415. (S. F. 05C99 (05C38) Kapoor) 82g:05078

Teo, K. L. (with Ahmed, N. U.) On the optimal controls of a class of systems governed by second order parabolic partial delay-differential equations with first boundary conditions. (Russian summary) Problems Control Inform. Theory / Problemy Upravlen. Teor. Inform. 7 (1978), no. 5, 361-392. (Authors' summary) 824:93035 93C20

(with Reid, D. W.) Existence of optimal controls for systems governed by parabolic partial differential equations with Cauchy boundary conditions. Ann. Mat. Pura Appl. (4) 124 (1980), 13-38. (Authors' summary) 82f:49003 49A22

(with Reid, D. W.) Hitting a target with maximum probability. Internat. J. Systems Sci. 11 (1980), no. 9, 1075-1081. (Vladimir Katkovnik) 82i:93097 93E20 (49A60)

(with Reid, D. W.) Optimal parameter selection of parabolic systems. Math. Oper. Res. 5 (1980), no. 3, 467-479. (Ekkehard W. Sachs) 82c49013 49B22 (49D07) (with Boyd, I. E.; Moore, E. J.; Olding, R.) Suboptimal decision making of a production firm. Opseurch 17 (1980), no. 4, 155-171. (Authors' summary) 82f:90012

Johrescu, Dan Nonhomogeneous Markov chains with desired properties—the nearest Markovian model. Stochastic Process. Appl. 10 (1980), no. 3, 255-270. (R. L. Tweedie) 82h:60087 60J10 (90C40, 92A25)

rescu, Ion D. Réalisations de l'école de géométrie de Bucarest dans la théorie des espaces de Vrânceanu. Proceedings of the National Conference on Nonholonomic Spaces (Iași, 1976), pp. 49-86, Ed. Acad. R.S. România, Bucharest, 1979. (Bernard Rouxel) 82:e010674 01A72 (53A40)

Sur la con on presque-p ective d'une variété différentiable. Bull. Math. Soc. Sci. Math. R. S. Re manie (N.S.) 24(72) (1980), no. 4, 411-416. (A. Kawaguchi)

Transformations presque-projectives d'une connexion. [Almost projective transformations of a connection] Bull. Math. Soc. Sci. Math. R. S. Roume 25(73) (1981), no. 1, 95–98. (J. J. Etayo) 82m:53(32 53C05

(with Mocanu, Petru T.) Sur les variétés différent Roumaine Math. Pures Appl. 26 (1981), no. 7, 985-990. (Luis A. Cordero) 53B05

e Victor Grigore C. Moisil. (Romanian) Gaz. Mat. (Bucharest) 85 (1980), no. 6, 241-242. (Editors) 82g:01074 01A70

dorescu, Radu I. Factorisations régulières et sous-espaces invariants. Acta Sci. Math. (Szeged) 42 (1980), no. 3-4, 325-330. (Harro Heuser) 82b:47010 47A45 (47A15) doresca, Veronica Un théorème d'existence pour une équation intégrale multivoque.

An. Univ. Craiova Mat. Fiz.-Chim. 6 (1978), 83-87. (From the text) 82a:45023 45N05

rescu, Voltaire Contributions to Coulomb interaction study in general relativity. mary) Rev. Roumaine Phys. 25 (1980), no. 3, 245-249. (Michael P. Ryan, Jr.) 82j:83034 83C50

Solosia, C. (with Nicolae, V.) On the generalized plane strain of an anisotropic elastic body. Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 25 (1980), no. 6, 879-892. (Authors' ary) 82i:73010 73C30

ns'kii, Ju. V. (with Samoilenko, A. M.) The Green function in the problem of invariant nary) Dokl. tori of countable systems of differential equations. (Russian. English summ

Akad. Nauk Ukrain. SSR Ser. A 1981, no. 1, 26-30, 91. (M. Tvrdý) 82g:34027 34B27
Tepljakov, G. M. N. N. Šiller (from the history of the Stoletov school of physicists).
(Russian) History and methodology of the natural sciences, No. XIX (Russian), pp. 202-224, Maskov. Gas. Univ., Mascow, 1978. (Peeter Müürsepp) 82e:01102 01A70 (01A72)

ty, Mark L. On semigroup algebras and semisimple semilattice sums of rings. Proc. Edinburgh Math. Soc. (2) 24 (1981), no. 2, 87-90. (B. J. Gardner) 82j:20126 20M25 20M25 (16A99)

Teptin, A. L. Estimates of the Green function of a multipoint boun (Russian) Differencial nye Uravnenija 17 (1981), no. 6, 1007-1015, 1147. (M. Tvrdý) 82h:39003 39A12 (34B27)

Ter-Akopov, A. K. (with Sukurjan, Ju. G.) Table programs and discrete transformers. 1. (Russian. English summary) Kibernetika (Kiev) 1978, no. 3, 8-14. (Sorin Istrail)

68B05 (68C40, 68D05)

On the influence of a magnetic field on the propagation of waves of discontinuity in a particular elastic medium. (Italian. English summary) Atti Accad. Peloritana Pericola nti Cl. Sci. Fis. Mat. Natur. 56 (1978), 151-156 (1980). (Author's mary) 82d:73079 73R05

aki Forms with logarithmic pole and the filtration by the order of the pole. Proceedings of the International Symposium on Algebraic Geometry (Kyoto Univ., Kyoto, 1977), pp. 673–685, Kinokuniya Book Store, Tokyo, 1978. (James A. Carlson) 82h:14064

14C30 (14F40, 32G13) Free arrangements of hyperplanes and unitary reflection groups. Proc. Japan Acad Ser. A Math. Sci. 56 (1980), no. 8, 389-392. (P. Orlik) 82e:32018a 32C40 (05B25. 51F15, 52A45)

Generalized exponents of a free arrangement of hyperplanes and

Shepherd-Todd-Brieskorn formula. Invent. Math. 63 (1981), no. 1, 159-179. (P. Orlik) 32C40 (05B25, 51F15, 52A45)

Terasaki, Yasuhiro Inequality measure of size distribution of income: a survey. (Japanese. English summary) J. Japan Statist. Soc. 10 (1980), no. 2, 93-126. (Author's summary) 90A10

xsawa, Jun Spaces N∪% and their dimensions. *Topology Appl.* 11 (1980), no. 1, 93–102. (Author's summary) 82k:54040 54D40 (54F45, 54G20)

Terisvirta, Timo (with Toutenburg, H.) A note on the limits of a modified Theil-estimator

Biometrical J. 22 (1980), no. 6, 561-562. (George P. H. Styan) 82e:62103 6210 (62P20)

Some results on improving the least squares estimation of linear models by mixed estimation. Scand. J. Statist. 8 (1981), no. 1, 33-38. (A. I. Khuri) 82f:62131 62J07

Terauti, Ryutaro On the modified Saha equation and thermodynamically consistent equations of state. (Japanese. English summary) J. College Engrg. Nihon Univ. Ser. B 22 (1981), 25–37. (Author's summary) 82d:82036 82A30 (85A15)

Ter Berg, Peter See ter Berg, Peter

Teregulov, A. E. (with Vasil'ev, S. N.) Theorems on stability. (Russian) Vector-valued Ljapunov functions and their construction (Russian), pp. 269–280, 288, "Nauka" Sibirsk. Oldel., Noocaibirsk, 1980. (Wolfgang Hahn) 821:34659 34D20
Teregulov, It fixzar Gizatovič See Birthday: Teregulov, I. G., 82ec1063
Terehin, A. P. Equivalence theorems for classes of functions with mixed derivative.

ssian) Dokl. Akad. Nauk SSSR 252 (1980), no. 1, 52-55. (A. A. Martinjuk) 46F35

Estimation of mixed p-norm by p-norms of smaller multiplicity. (Russian) Sibirsk. Mat. Ž. 22 (1981), no. 1, 158-172, 230. (J. Musiclak) 82i:46045 46E30 (41A17)

Terehov, A. N. A boundary value problem for an equation of mixed type. (Russia Application of the methods of functional analysis to problems of mathematical physics and numerical analysis (Russian), pp. 128-136, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat.,

Novosibirsk, 1979. (Megumi Saigo) 82d:35070 35M05
Unique solvability of a problem for an equation of mixed type. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 62-64, 248, "Nauka" Sibirsk. Oidel, Novosibirsk, 1980. (Author's summary) 82h:35075 35M05

824

Terent'ev, E. D. On perturbations associated with the final momentum in the problem of inslated as on. Prikl. Mat. Meh. 43 (1979), no. 1, 51-56 (Russian); tra J. Appl. Math. Mech. 43 (1979), no. 1, 53-59 (1980). (Author's summary) 82j:76059 76L05 (35L67, 76N15)

(with Manullovič, S. V.) Asymptotic solution of the problem of supersonic flow of an ideal gas around a blunt wedge. (Russian) Učen. Zap. CAGI 11 (1980), no. 6, 46-57. (Authors' summary) 821:76019 76J99

Terent'ev, M. V. (with Kondratjuk, L. A.) The scattering problem for relativistic systems with a fixed number of particles in light-front dynamics. Jadernaja Fiz. 31 (1980), no. 4, 1087-1106 (Russian); translated as Soviet J. Nuclear Phys. 31 (1980), no. 4, 561-570

(1981). (Authors' summary) 82e81051 81F20
enzi, Paolo On bounded and total biorthogonal systems spanning given subspaces.
(Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 3-4, 168-178 (1980). (W. H. Ruckle) 82g:46030 46B15

plement to Krein-Mil'man-Rutman theorem, with applications. (Italian Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 341-353 (1981). Lin) 82h:46022 46B15 (Bor-Luh Lin) 82h:46022

On the structure of overfilling sequences of a Banach space. Riv. Mat. Univ. Parma (4) 6 (1980), 425-441 (1981). (W. H. Ruckle) 82g:46031 46B15

Terescenko, M. I. (with Lerman, L. B.: Skurs'kii, P. P.) Application of normal-regular solutions to problems of wave propagation in continuous-layered media. (Ukrainian. English and Russian summaries) Visnik Kiiv. Univ. Ser. Mat. Meh. No. 22 (1980),

50-54, 149. (Authors' summary) **82k:35020** 35C99

Tereščenko, V. Ja. Method of orthogonal expansions on the domain boundary in three-dimensional problems of the linear theory of elasticity. Prikl. Mat. Meh. 43 (1979), no. 4, 688-697 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 4, 737-746 (1980). (Author's summary) 82g:73012 73C35

On the convex functionals analogous to the generalized Trefftz functionals in variational problems of the theory of elasticity. Prikl. Mat. Meh. 44 (1981), no. 1, 185-188 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 1, 132-133 (1981). 73C60 (49H05) (Author's summary) 82h:73019

Te Riele, Herman J. J. See te Riele, Herman J. J.

Terleckii, Ja. P. Complementarity and irreversibility. (Russian. English summary) History leckii, Ja. P. Complementarity and irreversionity. (Aussian). England 21, Moskov. Gos. and methodology of the natural sciences, No. XXI (Russian), pp. 3-11, Moskov. Gos. 1211. Moscow. 1979. (Author's summary) 82b:81011 81B05 (00A69, 82A05) Univ., Moscow, 1979. (Author's summary) 82b:81011

Ter Meulen, Alice See ter Meulen, Alice

Termini, D. (with Puccio, L.; Ricca, G.) On the construction of a table of BIBD for v from 4 to 10. (Italian. English summary) Atti Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur. 55 (1980), 59-78. (A. Barlotti) 82m:05019 05B05 (62K10)

Termonia, Yves (with Ross, John) Oscillations and control features in glycolysis: numerical analysis of a comprehensive model. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 5, part 2,

2952-2956. (From the summary) 82j:92035 92A09

Terng, Chuu Lian (with Tenenblat, Keti) Bäcklund's theorem for n-dimensional submanifolds of R²ⁿ⁻¹. Ann. of Math. (2) 111 (1980), no. 3, 477-490. (Ngô Van Què) 82j:58068 58F07 (35Q20, 53A05)

A higher dimension generalization of the sine-Gordon equation and its soliton theory. Ann. of Math. (2) 111 (1980), no. 3, 491-510. (Ngô Van Què) 82j:58069 58F07 (35Q20, 53A05, 81C05)

Ternov, I. M. (with Lobanov, A. E.; Rodionov, V. N.; Halilov, V. R.) Elastic scattering amplitudes of the electron and photon in a constant electromagnetic field. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 377-389. (Authors' summary) 82c:81134 81F20 (81G10)

(with Bordovicyn, V. A.; Razina, G. K.) Spin dynamics in orthogonal fields.
(Russian) Izv. Vysš. Učebn. Zaved. Fizika 1981, no. 1, 44-48. (Authors' summary) 81C99 (78A25)

82£81061 81C99 (78A25)
krasičkov-Ternovskii, I. F. See Krasičkov-Ternovskii, I. F.
Térouanne, Eric On a class of "impossible" figures: a new language for a new analysis. J.

Terpe, Frank (with Flachsmeyer, Jürgen) Summations as linear maps and as curves. Proceedings of the Conference Topology and Measure, I (Zinnowitz, 1974), Part 1, pp. 129-138, Ernst-Moritz-Arndt Univ., Greifswald, 1978. (From the introduction) 82i:40011 40J05 (28C15, 54A99)

Terpigoreva, V. M. (with Efimov, A. V.; Zolotarev, Ju. G.) ★Математический анализ льные разделы). Часть II. (Russian) [Mathematical analysis (special sections). Part II] Применение некоторых методов математического в функционального анализа. [Applications of some methods of mathematical and functional analysis] "Vysš. Škola", Moscow, 1980. 296 pp. (F. Smithies) 82h:00001b 00-01 (26-01, 46-01, 49-01, 65-01)

Terpstra, G. A. (with Bergstra, J. A.; Goeman, H. J. M.; Ollongren, A.; van der Weide, Th. P.) Axioms for multilevel objects. Fund. Inform. (4) 3 (1980), no. 2, 171-180. (From the summary) 82i:68014 68B15

Terpstra, T. J. Efficiency and optimality properties of a class of k-sample rank tests against trend. Metrika 27 (1980), no. 4, 225-235. (W. Hoeffding) 82:62081 62G20

Terras, Audrey Integral formulas and integral tests for series of positive matrices. Pacific J.

Math. 89 (1980), no. 2, 471–490. (O. M. Fomenko) 82g:10047 10D24 (10C15, 10D20, 10E35)

Terras, Riho (with Swanson, Robert) Image methods for constructing Green's functions and eigenfunctions for domains with plane boundaries. J. Math. Phys. 21 (1980), no. 8, 2140-2153. (J. Donig) 82a:31005 31A35

Algorithms for some integrals of Bessel functions and multivariate Gaussian

integrals. J. Comput. Phys. 41 (1981), no. 1, 192-199. (Author's introduction) 82g:65016

hypergeometric functions. J. Comput. Phys. 44 (1981), no. 1, 156–166. (Harold Exton) 82m:33003 33A30 (65D20) Generalized exponential operators in the continuation of the confluent

Normal modes for Green's functions and the method of theta functions. Math. Proc. Cambridge Philos. Soc. 89 (1981), no. 2, 331-341. (Werner Nowacki) 82e:82019 82A60 (35P10, 78A25)

Terreni, Brunello (with Profeti, Alessandro) The uniformity for convergence of parabolic operators in the case of homogenization. (Italian. English summary) Boll. Un. B (5) 16 (1979), no. 3, 826-841. (Lucio Boccardo) 82m:35069a 35K (0 (49D) 35K10 (49D50)

(with Profeti, Alessandro) On some methods for the study of the convergence of parabolic equations. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 17 (1980), no. 2, 675–691. (Lucio Boccardo) 82m:35069b 35K10 (49D50)

no. 2, 675-691. (Lucio Boccardo) 82m:35069b 35K10 (49D50)

Terry, P. W. The collision operator and long-time behavior of a perturbed two-body problem. Celestial Mech. 23 (1981), no. 2, 119-130. (Author's summary) 82c:76020 70F99

Terry, Tamara (with Tomber, Marvin L.; Norris, Diane M.; Reynolds, Mary: Balzer. Cindy; Trebilcott, Kathy; Coryell, Hellen; Ordway, Judy) A nonassociative algebra bibliography. Proceedings of the Second Workshop on Lie-Admissible Formulations (Sci. Center, Harvard Univ., Cambridge, Mass., 1979), Part B. Hadronic J. 3 (1979/80), no. 1, 507-725. (J. Dieudonné) 82i:17001 17-02 (00A15)

Terskov, A. H. (with Zavolženskii, M. V.) The effect of small perturbations of the position of an elliptic cylinder on the dynamics of its behavior in the flow of a viscous incompressible fluid. (Russian) Gidromeh. (Kiev) No. 44 (1981), 20-28, 121. (Authors'

summary) 82k:76031 76D99

Tertişco, Mihai (with Stoica, Petre) ★Identificarea şi estimarea parametrilor sistemelor. (Romanian) [System identification and parameter estimation] With an English summary. Editura Academiei Republicii Socialiste România, Bucharest, 1980. 291 pp. (Authors' summary) 82m:93030 93B30 (65U05, 93E12)

Tertyčnyi, S. I. N-type vacuum Einstein spaces. Phys. Lett. A 81 (1981), no. 2-3, 111-112.
(Author's summary) 82a:83014
83C20

Terzioğlu, T. (with Aytuna, A.) On certain subspaces of a nuclear power series spaces of finite type. Studia Math. 69 (1980/81), no. 1, 79-86. (M. S. Ramanujan) 82d:46016 46A45 (32E10)

er, W. (with Hagedorn, P.) An instability theorem for steady motions in free and restrained dynamical systems. Trans. ASME Ser. E. J. Appl. Mech. 47 (1980), no. 4, 908-912. (Ja. V. Tatarinov) 82j:70016 70K20 (34D20)

Tesei, Alberto (with Schiaffino, Andrea) On the asymptotic stability for abstract Volterra integro-differential equations. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 67-74 (1980). (G. S. Jordan) 82g:45025 (34K05, 47D05)

(with Schiaffino, Andrea) Asymptotic stability properties for nonlinear diffusion Volterra equations. (Italian summary) Atti Accad. Nat. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 3-4, 227-232 (1980). (Gustaf Gripenberg) 82i:45012 45K05

Stability properties for partial Volterra integro-differential equations. Ann. Mat. Pura Appl. (4) 126 (1980), 103-115 (1981). (M. Švec) 82i:45016 45M10 (45K05)

(with Negrini, Piero) Attractivity and Hopf bifurcation in Banach spaces. J. Math. Anal. Appl. 78 (1980), no. 1, 204-221. (J. K. Hale) 82f:58068 58F14 (34C25, 34G20) (with de Mottoni, P.) A singular perturbation approach for a reaction diffusion system arising in nuclear reactor theory. Math. Methods Appl. Sci. 2 (1980), no. 1, 91-107. (Claude-Michel Brauner) 82d:35021 35B25 (35K60, 82A75)

(with de Mottoni, P.) A comparative analysis of some semilinear parabolic systems modelling the dynamics of fast nuclear reactors. (German and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 11, 615-622. (V. Mastrangelo) 82g:82062 82A75

(with Schiaffino, Andrea) Global attractivity for diffusion delay logistic equati Nonlinear differential equations (Proc. Internat. Conf., Trento, 1980), pp. 339-345. Academic Press, New York, 1981. (Gustaf Gripenberg) 82:45013 45K05 (92 45K05 (92A15)

Tesfatsion, Leigh Parameter-sensitivity study for a linear-quadratic control problem with random state coefficients. Inform. Sci. 15 (1978), no. 2, 101-125. (Author's summary) 82k:93080 93F20

(with Kalaba, Robert; Spingarn, K.) Optimal strategies for C³ problems. V. The orporation of symmetrical rationality. *Inform. Sci.* 18 (1979), no. 2, 131–140. (Josef Kaška) 82d:90147e 90D35 (90A05, 90D45)

Criterion decomposition for myopic sequential control of uncertain systems Thirteenth Asilomar Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1979), pp. 475–478, IEEE, New York, 1980. (Author's summary) 82a:49019 49A60

(with Kalaba, Robert; Spingarn, K.) A new differential equa ion method for finding the Perron root of a positive matrix. Appl. Math. Comput. 7 (1980), no. 3, 187-193. (Steven M. Serbin) 82c:65023 65F15 (65L05)
Global and approximate global optimality of myopic economic decisions. J.

Econom. Dynamics Control 2 (1980), no. 2, 135-160. (Edwin Burmeister) 82i:90022 90A16 (93E20)

(with Kalaba, Robert) A least-squares model specification test for a class of dynamic nonlinear economic models with systematically varying parameters. J. Optim. Theory Appl. 32 (1980), no. 4, 537-567. (From the summary) 82m:90053 90A16

Dynamic investment, risk aversion, and foresight sensitivity. J. Econom. Dyn Control 3 (1981), no. 1, 65-96. (Author's summary) 82f:90018

(with Kalaba, Robert; Spingarn, K.) Variational equations for the eigenvalues and eigenvectors of nonsymmetric matrices. J. Optim. Theory Appl. 33 (1981), no. 1, 1-8. (Authors' summary) 82e:65038 65F15 (15A18)

Tešis, Vitautas Computation rate and efficiency of some global minimization algorithms. (Russian. Lithuanian and English summaries) Teor. Optimal. Rešenii—Trudy Sem. Processy Optimal. Upravlenija VI Sekcija No. 6 (1980), 95–105, 157. (G. D. Maistrovskii) 90C30 (68C05)

Tesitelova, Marie See Prague studies in mathematical linguistics, 82m:03005
Teskin, O. I. Precise confidence limits for the reliability of redundant systems in the case of

failure-free tests of their elements. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 4, 132-139, 221 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 4, 116-123 (1980). (A. Balogh) 82m:62232 62N05 (62F25)

Teslenko, O. A. (with Osinovskii, M. E.) Global analysis of vacuum spaces of the third type admitting a two-dimensional commutative isometry group. (Russian) Gravitacija i To

Otnositel'nosti No. 16 (1980), 111-119. (A. K. Guc) 82i:83011 83C20 (53C50)

Teslenko, V. P. (with Sinickil, L. A.) Computer design of circuits by the method of separation of motions. (Russian. English summary) Teoret. Elektrotehn. No. 28 (1980), 106-115, 170. (From the text) 82a:94104 94C05

Tessarotto, Massimo Collisional transport for general magnetized plasmas in the weakly collisional regime. Ann. Mat. Pura Appl. (4) 127 (1981), 253-281. (D. ter Haar) 82A45

Tessmann, Hans-Jürgen (with Viehweger, Uwe; Hippe, Lutz; Bittrich, Hans-Joachim) Zur Modellierung oszillierender Reaktionssysteme am Analogrechner. Wiss. Z. Tech. Hochsch. Leuna-Merseburg 22 (1980), no. 4, 503-510. (K. R. Schneider) 82h:68133 68J05 (34C05, 92A09)

Testa, M. (with Rossi, G. C.) The structure of Yang-Mills theories in the temporal gauge. II. Perturbation theory. Nuclear Phys. B 176 (1980), no. 2, 477-499. (Authors' summary)

82c-81115 81E99 (53C05, 81C35)

Tesukov, V. M. Centralized waves in three-dimensional gas flows. (Russian) Dinamika Sploin. Sredy No. 39 (1979), 102-118, 167. (Simona Popp) 82a:76058 76N15 Decay of an arbitrary discontinuity on a curvilinear surface. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 2, 126-133, 175. (Author's summary) 82b:76040

Tetel'baum, A. Ja. (with Petrenko, A. I.; Šramčenko, B. L.) Algebraic formulation of circuit design problems. Kibernetika (Kiev) 1981, no. 2, ii, 49-55, 150 (Russian. English ary); translated as Cybernetics 17 (1981), no. 2, 210-219, (From the conclusion) 94C05

Tetrault, G. E. Deviant, many-valued modellings of paradox: outlines of indefiniteness as the formal source of exact logic. Internat. Logic Rev. No. 17-18 (1978), 47-57. (From the introduction) 82±03035 03B50 (03A05)

Tetruašvili, M. R. The conjugacy problem for groups with one defining relation and the complexity of Turing calculations. (Russian) Begriffsschrift—Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 477-482, Friedrich-Schiller-Univ., Jena, 1979. (O. V. Belegradek) 82h:20050 20F10 (03D15)

Tetvadze, G. E. Boundary value properties of Blaschke-type products in the unit circle. (Russian. Georgian and English summaries) Soobië. Akad. Nauk Gruzin. SSR 99 (1980), no. 3, 537-539. (V. Kabaila) 82k:30036 30D50 (30D40)

Teufel, Michael Glättung endlich-differenzierbarer Räume. (English summary) Manuscrip

Math. 33 (1980/81), no. 1, 37-49. (Charles D. Marshall) 82h:58003 Teuffel, Erich Einige asymptotische Eigenschaften der Quadratwurzelschnecke. Math. Semesterber. 28 (1981), no. 1, 39-51. (Harald Niederreiter) 82j:10085

Teut, O. M. A boundary value problem with constant coefficients for a system of two equations of mixed-composite type. (Russian) Izv. Vysš. Učebn. Zaved. Matematika equations of mixed-composite type. (russian) 12v. 1983. Ocean. Zaveal. Matematika 1980, no. 9, 41–49. (A. P. Soldatov) 82h;35076 35M05 Tevikjan, R. V. The cosmological term in the Einstein theory. Phys. Lett. A 83 (1981), no. 2,

49-50. (Author's summary) 82c:83013 83C05 (83F05)

тетјавеч, А. D. (with Evdokimov, А. G.) ★Оперативное управление потокораспределение в видемерации сстях. (Russian) [Operative control of flow distribution in engineering networks] "Višča Škola", Kharkov, 1980. 144 pp. (Publisher's description) 82g:90044 90B10 (90B15)

Tevy, Ionel (with Cristian, Bruteanu) On characterizing connected functions. Real Anal. Exchange 6 (1980/81), no. 2, 203-207. (A. M. Bruckner) 82g:26015 26A99

Tewari, K. (with Seth, V.) Classical near-rings of left and right quotients. Progr. Math. (Allahabad) 12 (1978), no. 1-2, 115-123. (G. Betsch) 82e:16035 16A76

Tewari, U. B. (with Magill, K. D., Jr.; Misra, Prabduh Ram) Unifying congri S(I). Semigroup Forum 21 (1980), no. 4, 361-371. (Bridget B. Baird) \$2e:20079 20M20 (54C35)

(with Dutta, M.; Vaidya, D. P.) Multipliers of group algebras of vector-valued functions. Proc. Amer. Math. Soc. 81 (1981), no. 2, 223-229. (Olusola Akinyele) 82c:43003 43A22 (43A20)

Tewarson, R. P. On the use of splines for the numerical solution of nonlinear two-point indary value problems. BIT 20 (1980), no. 2, 223-232. (Aurėl Galántai) 82j:65058 65L10 (65D07, 65V05)

(with Salane, D.) On symmetric minimum norm updates. IMA J. Numer. Anal. 1 81), no. 2, 235-240. (Authors' summary) 82e:65077 65K10 (1981), no. 2, 235-240. (Authors' summary) 82e:65077

On the use of Simpson's rule in renal models. Math. Biosci. 55 (1981), no. 1-2, 1-5. (Author's summary) 82k-92016 92A07 (92A09) cker, H. B. (with Kwong, Waikwok; Rosner, Jonathan L.; Schonfeld, Jonathan F.;

Quigg, C.) Degeneracy in one-dimensional quantum mechanics. Amer. J. Phys. 48 (1980), no. 11, 926-930. (Authors' summary) 82c:81020 81C05 (34B25, 81F99)

(with Schonfeld, Jonathan F.; Kwong, Waikwok; Rosner, Jonathan L.; Quigg, C.) On the convergence of reflectionless approximations to confiring potentials.

Physics 128 (1980), no. 1, 1–28. (Marcel Coz) 82b:81104

81F05 (34B25, 81G05)

(with Creamer, Dennis B.; Wilkinson, David) Quantum Gel'fand-Levitan method as a generalized Jordan-Wigner transformation. Phys. Lett. B 92 (1980), no. 1-2, 144-148. (Authors' summary) 82h:81127 81F99 (22E70, 81E99, 81H99)

(with Creamer, Dennis B.; Wilkinson, David) Some exact results for the two-point function of an integrable quantum field theory. Phys. Rev. D (3) 23 (1981), no. 12, 3081-3084. (Authors' summary) 82h:81082 81E10 (58A15)

Exact integrability in quantum field theory and statistical systems. Rev. Modern Phys. 53 (1981), no. 2, 253–285. (Author's summary) 82d:81112 81E99 (35Q20,

acker, William Carlisle Some exact solutions to the nonlinear shallow-water wave equations. J. Fluid Mech. 107 (1981), 499-508. (Author's summary) 821:76012

See Euclid, 82f:01181 er, Cler

Thaheem, A. B. Structure of an automorphism of an operator algebra. Garyounis Sci. Bull. 2 (1980), no. 3, 29-30. (Author's summary) 82i:47071 47D25

(with Gazdar, Abdus Sattar) A simple approach to determine the form of functions for certain functional equations. Garyounis Sci. Bull. 2 (1980), no. 3, 51-53. (F. J. Papp)

Thai, V. N. On stability of constant Laplace solutions of the unrestricted three-body n, v. 14. On statuting of constant Laplace solutions of the university time-body problem. Prikl. Mat. Meh. 42 (1978), no. 6, 1026–1032 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 6, 1123–1130 (1980). (Author's summary) 82m:70007 70F07 (34D20)

stability of mecha ical systems under the action of position forces. Prikl. Mat. Meh. 44 (1981), no. 1, 40-48 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 1, 24-29 (1981). (Mineo Ikeda) 82i:70023 70K20 (58F10, 73H10)

skare, N. K. (with Patil, K. R.) Operational formulas and generating functions in the unified form for the classical orthogonal polynomials. Math. Student 45 (1977), no. 1, 41-51 (1978). (TITLE) 82c:33020 33A65 (42CO5)

(with Pethe, P. V.) Convex sums of orthogonal projections on a Banach st Math. Student 45 (1977), no. 4, 49–52 (1979). (A. R. Sourour) 82i:47056 47B99

(with Phadke, S. V.) A study of elements of normed algebras by means of special sets. Bull. Calcutta Math. Soc. 71 (1979), no. 6, 406-411. (T. Husain) 82;46060 46H05 (46C99)

(with Pawar, Y. S.) On prime semilattices. Canad. Math. Bull. 23 (1980), no. 3, 291-298. (J. Karásek) 82π96906 06A12
 (with Phadke, S. V.) Conditions on ρ-oid operators implying normality. Indian J.

Appl. Math. 11 (1980), no. 9, 1188-1193. (Takayuki Furuta) 82a:47025 47B20 (47A12, 47B15)

(with Patil, D. A.) On univalence of certain integrals. Indian J. Pure Appl. Math. 11

(1980), no. 12, 1626-1642. (E. P. Merkes) 82f:30011 30C45 (with Madhekar, H. C.) A characterization for modified polynomial sets. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1659-1664. (Harold Exton) 82e:33017

akur, Ajit K. (with DeLisi, Charles) Fluctuation analysis in small chemically reacting Bull. Math. Biol. 42 (1980), no. 2, 147-160. (Authors' summary) 82k:92035 92A09 (80A32)

Thakur, L. B. On a stochastic integral equation of the Volterra-Fredholm type. J. Man Azad College Tech. 12 (1979), 21-32. (Seppo Heikkilä) 820:60074 60H20

Thakur, P. J. (with Prasad, S. N.) Axially symmetrical universal motions of Navier-Stokes Math. Ed. (Siwan) 14 (1980), no. 2, A15-A24. (P. L. Sulem) 82c:76034 76D05 (35Q10)

(with Prasad, S. N.) Rotationally symmetrical universal motions of Navier-Stokes fluids. Math. Ed. (Siwan) 14 (1980), no. 3, A35-A45. (From the text) 821:76012 76D05

ore (with Bhowmik, Kanti Bhusan; Bhattacharjee, Pramode Ranjan; akur, Ranajit Kish Modak, Susanta) A simpler method for minimization of switching functions. *Internat. J. Comput. Math.* 10 (1981/82), no. 1, 77-89. (Authors' summary) 82m:94054 94C10

Thakur, S. S. (with Maheshwari, S. N.) Countably α-compact spaces. J. Sci. Res. 3 (1981), no. 2, 121–123. (Authors' summary) 82k:54036 54D30 (with Maheshwari, S. N.; Chae, Gyu Ihn) On α-convergent filters. (Korean

vary) Ulsan Inst. Tech. Rep. 12 (1981), no. 2, 297-300. (Olav Njastad) 82j:54003 54A10

aler, George J. (with Lin, Wei Song; Kuo, Te Son) A method of minimum time control for 2nd order linear digital control systems with bounded control signals. Fourteenth Asilomar Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 272–276, IEEE, New York, 1981. (See **824-93001**) 49B36

er, Maximilian Estimates of the invariant densities of endomorphisms with indifferent fixed points. Israel J. Math. 37 (1980), no. 4, 303-314. (F. Schweiger) 82f:28021

28D05 (10K10)

(with Österreicher, F.) Ein Beitrag zur Suche der Extremstelle einer strikt

odalen Funktion. (English summary) Monatsh. Math. 90 (1980), no. 3, 237-248. (W. H. J. Fuchs) 82m:62093 62G05

Thaler, R. M. (with Goldflam, R.; Tobocman, W.) Multipartition generalizations of the Schwinger variational principle. Nuclear Phys. A 359 (1981), no. 1, 122-130. (Authors' summary) 824:81123 81F10

Thaler, Richard (with Shefrin, H. M.) Interpreting α-rationality in hierarchical games. Econom. Lett. 5 (1980), no. 2, 109–113. (Andrew Postlewaite) 82g:90087 90D-(90A07)

Thall, Peter F. Cluster shock models. J. Appl. Probab. 18 (1981), no. 1, 104–111. (S. K. Srinivasan) 82d:60175 60K10 (60G99, 62N05, 90B25)

Thaller, B. Potential scattering of Dirac particles. J. Phys. A 14 (1981), no. 11, 3067-3083. (Author's summary) 82k:81083 81F20

Tham, L. G. (with Cheung, Y. K.) On the numerical solution of certain initial value problems. Numerical methods in geomechanics, Aachen 1979 (Proc. Third Internat. Conf., Aachen, 1979), Vol. IV, pp. 1283–1292, Balkema, Rotterdam, 1980. (W. F. Ames) 65N30

es, Howard D., Jr. Mathematical models of dose and cell cycle effects in multifraction radiotherapy. Modeling and differential equations in biology (Conf., Southern Illinois Unio., Carbondale, Ill., 1978), pp. 51–105, Lecture Notes in Pure and Appl. Math., 58, Dekker, New York, 1980. (B. F. Dibrov) 82m:92011 92A05 (92A07)

en tu Than' See Nguen Tu Th

Thandapani, E. (with Agarwal, Ravi P.) A comparison result for the Goursat problem. Proceedings of the Conference on Probability, Stochastic Processes and Statistical Mechanics (Mysore, 1979), pp. 115-120, Matscience Rep., 97, Inst. Math. Sci., Madras, 1979. (Jagdish Chandra) 82b:35010 35B05

(with Agarwal, Ravi P.) On nonlinear discrete inequalities of Gronwall type. An. int. Unio. "Al. I. Cuza" Iaşi Sect. I a Mat. (N.S.) 27 (1981), no. 1, 139-144. (B.

Crstici) 821:39001 39A10 (26D15)

Thangamani, J. On a generalization of the class of functions with bounded Mocanu variation. Proc. Indian Acad. Sci. Math. Sci. 90 (1981), no. 3, 213-218. (M. Reade) 82m:30020 30C45

inh ngoc Thanh
See Dinh Ngoc Than
ú'a Thanh Huy
See Hú'a Thanh Huy

Thanh Liem See Vo Thanh Liem Thanigasalam, K. On Waring's problem. Acta Arith. 38 (1980/81), no. 2, 141-155. (H. G. Meijer) 82h:10065 10J06

Thapa, G. B. A theorem on a generalised Laplace transform. Nepali Math. Sci. Rep. 5 (1980), no. 1, 45-50. (B. S. Tavathia) 82c:44003 44A20

Thus, C. n-dimensional submanifolds with an (n-1)-dimensional asymptotic distribution d with 1-asymptotic lines in a space form $R^m(k)$. J. Geom. 14 (1980), no. 2, 143-150. (Yoshiaki Maeda) 82h:53075 53C40

Thus, Joseph A. (with Debroey, Ingrid) Semipartial geometries in PG(2,q) and PG(3,q). (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 64 (1978),

(tanana sammar) All Acteal. Nat. Amer. Rend. Co. 7-8. Stat. Nat. (s) no. 2, 147–151. (L. A. Rosati) 82a:05028 05B25 (51E30)

Construction of maximal arcs and dual ovals in translation planes. Et Combin. 1 (1980), no. 2, 189–192. (G. L. Alexanderson) 82a:05031 05B25

(with De Clerck, F.; Dye, R. H.) An infinite class of partial geometries associated with the hyperbolic quadric in PG(4n-1,2). European J. Combin. 1 (1980), no. 4, 323-326. (V. Volenec) 82e-95045 05B25

A remark on the theorem of Yanushka and Ronan characterizing the "generalized exagon" H(q) arising from the group $G_2(q)$. J. Combin. Theory Ser. A 29 (1980), no. 3,

361–362. (Pedro P. Sanchez) 82a:05037 05B30 (with Hirschfeld, J. W. P.) The characterization of projections of quadrics over finite fields of even order. J. London Mah. Soc. (2) 22 (1980), no. 2, 226–238. (Christiane Lefèvre-Percsy) 82b:51016 51E20 (05B25, 51A45)

(with Hirschfeld, J. W. P.) Sets of type (1, n, q+1) in PG(d, q). Proc. London Math. Soc. (3) 41 (1980), no. 2, 254-278. (W. M. Kantor) 82h:51018

(with Payne, S. E.) Moufang conditions for finite generalized quadrangles. Finite geometries and designs (Proc. Conf., Chelwood Gate, 1980), pp. 275–303, London Math. Soc. Lecture Note Ser., 49, Cambridge Univ. Press, Cambridge, 1981. (Ferenc Fenyves) 82k:05031 05B25 (51A40)

(with Payne, S. E.) Generalized quadrangles and the Higman-Sims techniqu European J. Combin. 2 (1981), no. 1, 79-89. (Alessandro Bichara) 82i:05020 05B25 Ovoids and spreads of finite classical polar spaces. Geom. Dedicata 10 (1981), no. 1-4, 135-143. (Francis Buckenhout) 82g:05031 05B25 (51E20)

Thathachar, M. A. L. (with Gajendran, F.) A global convergence criterion for discrete-time multivariable adaptive systems. Internat. J. Control 34 (1981), no. 1, 127-142. (Authors' summary) 82h:93048 93C55

Thayse, André Boolean difference calculus. (French and German summaries) Digital Process. 6 (1980), no. 2-3, 175–184. (A. N. Melikhov (Melihov)) 82c:94014 94 (with Davio, Marc) Implementation and transformation of algorithms based on automata. I. Introduction and elementary optimization problems. *Philips J* (1980), no. 2, 122-144. (Michael Bauer) 82j:68020a 68C05 (68B05, 68D05)

Implementation and transformation of algorithms based on automata. II. Synthesis of evaluation programs. Philips J. Res. 35 (1980), no. 3, 190-216. (Michael Bauer) 82j:68020b 68C05 (68B05, 68D05)

Universal algorithms for evaluating Boolean functions. Discrete Appl. Math. 3 (1981), no. 1, 53-65. (M. J. Mączyński) 824:94083 94C10 (06E99)

P-functions: a new tool for the analysis and synthesis of binary programs. IEEE Trans. Comput. 30 (1981), no. 2, 126-134. (Author's summary) 82a:94122 94C10

(with Sanchez, E.) Implementation and transformation of algorithms based on automata. III. Optimization of evaluation programs. *Philips J. Res.* **36** (1981), *no.* 3, 159–172. (Michael Bauer) **82**;6**8020**c 68C05 (68B05, 68D05)

k'eu The Dyk See K'eu The Dyk

nguyen The Hoàn See Nguyen The Hoàn

le The Hung

See Le The Hung

Theil, Henri

The increased use of statistical concepts in economic analysis. Developm statistics, Vol. 3, pp. 159-215, Academic Press, New York, 1980. (G. Tintner) 82d:62169

(with Conway, Delores) The maximum entropy moment matrix with missing values. m. Lett. 5 (1980), no. 4, 319-322. (Authors' summary) 82f:62085 (62P20)

The symmetric maximum entropy distribution. Econom. Lett. 6 (1980), no. 1, 53-57. (Author's summary) 82d:62089

m The Lai See Pham The Lai

colliot-Thélène, Jean-Louis See Colliot-Thélène, Jean-Louis

de Thélin, François Régularité de la solution d'une équation fortement (ou faiblement) non linéaire dans R^a. (English summary) Ann. Fac. Sci. Toulouse Math. (5) 2 (1980), no. 3-4, 249-281. (J.-P. Gossez) 82i:35069 35J65 (46E35) 9-281. (J.-P. Gossez) 82:35069 35J65 (46E35) ald, C. M. Correction to: "Generalizations of mean square error applied to ridge

regression" [J. Roy. Statist. Soc. Ser. B 36 (1974), 103-106; MR 51 #4569]. J. Roy. Statist. Soc. Ser. B 43 (1981), no. 1, 104. (Editors) 82d:62118 62J07

cobald, Geneviève (with Planat, Michel) Phénomènes non linéaires dans les dispositifs élastiques à forte puissance. (English summary) Study Conference on Acoustic Propagation (Marseille, 1980). Rev. CETHEDEC Cahier 1980, no. 1, 39-45. (Authors' summary) 82d:73016 73C50 (73D35)

Theocaris, P. S. (with Ioakimidis, Nikolaos I.) The numerical evaluation of a class of generalized stress intensity factors by use of the Lobatto-Jacobi numerical integration rule. (French summary) *Internat. J. Fracture* **14** (1978), no. 5, 469–484. (Authors' summary) **82c:73016** 73C45 (65R20)

(with Ioakimidis, Nikolaos I.) A numerical method for the solution of plane crack roblems in finite media. Internat. J. Math. Math. Sci. 3 (1980), no. 4, 739-760. (W. Velte) 82b:73049 73M05 (45E05, 65P05)

(with Andrianopoulos, N.; Tsamasphyros, G.) An algorithm for the numerical inversion of Mellin transform by using Laguerre polynomials. Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 25 (1980), no. 3, 489–495. (P. M. Gupta) 82;65093 65R10 (65D20)

Ser. Nec. Appl. 25 (1900), no. 3, 465–495. (F. N. Gupta) \$2,00095 65Rt0 (65)220) (with Tsamasphyros, G.) Méthode générale de quadrature des intégrales du type Cauchy. Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 25 (1980), no. 6, 839–856. (Authors) summary) 82h:65019 65D30

(with Kazantzakis, J. G.) On the numerical evaluation of two- and three-dimensional Cauchy principal-value integrals. Acta Mech. 39 (1981), no. 1-2, 105-115. (Authors' ummary) 82d:65029 65D30 (73L99)

(with Bardzokas, D.) Stresses and displacements on the boundary of a hole in the infinite plane. (German summary) Acta Mech. 39 (1981), no. 3-4, 183-194. (Authors'

summary) 82g:73009 73C03 (with Panayotounakos, D. E.) Large elastic deformations in thin cantilever rods due to concentrated loadings. (French and German summaries) Internat. J. Non-Linear Mech. 16 (1981), no. 1, 53–63. (Authors' summary) 824:79039 73K05 (73G05)

(with Panayotounakos, D. E.) Nonlinear elastic analysis of planar curved beams loaded by co-planar concentrated forces. (German summary) J. Elasticity 11 (1981), no. 4, 429-437. (Authors' summary) 82k:73045 73K05

(with Kazantzakis, J. G.) Modified quadrature rules for the numerical evaluation of certain Cauchy principal values. Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 26 (1981), no. 5, 725-730. (Authors' summary) 82m:65024 65D32

odorescu, Radu (with Herkenrath, Ulrich) Expediency and optimality for general control systems. (French summary) Information theory (Proc. Internat. CNRS Colloq., Cachan, 1977) (French), pp. 447-455, Colloques Internat. CNRS, 276, CNRS, Paris, 1978. (Viorel Gh. Vodă) 82j:92063 92A25 (68D25)

(with Hengartner, Walter) * Функции конпентрации. (Russian) [Concentration functions] Translated from the English by V. M. Kruglov. "Nauka", Moscow, 1980.

174 pp. (Editors) 82c:60024 60Exx (60Fxx)

(with Ismail, Mourad E. H.) Asymptotic and explicit formulae for a non-Markovian model with linear transition rule. (German and French summaries) Biometrical J. 22 (1980), no. 1, 67-71. (M. Iosifescu) 82d:60194 60K99 (60J10, 92A25)

(with Nadeau, Raymond) Restricted Bayes strategies for programs with simple recourse. Oper. Res. 28 (1980), no. 3, part 2, 777-784. (I. M. Stancu-Minasian)

90C15 (90D05)

1982

(with Henze, Ernst; Wehking, Annette) On multiple Markov dependence. Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 2, 101-105 (1981). (A. Fuchs) 82m:60084

(with Hengartner, Walter; Kalin, Dieter) On the Bernoulli two-armed bandit problem. (German and French summaries) Math. Operationsforsch. Statist. Ser. Optim. 12 (1981), no. 2, 307–316. (Authors' summary) 82f:62151 62L15

Thera, Michel Subdifferential calculus for convex operators. J. Math. Anal. Appl. 80 (1981), no. 1, 78–91. (J. Borwein) 82f:90100 90C48 (46G99, 90C25)

serrien, Charles W. Relations between 2-D and multichannel linear prediction. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 3, part 1, 454-456. (Author's summary) 82e-94014 94A(5 (03F11) nary) 82e:94014 94A05 (93E11)

bùi Thế Tâm See Bùi Thế Tâm

umann, Alba Ferromagnetic and spin-glass behavior in the random hierarchical model. Phys. Rev. B (3) 22 (1980), no. 11, 5441-5446. (B. Derrida) 82c:82075 82A42 (82A67) Random Ising model with long-range interactions. J. Phys. A 14 (1981), no. 10, 2759–2765. (Author's summary) 82j:82050 82A42 (82A25)

Thévenaz, Jacques * Représentations linéaires de groupes finis en caractéristique p'.

(French) [Linear representations of finite groups with characteristic p'] Dissertation, Université de Genève, Geneva, 1980. Thèse [Thesis], 1911. Juris Druck und Verlag AG, Zurich, 1980. ii+124 pp. ISBN 3-260-04809-X (Editors) 82j:20030 20C99

ews, Klaus A reduction method for some nonlinear Dirichlet problems. Nonlinear Anal

3 (1979), no. 6, 795-813. (Long-Yi Tsai) 82a:35046 35J65

T-periodic solutions of time dependent Hamiltonian systems with a potential vanishing at infinity. Manuscripta Math. 33 (1980/81), no. 3-4, 327-338. (A. Vanderbauwhede) 82g:49011 49A40 (58E05, 58F05)

dao čong Thi See Dao Čong Thi

Thiagarajan, P. S. (with Genrich, H. J.) Bipolar synchronization systems. Automata, languages and programming (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 257-272, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (From the introduction) 82e:68055 68D90

(with Genrich, H. J.; Lautenbach, K.) Substitution systems-a family of system models based on concurrency. Mathematical foundations of computer science, 1980 (Proc. Ninth Sympos., Rydzyna, 1980), pp. 698-723, Lecture Notes in Comput. Sci., 88, Springer, Berlin, 1980. (Authors' summary) 82h:68086 68J10 (68A05, 68B20)

(with Genrich, H. J.; Lautenbach, K.) Elements of general net theory. Net theory and applications (Proc. Adv. Course General Net Theory Processes Systems, Hamburg, 1979), pp. 21-163, Lecture Notes in Comput. Sci., 84, Springer, Berlin, 1980. (Danny 68D90 (03B60, 05C99, 94A15)

bault, Lionel Calcul sous-différentiel et calcul des variations en dimension infinie Analyse non convexe (Proc. Colloq., Pau. 1977). Bull. Soc. Math. France Mém. No. 60 (1979), 161–175. (Françoise Berquier) 82e:49043 49C05 (46G05, 58E20)

Cônes tangents et épi-différentiels de fonctions vectorielles. Travaux Sém. Anal. Convexe 9 (1979), no. 2, Exp. No. 13, 38 pp. (Jean-Paul Penot) 82b:26015 (49A51, 58C06, 58C20)

Subdifferentials of compactly Lipschitzian vector-valued functions. Ann. Mat. Pura

Appl. (4) 125 (1980), 157–192. (A. B. Németh) 82h:58006 58C20 (49A51, 90C30)

Thibath, Roger Dynamic systems: study of a degenerate subharmonic bifurcation in a 2nd order equation by the separation of solutions into periodic and antiperiodic parts. Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. 11 (Prague, 1978), pp. 695-700, Academia, Prague, 1979. (Author's summary) 82j:34041

Étude d'une récurrence positivement homogène. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 3, 225-230. (Author's summary) 82b:58064 58F14

Thickstun, T. L. Open acyclic 3-manifolds, a loop theorem and the Poincaré conjecture. Bull. Amer. Math. Soc. (N.S.) 4 (1981), no. 2, 192-194. (John Hempel) 82b:57006 57M40 (57M35)

laurent-Thiébaut, Christine See Laurent-Thiébaut, Christine
Thiel, Christian Bedeutungsvollständigkeit und verwandte Eigenschaften der logischen Systeme Freges. Begriffsschrift-Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 483-494, Friedrich-Schiller-Univ., Jena, 1979. (Ignacio Angelelli) 03B30

See also Frege, Gottlob, 82b:01072

Thiel, L. (with Lam, C. W. H.; Swiercz, S.; Regener, E.) A computer search for (α,ω)-graphs. Proceedings of the Ninth Manitoba Conference on Numerical Mathematics and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 285–289, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (Editors) 82b:05002 05-04 (05C99)

Thiele, Everett (with Stone, James; Goodman, Myron F.) A class of master equations that exhibit a generalized form of canonical invariance and other "displacement" invariances. J. Chem. Phys. 74 (1981), no. 11, 6394-6406. (Authors' summary) 82f:82032 (60J10)

Thiele, Helmut On equivalent transformations of binary search trees. Trees in algebra and programming (Proc. 5th Lille Collog., Lille, 1980), pp. 95-109, Univ. Lille I, Lille, 1980. (From the introduction) 82g:68093 68H05 (68B15)

Thiele, Joachim See v. Seeliger, Hugo, \$2g:01069

Thiele, Rüdiger *Mathematische Beweise. (German) [Mathematical proofs]

Mathematische Schülerbücherei [Mathematical Library for Students], 99. BSB B. G.

Teubner Verlagsgesellschaft, Leipzig, 1979, 172 pp. (Robert Fromageot and Marcel Guillaume) 82k:03002 03-01 (00-01)

Thiele, T. N. See Hald, A., 82m:01060

lễ văn Thiêm See Lê Văn Thiêm

nn, J. G. F. (with Overdijk, D. A.; Simons, F. H.) A comment on unions of rings. Nederl. Akad. Wetensch. Indag. Math. 41 (1979), no. 4, 439-441. (V. Ficker) 82e:28001 28A05 (04A99)

Thieme, Horst R. Some mathematical considerations of how to stop the spatial spread of a rabies epidemic. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 310-319, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (H. W. Hethcote)

n-Thien, N. See Phan-Thien, N.

le Thien Hyong See Le Thien Hyong
Thierrin, G. (with Reis, C. M.) Reflective star languages and codes. Inform. and Control 42 (1979), no. 1, 1-9. (Authors' summary) 82i:94034 94B99 (68F05)

(with Kuan, L. Y.) Locally noncounting languages. Soochow J. Math. 5 (1979), 39-44. (Karel Čulik) 82a:68145 68F05

44. (Karel Cune) 828.00949 oorto. (with Shih, Hui Jan) Locally regular and locally finite languages. Tamkang J. Math. (1979). no. 2 253–262. (H. P. Edmundson) 82m:68125 68F05 10 (1979), no. 2, 253-262. (H. P. Edmundson) 82m:68125

(with Head, Tom) Hypercodes in deterministic and slender OL languages. Inform. and Control 45 (1980), no. 3, 251-262. (K. P. Lee) 82e:68077 68F05

Decomposition of some classes of subsets in a semigroup. Semigroups (Proc. Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 182–188, Lecture Notes in Math., 855, Springer, Berlin, 1981. (K. D. Magill, Jr. (Zbl 454:20051)) 82g:20093 20M10 (20M11)

Rings with right disjunctive elements. Simon Stevin 55 (1981), no. 1-2, 37-40.

(Author's summary) 82e:16041 16A99

Thierry-Mieg, Jean (with Ne'eman, Yuval) Extended geometric supergravity on group manifolds with spontaneous fibration. Ann. Physics 123 (1979), no. 2, 247-273. (From

the text) 82h:83070 83E50 (22E65)
(with Ne'eman, Yuval) Gauge asthenodynamics (SU(2/1)) (classical discussion).

Differential geometrical methods in mathematical physics (Proc. Conf.,

Aix-en-Provence/Salamanca, 1979), pp. 318-348, Lecture Notes in Math., 836, Springer, Berlin, 1980. (W. Cox) 82h:81137 81G20

(with Ne'eman, Yuval) Geometrical theory of ghost and Higgs fields and SU(2/1). Group theoretical methods in physics (Proc. Eighth Internat. Collog., Kiryat Anavim, 1979), 100-115, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81004) (17A70)

(with Ne'eman, Yuval; Takasugi, E.) Soft-group-manifold Becchi-Rouet-Stora transformations and unitarity for gravity, supergravity, and extensions. Phys. Rev. D (3) 22 (1980), no. 10, 2371-2379. (W. Cox) 82b:83071 83E99 (22E70, 53C05, 81G20) (with Morel, B.) SU(1/2)-supergravity. Phys. Lett. B 101 (1981), no. 6, 393-395. 83E99 (81G20) (Authors' summary) 82e:83040

Thijsse, G. Philip A. (with den Boer, H.) Semistability of sums of partial multiplicities under additive perturbation. Integral Equations Operator Theory 3 (1980), no. 1, 23-42. (L. Rodman) 82f:47021 47A53 (15A18)

Rules for the partial multiplicities of the product of holomorphic matrix function Integral Equations Operator Theory 3 (1980), no. 4, 515-528. (L. Rodman) 82a:15020 15A54 (15A42, 47A68)

On the (sub)logarithmic property of the pole-, zero- and algebraic multiplicity of operator functions. Proc. Edinburgh Math. Soc. (2) 23 (1980), no. 2, 207-217. (John P.

47A68 (30D30) Daughtry) 824:47026

mm, Anton *Über die integrabilität geodätischer Flüsse auf homogenen Räumen. (German) [On the integrability of geodesic flows on homogeneous spaces] Dissertation, Rheinische Friedrich-Wilhelms-Universität, Bonn, 1980. Bonner Mathematische Schriften [Bonn Mathematical Publications], 127. Universität Bonn, Mathematisches Institut, Bonn, 1980. ix + 89 pp. (Helmut Rüssmann) 82m:58033 58F07 (49C99, 70H05)

Thirring, W. Gauge theories of gravitation. Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 272–275, Lecture Notes in Phys., 116, Springer, Berlin, 1980. (From the text) 82b:83035 83C45

A lower bound with the best possible constant for Coulomb Hamiltonians. Comm. Math. Phys. 79 (1981), no. 1, 1-7. (Y. Kato) 82g:81122 81H05 (81C10)

(with Narnhofer, Heide) Canonical scattering transformation in classical mechanics. Phys. Rev. A (3) 23 (1981), no. 4, 1688-1697. (R. G. Newton) 82c:70018 (81F05)

Thisse, Jacques (with Weiserbs, Daniel) Existence and uniqueness of an optimal control with an infinite horizon. Cahiers Centre Études Rech. Opér. 21 (1979), no. 1, 17-22. (Authors' introduction) 82h:49002 49A10 (90A16) (with Jaskold Gabszewicz, J.) Entry (and exit) in a differentiated industry.

Noncooperative approaches to the theory of perfect competition. J. Econom. Theory 22

(1980), no. 2, 327-338. (See 82e:90023) 90A14 (90A12)

Thistlewaite, Paul B. (with McRobbie, Michael A.; Meyer, Robert K.) A mechanized decision procedure for nonclassical logics: the program KRIPKE. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 9 (1980), no. 4, 189-192. (Editors) 82h:03035 (03B25, 03B60)

Thol, Klaus (with Haake, Fritz) Universality classes for one-dimensional kinetic Ising models. Z. Phys. B 40 (1980/81), no. 3, 219-226. (Authors' summary) \$2c:\$2063 82A42 (60K35, 82A25, 82A70)

Tholen, Walter (with Börger, Reinhard) Remarks on topologically algebraic functors. Cahiers Topologie Géom. Différentielle 20 (1979), no. 2, 155-177. (From the introduction) 18B30 (54B30)

MacNeille completion of concrete categories with local properties. Comment. Mat Univ. St. Paul. 28 (1980), no. 2, 179–202. (H. Herrlich) 82h:18003 18A40 (18B99)

m, A. S. See Thom, Archibald S.

Thom, Alexander (with Thom, Archibald S.) A new study of all megalithic lunar lines. Archaeoastronomy No. 2 suppl. J. Hist. Astronom. 11 (1980), \$78-\$89. (C. R. Fletcher) 82e:01008 01A10

(with Thom, Archibald S.) Astronomical foresights used by megalithic man.

Archaeoustronomy No. 2 suppl. J. Hist. Astronom. 11 (1980), S78-S89. (C. R. Fletcher)

n, Alexander) Astronomical foresights used by megalithic man.
mmy No. 2 suppl. J. Hist. Astronom. 11 (1980), S90-S94. (C. R. Fletcher)

01A10

mé De quoi faut-il s'étor ner? Circé 8/9 (1978), 7-90. (I. Stewart) 82e:58026 58C28 (92A90)

(with Kergosien, Yannick Louis) Sur les points paraboliques des surfaces. (English nmary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 15, A705-A710. (James Callahan) 82a:53003a 53A05 (58C27)

(with Banchoff, Thomas F.) Erratum et compléments: "Sur les points paraboliques des surfaces" by Y. L. Kergosien and Thom. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 8, A503-A505. (James Callahan) 82a:53003b 53A05 (58C27) From icon to symbol. A sketch of a theory of symbolism. (Polish) Translated from the French by Roman Duda. Wiadom. Mat. (2) 23, no. 1, 39-54 (1980). (J. S. Joel) 58C28 (00A25)

muss, Ann M. (with Anderson, Donald A.) Near minimal resolution IV designs for the s" factorial experiment. Technometrics 21 (1979), no. 3, 331-336. (M. N. Das) 82a:62123

(with Anderson, Donald A.) Weakly resolvable IV.3 search designs for the pⁿ factorial experiment. J. Statist. Plann. Inference 4 (1980), no. 3, 299-312. (S. Ghosh)

as, C. B. Characteristic classes of representation ons over imaginary quadratic fields. Topology Symposium, Siegen 1979 (Proc. Sympos., Univ. Siegen, Siegen, 1979), pp. 471-481, Lecture Notes in Math., 788, Springer, Berlin, 1980. (Czes Kosniowski) 826:57017 57R20 (22E40)

Classification of free actions by some metacyclic groups on S²ⁿ⁻¹. Ann. Sci. École Norm. Sup. (4) 13 (1980), no. 4, 405–418. (Allan Edmonds) 82g:57016 57S25 (57S17) Maps between real classifying spaces. Math. Ann. 253 (1980), no. 3, 195-203. (J. F.

Adams) 82e:55004 55N15 (55R35) Adams 826:53604 53717 (1981), no. 4, no. 4, a useful algorithm in lattice geometry. Acta Cryst. Sect. A 37 (1981), no. 4, 553-557. (Author's summary) 82j:52002 52-04 (68C05) omas, Daniel (with Bunow, Barry; Kernevez, Jean-Pierre; Joly, Ghyslaine) Pattern

formation by reaction-diffusion instabilities: application to morphogenesis in *Drosophila*.

J. Theoret. Biol. 84 (1980), no. 4, 629-649. (F. Rothe) 82a:92009 92A09

mas, David R. (with Dodge, Yadolah) On the performance of nonparametric and normal theory multiple comparison procedures. Sankhyā Ser. B 42 (1980), no. 1-2, 11-27. (Authors' summary) 82k:62145 62J15

nas, Edward (with Churchill, Richard C.; Rod, David L.) Normal modes and stability for some classes of mechanical systems. Classical mechanics and dynamical systems (Medford, Mass., 1979), pp. 13–23, Lecture Notes in Pure and Appl. Math., 70, Dekker, New York, 1981. (See 822:58002) 58F05 (58F13, 70K20)

New Fork, 1981. (See accessible)

To the fundamental group of a space of sections.

Math. Scand. 47 (1980), no. 2, 232–246. (Ronald Brown) 82h:55014

55Q52 (55S45)

Hass, Ewart A. C. (with Ross, Brian H.) On appropriate procedures for combining

probability distributions within the same family. J. Math. Psych. 21 (1980), no. 2, 136–152. (Authors' summary) 82m:62035 62E10 mass. G. The consistence error of extended variational principles in the finite element

method. Comput. Math. Appl. 6 (1980), no. 4, 401-409. (Author's summary) 82h:65141 65N30 (49D10)

omas, Glänffrwd P. A note on Young's raising operator. Canad. J. Math. 33 (1981), no. 1, 49-54. (R. C. Read) 82:05003 05A10 (05A17)

as, H. R. (with Morgan, K.; Lewis, R. W.) Finite element modelling of cooling stresses in cast metal and drying stresses in timber. Modelling and simulation in practice, 2 (Proc. Second Annual Polymodel Conf., Teesside Polytech., Middlesbrough, 1979), pp. 51–76. Emjoc, Northallerton, 1980. (See 82:e65001) 65N30 (80A20) tomas, Harry (with Bennett, C. H.; Büttiker, M.; Landauer, R.) Kinematics of the forced

and overdamped sine-Gordon soliton gas. J. Statist. Phys. 24 (1981), no. 3, 419-442. (Authors' summary) 82e:82004 82A05

as, Howard (with Bunn, Derek W.) Problems in the application of decision analytic methods to policy formulation. Formal methods in policy formulation, pp. 84-99, Interdisciplinary Systems Res., 49, Birkhäuser, Basel, 1978. (See 82k:90009)

See also Formal methods in policy formulation, 82k:9000 mas, J.-C. See Thomas, Jean-Claude

s, J. R., Jr. (with Siewert, C. E.) Strong evaporation into a half space. (German nary) Z. Angew. Math. Phys. 32 (1981), no. 4, 421-433. (A. D. Solomon) 82k:76055 76P05 (82A25)

mas, Jean-Claude Homotopie rationnelle des fibrès de Serre. (French summary)
U.E.R. Math. Pures Appl. IRMA 2 (1980), no. 3, exp. no. 4, 27 pp. (Author's sur le Homotopie rationnelle des fibrés de Serre. (French summary) Publ. 55P62 (55R05, 55T20, 57S15)

Eilenberg-Moore models. (French summary) Publ. U.E.R. Math. Pures Appl. IRMA 3 (1981), no. 2, exp. no. 3, 38 pp. (Author's summary) 82e:55024 55P62 (55T20) Quelques questions commentées sur la fibre d'Eilenberg-Moore d'une fibration de

Quelques questions commentées sur la fibre d'Eilenberg-Moore d'une fibration de Serre. Publ. U.E.R. Math. Pures Appl. IRMA 3 (1981), no. 2, exp. no. 6, 15 pp. (Author's summary) 82e:55019 55P50 (55P62, 55R05)
mas, John B. (with Abrahams, Julia) Properties of the maximal correlation function. J. Franklin Inst. 310 (1980), no. 6, 317–323. (H. Vincent Poor) 82g:94004 94A17

(with Abrahams, Julia) Some comments on conditionally Markov and reciprocal Gaussian processes. IEEE Trans. Inform. Theory 27 (1981), no. 4, 523-525. (Authors' mary) 82k:60074 60G10 (60G15, 60J25)

(with Lee, Chung Chieh) Sequential detection based on simple quantization. J. Franklin Inst. 312 (1981), no. 2, 119–135. (Authors' summary) 821-93070 93E10 omas, K. S. Galerkin methods for singular integral equations. Math. Comp. 36 (1981), no. 153, 193–205. (Baruch Cahlon) 82c-65092 65R20 (45F99)

omas, L. K. (with Doran, R. W.) Variants of the software solution to mutual exclusion

Inform. Process. Lett. 10 (1980), no. 4-5, 206-208. (From the introduction) 82a:68042

Duns, Lawrence E. Scattering from point interactions. Mathematical methods and applications of scattering theory (Proc. Conf., Catholic Univ., Washington, D.C., 1979), pp. 159-162, Lecture Notes in Phys., 130, Springer, Berlin, 1980. (See 82h:81117) 81F10

Stochastic coupling and thermodynamic inequalities. Comm. Math. Phys. 77 (1980), no. 3, 211-218. (Richard Holley) 82a:60151 60K35 (60E15, 82A05)

nas, Lyn C. Connectedness conditions for denumerable state Markov decision processes. Recent developments in Markov decision processes (Proc. Internat. Conf., Univ. Manchester, Manchester, 1978), pp. 181–204, Academic Press, London, 1980. (See 82k:90128) 90C40

See also Recent developments in Markov decision processes, 82k:90128 us, Marc P. Lower bounds for commutative radical Banach algebras. J. Funct. Anal. 41 (1981), no. 2, 204-212. (H. G. Dales) 82e:46070 46J05

mas, R. S. D. (with Patuwo, B. E.; Wang, Chung Lie) The triangle inequality of Lessells and Pelling. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 45-47 (1981). (S. R. Mandan) 82i:51034 51N20

mas, Rainer (with Rinne, Horst) *Mathematik. I. (German) [Mathematics. I] Analysis. Reihe Uni-Papers. [Uni-Papers Series] Verlag Ölschläger, Munich, 1979. 271 pp. ISBN 3-88295-023-4 (From the text) 82m:00009a 00A06 (with Rinne, Horst; Preis, Albert) *Mathematik. II. (German) [Mathematics. II] Lineare Algebra. [Linear algebra] Reihe Uni-Papers. [Uni-Papers Series] Verlag Ölschlüger, Munich, 1979. 230 pp. ISBN 3-88295-024-2 (From the text) 82m:00009b

s, Richard M. On the centralizers of elements of order 3 in finite groups. I, II. J. Algebra 67 (1980), no. 1, 163–172, 173–184. (John L. Hayden) 82c:20036 20D05
On the number of generators for certain finite groups. J. Algebra 71 (1981), no. 2, 576–582. (W. E. Deskins) 82j:20056 20D99 (20D45)
mmas, Wolfgang (with Rang, B.) Zermelo's discovery of the "Russell paradox". (German and French summaries) Historia Math. 8 (1981), no. 1, 15–22. (E. Mendelson) 82k:04001

04-03 (01A60, 03-03)

Remark on the star-height-problem. Theoret. Comput. Sci. 13 (1981), no. 2, 231-237. (L. C. Eggan) 82b:68046 68D45

mason, Andrew (with Cockayne, E. J.) Optimal multimessage broadcasting in complete graphs. Utilitas Math. 18 (1980), 181-199. (Norman Biggs) 82c:05080

(with Cockayne, E. J.; Favaron, O.; Pavan, C.) Contributions to the theory of domination, independence and irredundance in graphs. Discrete Math. 33 (1981), no. 3,

249-258. (W.-K. Chen) 82b:05081 05C35 (with Bollobás, Béla) Graphs which contain all small graphs. European J. Combin. 2 (1981), no. 1, 13-15. (W. G. Brown) 82d:05071 05C35

(with Bollobás, Béla) Dense neighbourhoods and Turán's theorem Theory Ser. B 31 (1981), no. 1, 111-114. (J. Sedláček) 82m:05059 05C35

mason, Robert W. Cat as a closed model category. Cahiers Topologie Géom Differentielle 21 (1980), no. 3, 305-324. (Harold Hastings) 82b:18005 (with Wilson, W. Stephen) Hopf rings in the bar spectral sequence. Quart. J. Math. Oxford Ser. (2) 31 (1980), no. 124, 507-511. (Stewart B. Priddy) 82f:55030 55T99 (55P42)

sen, Carsten Planarity and duality of graphs. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. I. Congr. Numer. 28 (1980), 5-14. (From the introduction) 82i:05032 05C10

2-linked graphs. European J. Combin. 1 (1980), no. 4, 371-378. (Maria Ferro) 05C99 (05C40) 82c:05086

ments. J. Combin. Theory Ser. B 28 (1980), no. 2, 142-163. (K. B. Reid) 82d:05065 05C20 (05C38, 05C40, 05C45)

(with Toft, Bjarne) Nonseparating induced cycles in graphs. J. Combin. Theory Ser. B 31 (1981), no. 2, 199-224. (G. Chartrand) 82m:05062 05C38 (05C40)

(with Bermond, J.-C.) Cycles in digraphs—a survey. J. Graph Theory 5 (1981), no. 1, 1–43. (L. C. Eggan) 82k:05053 05C20 (05–02, 05C38)

masset, François (with Hua, Lien) Numerical study of coastal upwellings by a finite lelement method. Computing methods in applied sciences and engineering (Proc. Fourth Internat. Sympos., Versailles, 1979), pp. 237–258, North-Holland, Amsterdam, 1980.

(From the introduction) 82e:86001 86A05 (65N30)

See also Teman, Roger, 82b:55133
née, Vidar (with Arnold, Douglas N.; Douglas, Jim, Jr.) Superconvergence of a finite element approximation to the solution of a Sobolev equation in a single space variable.

Math. Comp. 36 (1981), no. 153, 53-63. (J. D. Atkinson) 82:65108 65N30 (35K70) (with Huang, Ming You) Some convergence estimates for semidiscrete type scher for time-dependent nonselfadjoint parabolic equations. Math. Comp. 37 (1981), no. 156, 327-346. (Authors' summary) 82i:65060 65M60 (65M15)

on, C. D. The VLSI complexity of sorting. VLSI systems and comp

(Pitisburgh, Pa., 1981), pp. 108-118, Computer Sci. Press, Rockville, Md., 1981. (Author's summary) 82m:68092 68C25 (68E05) ompson, Colin J. (with McGuire, James B.) On the universality and computation of Feigenbaum's 8. Phys. Lett. A 84 (1981), no. 9, 451-453. (Editors) 82j:58100 58F20

(with Inawashiro, S.; Frankel, N. E.) Magnetic lattice gas. Phys. Rev. B (3) 24 (1981), no. 11, 6524–6531. (Authors' summary) 82k:82019 82A25 (82A68)

(with Inawashiro, S.; Frankel, N. E.) Disordered magnetic lattice gas: formulation by the method of the distribution function. Phys. Rev. B (3) 24 (1981), no. 11, 6532-6541. (Authors' summary) 82m:82039b 82A42

(with Inawashiro, S.; Frankel, N. E.) Disordered magnetic lattice gas: Gaussian probability distributions and the limit of infinitely-long-ranged interactions. Phys. Rev. B (3) 24 (1981), no. 11, 6542–6549. (Authors' summary) 82m:82039a 82A57 mmpson, Dale V. (with Kaul, Saroop K.) On a theorem of Nielsen. Bull. Austral. Math. Soc. 24 (1981), no. 1, 37–47. (S. Kinoshita) 82i:57007 57N05 (20H10, 30F40, 54H15, 1982).

m, Donald M. Eigengraphs: constructing strongly regular graphs with block

designs. Utilitas Math. 20 (1981), 83-115. (J. J. Seidel) 82m:05054 05C25 (05B05)

Use State Company Com

Chapters 12-19. Oxford University, Mathematical Institute, Oxford, 1980. pp. 151-312.

(Editors) 82j:20002b 20-01 (20Bxx, 51-01)

mpson, Earl A. Characteristics of worlds with perfect strategic communication. J. rory 23 (1980), no. 1, 111-119. (Andrew P. Sage) 82d:90135 90D12

son, Gerald L. Pareto optimal deterministic models for bid and offer auctions. Third mposium on Operations Research (Univ. Mannheim, Mannheim, 1978), Section 5, pp. 517-530, Operations Research Verfahren, 35, Hain, Meisenheim, 1979. (Carl P.

Simon) 82a:90039 90A12 (90A09)

(with Sethi, Suresh P.) Simple models in stochastic production planning. Applied stochastic control in econometrics and management science, pp. 295–304, Contrib. Econom. Anal., 130, North-Holland, Amsterdam, 1980. (Authors' introduction) 82i:90054

(with Nagelhout, Robert V.) A cost operator approach to multistage

location-allocation. European J. Oper. Res. 6 (1981), no. 2, 149-161. (Authors' summary) 82h:90037 90B05

on, J. F. (with Mastin, C. W.; Ghosh, A.) A fractional step method for the solution of the Navier-Stokes equations in arbitrary three-dimensional regions. computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Unio., Bethlehem, Pa., 1979), pp. 114–117, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82c:76032 76D05 (65N05)

npson, J. M. T. (with Thompson, Richard J.) Numerical experiments with a strange attractor. Bull. Inst. Math. Appl. 16 (1980), no. 7, 150-154. (Joseph Ford) 82c:58044

on, J. W. (with Lewis, Toby) Dispersive distributions, and the connection between dispersivity and strong unimodality. J. Appl. Probab. 18 (1981), no. 1, 76-90. (Stephen James Wolfe) 82c:60027 60E05 (62E10)

mpson, John G. Fixed point free involutions and finite projective planes. Finite simple groups, II (Proc. Sympos., Univ. Durham, Durham, 1978), pp. 321-337, Academic Press, London, 1980. (See 82h:20021) 20G25 (51E15)

A finiteness theorem for subgroups of PSL(2, R) which are commensurable with PSL(2, Z). The Santa Cruz Conference on Finite Groups (Unio. California, Santa Cruz. Calif., 1979), pp. 533–555, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (James E. Humphreys) 82b:20067 20H05 (10D07, 20D08, 22E40)

(with Anstee, Richard P.; Hall, Marshall, Jr.) Planes of order 10 do not have a collineation of order 5. J. Combin. Theory Ser. A 29 (1980), no. 1, 39-58. (D. A. Foulser) 82c:51012 51E15 (05B25, 94B40)

Invariants of finite groups. J. Algebra 69 (1981), no. 1, 143-145. (Joseph B. Dennin, Jr.) 82d:20042 20G20

Finite-dimensional representations of free products with an amalgamated subgroup J. Algebra 69 (1981), no. 1, 146-149. (Stephen D. Smith) 82e:20007 20C15 (20D08) (with Sloane, N. J. A.) The nonexistence of a certain Steiner system S(3, 12, 112). J Combin. Theory Ser. A 30 (1981), no. 3, 209-236. (A. E. Brouwer) 82m:05023

Impson, Mark The principle of limiting absorption for Laplacians on two-point homogeneous spaces. Proc. Roy. Soc. Edinburgh Sect. A 87 (1980/81), no. 3-4, 319-329.
 (H. D. Fegan) 82j:58112 58G30 (35J05)

mpson, R. J. See Thompson, Richard J.

mpson, R. S. (with Gibson, W. G.) Neural model with probabilistic firing behavior. I. General considerations. Math. Biosci. 56 (1981), no. 3-4, 239-253. (Authors' summary)

(with Gibson, W. G.) Neural model with probabilistic firing behavior. II. One- and two-neuron networks. Math. Biosci. 56 (1981), no. 3-4, 255-285. (Authors' summary) 92A09 (92A07)

mpson, Richard A. (with Walters, Stephen M.; Gray, F. Gail) Self-diagnosing cellular implementations of finite-state machines. *IEEE Trans. Comput.* 30 (1981), no. 12, 953–959. (Authors' summary) 82m:68107 68D35 (68D20)

mpson, Richard J. (with Thompson, J. M. T.) Numerical experiments with a strange attractor. Bull. Inst. Math. Appl. 16 (1980), no. 7, 150–154. (Joseph Ford) 82c:58044 58F13

on, Robert J. Functional-differential equations with unbounded delay in a Banach space. Nonlinear Anal. 5 (1981), no. 5, 469-473. (G. F. Webb) 82g:34110 34K30

mpson, Robin Maximum likelihood estimation of variance components. Math.

Operationsforsch. Statist. Ser. Statist. 11 (1980), no. 4, 545-561. (Friedrich Pukelsheim) 82g:62102 62J10 (65U05)

(with Baker, Robert John) Composite link functions in generalized linear models. J. Roy. Statist. Soc. Ser. C 30 (1981), no. 2, 125-131. (Authors' summary) 82i:62098

on, S. (with Johnson, R. S.) A solution of the inverse scattering problem for the Kadomtsev-Petviashvili equation by the method of separation of variables. Phys. Lett. A 66 (1978), no. 4, 279–281. (Authors' summary) 826:35093 35Q20 (76B25)

mpson, Skip (with Rodabaugh, D. J.) A note on the relative efficiency of Adams methods. Comput. Math. Appl. 7 (1981), no. 5, 401-403. (Authors' summary) 821:65081

m, Ib The use of Markov chain models in sampling from finite population

J. Statist. 8 (1981), no. 1, 1-9. (Kenneth R. W. Brewer) 82g:62027 62D05 omsen, Momme Johs Near-rings with right inverse property. Geometry and differential netry (Proc. Conf., Univ. Haifa, Haifa, 1979), pp. 174-182, Lecture Notes in Math.,

792, Springer, Berlin, 1980. (J. R. Clay) 82a:16037 16A76 (51A35, 51D10) msen, W. (with Lipecki, Zbigniew; Plachky, Detlef) Extensions of positive operators and extreme points. I. Collog. Math. 42 (1979), 279–284. (N. Pacchiarotti) 82k:47055 47B55 (46A40)

omson, B. S. On full covering properties. *Real Anal. Exchange* 6 (1980/81), no. 1, 77–93. (Clifford E. Weil) 82e:26008 26A24

Cantorus E. Weili DacaseMMS 200/L4 soon, J. J. See Topper, David R., \$2g:01028 soon, James D. Implications of different sorts of evidence for competition. Amer.

Natur. 116 (1980), no. 5, 719-726. (Ronald E. Harrell) 82g:92055 92A17 (92A15)

Sunson, James E. (with Olin, Robert F.) Algebras of subnormal operators. J. Funct. Anal. 37 (1980), no. 3, 271–301. (D. Sarason) 82a:47024 47B20 (47A15, 47D20) (with Olin, Robert F.) Irreducible operators whose spectra are spectral sets. J. Math. 91 (1980), no. 2, 431-434. (John B. Conway) 82j:47012 47A25 47A25 (46I15.

Two characterizations of the Raiffa solution. Econom. Lett. 6 (1980). no. 3, 225-231. (Author's introduction) 82j:90085 90D12 Nash's bargaining solution and utilitarian choice rules. Econometrica 49 (1981),

no. 2, 535-538. (Author's introduction) 82k:90018

uyen-quang-do Thong See Nguyen-Quang-Do Thong
orbergsson, G. (with Ballmann, W.; Ziller, W.) Closed geodesics and the fundamental
group. Duke Math. J. 48 (1981), no. 3, 585-588. (Y. Mutô) 82j:58041 58E10 (58D17)

, Jens (with Aalen, Odd O.; Borgan, Ørnulf; Keiding, Niels) Interaction between life history events. Nonparametric analysis for prospective and retrospective data in the presence of censoring. Scand. J. Statist. 7 (1980), no. 4, 161-171. (M. M. Siddiqui) 82f:62070 62G05 (62P10)

orn, Charles B. Infinite N_c QCD at finite temperature: is there an ultimate temperature? Phys. Lett. B 99 (1981), no. 6, 458-462. (Author's summary) 824:81150

re Thorne, Betty Jeanne See Moore Thorne, Betty Jeanne

Thorne, Kip S. (with Flammang, Richard A.; Żytkow, Anna N.) Stationary spherical accretion into black holes. I. Equations of structure. Monthly Notices Roy. Astronom. Soc. 194 (1981), no. 2, 475-484. (Andrew King) 82d:85006 85A15 (83C99)

ornton, Melvin C. (with Hardy, Darel W.) Partial orders, closed relations and their automorphisms. Semigroup Forum 22 (1981), no. 2, 125-138. (D. B. McAlister) 20M20

Thoro, Dmitri (with Edgar, Hugh) Exploring an algorithm. Fibonacci Quart. 19 (1981), no. 3, 271-275. (Claude Brezinski) 82h:10014 10A32 (40A15)

orpe, B. (with Kuttner, B.) A note on strong Cesaro summability. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 167-182. (S. Baron) 82m:40009 40G05 (40F05)

A Cauchy criterion for the summability of an infinite integral. Proc. Edinbu Math. Soc. (2) 23 (1980), no. 2, 219-224. (J. Mařík) 82a:26010 26A99 (40A10) An extension of Kuttner's theorem. Bull. London Math. Soc. 13 (1981), no. 4, 301–302. (M. R. Parameswaran) 82h:40013 40H05 (40D20, 46A45) orpe, M. F. (with Miyazima, S.) Thermodynamics of dilute XY quantum chains. Phys.

Rev. B (3) 24 (1981), no. 11, 6686-6693. (Authors' summary) 82k:82056 (82A25)

Thowsen, Arild Analysis and control of time-delay systems using finite-dimensional approximations. Comput. Electr. Engrg. 8 (1981), no. 1, 3-6. (Author's summary) 82b:34102 34K35 (65L99, 93D15)

(with Feliachi, Ali) Memoryless stabilization of linear delay-differential systems. IEEE Trans. Automat. Control 26 (1981), no. 2, 586-587. (Authors' summary) 824:93049

An analytic stability test for a class of time-delay systems. IEEE Trans. Automat. Control 26 (1981), no. 3, 735-736. (Author's summary) 82j:93026 93D05

The Routh-Hurwitz method for stability determination of linear differential-difference systems. Internat. J. Control 33 (1981), no. 5, 991-995. (R. F.

34K20 (93D05) Datko) 82i:34095 Thrall, Anthony D. Some properties of least-squares digital filters. SIAM J. Appl. Math. 40

(1981), no. 2, 169–178. (William A. Porter) 82c:94004 94A05

Thrall, Robert M. See Mathematical frontiers of the social and policy sciences, 82c:92005a

Threlfall, William (with Seifert, Herbert) ★Seifert and Threlfall: a textbook of topology.

Translated from the German edition of 1934 by Michael A. Goldman. With a preface by Joan S. Birman. With "Topology of 3-dimensional fibered spaces" by Seifert. Translated from the German by Wolfgang Heil. Pure and Applied Mathematics, 89. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London-Toronto, Ont., 1980.

xvi+437 pp. ISBN 0-12-634850-2 (Ross Geoghegan) 82h:55001 55-02 (57N12)
Thron, C. D. The nonexistence of "hermaphroditic" tracer systems. Bull. Math. Biol. 42 (1980), no. 2, 257-265. (Author's summary) 82k:92017 92A07

on, R. Nichtlineare Vektoroptimierungsprobleme und eine Modifizierung des Satzes von Krein-Mil'man. Wiss. Z. Tech. Hochsch. Ilmenau 26 (1980), no. 6, 147-158. (Tomas Gal) 90C31 (46G99)

Thron, Wolfgang J. (with Jones, William B.) *Continued fractions. Analytic theory and applications. With a foreword by Felix E. Browder. With an introduction by Peter Henrici. Encyclopedia of Mathematics and its Applications, 11. Addison-Wesley

Publishing Co., Reading, Mass., 1980. xxix+428 pp. ISBN 0-201-13510-8 (E. Frank) 82c:30001 30-02 (30B70, 41A21)

(with Waadeland, Haakon) Analytic continuation of functions defined by means of ntinued fractions. Math. Scand. 47 (1980), no. 1, 72-90. (L. J. Lange) 82c:30004 30B70 (30B40)

(with Ori, Ramesh) A note on h-proximities. Proc. Amer. Math. Soc. 83 (1981), no. 1, 205-206. (H. L. Bentley) 82h:54039 54E05 (54D45)

nguyễn văn Thu See Nguyễn Văn Thu

nguyễn Thủa Hộp See Nguyễn Thủa Hộp nguyễn duy Thuần See Nguyễn Duy Thuần Thuente, David J. Duality theory for generalized linear programs with computational methods. Oper. Res. 28 (1980), no. 4, 1005-1011. (Walter Habenicht) 82a:90085 90C05 (90C08)

ier, H. (with Delorme, Charles; Maheo, Maryvonne; Kob, K. M.; Teo, H. K.) Cycles with a chord are graceful. J. Graph Theory 4 (1980), no. 4, 409-415. (S. F. Kapoor) 82g:05078 05C99 (05C38)

asiraman, K. (with Swamy, M. N. S.) *Graphs, networks, and algorithms. A Wiley Interscience Publication. John Wiley & Sons, Inc., New York, 1981. xviii+592 pp. ISBN 0-471-03503-3 (Narsingh Deo) 82j:94030 94C15 (05B35, 05Cxx, 68E10, 90B10,

nguyen Thuong Uen See Nguyen Thuong Uen
Thüring, Bruno Operative oder analytische Definition des Begriffs Inertialsystem? [Operative or analytic definition of the concept of an inertial system?] Philos. Natur. 18 (1980/81), no. 2-3, 225-242. (Z. Janković) 82k:70001 70-03

w, Christine R. (with Eastham, Michael S. P.) The existence of eigenvalues of infinite

multiplicity for the Schrödinger operator. Proc. Roy. Soc. Edinburgh Sect. A 86 (1980), no. 1-2, 61-64. (J. Weidmann) 82b:35125 35P99 (35J10, 81F05)

er, Rainer Notiones mathematicae. Die praktische Bedeute Metaphysik als Antinaturalismus. Theory and practice: on the relationship of theory and practice in the seventeenth and eighteenth centuries, Vol. 1 (Hannover, 1977), pp. 95-100, Studia Leibnitiana Suppl., XIX, Steiner, Wiesbaden, 1980. (Eberhard Knobloch) 00A25 (01A45)

m, R. N. (with Almgren, Frederick J., Jr.) Liquid crystals and geodesics. (French nmary) J. Physique 42 (1981), no. 3, 413-417. (Authors' summary) 82c:82089 82A60 (49F22, 58E15)

Thurston, William See Travaux de Thurston sur les surfaces, 82m:57003
Thyagaraja, A. Recurrence, dimensionality, and Lagrange stability of solutions of the nger equation. Phys. Fluids 24 (1981), no. 11, 1973-1975. (Author's summary) 82k:76015 76B15 (35Q20) sverdrup-Thygeson, Harald See Sverdrup-Thygeson, Harald čan kim T'i See Čan Kim T'i

Tian, Chou A system of integral formulas for submanifolds. (Chinese. English summary) Beijing Daxue Xuebao No. 2 (1980), 5-15. (H. Wu) 82e:53089 53C42

Tian, Feng (with Ma, Zhong Fan) A polynomial algorithm for the linear programming problem. (Chinese) Knowledge Practice Math. No. 2 (1980), 36–44. (Editors) 82c:90054 probl 90C05

Tiao, George C. (with Hillmer, Steven C.) Smoothing of time series from a Bayesian viewpoint. Bayesian analysis in econometrics and statistics, pp. 271-280, Stud. Bayesian Econometrics, 1, North-Holland, Amsterdam, 1980. (See 824:62170) 62M10 (62F15) Econometrics, 1, North-Holland, Amsterdam, 1906, 18te Sachasa (9) (24th (82th 1996)), Hidden periodic autoregressive-moving average models in tin series data. Biometrika 67 (1980), no. 2, 365–373. (Authors' summary) 82k:62175 ressive-moving average models in time

See also Directions in time series, 82f:62174

Tiba, Dan Obstacle problems for first order partial differential operators. Variational inequalities and optimization problems (Proc. Summer School, Constanţa, 1979), 105-113, Minist. Ed. Învățămiîntului, Constanța, 1979. (M. Biroli) 82b:49016 49A29 (47H15)

Regularization of saddle functions. Boll. Un. Mat. Ital. A (5) 17 (1980), no. 3, 420-427. (Jiří V. Outrata) 82b:90093 90C25 (47H99, 52A40)

enský, Ján National science and its relationship to international science as a methodological problem of the history of science. (Czech. Russian and English summaries) DVT—Dějiny Věd Tech. 14 (1981), no. 1, 37–46. (Author's summary) 92-01114 01A72 (01A80)

Tiberio Bianchini, Rosa Maria (with Zecca, P.) Local controllability for autonomous dinear systems. J. Optim. Theory Appl. 31 (1980), no. 1, 69-83. (Authors' summary) 82f-49043 49E20 (93B05)

marchionna Tibiletti, Cesarina See Marchionna Tibiletti, Cesarina
Tichonow, V. I. See Tibonov, V. I.
Tichy, Robert F. Ein metrischer Satz in der Theorie der Gleichverteilung. Österreich. Akad. Wiss. Math.-Natur. Kl. Sitzungsber. II 188 (1979), no. 8-10, 317-327. (I. Danicic) 82c:10061 10K05 (65C10)

Polynomial functions over finite monoids. Semigroup Forum 22 (1981), no. 1, 83-87. (D. B. McAlister) 82h:20085 20M99

A remark on polynomial functions over finite monoids. Semigroup Forum 22 (1981), no. 4, 391–392. (Author's summary) 82h:20086 20M99

ard (with Hecht, Friedrich-Karl; Schütte, Fritz-Joachim) Schallausbreitung in mikroinhomogenen Medien. (Russian and English summaries) Wiss. Z. Pādagog. Hochsch. "Karl Liebknecht" Potsdam 24 (1980), no. 1, 179-187. (Authors' summary) 73S05 (73D99)

Wahrscheinlichkeitsrechnung und mathematische Statistik. (German) [Probability theory and mathematical statistics] Second edition. Mathematik für Ingenieure, rwissenschaftler, Ökonomen und sonstige Anwendungsorientierte Berufe [Mathematics for Engineers, Natural Scientists, Economists and other Application-Oriented Occupations], 17. Verlag Harri Deutsch, Thun, 1980. 224 pp. ISBN 3-87144-433-2 (From the introduction) 82k:60002a 60-01 (62-01) (with Beyer, Otfried; Hackel, Horst; Pieper, Volkmar)

*Wahrscheinlichkeitsrechnung und mathematische Statistik. (German) [Probability theory and mathematical statistics] Second edition. Mathematik für Ingenieure, enschaftler, Ökonomen und Landwirte [Mathematics for Engineers, Natural Scientists, Economists and Agriculturalists], 17. BSB B. G. Teubner Verlagsgesellschaft, Leipzig, 1980. 224 pp. (Editors) 82k:60002b 60-01 (62-01)

ong Tiem See Dang Hong Tiem hguen zui Tien See Hguen Zui Tien nguen zui Tien See Nguyễn Duy Tiền nguyễn duy Tiến See Nguyễn Duy Tiến

nguyen huu Tien See Nguyen Huu Tien Tier, Charles A tri-allelic diffusion model with selection, migration, and mutation. Math. Biosci. 44 (1979), no. 1-2, 41-60. (Author's summary) 82m:92054 92A10 (with Hanson, Floyd B.) Persistence in density dependent stochastic populations.

Math. Biosci. 53 (1981), no. 1-2, 89-117. (S. Levin) 82h:92049 92A17 (with Hanson, Floyd B.) An asymptotic solution of the first passage problem for lar diffusion in population biology. SIAM J. Appl. Math. 40 (1981), no. 1, 113-132. 60J70 (92A15)

(H. Hering) 82d:60159 Tierney, L. The asymptotic time to failure of a bundle of fibers with random slacks. Adv. in Appl. Probab. 13 (1981), no. 3, 548-566. (Andrew D. Barbour) 82i:62144 (60K10, 90B25)

Tietz, Hubert Zur pV-summierung durch Riesz-Verfahren. (English summary) Indian J. Math. 17 (1975), no. 2, 53-69. (Author's summary) 82c:40011 40G99 (40E05)
 Tietze, Heinrich Gelöste und ungelöste mathematische Probleme aus alter und neuer Zeit.

(German) [Solved and unsolved mathematical problems from the past and the present] Vierzehn Vorlesungen für Laien und für Freunde der Mathematik. [Fourteen lectures for laymen and friends of mathematics]. Seventh edition. Verlag C.H. Beck, Munich, 1980. xix + 256 + 298 pp. ISBN 3-406-02535-8 (Editors) 82c:01007 01A05 (00A05)

Tigan, Ștefan Remarques sur certains problèmes de programmation pseudo-linéaire par

morccaux. Proceedings of the Third Colloquium on Operations Research (Cluj-Napoca, 1978), pp. 288-292, Univ. "Babeş-Bolyai", Cluj-Napoca, 1979. (From the text) 82k:90

laar, Harm Hilgard *Identification and informative sample size. Dissertation Technische Hogeschool Eindhoven, Eindhoven, 1981. With a Dutch summary. isch Centrum, Amsterdam, 1981. 143 pp. (From the introduction) 82k:62180 62M20

Tignol, J.-P. Corps à involution neutralisés par une extension abélienne élémentaire. The Brauer group (Sem., Les Plans-sur-Bex, 1980), pp. 1-34, Lecture Notes in Math., 844, Springer, Berlin, 1981. (B. Fein) 82h:16013 16A39 (12E15)

cleja-Tigoiu, Sanda See Cleja-Tigoiu, Sanda Tihomirov, A. N. Convergence rate in the central limit theorem for weakly dependent random variables. (Russian. English summary) Teor. Verojatnost. i Primenen. 25 (1980), no. 4, 800-818. (J. R. Leslie) 82h:60650 60F05 (60G10)

Tihomirov, A. S. Constructive realization of a mapping of K-planes of the projective space bullow, A. S. Constitutive remarkation of a mapping of A-phanes of the projective space P_{n} , by a hypersurface of the projective space P_{k+1} , (Russian) Modern geometry (Russian), pp. 84–91, Leningrad. Univ., Leningrad, 1980. (V. Medek) 82i:14031 14M15 (51M99) The intermediate Jacobian of double P^{3} that is branched in a quartic. (Russian) Izv. d. Nauk SSSR Ser. Mat. 44 (1980), no. 6, 1329-1377, 1439. (Miles Reid) 82k:14041 14J30 (14C30, 14K30)

omirov, N. B. Divergence of interpolation processes. (Russian) Differential geometry (Russian), pp. 104-111, 141, Kalinin. Gos. Univ., Kalinin, 1977. (P. Vértesi) 826:41006

Divergence of interpolation processes on a set of complete measure. (Russian) Application of functional analysis to approximation theory (Russian), pp. 138-150, 161, Kalinin. Gos. Univ., Kalinin, 1980. (P. Vértesi) 82i:41005 41A05

mirov, V. M. (with Dorofeeva, A. V.) From the rule of the Lagrange multiplier to the Pontrjagin maximum principle (on the history of the necessary conditions for an extremum in problems with constraints). (Russian) Istor-Mat. Issled. No. 25 (1980), 104-128, 378. (Rolf Klötzler) 82g:01021 01A50 (01A60, 49-03)

(with Volevič, L. R.; Voskresenskii, G. P.; Zabrodin, A. V.; Kolmogorov, A. N.; Oleĭnik, O. A.) Konstantin Ivanovič Babenko (on the occasion of his 60th birthday). (Russian) Uspehi Mat. Nauk 35 (1980), no. 2(212), 231-239. (Editors) 82g:01078

(with Magaril-Il'jaev, G. G.) On the Kolmogorov inequality for fractional derivatives on the half line. (Russian summary) Anal. Math. 7 (1981), no. 1, 37-47. (Jöran Bergh) 82g:26026 26D15 (26A33)

on, Anne Un traité astrono e chypriote du XIVe siècle. III. [A XIVth century Cypriot astronomical treatise. III] Janus 68 (1981), no. 1-3, 65-127. (Author's introduction) 82m:01024 01A35

Tihonenko, M. Ja. (with Popov, V. G.) Approximate solution of a singular integral equation with involution. (Russian) Approximate solution of some problems for differential and integral equations of applied character (Russian), pp. 15-18, 46, Preprint 80, 17, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (See 82g:65004)

nov, A. I. (with Cagin, V. A.) Computer analysis of periodic modes in nonlinear systems. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 414 (1979), 58–62, 109. (A. A. Pervozvanskii) 82d:93033 93C10 (65L10) onov, A. N. (with Oleinik, O. A.; Sobolev, S. L.) The works of I. G. Petrovskii on partial

differential equations and their role in the development of the theory of differential equations (Russian) Proceedings of an All-Union Conference on Partial Differential Equations (Moscow State Univ., Moscow, 1976) (Russian), pp. 9–20, Moskov. Gos. Univ.,

Meh.-Mat. Fakul'tet, Moscow, 1978. (Editors) 82;:01069 01A70 (35-03) (with Arsenin, V. Ja.) ★Методы решения некорректных задач. (Russian) [Methods for the solution of ill-posed problems] Second edition, revised and supplemented. "Nauka", Moscow, 1979. 286 pp. (V. V. Vasin) 82e:65002 65-02 (47A50, 65J10)

(with Bicadze, A. V.; Erugin, N. P.; Arsen'ev, A. A.; Il'in, V. A.; Svešnikov, A. G.; Popov, Ju. P.) Aleksandr Andreevič Samarskii (on the occasion of his 60th birthday). (Russian) Differencial'nye Uravnenija 15 (1979), no. 7, 1155-1163. (Editors) 82j:01074 01A70

(with Budak, B. M.; Samarskii, A. A.) *Сборник задач по математической физике. (Russian) [A collection of problems in mathematical physics] Third edition. Nauka", Moscow, 1980. 687 pp. (Editors) 82a:35002 35-01 (00A69)

(with Il'inskii, A. S.; Svešnikov, A. G.) Mathematical models of electrodynamic radiative systems. (Russian) Problems of numerical mathematics (Russian), pp. 82-108, Moskov. Gos. Univ., Moscow, 1980. (A. S. Silbergleit) 82j:78009 78A45

A principle of mutuality. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 2, 305-308. (F. M. Kirillova) 82c:49004 49A22 (65J99, 65K10)

Approximate systems of linear algebraic equations. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 6, 1373-1383, 1629. (Petr Liebl) 82j:65024 65F20

The Department of Numerical Mathematics and Cybernetics at the end of two five-year plans. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1981,

onov, A. P. (with Hohlov, Ju. E.) Biholomorphy of solutions of an inverse boundary value problem in C. (Russian) Trudy Sem. Kraev. Zadačam No. 16 (1979), 163–179, 245. (P. Agranovič) 82c:32005 32A30

nov, Ju. L. (with Semesenko, M. P.) Modeling of periodically arriving tasks in a shared system. (Russian) Methods and practice of construction of data processing systems (Russian), pp. 61-68, 98-99, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979.

(Authors' summary) 82a:90073 90B35 (68B20)
Tihonov, V. I. (with Harisov, V. N.) Optimum reception of randomly delayed discrete signals. Radiotehn. i Elektron. 25 (1980), no. 3, 529-539 (Russian); translated as Radio Engrg. Electron. Phys. 25 (1980), no. 3, 52-59 (1981). (Authors' summary) 82d:94010

★Umkehraufgaben und Datenbewertung. (German) [Inverse problems and data evaluation] With a Russian summary. Bericht [Report], 172. Forschungszentrum Graz, Mathematisch-Statistische Sektion, Graz, 1981. viii + 106 pp. (Menachem Dishon) 82k:65088 65U05 (65D15)

nova, I. M. (with Bykov, I. A.) Algorithms for digital processing of borehole azimuthal observations. (Russian) Questions in the dynamical theory of seismic wave propagation, No. XX, pp. 135-155, 215, "Nauka" Leningrad. Otdel., Leningrad, 1981. (See 82k:86002)

- Tihov, M. S. Comparison of plans of control on the basis of a posteriori characteristics. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 3, 86-93, 221 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 3, 62-68 (1980). (J. Gladitz) 82a:62147 62N05
- Tiit, E. A. A problem of optimal pairing and an algorithm for its solution. (Russian. English summary) Tartu Riikl. Ül. Toimetised No. 541 Trudy Mat. Meh. (1980), 57-77. (Author's summary) 82m:62136 62H30

Tijdeman, R. (with Győry, Kálmán; Voorhoeve, M.) On the equation $1^k + 2^k + \cdots + x^k = y^z$. Acta Arith. 37 (1980), 233–240. (C. L. Stewart) 82h:10021

(with Voorhoeve, M.) Bounded discrepancy sets. Compositio Math. 42 (1980/81), no. 3, 375-389. (Robert F. Tichy) 82i:10071 10K05

The chairman assignment problem. Discrete Math. 32 (1980), no. 3, 323-330. (H. G. Meijer) 82b:10072

On the discrepancy of a sequence in [0,1]. Seminar on Number Theory, Paris 1979-80, pp. 317-329, Progress in Math., 12, Birkhäuser, Boston, Mass., 1981. (See

(with Brouwer, Andries) On the edge-colouring problem for unions of complete uniform hypergraphs. Discrete Math. 34 (1981), no. 3, 241–260. (Jean-Claude Fournier) 05C15 (05C65, 05C70)

Solvability of Diophantine equations. Nieuw Arch. Wisk. (3) 29 (1981), no. 1, 36-49. (H. London) 82j:10036 10B99 (01A65, 12A99)

Tijms, H. C. An algorithm for average costs denumerable state semi-Markov decision problems with applications to controlled production and queueing systems. Recent developments in Markov decision processes (Proc. Internat. Conf., Univ. Man Manchester, 1978), pp. 143-179, Academic Press, London, 1980. (See 82k:90128)

A unified steady-state analysis for controlled Markov drift processes in inventory, queueing and replacement problems. Point processes and queuing problems (Colloq., Keszthely, 1978), pp. 359-379, Colloq. Math. Soc. János Bolyai, 24, North-Holland, Amsterdam, 1981. (Mark Berman) 82h:60171 60K10 (60K30, 90B05)

(with van Hoorn, M. H.; Federgruen, Awi) Approximations for the steady-state probabilities in the M/G/c queue. Adv. in Appl. Probab. 13 (1981), no. 1, 186-206. (Jacqueline Loris-Teghem) 82h:60189 60K25 (90B22)

Tijs, S. H. (with Borwein, J. M.) Some generalizations of Carathéodory's theorem via barycentres, with application to mathematical programming. Canad. Math. Bull. 23 (1980), no. 3, 339-346. (M. Brannigan) 82a:90086 90C05 (46G99, 58C20)

A characterization of the value of linear programs. Simon Stevin 55 (1981), yo. 3,

141-148. (Author's summary) 82j:90046 90C05

Tikekar, Ramesh A note on plane symmetric perfect fluid distributions of embedding class one. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1681–1686. (Author's summary)

83C55 (83C15)

Tikekar, V. G. (with Seshan, C. R.; Achary, K. K.) A simple proof of a basic result of uniqueness of solution in linear programming. Internat. J. Math. Ed. Sci. Tech. 11 (1980), no. 4, 591-593. (A. G. Azpeitia) 82b:90075 90C05

(with Seshan, C. R.) Algorithms for integer fractional programm ng. J. Indian Inst. Sci. 62 (1980), no. 2, 9-16. (Authors' introduction) 82b:90082 90C11

Tikhonov, V. L. See Tihonov, V. L.

Tikhov, M. S. See Tihov, M. S.

Tikochinsky, Yoel Exact propagators for multidimensional quadratic Hamiltonians—initial value approach. J. Math. Phys. 22 (1981), no. 6, 1224–1228. (Author's summary) 81C10 (81C35)

Tiku, M. L. Robust estimation of the variance-covariance matrix of symmetric multivariate distributions. Multivariate statistical analysis (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1979), pp. 251-256, North-Holland, Amsterdam, 1980. (B. Raja Rao) 82j:62037 62H12 (62F35)

Goodness-of-fit statistics based on the spacings of complete or censored samples Austral. J. Statist. 22 (1980), no. 3, 260-275. (Author's summary) 82f:62084 62G30 Robustness of MML estimators based on censored samples and robust test statistics. J. Statist. Plann. Inference 4 (1980), no. 2, 123-143. (A. N. Pettitt) 82c:62046

A goodness of fit statistic based on the sample spacings for testing a symmetric distribution against symmetric alternatives. Austral. J. Statist. 23 (1981), no. 2, 149–158. (Author's summary) 82m:62057 62F03

van Tilborg, Henk C. A. On the uniqueness resp. nonexistence of certain codes meeting the er bound. Inform. and Control 44 (1980), no. 1, 16-35. (Author's summary) 94B05

The smallest length of binary 7-dimensional linear codes with prescribed minimum distance. Discrete Math. 33 (1981), no. 2, 197-207. (Author's summary) 82a:94066 94B05

Tilgner, Hans Z2-graded generalizations of some classical Lie algebras and curvature structures. (Arabic summary) J. Fac. Sci. Riyad Univ. 10 (1979), 195-208. (Nigel B. Backhouse) 82f:17003 17A70 (58F06)

Tilidetzke, Robert A characterization of 0-minimal (m, n)-ideals. With a loose Russian ary. Czechoslovak Math. J. 31(106) (1981), no. 1, 48-52. (J. E. Kuczkowski) 820:20100 20M12

Tiller, John Augmented compact spaces and continuous lattices. Houston J. Math. 7 (1981),

no. 3, 441-453. (K. H. Hofmann) 82m:06008 06B30 (06B15, 54B99)

Tiller, Wayne (with Doran, R. S.) Extensions of pure positive functionals on Banach
*-algebras. Proc. Amer. Math. Soc. 82 (1981), no. 4, 583-586. (J. W. M. Ford) 82i:46062

Tilling, Laura See Newton, Isaac, 82j:01079

Tillotson, J. (with Booth, Peter) Monoidal closed, Cartesian closed and convenient categories of topological spaces. Pacific J. Math. 88 (1980), no. 1, 35-53. (R. M. Vogt) 55U40 (18B30, 18D15, 54B10, 54C35) 55021

Tillson, Timothy W. (with Archdeacon, D. S.; Dinitz, J. H.; Stinson, D. R.) Some new row-complete Latin squares. J. Combin. Theory Ser. A 29 (1980), no. 3, 395–398. (Authors' summary) 82d:05031a 05B15

A Hamiltonian decomposition of K_{2m}, 2m>8. J. Combin. Theory Ser. B 29 (1980), no. 1, 68-74. (Arthur M. Hobbs) 82e:05075 05C20 (05B15, 05C45) (with Archdeacon, D. S.; Dinitz, J. H.; Stinson, D. R.) Addendum: "Some new

row-complete Latin squares". J. Combin. Theory Ser. A 30 (1981), no. 1, 116. (Editors) 82d:05031b 05B15

Tilove, Robert Bruce Set membership classification: a unified approach to geometric intersection problems. *IEEE Trans. Comput.* 29 (1980), no. 10, 874-883. (Wolfgang Boehm) 82c:68063 68K05 (51-04)

Timan, A. F. See Vlasov, V. F.; et al., \$2f:01153 Timischl, W. (with Rosner, J.) Über ein Differenzengleichungssystem der

Populationsgenetik. Österreich. Akad. Wiss. Math.-Natur. Kl. Sitzungsber. II 188 (1979), no. 4-7, 247-254. (L. E. Bobisud) 82g:92028 92A10 (39A10)

Timm, Neil H. Multivariate analysis of variance of repeated measurements. Analysis of variance, pp. 41-87, Handbook of Statistics, 1, North-Holland, Amsterdam, 1980. (See 821:62102) 62J10

The analysis of nonorthogonal MANOVA designs employing a restricted full rank multivariate linear model. Multivariate statistical analysis (Proc. Conf., Dalhousie Univ. Halifax, N.S., 1979), pp. 257-273, North-Holland, Amsterdam, 1980. (C. G. Khatri) 62110

el, G. Statistische Suchverfahren zur Bestimmung von Kompromißmengen. Polyoptimization-theoretic foundations and applications (Sem., Bad Stuer, 1976) (German), pp. 17–31, ZKI-Inform. 78, 2, Akad. Wiss. DDR, Berlin, 1978. (See 82&9002) 90C15

Ein stochastisches Suchverfahren zur Bestimmung der optimalen Kompromißlösungen bei statischen polykriterialen Optimierungsaufgaben. Wiss. Z.

Tech. Hochsch. Ilmenau 26 (1980), no. 6, 159-174. (Knut Richter) 82e:90104 Timmermans, C. A. A new type of approximation operators in $L^2(\Omega)$, $\Omega \subset \mathbb{R}^m$. Delft Progr. Rep. 6 (1981), no. 2, 97–106. (D. E. Edmunds) 82m:35060 35170 (47B38)

mmesfeld, Franz G. A condition for the existence of a weakly closed TI-set. J. Algebra 60 (1979), no. 2, 472-484. (From the text) 82j:20040 20D05 Groups of GF(2)-type and related problems. Finite simple groups, II (Proc. Sympos.,

Durham, 1978), pp. 151–180, Academic Press, London, 1980. (See 20D05 Univ. Durham, Durham 82h:20021)

Groups generated by a conjugacy class of involutions. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 103-109, Proc. Sympos. Pure Math , 37, Amer. Math. Soc., Providence, R.I., 1980. (Editors) 82c:20037 20D05 (20B30)

A note on elementary abelian 2-subgroups of finite groups. Mitt. Math. Sem. Giessen No. 149 (1981), 17–25. (Henry S. Leonard, Jr.) 82m:20014 20D05

On finite groups in which a maximal abelian normal subgroup of some maximal 2-local subgroup is a TI-set. Proc. London Math. Soc. (3) 43 (1981), no. 1, 1-45. (J. L. 20D05

Timofeev, A. Ju. Splitting of a sequence of exponential polynomials. (Russian) Dokl. Akad. Nauk SSSR 260 (1981), no. 1, 43-46. (C. Tanaka) 82j:30001 30B50

Timofeev, A. V. Parametric optimization of programmed motions and adaptive terminal control. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 2, 310-313. (Stefan Mirică) 824:49003 49A10 (93C40, 93D15)

(with Popov, E. P.) The principle of high-speed control in the problem of analytic synthesis of stabilization automata. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 5,

1073-1076. (From the text) 82i:93062 93D99 (34H05)
Timofeev, B. B. See Automation of the control of industrial plants, 82d:90069
Timofeev, I. Ja. Convergence of the "discrete vortex" method of solving linear problems of airfoil theory. (Russian) Učen. Zap. CAGI 11 (1980), no. 1, 18-25. (Author's summary) 82c:76027

76C05 (76B05) Timofeev, N. N. (with Svirežev, Ju. M.) The theory of trophic chains and related optimization problems. (Russian) Control and optimization in ecological systems. Voprosy Kibernet. (Moscow) No. 52 (1979), 5-17. (Authors' summary) 82i:92036

92A17 (49A10) Timofeeva, E. P. A two-dimensional Fredholm integral equation of the third kind. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 7, 54-64. (S. N. Kračkovskii) 82e:45001 45R05

Timohin, A. M. (with Baušev, V. S.; Viliunov, V. N.) Stability of stationary solutions of the system of equations of the combustion theory. Prikl. Mat. Meh. 44 (1981), no. 1, 96-103 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 1, 65-69 (1981). (Richard J. Field) 82h:80004 80A25 (35P20)

Timohin, S.A. (with Vasilenko, Ju. G.; Kuznecov, E. N.; L'vov, V. S.; Nesterihin, Ju. E.; Sobolev, V. S.; Spektor, M. D.; Utkin, E. N.; Šmoilov, N. F.) Generation of Taylor vortices in a Couette flow. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 2, 58-64, 173. (M. Yanowitch) 82d:76053 76E99

shov, L. A. (with Skvorcov, G. E.) Defining relations of a turbulent fluid. (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 295-300, 319-320, Leningrad. Univ., Leningrad, 1980. (J. D. Atkinson) 82k:76039 76F10 (60H15)

See Timohin, A. M.

noney, Richard M. (with Bennett, Grahame; Stegenga, David A.) Coefficients of Bloch and Lipschitz functions. *Illinois J. Math.* **25** (1981), no. 3, 520–531. (Kenneth Stephenson) **82m:30022** 30C50 (30B20)

in, O. M. (with Grigorenko, Ja. M.) Stressed state of laminar shells of revolution taking into account geometrical nonlinearity and shift. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 46-50, 105. (Szczepan Borkowski)

73L10 nonina, E. E. (with Ivčenko, G. I.) Estimation in sampling from a finite population. (Russian) Mat. Zametki 28 (1980), no. 4, 623-633, 637. (Dana Vorličková) 82h:62010

On the structure of a multidimensional three-web which is the real realization of a three-web over a commutative associative algebra. (Russian) Geometry of imbedded manifolds (Russian), pp. 93-100, Maskov. Gos. Ped. Inst., Mascow, 1979. (J. Vanžura) 82m:53018 53A60

shkova F. I. See Timotkova F. I.

ošina, I. R. (with Šablinskaja, I. R.) A method for solving a nonse mooth problem based on a necessary integral condition of the extremum. (Russian. English sum Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 2, 47-51, 124. (M. M. Cvetanov) 49B10

ova, E. I. The formal integrals of the restricted, plane, three-body problem.

- Astronom. 2. 57 (1980), no. 4, 833-840 (Russian); translated as Soviet Astronom. 24 (1980), no. 4, 479-482 (1981). (Author's summary) 824:70019 70F07

 The formal integrals of the regularized restricted planar problem of three bodies.
- ssian summary) Astronom. Nuchr. 302 (1981), no. 2, 87-91. (Author's sum
- otin, D. (with Ando, T.: Suciu, Ion) Characterization of some Harnack parts of contractions. J. Operator Theory 2 (1979), no. 2, 233-245. (E. Durszt) 82a:47014
- nourian, J. G. (with Church, P. T.) Deficient points of maps on manifolds. Michigan Math. J. 27 (1980), no. 3, 321-338. (John J. Walsh) 82a:55007 55M25 (54C10, 55M10, 57M12)
- asit, R. S. (with Rosenfeld, Aron Marcus) The potential distribution in a constricted cylinder: an exact solution. Quart. Appl. Math. 39 (1981/82), no. 3, 405-417. (Authors' summary) 82m:78010 78A30 (35J05)
- sson, W. J. (with Benney, D. J.) The rolling motion of a viscous fluid on and off a rigid surface. Stud. Appl. Math. 63 (1980), no. 2, 93-98. (Vladimir Kerchman) 82a:76029
- erg, N. B. Some inde berg, N. B. Some indecomposable modules of groups with split (B, N)-pairs. J. Algebra 61 (1979), no. 2, 508-526. (Louis Solomon) 82e:20012 20C20
 - Some indecomposable modules of groups with split (B, N)-pairs. The Santa Cruz Conference on Finite Groups (Unio. California, Santa Cruz, Calif., 1979), pp. 363-366, Proc. Sympav. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (From the introduction) 82e:20025 20C20
 - Modular representations of finite groups with unsaturated split (B, N)-pairs. Canad. J. Math. 32 (1980), no. 3, 714–733. (P. Fong) 82c:20024 20C20
 - The Levi decomposition of a split (B, N)-pair. Pacific J. Math. 91 (1980), no. 1, 233–238. (Bhama Srinivasan) 82m:29009 20C20
- d, Jurgen Certain kinds of polar sets and their relation to mathematical p inatorial optimization. *Math. Programming Stud. No.* 12 (1980), 206-213. (Klaus atzsch) **82g.90069** 90C10 (05B30, 52A20) Lommatzsch) 82g:90069
 - (with Wolsey, Laurence A.) An elementary survey of general duality theory in mathematical program summary) 82j:90039 ming. Math. Programming 21 (1981), no. 3, 241-261. (Authors' 90Cxx
- ell, Ralph (with Boesch, Frank) Robbins's theorem for mixed multigraphs. Amer. Math. Monthly 87 (1980), no. 9, 716-719. (Carsten Thomassen) 82e:05070 (05C40)
- (with Bloom, Ster then L.) Compatible orderings on the metric theory of trees. SIAM omput. 9 (1980), no. 4, 683-691. (M. C. Golumbic) 82f:68063 06A10)
- (with Bauer, D.; Suffel, C. L.; Boesch, Frank) Connectivity extremal problems and e design of reliable probabilistic networks. The theory and applica too, Mich., 1980), pp. 45-54, Wiley, New York, 1981. (Geoffrey Exoo) (Kalan 05C40 (05C35, 94C15)
- (with Harary, Frank) Every forest can be obtained from a minimal block. J. Reine Angew. Math. 323 (1981), 88–100. (W. G. Brown) 82e:05091 05C40 (05C05, 05C35) (with Akiyama, Jin; Boesch, Frank; Era, Hiroshi; Harary, Frank) The cohesiveness of a point of a graph. Networks 11 (1981), no. 1, 65-68. (John C. Molluzzo) 82f:05065 05C40
- Ting, Bing Yuan (with Luke, Yudell L.) Conversion of polynomials between different polynomial bases. IMA J. Numer. Anal. 1 (1981), no. 2, 229-234. (Authors' summary) polynomia 82f:65018 65D15 (33A65)
 - (with Luke, Yudell L.) Computation of integrals with oscillatory and singular integrands. Math. Comp. 37 (1981), no. 155, 169-183. (Walter Gautschi) 821:65022
- Ting, C. S. (with Hu, Bambi) The Heisenberg antiferromagnetic chain. J. Phys. A 14 (1981), no. 5, L189–L191. (Authors' summary) 824-82031 82A25 (82A67, 82A68) Ting, L. (with Stickler, D. C.; Ahluwalia, Daljit S.) Application of Ludwig's uniform
- progressing wave ansatz to a smooth caustic. J. Acoust. Soc. Amer. 69 (1981), no. 6, 1673–1681. (Authors' summary) 82g:76032 76Q05
 Ting, Mei Ling (with Block, Henry W.) Some concepts of multivariate dependence. Comm.
- Statist. A-Theory Methods 10 (1981), no. 8, 749-762. (Khursheed Alam) 82m:62111 62H05
- Ting, T. C. T. Effects of change of reference coordinates on the stress analyses of otropic elastic materials. Internat. J. Solids and Structures 18 (1982), no. 2, 139-152. (Author's summary) 82m:73010 73C30
- Tinholer, Gottfried The graphsack problem. Discrete structures and algorithms (Proc. Conf., Berlin, 1979), pp. 1-16, Hanser, Munich, 1980. (Author's summary) 82e:90060 (90C39)
 - On the use of some almost sure graph properties. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 113–126, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Author's summary) 82h:68096 68E10 (05C99)
- ham, M. (with Lobb, C. J.; Frank, D. J.) Percolative conduction in anisotropic media: a renormalization-group approach. Phys. Rev. B (3) 23 (1981), no. 5, 2262-2268. (Authors' summary) 82c:82070 82A42 (60K35) sley, P. A. (with Swamy, P. A. V. B.) Linear prediction and estimation methods for
- ssion models with stationary stochastic coefficients. J. Econometrics 12 (1980), no. 2,
 - 103-142. (Authors' summary) 82k:62179 62M20 (with Spindt, P. A.; Friar, Monica) Indicator and filter attributes of monetary aggregates. A nit-picking case for disaggregation. Econometric modeling and policy design at the Federal Reserve, Part I. J. Econometrics 14 (1980), no. 1, 61-91. (See 82c:90003a) 62P20
 - (with von zur Muehlen, Peter) A maximum probability approach to short-run policy. Econometric modeling and policy design at the Federal Reserve, Part II. J. Econ 15 (1981), no. 1, 31-48. (See 82c:90003b) 90A16 (62P20)
- (with Garrett, Bonnie; Friar, Monica) An expose of disguised deposits.

 Econometric modeling and policy design at the Federal Reserve, Part II. J. Econ

 15 (1981), no. 1, 117–137. (See 82c:9003b) 62P20

 Tintner, G. (with Deistler, Manfred) Identifiability. Contributions to probability.
- pp. 231-246, Academic Press, New York, 1981. (Authors' summary) 82h:62188 62P20

- nno, J. (with Bollini, C. G.; Giambiagi, J. J.) Wilson loop and related strings for the instanton and their variational derivatives. Nuovo Cimento A (11) 59 (1980), no. 4, 412-418. (Authors' summary) 82b:81081 81E99 412-418. (Authors' summary) 82b:81081
- 61E37 61E48. (Authors summary) accession 61E37 61E37 61E37 61E37 61E37 61E37 61E37 61E37 61E37 61E38 6
 - (with Marsden, Jerrold E.) Maximal hypersurfaces and foliations of constant mean curvature in general relativity. Phys. Rep. 66 (1980), no. 3, 109-139. (F. J. Flaherty) 83C99 (57R30, 58D25, 58D30)
 - Singularities from colliding plane gravitational waves. Phys. Rev. D (3) 22 (1980), no. 12, 2929-2932. (J. D. Finley, III) 82j:83021 83C35 (83C40)
- Tirapegui, Enrique (with Langouche, F.; Rockaerts, D.) on the most probable path for diffusion processes. J. Phys. A 11 (1978), no. 12, L263-L268. (Authors' summary) 82h:82051 82A70 (81C35)
 - (with Langouche, F.; Roekaerts, D.) On the path integral solution of the master Phys. Lett. A 68 (1978), no. 5-6, 418-420. (Authors' summary) 82i:82033 82A35 (81C35)
 - (with Langouche, F.; Roekaerts, D.) WKB expansions with higher order corrections: the general case. Phys. Lett. A 72 (1979), no. 6, 413-416. (Authors' summary) 82c:81031 81C12 (58G15)
 - (with Langouche, F.; Roekaerts, D.) Semiclassical expansions on Rier nifolds. Functional integration theory and applications (Proc. Colloq.
 - Louvain-la-Neuve, 1979), pp. 191-205, Plenum, New York, 1980. (Takashi Miura) 82481056 81C99 (58G25, 81C35)
 - (with Langouche, F.; Roekaerts, D.) On quantization and point canonical transformations in phase-space functional integrals. Lett. Nuovo Cimento (2) 29 (1980), no. 7, 214-220. (M. Demuth) 82b:81036 81C35 (58D30, 58F06)
 - (with Langouche, F.; Roekaerts, D.) Covariant WKB expansion in Rieman space. Phys. Lett. A 77 (1980), no. 1, 3-6. (Authors' summary) 82c:81043
 - (58G15) (with Langouche, F.; Roekaerts, D.) General Langevin equations and functional integration. Field theory, quantization and statistical physics, pp. 295–318, Math. Phys. Appl. Math., 6, Reidel, Dordrecht, 1981. (Authors' summary) 82h:82022 82A35
 - (60J25, 81C35) (with Langouche, F.; Roekaerts, D.) Master equation approach to the dynamical critical behaviour of the Schlögl model. Phys. Lett. A 82 (1981), no. 7, 309–312. (Authors' summary) 824:80033
- (with Langouche, F.; Roekaerts, D.) Covariant and gauge-invariant calculation of higher-order corrections in WKB expansions on Riemannian manifolds. Phys. Rev. D (3) 23 (1981), no. 6, 1290–1304. (Takashi Miura) 82g:81024 81C35 (58C15, 58C35)

 See also Field theory, quantization and statistical physics, 82b:81004 and Functional integration theory and applications, 82b:81005

 Tironi, Gimo Paracompactness-like properties and products of topological spaces.
- Proceedings of the Meeting on General Topology (Univ. Trieste, Trieste, 1978), pp. 153–157, Univ. degli Studi Trieste, Trieste, 1981. (See 82i:54001) 54 Tiščenko, N. F. (with Matov, A. Ja.) Mathematical models of computational systems with priority failure in the servicing. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 3, 190-194, 223 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 3, 130 (1981). (Authors' summary) 82k:60193 60K25
- Tischerova, Z. Die Eigenschaften der Ovale in der endlichen projektiven Ebene der Ordnung 16. Vorträge von der Tagung Geometrie und Anwendungen (Gaussig, 1977), pp. 127-132, Weiterbildungszentrum Math. Kybernet. Rechentech., 28, Tech. Univ. esden, Dresden, 1978. (From the text) 82f:51007 51E15
- Tiser, J. On strict preponderant maxima. Comment. Math. Univ. Carolin. 22 (1981), no. 3, 561-567. (Richard J. O'Malley) 82k:26009
- nko, N. F. See Tiščenko, N. F.
- Tishler, Asher (with Zang, Israel) A maximum likelihood method for piecewise regression models with a continuous dependent variable. J. Roy. Statist. Soc. Ser. C 30 (1981), no. 2, 116-124. (Authors' summary) 82i:62099 62J05 (62F10)
- Tishyadhigama, S. (with Polak, Elijah) New convergence theorems for a class of feasible directions algorithms. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 432-438, IEEE, New York, 1979. (J. Abrham) 82i:90098 90C30
- Tišin, Ju. V. Generalized free products of abelian-by-finite linear groups. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 4, 297-300, 379. (Ju. I. Merzljakov) 82h:20031 20E06 (20H20)
- Tiškin, V. F. (with Koršija, T. K.; Favorskii, A. P.; Šaškov, M. Ju.) Variational-flux difference schemes for the calculation of magnetic field diffusion. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1388-1391. (Ll. G. Chambers) 82a:78005 (65N05, 78A55)
 - (with Goloviznin, V. M.; Koršija, T. K.; Samarskii, A. A.; Favorskii, A. P.)
 - Variational schemes of magnetohydrodynamics in an arbitrary coordinate system. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 1, 54-68, 253. (Authors' summary) 76W05 (49H05)
- ut-Tison, Françoise See Pécaut-Tison, Françoise
- Tită, Nicolae ii, Nicolae E_{b, v} operators between normed spaces. Portugal. Math. 37 (1978), no. 3-4, 255-258 (1981). (H. Triebel) 82k:47065 47D30 (47B10)
 - On inclusion theorems for absolutely summing operators. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 25(73) (1981), no. 2, 191-193. (Author's summary)
- 82m:47033 47D30 (47B10)

 Titarenko, B. P. Robust estimates of parameters of regression models. (Russian) Algorithms and software for applied statistical analysis. Učen. Zap. Statist. 36 (1980),
- High Hard Control of the Control of
- Titiev, Robert J. A locus problem involving the three-dimensional city-block metric. J.

Math. Psych. 22 (1980), no. 3, 209-217. (Author's summary) 82h:92047 92A25

Titli, A. (with Hassan, Mohammed F.; Singh, Madan G.; Hurteau, R.) Stability,

stabilisation and performance of multilevel controllers under structural perturbations. I. Cutting the links between coordinator and subsystems. *Proc. IEE-D* 127 (1980), *no.* 5, 207–213. (Authors' summary) 82b:49039a 49C20 (49E25, 93D99)

Titov, A. N. On the determination of a convolution of identical distribution functions from its values on a half line. (Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 3, 610-611. (Paul Deheuvels) 82k:60034 60E10

Analytic properties of a class of mixtures of infinitely divisible laws of distribution (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1981, no. 2, 56-59, 64. (E. Lukacs) 82j:60021 60E05

Titov, G. N. Groups containing a cyclic subgroup of index p². (Russian) Mat. Zametki 28 (1980), no. 1, 17-24, 167. (Ju. I. Merzljakov) 82a:20034 20D15 (20F26)

Titov, O. V. On certain properties of the equations of the three-dimensional boundary layer. Prikl. Mat. Meh. 43 (1979), no. 2, 369-371 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 2, 398-400 (1980). (Author's summary) 82m:76023 76D10 (35B40)

Tits, A. L. (with Polas, Elijah) A globally convergent, implementable multiplier method with automatic penalty limitation. Appl. Math. Optim. 6 (1980), no. 4, 335–360. (M. M. Flood) 82c:90084 90C30 (49D37)

Tits, Jacques Le principe d'inertie en relativité générale. Bull. Soc. Math. Belg. Sér. A 31 (1979), no. 2, 171-197. (J. R. Vanstone) 82m:\$3067 53C50 (83C40)

Four presentations of Leech's latice. Finite simple groups, II (Proc. Sympos., Univ. Durham, Durham, 1978), pp. 303–307, Academic Press, London, 1980. (See 82h:20021) 20C05 (10E45)

Buildings and Buckenhout geometries. Finite simple groups, II (Proc. Sympos., Univ. Durham, Durham, 1978), pp. 309–320, Academic Press, London, 1980. (See 82h:20021) 20G25

The work of Gregori Aleksandrovitch Margulis. Proceedings of the International Congress of Mathematicians (Helsinki, 1978), pp. 57-63, Acad. Sci. Fennica, Helsinki, 1980. (Editors) 82g:01075 01A70 (22-03)

Quaternions over Q(√5), Leech's lattice and the sporadic group of Hall-Janko. J. Algebra 63 (1980), no. 1, 56-75. (J. H. Lindsey, II (Zbl 436:20004)) 82k:20034 · 20D08

Définition par générateurs et relations de groups avec BN-paires. (English summary) [Definition by generators of relations or groups avec DN-paires, Lengisti summary]
[Definition by generators and relations of groups with BN-pairs] C. R. Acad. Sci. Paris
Sér. I Math. 293 (1981), no. 6, 317–322. (Author's summary) 82k:20069

20F99

terington, D. M. (with Silvey, Samuel David; Torsney, B.) An algorithm for optimal designs on a finite design space. Optimal design theory. Comm. Statist. A—Theory Methods 7 (1978), no. 14, 1379–1389. (See 82g:62106) 62K05

Geometric approaches to design of experiment. (German and Russian su Math. Operationsforsch. Statist. Ser. Statist. 11 (1980), no. 1, 151–163. (K. G. Russell) 82m:62170 62K05

(with Silverman, B. W.) Minimum covering ellipses. SIAM J. Sci. Statist. Comput. 1 (1980), no. 4, 401–409. (R. Pfaffenberger) 82g:51025 51M10 (62J99, 90C99)

(with Murray, G. D.; Murray, L. S.; Spiegelhalter, D. J.; Skene, A. M.; Habbema, J. D. F.; Gelpke, G. J.) Comparison of discrimination techniques applied to a complex data set of head injured patients. With discussion. J. Roy. Statist. Soc. Ser. A 144 (1981), no. 2, 145-175. (Authors' summary) 82h:62182 62P10 (62H30)

Titulaer, U. M. (with Burschka, M. A.) The kinetic boundary layer for the Fokker-Planck equation with absorbing boundary. J. Statist. Phys. 25 (1981), no. 3, 569–582. (Authors' summary) 82;82071 82A70 (60H25, 60J65, 80A30)

Tiuryn, Jerzy (with Bergstra, J. A.) Regular extensions of iterative algebras. Trees in algebra and programming (Proc. 5th Lille Colloq., Lille, 1980), pp. 1–10, Univ. Lille I, Lille, 1980. (From the introduction) 82j:68087 68F20

Unique fixed points vs. least fixed points. Theoret. Comput. Sci. 12 (1980), no. 3. 229-254. (Stephen L. Bloom) 82c:68012 68B10

ari, B. M. L. Real inversion and representation theorem for a generalised Laplace transform. I. J. Math. Sci. 5 (1970), no. 2, 16-21 (1979). (U. C. Jain) 82h:44003 Tivari, B. M. L.

(with Jaju, R. P.) On the inversion operator function of a generalised convolution transform involving Hermite polynomial in its kernel. Math. Student 45 (1977), no. 3, 47-51 (1979). (J. N. Pandey) 82c:44004 44A35 (33A65, 40G10)

(with Singh, S. L.; Gupta, Vijay Kumar) Common fixed points of con mappings in 2-metric spaces and an application. Math. Nachr. 95 (1980), 293-297. (I. A. 54H25

ončuk, V. I. (with Šlepakov, L. N.) Spline-iteration method for solving Volterra linear integral equations. (Russian) Boundary value problems of mathematical physics (Russian), pp. 159–166, 182, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1978. (R. S. Anderssen) 82c:65093 65R20

(with Slepakov, L. N.) On convergence conditions and error estimation of a spline-iterative method for solving nonlinear Hammerstein integral equations. (Russian)
Approximate and qualitative methods in the theory of differential and functional-differential m), pp. 75-84, 111, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1979. (R. S. Anderssen) 82c:65094

S. Anderssen) 82c65094 65R20 (with Slepakov, L. N.) Solutions of systems of Volterra-Fredholm linear integral equations by the spline-iterative method. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1979, no. 6 O Nekotornyh. Metodah Rešenija Integral. i Differen. Uravnenii, 31-46. (Ulrich Eckhardt) 82e:65135 65R20

(with Slepakov, L. N.) Numerical-analytic method for solving systems of linear Volterra integral equations (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 1, 84-88. (V. V. Ivanov) 82f:65140 65R20 (45D05, 45L05)

Tiwari, A. K. On a distributional generalized Laplace transform. Indian J. Pure Appl. Math. 11 (1980), no. 12, 1609-1616. (V. P. Mainra) 82g:46081 46F12 (44A10)

Some results on spaces of type LH_{a,p}. Indian J. Pure Appl. Math. 12 (1981), no. 3, 370-376. (B. R. Bhonsle) 82e:44001 44A05 (46F12)

Tiwari, B. M. L. See Tivari, B. M. L.

Tiwari, Ramji (with Pandey, S. N.) Conformally flat spherically symmetric charged perfect fluid distribution in general relativity. *Indian J. Pure Appl. Math.* 12 (1981), no. 2, 261–264. (Authors' summary) 824:83639 83C55

Tiwary, A. K. (with Paramhans, S. A.; Pandey, B. M.) Generalizations of quasi-injectivity Progr. Math. (Allahabad) 13 (1979), no. 1-2, 31-40. (K. A. Byrd) 82c:16022 16A5

It Ti Zung Sre Le Ti Zung Sre Le Ti Zung Tagnibedina, O. S. (with Pjatnicyn, B. N.) The role of the concepts of "probability" and "degree of certainty" in B. Bolzano's logic. (Russian) Studies in logical methodology (Russian), pp. 167–181, Moskov. Gos. Univ., Moscow, 1980. (Siegfried Gottwald) 01A55 (03-03, 60-03)

Tjagunov, L. I. Some properties of the structure of the set of kernels of a symmetric graph. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 27 Metody mir. i Priložen (1979), 56-60, 126-127. (J. Bosák) 82h:05041 (68G10, 92A07)

semenov-Tjan-Šanskii, M. A. See Semenov-Tjan-Šanskii, M. A. Tjon, J. A. (with Lewis, J. Courtenay) Resonant production of solitons in the RLW equation. Phys. Lett. A 73 (1979), no. 4, 275-279. (L. Debnath) 82c:76016 76B15 (35O20, 76B25)

(with Hoogeveen, W.) Efimov effect and the third cluster coefficient of binary mixtures. Phys. A 108 (1981), no. 1, 77-106. (Authors' summary) 82i:82039 (with Janssen, T.) Bifurcations with nonuniversal exponents in a lattice model. Phys. Lett. A 87 (1981/82), no. 4, 139–144. (Authors' summary) 82k:58073 58F14 (58F20, 82A25)

(with Drohm, J. K.; Kok, L. P.; Simonov, Ju. A.; Veselov, A. I.) Collision and rotation of solitons in three space-time dimensions. Phys. Lett. B 101 (1981), no. 3, 204-208. (Authors' summary) 824:81097 81E99

stheim, Dag Measuring deviations from stationarity. Stochastic Process. Appl. 10 (1980), no. 2, 145-160. (A. I. Ponomarenko) 82i:60061 60G12 (60G10) (with Stensholt, Eivind) Factorizing multivariate time series operators. J.

Multivariate Anal. 11 (1981), no. 2, 244-249. (Benjamin Kedem-Kimelfeld) 82):60059 60G10 (62M10)

en ngok Tju See Nguen Ngok Tju

Tjulina, I. A. Varignon's treatise Nouvelle mécanique (on the 250th anniversary of its publication). (Russian. English summary) History and methodology of the natural sciences, No. XX (Russian), pp. 187–195, Moskov. Gos. Univ., Moscow, 1978. (Rudolf Veselkov) 82a:01018 01A50 (70-03)

See also History and methodology of the natural sciences, 82c:01004

Tjupcov, A. D. (with Babskii, V. G.; Kopačevs'kii, N. D.; Myškis, A. D.; Slobožanin, L. A.) On some unsolved problems of zero-gravity hydromechanics. Nonlinear Anal. 4 (1980), no. 3, 607-621. (From the introduction) 82a:76001 76-02 (76D99)

Тјирtja, V. I. (with Ermol'ev, Ju. M.; Ljaško, I. I.; Mihalëvič, V. S.) ★Математические методы исследования операций. (Russian) [Mathematical methods in operations research] "Višča Škola", Kiev, 1979. 312 pp. (J. S. Joel) 82e:90001 90-01 90-01 (49-01. 90Cxx, 90Dxx)

Tjur, Tue ★Probability based on Radon measures. Wiley Series in Probability and ematical Statistics. John Wiley & Sons, Ltd., Chichester, 1980. xi+232 pp.

ISBN 0-471-27824-6 (R. M. Dudley) 82b:60032 60G05 (28C05, 60A10)

Tjurikov, L. G. (with Popov, M. M.) Two approaches to the calculation of geometric divergence in an inhomogeneous isotropic medium. (Russian) Questions in the dynamical theory of seismic wave propagation, No. XX, pp. 61–68, 213–214, "Nauka" Leningrad. Otdel., Leningrad, 1981. (See 82k:86002) 86A15

Calculation of geometric divergence for vertically inhomogeneous media and for media with spherical or cylindrical symmetry. (Russian) Questions in the dynamical theory of seismic wave propagation, No. XX, pp. 69–74, 214, "Nauka" Leningrad. Otdel., Leningrad, 1981. (See 82k:86002) 73D15 (86A15)

Tjurin, A. N. Geometry of singularities of a general quadratic form. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 5, 1200-1211, 1215. (J. Čižrnár) 82h:14015 14F05 (14J17)

Tjurin, V. M. On the dichotomy of solutions of linear differential equations with almost periodic coefficients. (Russian. Azerbaijani and English summaries) Izo. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 6, 44–47. (P. Talpalaru) 34G10 (47A50)

Tjutjunnikov, P. L. Determination of the coefficients of the sum of exponents by the method of additional integral variables. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 4, 841-848, 1083. (Author's summary) 82a:65014 65D10

Tkač, V. I. (with Geršun, V. D.) Supersymmetric constraints and gauge fields on a superspace. (Russian. English summary) Teoret. Mat. Fiz. 48 (1981), no. 2, 180–186. perspace. (Russian. English st (Authors' summary) 82i:81144 81G20

Tkačenko, A. I. See Tkačenko, O. I.

Tkačenko, A. N. Burnside and Frobenius theorems in a class of locally normal groups. (Russian) Constructive description of groups with properties prescribed on their subgroups (Russian), pp. 71-76, 145, Akad. Nauk Ukrain. SSR, Inst. Mat., Kieo, 1980. (Richard E. (Russian), pp. 1-10, 1-15, Asia: Asi

Tkačenko, M. G. Bicompacta that are continuous images of sets everywhere dense in the product of spaces. (Russian. English summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 10, 797–802. (E. Halfar) 82d:54035 54E35

The behaviour of cardinal functions on inverse spectra consisting of topological

spaces. Serdica 6 (1980), no. 1, 42-55. (Paul R. Meyer) 82a:54011 54A25
Continuous mappings onto spaces of smaller weight. (Russian. English summary)
Vestnik Moskov. Univ. Ser. I Mat. Meh. 1980, no. 2, 37-40, 102-103. (Douglass L. Grant) 82a:54012 54A25 (54C10)

An example of a nonmetrizable bicompactum in which each weakly expanded subspace is countable. (Russian) Mat. Zametki 29 (1981), no. 6, 917–921, 957. (Z. Balogh) 82m:54027 54E65 (54A35, 54D30)

Some conditions which imply compactness of countably compact spaces. (Russian)

Uspehi Mat. Nauk 36 (1981), no. 1(217), 229-230. (H. H. Wicke) 82h:54032

54D30

ičenko, O. I. The determination of the orientation of a trihedron with the aid of a state identifier. (Russian) Complex control systems (Russian), pp. 35-41, Inst. Kibernet., Akad. Nauk Ukrain. SSR, Kiev., 1978. (See 804:93034) 93B30

Asymptotic estimation of the state of linear nonstationary systems that do not satisfy

The connection of the problems of approximate differentiation with the problem of identification of states. (Russian) Complex control systems (Russian), pp. 76-85, 99, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kieo, 1980. (Author's summary) 82g:93015 93B30

cents, V. A. Analysis of the degree of stability of linear control systems. Automat. i Telemeh. 1980, no. 3, 36–45 (Russian. English summary); translated as Automat. Remote Telemeh. 1900, no. 3, 36-45 (Russian. English summary); translated as Automated (1980), no. 3, part 1, 316-324. (Author's summary) 82g-93036 Spectral theory in spaces of analytic functionals for operators generated by multiplication by the industry of the state of

ation by the independent variable. (Russian) Mat. Sb. (N.S.) 112(154) (1980), no. 3(7), 421-466, 476. (Boris Paviov) 82:47046 47B38 (30H05, 46E15) See also Control of objects with distributed parameters, 82:76041a

Tkačenko, V. Î. Justification of the averaging method on the semiaxis. (Ukrainian. English and Russian summaries) Visnik Kiiv. Univ. Ser. Mat. Meh. No. 22 (1980), 112–117, 151. (From the introduction) 82k:35014 35B40 (35C20)

Thachenko, V. A. See Thacenko, V. A.

Thacov, F. V. (with Četyrkin, K. G.; Kataev, A. L.) Five-loop calculations in the $g\phi^4$ model and the critical index η. Phys. Lett. B 99 (1981), no. 2, 147-150. (Authors' ary) 82b:81077a 81E15

A theorem on analytical calculability of 4-loop renormalization group functions. Phys. Lett. B 100 (1981), no. 1, 65-68. (Authors' summary) 82b.81030 81C30 (81E16) (with Četyrkin, K. G.; Kataev, A. L.) Errata: "Five-loop calculations in the go 81C30 (81E15) model and the critical index n". Phys. Lett. B 101 (1981), no. 6, 457. (Editors) 81E15

Tkacz, M. (with Grochulski, J.; Konik, T.) On the tangency of sets in metric spaces. Ann. Polon. Math. 38 (1980), no. 2, 121–131. (S. A. Peregudov) 82h:53684 53C70 (54E35)
 Tkebučava, G. E. Bases in Orlicz spaces. (Russian. English summary) Anal. Math. 7 (1981), no. 1, 69–80. (T. Figiel) 82m:46029 46E30 (41A15)

behevava, R. S. On an optimal stopping problem with small "noise". (Russian. Georgian and English summaries). Soobšč. Akad. Nauk Gruzin. SSR 102 (1981), no. 3, 549-552. (Author's summary). 82m:62189 62L15 (60G40).

emaladze, N. T. (with Kikvidze, È. A.; Gogiašvili, N. M.) A method of determining a

membership function of a fuzzy set. (Russian) Theoretical cybernetics (Russian), pp. 107–110. "Mecniereba", Tbilisi, 1980. (I. Nikitina (RŽMat 1981:4 V569)) 82g:90008

Tkhai, V. N. See Thai, V. N.
Tlas-Jako, E. Minimization of Boolean functions using a new form of canonical decomposition. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 438 (1979),

74-80, 169. (E. Burlacu) 82f:03057 03G05

Tlehugov, H. T. The Dini-Schwarz formula for infinite circular domains. (Russian) Trudy Vyčisl. Centra Akad. Nauk Gruzin. SSR 20 (1980), no. 1 Vyčisl. Mat. Programmirovanie, 214-218. (L. A. Aksent'ev) 82e:30016a 30C40 (30E25)

The Cisotti formula for infinite circular domains. (Russian) Trudy Vyčisl. Centra Akad. Nauk Gruzin. SSR 20 (1980), no. 1 Vyčisl. Mat. Programmirovanie, 219-224. (L. A. Aksent'ev) 82e:30016b 30C40 (30E25)

Tleukenov, S. K. (with Koïšanbaev, M. K.) On the reflection of SH-waves from a nonhomogeneous half space. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 1, 72-75, 87. (Authors' introduction) 82k:86007 86A15 (73D25)

Tllašev, H. 'Imad ad-din al-Baghdadi's treatise "Brilliant uses of arithmetic rules

(Russian) Mathematics in the East in the Middle Ages (Russian), pp. 179-190, 197, "Fan", Tashkent, 1978. (B. Rozenfel'd) 82g:01011 01A30

To, T. O. (with Szeto, George) The p.p. ring and the Pierce sheaf representation of nutative rings. (Russian sum ry) Math. Slovaca 30 (1980), no. 4, 337-343. (A. Verschoren) 82a:16004 16A04 (16A65)

Toader, Gh. On a problem of Nagata. Mathematica (Chij) 20(43) (1978), no. 1, 77-79. (Editors) 82k:54024 54C99

Some metrics for function spaces. Studia Univ. Babeş-Bolyai Math. 25 (1980), no. 1, 3-7. (S. Swaminathan) 82;46050 46E99 (54E35)
To An' Zung (with Vo An' Zung; Muhin, A. B.) Certain local limit theorems for

independent integer-valued random variables. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 5, 9-15, 99. (S. A. Book) 824:60046 60F05 hiss, T. Estimates of the coefficients of a diffusion process from indirect observations.

(Russian) Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. 29 (1980), no. 4, 432-435, 468. (Constantin Tudor) 82g:60105 60J60 (62F10)

ies, Renate Zur internationalen wissenschaftsorganisatorischen Tätigkeit von Felix Klein (1849-1925) auf dem Gebiet des Mathematikunterrichts. NTM Schr. Geschichte Natur. Tech. Medizin 16 (1979), no. 1, 12-29. (D. J. Struik) 82m:01070 01A70 (01A60)

iska, Lutz (with Roos, Hans-Görg) Die asymptotische Lösung spezieller Wärmeleitungsprobleme in Strömungen. Wiss. Z. Tech. Hochsch. Magdeburg 23 (1979), no. 6, 575-577. (Authors' summary) 82k:35018 35C20 (80A20)

Tobler, Waldo R. Smooth pycnophylactic interpolation for geographical regions. With a ment by Nira Dyn [Nira Richter-Dyn], Grace Wahba and Wing Hung Wong and a rejoinder by the author. J. Amer. Statist. Assoc. 74 (1979), no. 367, 519-536. (Author's 62P99

cman, W. (with Goldflam, R.; Thaler, R. M.) Multipartition generalizations of the Schwinger variational principle. Nuclear Phys. A 359 (1981), no. 1, 122-130. (Authors' 81F10 mary) 82d:81123

Toca, Aurelia Ω-automata. Math tica (Clui) 21(44) (1979), no. 2, 209-213, (D. Simovici) 82c:68037 68D99 (03D05)

(Russian) Telephone traffic theory and networks with controllable elements (Russian), pp. 138–142, 214, "Nauka", Moscow, 1980. (M. A. Fedotkin) 82k:60205 60K25 (60K10, 90B22)

Tod, K. P. (with Newman, Ezra T.) Asymptotically flat space-times. General relativity and ravitation, Vol. 2, pp. 1-36, Plenum, New York, 1980. (Richard Hansen) 82j:83017 83C30 (53C55, 83-02)

An asymptotically flat K-space. Gen. Relativity Gravitation 13 (1981), no. 2,

109-122. (Garry Ludwig) 82j:83019 83C30 (53C55)

(with Sparling, G. A. J.) An example of an %-space. J. Math. Phys. 22 (1981), no. 2, 331-332. (Beverly K. Berger) 82f:83035 83C30 (with Ludvigsen, Malcolm; Newman, Ezra T.) Asymptotically flat %-spaces. J. Math. Phys. 22 (1981), no. 4, 818-823. (Garry Ludwig) 82j:83016 83C30 (53C55) (with Ko, M.; Ludvigsen, Malcolm; Newman, Ezra T.) The theory of 3C-space. Phys. Rep. 71 (1981), no. 2, 51–139. (Garry Ludwig) 82;83015 83C30 (53C55)

la, Mitsuhiko (with Sugiyama, Kozo; Tagawa, Shôjirō) Methods for visual understanding of hierarchical system structures. IEEE Trans. Systems Man Cybe (1981), no. 2, 109–125. (Authors' summary) 82d:92035 92A20 (93A13)

Toda, Morikazu ★Nonlinear lattice dynamics. (Japanese) Iwanami Shoten, Tokyo, 1978. xi+195 pp. (Takayuki Nôno) 82k:58052a 58F07 (70F99, 82A55)

On a nonlinear lattice (the Toda lattice). Solitons, pp. 143–155, Topics Current Phys., 17, Springer, Berlin, 1980. (See 82m:35001)

*Theory of nonlinear lattices. Translated from the Japanese by the author. Springer

Series in Solid-State Sciences, 20. Springer-Verlag, Berlin-New York, 1981. x+205 pp. ISBN 3-540-10224-8 (Editors) 82h:58052b 58F07 (70F99, 82A55)

Todd, John Some applications of elliptic functions and integrals. Numerical met Colloq., Keszthely, 1977), pp. 591-618, Colloq. Math. Soc. János Bolyai, 22,

North-Holland, Amsterdam, 1980. (Author's review) 82a:65016 65D15 (41A50) John Hamilton Curtiss, 1909-1977. Ann. Hist. Comput. 2 (1980), no. 2, 104-110 (1

plate). (Editors) 82:01150 01A70
(with Stembridge, John R.) On a trigonometrical sum. Linear Algebra Appl. 35 (1981), 287-295. (S. Lajos) 82b:15002 15A15

Todd, Michael J. Numerical stability and sparsity in piecewise-linear algorithms. Analysis and computation of fixed points (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1979), pp. 1-24, Publ. Math. Res. Center Univ. Wisconsin, 43, Academic Press, New York, 1980. (B. T. Poljak) 82b:65050 65H10 (58C15, 58C30, 90C30)

Global and local convergence and monotonicity results for a recent variable-dimension simplicial algorithm. Numerical solution of highly nonlinear problems (Sympos. Fixed Point Algorithms and Complementarity Problems, Univ. Southampton, Southampton, 1979), pp. 43–69, North-Holland, Amsterdam, 1980. (Author's summary) 82e:65058 65H05 (55-04, 55M99)

The monotonic bounded Hirsch conjecture is false for dimension at least 4. Math. Oper. Res. 5 (1980), no. 4, 599-601. (J. Parida) 82c:52013 52A25 (90C05)

(with Freund, Robert M.) A constructive proof of Tucker's combinatorial lemma. Combin. Theory Ser. A 30 (1981), no. 3, 321-325. (Daniel I. A. Cohen) 82k:05016 05A99 (55M20)

Todd, T. N. (with Lichtenberg, A. J.; Rivière, A. C.; Edlington, T.) The case for drift island diffusion: results from the Culham levitron. Intrinsic stochasticity in plasmas (Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 285-296, École

(Internat. Workshop, Inst. Etudes Sci. Cargese, Cargese, 1919), pp. 285–290, Ecote Polytech., Palaiseau, 1979. (Authors' summary) 82g.82045 82A45 (76W05)

Todorčević, Stevo B. Rigid Aronszajn trees. Publ. Inst. Math. (Beograd) (N.S.) 27(41) (1980), 259–265. (Thomas J. Jech) 82k:04008 04A20

Very strongly rigid Boolean algebras. Publ. Inst. Math. (Beograd) (N.S.) 27(41)

(1980), 267–277. (Sabine Koppelberg) 82k:06017 06EDS (03C65, 03E65)

Cardinal functions on linearly ordered topological spaces. Topology and order structures, Part 1 (Lubbock, Tex., 1980), pp. 177–179. Math. Centre Tracts, 142, Math. Centrum, Amsterdam, 1981. (Richard Wilson) 82j:54069 54F05 (06F30, 54A25)

Trees, subtrees and order types. Ann. Math. Logic 20 (1981), no. 3, 233–268. (F. R. Drake) 82mc03062 03E05 (03E35, 54A25)

Todorov, A. N. Surfaces of general type with $p_g = 1$ and (K, K) = 1. I. Ann. Sci. École Norm. Sup. (4) 13 (1980), no. 1, 1–21. (I. Dolgachev) 82:14024 14J25 (14C30, 14J15) Applications of the Kähler-Einstein-Calabi-Yau metric to moduli of K3 surfaces. Invent. Math. 61 (1980), no. 3, 251-265. (Y.-T. Siu) 82k:32065 32J15 (14J15)

A construction of surfaces with $p_g = 1$, q = 0 and $2 = (K^2) \le 8$. Counterexamples of the global Torelli theorem. *Invent. Math.* 63 (1981), no. 2, 287–304. (Ulf Persson) 82k:14034 14J10 (14J25)

Todorov, Gordana Almost split sequences for TrD-periodic modules. Representation theory,

II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 600-631, Lecture Notes in Math., 832, Springer, Berlin, 1980. (Author's summary) 82c:16030 16A64

Todorov, K. (with Bijev, G.) Coregular semigroups. Notes on semigroups, VI, pp. 1-11, DM 80, 4, Karl Marx Univ. Econom., Budapest, 1980. (From the text) 82h:20070

Todorov, Pavel G. On a new explicit representation of Euler numbers. (Russian. English summary) Plovdiv. Univ. Naučn. Trud. 16 (1978), no. 1, 295-301 (1980). (T. C. Brown) \$2m:05006 05A10 (10A40)

Radius of convexity for a Nevanlinna class of analytic functions. (Bulgarian, Russian and English summaries) Plovdiv. Univ. Naučn. Trud. 16 (1978), no. 1, 315-323 (1980). (Author's summary) 82f:30013 30C45

A simple proof of the Kirwan theorem for the radius of starlikeness of the typically real functions and one new result. Acad. Roy. Belg. Bull. Cl. Sci. (5) 66 (1980), no. 4, 334-342. (M. S. Robertson) 82a:30021 30C45

Uniqueness of the maximal univalence domain of the derivative class $\Phi^{(\nu-1)}(R_{\nu})$ of the rational class Φ(R_s), (Russian, Lithuanian and French summaries) Litousk, Mat. Sh. 21 (1981), no. 1, 203-208. (P. T. Mocanu) 82j:30024 30C55 (30C45)

Explicit formulas for the coefficients of Faber polynomials with respect to functions of the class \(\Sigma\). Proc. Amer. Math. Soc. 82 (1981), no. 3, 431-438. (Evelyn M. Silvia) 82f:30016 30C50 (30D30)

Todorov, St. (with Baltov, A.) The additional load method for solution of optimization problems in combination with the finite element method. (Bulgarian. Russian and English summaries) Teoret. Prilož. Meh. 12 (1981), no. 3, 7, 9, 76-83. (Authors' nary) 82m:73057 73K40

Todorov, T. D. Asymptotic numbers. I. Algebraic properties. (Russian summary) Bulgar. J. Phys. 7 (1980), no. 5, 450-468. (W. A. J. Luxemburg) 82e:12036 12J99 (10N15.

Asymptotic functions and the problem of multiplication of distributions. (Russian summary) Bulgar. J. Phys. 8 (1981), no. 2, 109-120. (W. A. J. Luxemburg) 82m:46041

Extended asymptotic functions-some examples. (Russian summary) Bulgar. J.

Phys. 8 (1981), no. 3, 216-226. (I. Fenyő) 82m:46042 46F10 (03H10)

limir T. Solution of Alexandroff's problem on Cantor manifolds. C. R. Acad. Bulgare Sci. 33 (1980), no. 4, 445-447. (J. J. Charatonik) 82f:54058 54F20

(with Hadžiivanov, Nikolaï G.) On non-Euclidean manifolds. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 4, 449-452. (K. Sieklucki) 82b:54042 54F20

(with Hadžiivanov, Nikolaĭ G.) On dimensional components of compact spaces. C. R. Acad. Bulgare Sci. 33 (1980), no. 11, 1433-1435. (J. Mioduszewski) 82k:54059 54F45 (55M10)

On a Mazurkiewicz theorem. Serdica 6 (1980), no. 3, 240-244. (M. Katětov) 82h:54064 54F45 (54F20)

(with Hadžiivanov, Nikolai G.) Weakly infinite-dimensional sets do not cut the products of a countable number of continua. (Russian) C. R. Acad. Bulgare Sci. 34 (1981), no. 4, 469-471. (Y. Kodama) 82h:54060 54F45 (54F15)

The solution of a problem of P. S. Aleksandrov on V'P-continua. (Russian) Mat.

Zametki 30 (1981), no. 1, 129-131, 155. (Y. Kodama) 82j:54070 54F15 (54F45, 55M10)

Todua, Z. B. Homology and cohomology groups of a distributive lattice. (Russian. Georgian and English summaries) Soobië. Akad. Nauk Grazin. SSR 102 (1981), no. 3, 557-560. (Author's summary) 82m:06016 06D99 (20110)
 Toellner, Richard Decora merenti. Glory, merit and science: Haller spellbound by the Newtonian star. Janus 67 (1980), no. 1-3, 171-185. (William R. Shea) 82a:01019

Toeplitz, Otto See Gohberg, Israel, 82f:01102; Bibliography: Toeplitz, Otto, 82f:01103;
 Behnke, Heinrich, 82g:01039a; Köthe, Gottfried, 82g:01039b and Born, Max, 82i:01044
 Toews, H. (with Chandna, O. P.; Prabaharan, K.) Integrability conditions and their

ions in steady plane electromagneto-fluid-dynamic aligned flows. Quart. Appl. 76W05 Math. 39 (1981/82), no. 2, 249-260. (From the introduction) 82j:76089 serban-Tofan, Doina See Serban-Tofan, Doina

Tofan, I. Sur les catégories internes. An. Stiint. Univ. "Al. I. Cuza" Iași Secț. I a Mat. (N.S.) 26 (1980), no. 2, 267-269. (Michel Coste) 82e:18007 18825 (03G30) (with Radu, Gheorghe Gh.; Ştefănescu, Mirela) On algebraic theories. An. Ştiint.

Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 27 (1981), no. 1, 7-11. (Jiří Adámek) 18C10 (08A99)

Toffalori, Carlo Existentially closed Archimedean semigroups. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 3-4, 162-167 Natura Natura (6) 67 (1979), no. 3-4, 1800. (8) M. Schein) 82h; 20084 (1926), 03C65)

Some observations on existentially closed commutative rings. (Italian. English (1980). (B. M. Schein) 82h:20080

summary) Boll. Un. Mat. Ital. B (5) 16 (1979), no. 3, 1093-1102. (G. Cherlin) 82f:13008 13L05 (03C60)

Sheaves of pairs of real closed fields. Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 2, 107–122 (1981). (S. Comer) 82m:03048 03C60 (03C65, 12D15)

Toffoli, Tommaso Bicontinuous extensions of invertible combinatorial functions. Math.

Systems Theory 14 (1981), no. 1, 13–23. (François Aribaud) 82a:94123 94C10 (58F40)

Toft, Bjarne (with Thomassen, Carsten) Nonseparating induced cycles in graphs. J. Combin. Theory Ser. B 31 (1981), no. 2, 199-224. (G. Chartrand) 82m:05062 (05C40)

A geometric study of the D-stability problem. Linear Algebra Appl. 33

(1980), 133-151. (Bryan E. Cain) 82a:15018 15A42 (53A05, 58C27)
Togliatti, Eugenio Giuseppe See Marchionna, Ermanno, 82f:01120 and Gallarati, Dionisio,

Togmid, S. (with Sagdar, L.; Cèrènbat, O.) An optimal quality control plan based on a multivariate quantitative attribute. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1979, no. 5, 30-35, 79. (K. Sarkadi) 82e:62163 62N05

Tognetti, Keith (with Winley, Graham) A growth function for a column of cells. Math.

Biosci. 56 (1981), no. 3-4, 209-216. (Authors' summary) 82k:92059 92A15
Tognoli, Alberto ★ Algebraic geometry and Nash functions. Institutiones Mathematicae
[Mathematical Methods], III. Academic Press, London-New York, 1978. 60 pp.
ISBN 0-12-363603-3 (G. A. Efroymson) 82g:14029 14G30 (14F05, 32B99)

(with Benedetti, R.) Approximation theorems in differential topology. II. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 17 (1980), no. 2, 539-549. (Authors' summary) 82j:53052 53C05 (32C05, 55R10, 57R15)

(with Tancredi, Alessandro) On a decomposition of the points of noncoherence of a real-analytic space (Italian English summary) Riv. Mat. Univ. Parma (4) 6 (1980), 401-405 (1981). (V. D. Golovin) 82i:32027 32C05 (32B20)

Togo, Shigeaki Subnormality and ascendancy in groups. Hiroshima Math. J. 10 (1980), no. 3, 597-605. (David McDougall) 82g:20054 20E15 (20F22) (with Honda, Masanobu; Sakamoto, Takanori) Ideally finite Lie algebras.

shima Math. J. 11 (1981), no. 2, 299-315. (Ernest Stitzinger) 82m:17008 Toh, K. H. The separability of double cosets in nilpotent-by-finite groups. Nanta Math. 11

(1978), no. 2, 134–135. (Author's summary) 82k20062 20F18

Toida, Shunichi (with Ibaraki, Toshihide; Kameda, Tsunehiko) On minimal test sets for locating single link failures in networks. IEEE Trans. Comput. 30 (1981), no. 3, 182-190.

(Authors' summary) 824:94087 94C15 Toint, Ph. L. A sparse quasi-Newton update derived variationally with a nondiagonally weighted Frobenius norm. Math. Comp. 37 (1981), no. 156, 425–433. (Author's summary) 82:65028 65F30 (15A24, 65K10)

A note about sparsity exploiting quasi-Newton updates. Math. Programming 21 (1981), no. 2, 172-181. (Author's summary) 82::90103 90C30

(1981), no. 2, 172-181. (Author's summary) 82:90103 90C30 sonen, H. Minimum variance control of first-order systems with a constraint on the input amplitude. IEEE Trans. Automat. Control 26 (1981), no. 2, 556-558. (Author's summary) 82e:93136 93E20

Tokarev, E. V. On c-convex Banach lattices. (Russian) Funkcional. Anal. i Priložen. 15 (1981), no. 2, 90-91. (G. J. O. Jameson) 82h:46037 46B30 (52A07)

Tokarev, V. F. (with Krasnikov, N. V.; Matveev, V. A.; Rubakov, V. A.; Tavhelidze, A. N.) The structure of the ground state in two-dimensional massless quantu electrodynamics. (Russian English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 313–328. (Authors' summary) 82b:81060 81E10 (81L05)

Tokarev, V. V. (with Mihailov, A. G.) Guaranteed estimates of the performance of program

control and of control with complete information in economic systems. Avional. i Telemeh. 1980, no. 7, 108-118 (Russian. English summary); translated as Automat.

Remote Control 41 (1980), no. 7, part 2, 973-981 (1981). (Authors' summary) 82m:93057

Tokareva, O. N. A method of solution of the general mathematical programming problem. (Russian) Mathematical methods in operations research and reliability theory (Russian), pp. 78-85, 92, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (Author's summary) 90C30

Tokareva, T. V. (with Bahtin, I. A.) Existence of positive eigenvectors of a class of concave discontinuous noncompact operators. (Russian) Functional analysis, No. 14 (Russian), pp. 36-46, Ul' janocsk. Gos. Ped. Inst., Ul' yanocsk, 1980. (J. Kolomý) 828:47069 47H07 (47H10)

Structure of the positive spectrum of a class of concave discontinuous noncompa operators. (Russian) Functional analysis, No. 14 (Russian), pp. 139-149, Ul'jamosk. Gos. Ped. Inst., Ul'yanovsk, 1980. (P. P. Zabreiko) 82b:47676 47H12 (47H07)

Tokarz, Marek Deduction theorems for RM and its extensions. Studia Logica 38 (1979), no. 2, 105-111. (Author's summary) 82i:03032 03B45 ★Essays in matrix semantics of relevant logics. Polish Academy of Sciences, Institute

of Philosophy and Sociology, Warsaw, 1980. i+108 pp. (John Slaney) 82h:03016

Tokarzewski, Jerzy The use of the state space method in the examination of dynamic properties of thyristor systems. (Polish. English, French, German and Russian maries) Rozprawy Elektrotech. 26 (1980), no. 1, 101-127. (Author's summary): 93044 93C45 (58F40, 93C05)

Toko, Kiyoshi (with Yamafuji, Kaoru; Urahama, Kiichi) Time-dependent Ginzburg-Landau equations for hard-mode instabilities. J. Phys. Soc. Japan **50** (1981), no. 11, 3819–3825. (Authors' summary) **82k:58077** 58F14 (92A09)

Tokuda, N. Numerical and series solution of a Stefan problem. Numerical meth thermal problems (Proc. First Internat. Conf., Univ. College, Swansea, 1979), pp. 159-171, Pineridge, Swansea, 1979. (See 82g:80001) 80A20 (35K05, 35R30)

Tokuda, Takehiro Eliminating unit reductions from LR(k) parsers using minimum contexts.

Acta Inform. 15 (1981), no. 4, 447-470. (Author's summary) 82i:68012

Tokumaru, Hidekatsu (with Sakai, Hideaki) Autocorrelation of certain chaos. IEEE Trans. ust. Speech Signal Process. 28 (1980), no. 5, 588-590. (Editors) 82g:58060 (62M10, 92A17, 93E11)

Tokunaga, Hiroshi Higher order approximation of weak nonlinear waves in a compressible fluid. J. Phys. Soc. Japan 48 (1980), no. 6, 2125-2133. (Author's summary) 82e:76050 76N99 (76D05)

Tokura, Nobuki (with Araki, Toshiro) Flow languages equal recursively enumerable languages. Acta Inform. 15 (1981), no. 3, 209-217. (Authors' summary) 82h:68099 68F05 (03D05)

(with Araki, Toshiro; Kagimasa, Toyohiko) Relations of flow languages to Petri net languages. Theoret. Comput. Sci. 15 (1981), no. 1, 51-75. (Authors' summary) 82i:68046 68F05 (68D90)

Toland, J. F. A duality principle for nonconvex optimisation and the calculus of variation Arch. Rational Mech. Anal. 71 (1979), no. 1, 41-61. (I. B. Medvedovskii) 82b:49031 49B27 (65K10, 70H30)

Solitary wave solutions for a model of the two-way propagation of water waves in a channel. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 2, 343-360. (R. C. MacCamy) 82;76023 76B25 (35Q20)

Toledo, Domingo (with O'Brian, Nigel R.; Tong, Yue Lin L.) The trace map and characteristic classes for coherent sheaves. Amer. J. Math. 103 (1981), no. 2, 225-252. (K. Lamotke) 82f:32021 32C35 (32C15, 57R20, 58A14) (with O'Brian, Nigel R.; Tong, Yue Lin L.) Hirzebruch-Riemann-Roch for coherent

sheaves. Amer. J. Math. 103 (1981), no. 2, 253-271. (K. Lamotke) 82f:32022 (32L15, 58C10)

(with O'Brian, Nigel R.; Tong, Yue Lin L.) Grothendieck-Riemann-Roch for complex manifolds. Bull. Amer. Mah. Soc. (N.S.) 5 (1981), no. 2, 182–184. (From the text) 82m:32011 32C35 (14F12, 58G05)

Tölke, Jürgen Eine kinematische Kennzeichnung der gleichseitigen Paraboloide. (English summary) Monatsh. Math. 87 (1979), no. 1, 69-80. (Author's introduction) 82k:51014

(with de Vasconcelos, Elinalva V.) Eine Raumbewegung mit nur kubischen Bahnkurven. Österreich. Akad. Wiss. Math.-Natur. Kl. Sitzungsber. II 188 (1979), no. 8-10, 407-415. (K. Strubecker) 821:53013 53A17 (with Ruas, Afrânio F.) Eine Kennzeichnung der symmetrischen Projektivbewegungen. Abh. Braumschweig. Wiss. Ges. 31 (1980), 143-147. (J. Hoschek)

Zur Kinematik von ebenen Kurvenpaaren. Abh. Math. Sem. Univ. Hamburg 50 (1980), 3-17. (Wendelin Degen) 82i:53012 53A17 (53A20)

Eine Bemerkung zum gleichseitigen hyperbolischen Paraboloid als Bewegfläche bei

Zylinderschrotungen. Elem. Math. 35 (1980), no. 5, 118-120. (Hellmuth Stachel) 82a:51020 51N25 (53A17)

Tolkovsky, Aviva M. (with Bard, Jonathan L. B.; Ghozlan, Aline; Goldbeter, Albert; Hardt, Shoshana; Levitzki, Alexander; Liron, Nadav; Odell, Garrett M.; Parna: Hanna; Perelson, Alan S.; Rapp, P. E.; Rubinow, Sol I.; Segel, Lee A.; Wehrhahn, Christian; Yagil, Gad; Zeigler, Bernard P.) *Mathematical models in molecular and cellular biology. Cambridge University Press, Cambridge-New York, 1980. x+757 pp. ISBN 0-521-22925-1 (John J. Tyson) 82c:92001 92-01 (92A09)

Tolle, J. W. (with Boggs, P. T.) Augmented Lagrangians which are quadratic in the multiplier. J. Optim. Theory Appl. 31 (1980), no. 1, 17-26. (Albert Buckley) 82a:90131 90C30

Tollefson, Jeffrey L. Involutions of sufficiently large 3-manifolds. Topology 20 (1981), no. 4, 323-352. (Klaus Johannson) 82h:57014 57N10 (57M99)

Toller, M. Geometric field theories with a given set of constant solutions. (Italian and Russian summaries) Nuovo Cimento B (11) 58 (1980), no. 2, 181-207. (Author's summary) 82c:81119 81E99 (58F06)

Tolley, H. Dennis (with Dunn, Mark R.; Alldredge, J. Richard) Exact formulas for approximating variogram function integrals. J. Internat. Assoc. Math. Geol. 12 (1980), no. 6, 577-588. (Authors' summary) 82c:86004 86A20 (62F12, 90A19)

Tolley, M. D. (with Wajc, S. J.) Approximate solution methods of Laplace's equation for a

- re domain. Advances in computer methods for partial differential equal IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 19 CS, New Brunswick, N.J., 1977. (See 82ac65004) 65N30 m, Pa., 1977), pp. 26-33,
- IMACS, New Brauswick, N.J., 1971. (See SERVICE)

 IMACS, New Brauswick, N.J., 1971. (See SERVICE)

 REALTONOM MEXAMINE. (Russian)

 REALTONOM Mexamine. (Russian)

 REALTONOM Mexamine. (Russian)

 REALTONOM Mexamine. (Russian) [Quasiclassical approximation in quantum mechanics] Moskov. Gos. Uni 1980. 189 pp. (Publisher's description) 82g:81019 81C15 (81-01, 81C40)
 - with Zaicev, Ju. N.) Dissipative equations of two-fluid hydrodynamics of superfluid m. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 4, 815-818. (J. F. Heyda) (with Zaicev, Ju. N.) Dissipative equa 81J05 (76Y05)
- man, L. Kirk Extensions of derangements. Proceedings of the West Coast Conference on Combinatorics, Graph Theory and Computing (Humboldt State Univ., Arcata, Calif., 1979), pp. 305-312, Coogress. Numer., XXVI, Utilitas Math., Winnipeg, Man., 1980. (Giuseppe Pellegrino) 82x05008 05A15 (05B15)
- man, Richard C. *The principles of statistical mechanics. Reprint of the 1938 original.

 Dover Publications, Inc., New York, 1979. xix+661 pp. ISBN 0-486-63896-0 (Editors) 82-01 (01A75)
- mikov, G. K. (with Sirokov, Ju. M.) An associative algebra of generalized functions, closed with respect to differentiation and taking primitives. (Russian. English su Teoret. Mat. Fiz. 46 (1981), no. 3, 305-309. (Bl. P. Damyanov) 82j:46056
- milkov, L. A. (with Pen'kov, V. B.) Application of the Riemann boundary value blem with a discontinuous matrix coefficient to mechanics. (Russian) Izv. Vysš. problem with a discontinu Učebn. Zaved. Matematika 1980, no. 12, 55-59. (N. K. Karapetjanc) 82h:30048 30E25 (73C03)
- ikov. V. A. Estimates in Carleson's corona theorem and finitely generated ideals of the algebra H[∞]. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 4, 85-86. (V. V.
- Peller) 82a:46058 46115 (30D50)

 Tolstoi, V. N. (with Berezin, F. A.) The group with Grassmann structure UOSP(1.2).

 Comm. Math. Phys. 78 (1980/81), no. 3, 409-428. (Nigel B. Backhouse) 82e:22023 22E99 (17A70, 81G20)
- stonogov, A. A. (with Finogenko, I. A.) On functional-differential inclusions in a Banach space with nonconvex right-hand side. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 1, 45–49. (J. Jarnik) 32±34164 34K30 (34A60)
 - no. 1, 45–49. (J. Jarnik, Zaiz-sture Service). On comparison theorems for differential inclusions in locally convex space. I. Existence of solutions. (Russian) Differencial nye Uravnenija 17 (1981), no. 4, 651–659,
 - 765. (Françoise Berquier) 823-49006a 49A27
 On comparison theorems for differential inclusions in locally convex space. II. Properties of solutions. (Russian) Differencial nye Uravnenija 17 (1981), no. 6, 1016–1024, 1148. (Françoise Berquier) 82;49006b 49A27
- opjatenko, A. V. (with Stratonovič, R. L.) Calculation of three-time thermal fluctuation moments by methods of Markov nonlinear nonequilibrium thermodynamics. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 8, 956-967 (Russian); translated as Radiophys. and Quantum Electronics 23 (1980), no. 8, 643–651 (1981). (Authors' summary) 82e:82011 82A35 (94C05)
- ★Рады Фурье. (Russian) [Fourier series] Third edition.
- ненко-Математическая Библиотека Инженера. [Library of Mathematics and Physics for the Engineer] "Nauka", Moscow, 1980. 382 pp. (Editors) 82a:42002 42-01
- Tolstova, G. D. Relative and special submanifolds of a complex of conics. (Russian) Studies in geometry and algebra (Russian), pp. 142-146, Kirgiz. Gos. Univ., Frunze, 1978. (Author's introduction) 82g:53012 53A15
- Tolstoy, V. N. See Tolstoi, V. N.
 Tom, Victor T. (with Quatieri, Thomas F., Jr.; Hayes, Monson H.; McClellan, James H.) Convergence of iterative nonexpansive signal reconstruction algorithms. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 5, 1052-1058. (Authors' summary)
- 94A12 (94A14) na, Ileana A method for solving polynomial differential equations with applications to the mathematical model concerning Belousov-Zhabotinskii chemical reaction. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 3, 319-325. (Richard J.
- 35K55 (80A30, 92A09, 92A40) On polynomial differential equations. Bull. Math. Soc. Sci. Math. R. S. Roum. (N.S.) 24(72) (1980), no. 4, 417-427. (John R. Graef) 82g:34021 34B15 (65L10) man, Eduard Probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-dimensional probability of connectedness of a random subgraph of an n-
- cube. (Russian) With a loose English summary. Math. Slovaca 30 (1980), no. 3, 251-265. (B. Zelinka) 82b:05093 05C40 (60C05)
- (B. Zeinka) alloweds (S. C. Color (1982)) amanov, G. M. The Frattini subgroup and normal subgroups of algebraic groups. (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 6, 499–502, 572. (Author's summary) 82h:20051 20G15 nantschger, Kurt Walter Allgemeine Darstellungssätze für die Lösungen einer
- elliptischen Differentialgleichung. (English summary) Ber. Math.-Statist. Sekt. Forsch.

 Graz No. 134 (1980), 105 pp. (Wolfgang Tutschke) 824:35042 35J15 (35A20, 35C99)

 *Bergman-Operatoren gewisser formal-hyperbolischer Differentialgleichungen. (German) [Bergman operators of certain formally hyperbolic differential equations] With an English summary. Bericht [Report], 175. Forschungszentrum Graz, Mathematisch-Statistische Sektion, Graz, 1981. 23 pp. (W. Watzlawek) 82k:35017
- (with Prabhakar, T. R.) Some integrals and series relations for biorthogonal Indian J. Pure Appl. Math. 11
- polynomials suggested by the Legendre polynomials. India: (1980), no. 7, 863-869. (B. R. Bhonsle) 82b;33013 33A45 s, Peter A. (with Kenig, Carlos E.) Maximal operators defined by Fourier multipliers.
- Studia Math. 68 (1980), no. 1, 79-83. (M. Jodeit, Jr.) 82c:42016 Tomašić, Vesna Die Eigenschaften der Kegelschnitte durch Spiegelungen geäußert. Publ. Inst. Math. (Beograd) (N.S.) 27(41) (1980), 279-285. (H. Brauner) 82i:51024 51F15
- ini, Giuseppe (with Ancona, Vincenzo) Géométrisation des modifications formelles. ary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 64 (1978), no. 2, 142-146. (H. Kerner) 824:32007 32C45 (32G07)
 - (with de Bartolomeis, Paolo) Traces of pluriharmonic functions. Analytic functions, Kozubnik 1979 (Proc. Seventh Conf., Kozubnik, 1979), pp. 10-17, Lecture Notes in Math., 798, Springer, Berlin, 1980. (Eric Bedford) 82b:32023 32F05 (31C10)
 - with de Bartolomeis, Paolo) Idéaux de type fini dans $A^{\infty}(D)$. (English summary) [Ideals of finite type in A (D)] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 2,

- 133-134. (Authors' summary) 82k:32004 32A10 (32E25)
 nassone, R. See Data analysis and informatics, 82f:62004
 nasta, Pavel (with Niepel, L'udovit) Elevation of a graph. With a loose Russian ary. Czechoslovak Math. J. 31(106) (1981), no. 3, 475-483. (Bruce Sagan)
- (with Zelinka, Bohdan) Decomposition of a complete equipartite graph into isomorphic subgraphs. (Russian summary) Math. Slovaca 31 (1981), no. 2, 165–169. (H. Joseph Straight) 82e:05110 05C70 (05B30)
- mastik, E. C. Conjugate and focal points of second-order differential systems. SIAM J. Math. Anal. 12 (1981), no. 3, 314–320. (Rodney D. Gentry) 82g:34040 34C10
- naszewicz, Andrzej (with Domański, Czesław) A note on convergence of the independence test statistic for 2×2 contingency tables to the chi-square distribution. Proceedings of the Second Prague Symposium on Asymptotic Statistics (Hradec Králové, 1978), pp. 147-158, North-Holland, Amsterdam, 1979. (Authors' summary) 82c:62083
- atsu. Shizuo Invariant sets of quasimixing transformation with infinite measures. Bull. Fac. Gen. Ed. Gifu Univ. No. 15 (1979), 1-4. (B. Kamiński) 82c:28036 nba, Gian-Paolo See Scalia-Tomba, Gian-Paolo
- Tombal, P. (with Moussiaux, A.; Demaret, Jacques) Exact solution for vacuum Bianchi type III model with a cosmological constant. J. Phys. A 14 (1981), no. 8, L277–L280. (Authors' summary) 82e:83012
- abber, Marrin L. A short history of nonassociative algebras. Proceedings of the Second Workshop on Lie-Admissible Formulations (Sci. Center, Harvard Univ., Cambridge, Mass., 1979), Part A. Hadronic J. 2 (1979), no. 6, 1252–1387. (J. Dieudonné) 82e:01069 01A55 (01A60, 17-03)
 - (with Norris, Diane M.; Reynolds, Mary; Balzer, Cindy; Trebilcott, Kathy; Terry, Tamara; Coryell, Hellen; Ordway, Judy) A nonassociative algebra bibliography
 - Proceedings of the Second Workshop on Lie-Admissible Formulations (Sci. Center, Harvard Univ., Cambridge, Mass., 1979), Part B. Hadronic J. 3 (1979/80), no. 1, 507-725. (J. Dieudonné) 82i:17001 17-02 (00A15)
 - Jacobson-Witt algebras and Lie-admissible algebras. Proceedings of the Third rkshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Workshop on Lie-Ac Part A. Hadronic J. 4 (1980/81), no. 2, 183-198. (Aleksei Gainov) 82k:17002 (17D25)
 - (with Smith, C. L.; Norris, Diane M.; Welk, R.) Addenda to: "A nonassociative algebra bibliography" [Hadronic J. 3 (1979/80), no. 1, 507-725; MR 82i:17001]. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ.
 - Massachusetts, Boston, Mass., 1980), Part C. Hadronic J. 4 (1980/81), no. 4, 1318-1443. (J. Dieudonné) 82i:17002 17-02 (00A15)
 - (with Smith, C. L.; Norris, Diane M.) A subject index of works relating to nonassociative algebras. Proceedings of the Third Workshop on Lie-Admissib Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part C. Hadronic J. 4
- (1980/81), no. 4, 1444–1625. (J. Dieudonné) 82j:17001 17–02 (00A15) nbesi, P. (with de Pasquale, F.; Tartaglia, P.) Transient behavior of nonequilibrium phase transitions. *Phys. Lett. A* 78 (1980), no. 2, 129–132. (Authors' summary) 82h-80022 80A30 (58F13, 92A40)
- houlis, E. SU(2) versus SU(2)/Z₂ lattice gauge theory and the crossover from weak to strong coupling. *Phys. Lett. B* 108 (1982), *no.* 3, 209–212. (Author's summary) 82m:81061 81E25
- nczak-Jaegermann, Nicole Computing 2-summing norm with few vectors. Ark. Mat. 17 (1979), no. 2, 273-277. (H. Jarchow) 82g:46032 46B15 (47B10)
 - (with Szarek, Stanisław) On nearly Euclidean decomposition for some classes of Banach spaces. Compositio Math. 40 (1980), no. 3, 367-385. (A. C. Thompson) 46B20 (52A07)
 - (with Davis, W. J.; Milman, V. D.) The distance between certain n-dimension Banach spaces. Israel J. Math. 39 (1981), no. 1-2, 1-15. (H. E. Lacey) 82h:46024 46B20
- no See tom Dieck, Tamr
- cu, Dan Construction of a function seminorm having the Riesz-Fischer property. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 2, 209-213. (N. Adasch) 82f:46033 46E30
- scu, F. M. G. (with Tomescu, I. B. L.) Local evaluations and errors of Haar series expansions. (French and German summaries) Rev. Roumaine Sci. Tech. Sér. Électrotech. Énergét. 26 (1981), no. 1, 45-53, iv, vi. (K. Tandori) 82k:42018 42C10
- scu, I. B. L. (with Tomescu, F. M. G.) Local evaluations and errors of Haar series expansions. (French and German summaries) Rev. Roumaine Sci. Tech. Sér. Électrotech. Energét. 26 (1981), no. 1, 45-53, iv, vi. (K. Tandori) 82k:42018 42C10
- escu, Ioan Presque tous les graphes sont k-connexes. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 7, 1125-1130. (W. G. Brown) 82d:05077 05C40 (05C30)
- On the number of connected h-hypergraphs. Rev. Rounaine Math. Pures Appl. 26 (1981), no. 2, 331-337. (D. A. Klarner) 82i:05048 05C30 (05C65) nic, Milos The saturation problem for angular approximation by singular integrals. (Russian) Mat. Vesnik 3(16)(31) (1979), no. 1, 89-97. (From the text) 82g:42017
- An investigation of the Nikol'skii-type function spaces $S_n^{\beta}H(\mathbb{R}^n)$. (Russian Serbo-Croatian summary) Akad. Nauka Umjet. Bosne Hercegov. Mat. Nauka No. 19 (1980), 111-128. (H. Triebel) 82c:46044 46 Rad. Odjelj. Prirod.
- Mat. Nauka No. 19 (1980), 111–128. (H. Triebel) 82c:480144 minaga, Hisao (with Murase, Ichiro) A study on Artinian rings. Math. J. Okayama 163. (Laurence S. Levy) 82c:16016
- (with Ohori, Masayuki) Characterizations of division rings. II. J. Fac. Sci. Shinshu Univ. 15 (1980), no. 2, 79-80. (From the text) 82f:16019 16A39
- (with Hirano, Yasuyuki; Hongan, Motoshi) Commutativity theorems for certain rings. Math. J. Okayama Univ. 22 (1980), no. 1, 65-72. (Hal G. Moore) 82b:16037
- (with Abu-Khuzam, Hazar; Yaqub, Adil) A commutativity theorem for rings with constraints involving an additive subsemigroup. II. Math. J. Okayama Univ. 22 (1980), no. 2, 107-109. (Howard E. Bell) 82x16032 16A70
- (with Abu-Khuzam, Hazar, Yaqub, Adil) Commutativity theorems for s-unital rings satisfying polynomial identities. Math. J. Okayama Univ. 22 (1980), no. 2, 111-114. (D. Z. Spicer) 82b:16036 16A70 (16A38)

(with Komatsu, Hiroaki) On modified chain conditions. Math. J. Okayama Univ. 22 (1980), no. 2, 131-139. (Harlan Hullinger) 82e:16008a 16A35 (16A33)

80), no. 2, 131-139. (Harian Humnger) secritores (with Hirano, Yasuyuki) A commutativity theorem for semiprime rings. Math. Japon. 25 (1980), no. 6, 665-667. (Howard E. Bell) 82f:16039

A note on quadratic extensions of simple algebras. Math. Japon. 25 (1980), no. 6, 669-670. (Martha K. Smith) 824:16024 16A56

(with Hirano, Yasuyuki) On rings whose nonconstant semigroup endomorphisms are ring endomorphisms. Math. J. Okayama Univ. 23 (1981), no. 1, 13-16. (Peter Puusemp)

(with Psomopoulos, Evagelos; Yaqub, Adil) Some commutativity theorems for n-torsion free rings. Math. J. Okayama Unio. 23 (1981), no. 1, 37-39. (Howard E. Bell) 16A70

See also Proceedings: Symposium on Ring Theory, 82j:16001
Tomio, Lauro (with Adhikari, Sadhan K.) Alternative to Padé technique for solving scattering integral equations. Phys. Rev. C (3) 24 (1981), no. 1, 43-55. (Authors' 81F20 summary) 82h:81124

nisaki, Matsuyo Dirichlet forms and diffusion processes associated with product measures. Rep. Fac. Sci. Engrg. Saga Unio. Math. No. 9 (1981), 1-30. (Constantin Tudor) 82h:60147 60J60 (31C25, 60J35)

nita, Etsuji A branching algorithm for deciding equivalence of deterministic pushdown automata (in $D_0:R_0$). Systems-Comput.-Controls 9 (1978), no. 5, 63-69 (1980). (Michael Anshel) 82g:68079 68F10 (68D05) 68F10 (68D05) nita, Kazukisa Chaos and its description. Pattern fermation by dynamic systems and

pattern recognition (Proc. Internat. Sympos. Synerget., Garmisch-Partenkirchen, 1979), pp. 90-97, Springer Ser. Synergetics, 5, Springer, Berlin, 1979. (See 82k:00028)

(with Tsuda, Ichiro) Chaos in the Belousov-Zhabotinsky reaction in a flow system Phys. Lett. A 71 (1979), no. 5-6, 489-492. (John J. Tyson) 82b:58059 58F13 (92A09) 58F13 (92A09,

(with Daido, Hiroaki) Possibility of chaotic behaviour and multibasins in forced glycolytic oscillations. *Phys. Lett. A* **79** (1980), *no.* 2-3, 133–137. (John J. Tyson) **82c:58045** 58F13 (34C28, 80A30, 92A09)

(with Tsuda, Ichiro) Towards the interpretation of Hudson's experiment on the Belousov-Zhabotinsky reaction—chaos due to delocalization. Progr. Theoret. Phys. 64 (1980), no. 4, 1138-1160. (John J. Tyson) 821:58063 58F13 (80A30, 92A09)

(with Kai, Tohru) Statistical mechanics of deterministic chaos. The case of one-dimensional discrete process. Progr. Theoret. Phys. **64** (1980), no. 5, 1532–1550. (Jean-Pierre Eckmann) **82d:58044** 58F13 (58F12, 82A05)

(with Tsuda, Ichiro) Towards the interpretation of the global bifurcation structure of the Lorenz system. A simple one-dimensional model. Progr. Theoret. Phys. Suppl. No. 69 (1980), 185–199 (1981). (D. L. Rod) 82i:58046 58F13

Tomita, Yukio (with Sudou, Kouzou; Takami, Toshihiro; Oushima, Shuzou) Pulsating flow of liquid metals in a circular pipe under a transverse magnetic field. Bull. JSME 24 (1981), no. 187, 90-98. (Authors' summary) 824:76091 76W05

Tomita, Yutaka (with Ohe, Syunichiro; Ohmatsu, Shigeru; Soeda, Takashi) Information-theoretical optimal smoothing estimators. Inform. Sci. 22 (1980), no. 3,

201-215. (L. L. Campbell) 82c:93023 93E14 (94A15) Tomiyama, Jun (with Nagisa, Masaru) Completely positive maps in the tensor products of

von Neumann algebras. J. Math. Soc. Japan 33 (1981), no. 3, 539-550. (Man-Duen Choi) 82i:46092 46L10

(with Inoue, Atsushi; Ota, Schoichi) Derivations of operator algebras into spaces of unbounded operators. Pacific J. Math. 96 (1981), no. 2, 389-404. (Ola Bratteli) 46L10 (46L55, 47D40)

Tomizuka, Masayoshi (with Yoshimura, Toshio) Application of model reference adaptive techniques to a class of nonlinear systems. Trans. ASME Ser. G. J. Dynamic Systems Measurement Control 103 (1981), no. 2, 158-163. (Authors' summary) 82f:93024

ikins, R. J. On the limiting behaviour of sample correlation coefficients. Multivariate

nkins, R. J. On the limiting behaviour of sample correlation coefficients. *Statistical analysis (Proc. Conf., Dalhousie Univ., Halifax, N.S.,* 1979), pp. 275–279, North-Holland, Amsterdam, 1980. (Reinhard Michel) 82d:62102 62H20 Limit theorems without moment hypotheses for sums of independent random variables. *Ann. Probab.* 8 (1980), no. 2, 314–324. (H. Teicher) 82b:60023 60F05

mkinson, M. J. A characterization of residually finite periodic FC-groups. Bull. London Math. Soc. 13 (1981), no. 2, 133–137. (Vance Faber) 82c:20073 20F24 (20E26) mkó, József Semi-Markov analysis of an $E_k/G/1$ queue with finite waiting room. Point

processes and queuing problems (Colloq., Keszthely, 1978), pp. 381-389, Colloq. Math. Soc. János Bolyai, 24, North-Holland, Amsterdam, 1981. (J. Chandramohan) 82h:60190

A limit theorem for Markov renewal processes. The First Pannonian Symposium on Mathematical Statistics (Bad Tatzmannsdorf, 1979), pp. 277-283, Lecture Notes in Statist., 8, Springer, New York, 1981. (Peter Kiessler) 82j:60168 60K15 (60F99)

See also Point processes and queueing problems, 82f:60006

Tomlin, J. A. Comments on: "Logical inference as an aid to analysis in large databases" by Jack Minker. Computer-assisted analysis and model simplification (Proc. First Sympos. Univ. Colorado, Boulder, Colo., 1980), pp. 443-445, Academic Press, New York, 1981. (See 82v:00016) 68G15 (68B15, 90C08)

mpa, Frank W. (with Ling, Tok Wang; Kameda, Tsunehiko) An improved third normal form for relational databa ases. ACM Trans. Database Systems 6 (1981), no. 2, 329-346.

(Authors' summary) 82f:68024 68B15 Tompa, Martin (with Borodin, Allan; Fischer, Michael J.; Kirkpatrick, David G.; Lynch, Nancy A.) A time-space tradeoff for sorting on nonoblivious machines. 20th Annual

ations of Computer Science (San Juan, Puerto Rico, 1979), pp. 319-327, IEEE, New York, 1979. (See 82a:68004) 68E05 An extension of Savitch's theorem to small space bounds. Inform. Process. Lett. 12

(1981), no. 2, 106-108. (From the text) 82d:68035 68C25 (03D15, 68C40)
(with Borodin, Allan; Fischer, Michael J.; Kirkpatrick, David G.; Lynch, Nancy A.) A time-space tradeoff for sorting on nonoblivious machines. Special issue dedicated to Michael Machtey. J. Comput. System Sci. 22 (1981), no. 3, 351-364. (Authors' summary) 82i:68042 68E05 (03D15)

Corrigendum to: "Time-space tradeoffs for computing functions, using connectivity properties of their circuits" [J. Comput. System Sci. 20 (1980), no. 2, 118-132; MR 81h:68032]. J. Comput. System Sci. 23 (1981), no. 1, 106. (Editors) 82j:68026

ns, David J. Interacting twisted and untwisted scalar fields in a nonsimply co pace-time. Ann. Physics 129 (1980), no. 2, 334-357. (Marcos D. Maia) 82d:81113 81E99 (58G40, 81E15)

nšič, Gabrijel (with Slivnik, Tomaž) On multiparameter problems. (Slovenian. English summary) Obzornik Mat. Fiz. 27 (1980), no. 6, 163-167. (Authors' summary) 82h:47021 47A70 (93C35)

skii, G. V. Encou nter-evasion problems in quasidynamic systems. Prikl. Mat. Meh. 42 (1978), no. 2, 219-227 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 2, 229-237 (1979). (Author's summary) 82k:90145 90D25

Nonstationary Navier-Stokes flows with vanishing viscosity. Rend. Circ. Mat. Palermo (2) 27 (1978), no. 2, 113-129. (Author's introduction) 82e:35065

On the initial-boundary value problem for viscous heat conducting compressible fluids. Kodai Math. J. 4 (1981), no. 1, 97-128. (Alberto Valli) 82m:35135 (76N10, 80A20)

On the initial-boundary value problem for nonhomogeneous incompressible

heat-conducting fluids. Rocky Mountain J. Math. 11 (1981), no. 1, 99-112. (V. G. Melamed) 82i:35098 35K60 (80A20)

Existence and uniqueness of a classical solution of an initial-boundary value problem of the theory of shallow waters. SIAM J. Math. Anal. 12 (1981), no. 2, 229-241. (W. F. Ames) 82d:35099 35O20 (76B15, 86A05)

Tončev, N. S. (with Brankov, I. G.) On the S-D model for coexistence of ferromagnetism and superconductivity. Phys. Status Solidi (B) 102 (1980), no. 1, 179-187. (Authors' summary) 82g:81124 81J05 (82A68)

Tonées, V. D. On block designs arising from rank 3 graphs. J. Statist. Plann. Inference 5 (1981), no. 4, 399–403. (Nicholas Krier) 82m:05021 05B05 (05C25)

Tonchev, N. S. See Tončev, N. S.

Tonchev, V. D. See Toncev, V. D.

Tondl, A. The effect of spring nonlinearities in a self-excited system with a tuned absorber.
Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. II (Prague, 1978), pp. 701-706, Academia, Prague, 1979. (See 82k:70002b) 34C15

Toner, John (with Nelson, David R.) Smectic, cholesteric, and Rayleigh-Bénard order in two dimensions. Phys. Rev. B (3) 23 (1981), no. 1, 316-334. (Authors' summary) 82A05 (58F13, 81J05, 82A50, 82A60) 82c:82019

Tonev, Toma V. Linear connected sets of matrices with Banach algebra elements. Generalized functions and operational calculus (Proc. Conf., Varna, 1975), pp. 211-216, Bulgar, Acad. Sci., Sofia, 1979. (A. Verona) 82m:46059 46399 (32E25, 55N10) (with Stankov, D. K.) Singular points of generalized analytic functions. (Russian) C.

R. Acad. Bulgare Sci. 33 (1980), no. 1, 23-24. (R. N. Abdulaev) 82h:30053 Tong, C. H. (with Brayton, Robert King) Constructive stability and asymptotic stability of dynamical systems. 1979 International Symposium on Circuits and Systems (Tokyo, 1979),

pp. 573-576, IEEE, New York, 1979. (See 82e:94002) 34D20 (93D20) ng, Fu (with Wu, Lian Da) A third-order solution of Vinti's problem with explicit expressions for the Poisson brackets. Chinese Astronom. Astrophys. 5 (1981), no. 2, 192-201. (From the introduction) 82h:70032 70M05 (58F05, 70F15)

Tong, Hing Criterion for unboundedness in the constructive approach to the stability of matrices. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 68 (1980), no. 4, 272-273. (Author's summary) 82m:93070 93D05 (34D20, 58F10)

Tong, Howell A view on nonlinear time series model building. Time series (Proc. Internat. Meeting, Univ. Nottingham, Nottingham, 1979), pp. 41-56, North-Holland, Amsterdam, 1980. (Author's summary) 82c:62124 62M10 (92A17)

Tong, Jing Cheng A note on the number of coprime integer solutions of $y^2 = ax^3 + k$. Indian J. Pure Appl. Math. 12 (1981), no. 9, 1078-1079. (Author's introduction) 82m:10030 10B15

Tong, Pin (with Pian, Theodore H. H.) Reissner's principle in finite element formulations. Mechanics today, Vol. 5, pp. 377-395, Pergamon, Oxford, 1980. (P. G. Ciarlet) 82c:73059 73K25 (78-02)

Tong, Wen Ting Disk theory for tensor products of matrices. (Chinese. English summary) Nanjing Daxue Xuebao 1980, Special Issue on Mathematics, 92-107. (Daniel K. C. Chen) 82c:15033 15A69 (15A18)

Tong, Y. L. See Tong, Yung Liang

Tong, Yue Lin L. (with O'Brian, Nigel R.; Toledo, Domingo) The trace map and characteristic classes for coherent sheaves. Amer. J. Math. 103 (1981), no. 2, 225-252.

(K. Lamotke) 82f:32021 32C35 (32C15, 57R20, 58A14) (with O'Brian, Nigel R.; Toledo, Domingo) Hirzebruch-Riemann-Roch for coherent sheaves. Amer. J. Math. 103 (1981), no. 2, 253–271. (K. Lamotke) 82f:32022 32C35 (32L15, 58C10)

(with O'Brian, Nigel R.; Toledo, Domingo) Grothendieck-Riemann-Roch for complex manifolds. Bull. Amer. Math. Soc. (N.S.) 5 (1981), no. 2, 182-184. (From the text) 82m:32011 32C35 (14F12, 58G05)

Tong, Yung Liang ★Probability inequalities in multivariate distributions. Probabilities and Mathematical Statistics. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London-Toronto, Ont., 1980. xiii + 239 pp. ISBN 0-12-694950-6 (Somesh Das Gupta) 82k:60038 60E15 (62H99)

(with Mihalko, Daniel) A sequential regression method in Monte Carlo studies. J. Statist. Comput. Simulation 12 (1980/81), no. 1, 41-50. (Authors' summary) 82a:62130 62L12 (65C05)

Tổng Văn Đức Structure presque-transverse. J. Differential Geom. 14 (1979), no. 2,

215-219. (F. Brickell) 82a:53037 53C10 (57R30)
Espaces de nullité du tenseur de courbure sur les fibrés principaux. J. Differen Geom. 15 (1980), no. 3, 355-363 (1981). (V. Cruceanu) 82k:53050 53C05 (55R10, 57R30)

Feuilletage et distributions définies par une connexion. Rev. Roumaine Math. Pu Appl. 25 (1980), no. 7, 1019–1025. (Author's summary) 82a:57024 57R30 (53C05)

nguyen To Nhu See Nguyen To Nhu
Tonin, M. (with Bonora, L.; Pasti, P.) Geometric description of extended BRS symmetry in

- superfield formulation. (Italian and Russian summaries) Nuovo Cimento A (11) 63 (1981), no. 3, 353-364. (Jiři Niederle) 82j:81057 81G20 (53C80)
- w, E. L. (with Irisov, A. E.) Sufficient conditions for the existence and optimality of tions of differential inclusions. (Russian) Mat. Fiz. No. 27 (1980), 13-19, 120. (L. von Wolfersdorf) 82b:49025 49B10 (34A60, 49A10)

Dynamical systems of translations and the questions of uniform controllability of a ear system. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 2, 290-294. (V.

Popescus 826:34080 34H05 (49EL5)
limov, M. See Conference: Theoretical and Applied Questions of Mathematics, 82d:00003
nnov, Ivan K. (with Stojanov, Ivan S.) The union and product of a variety of associative
algebras. (Russian) PLESKA Stud. Math. Bulgar. 2 (1981), 130–133. (Authors' summary)
82m:00008
08B10 (16A99)

ne properties of the product of varieties of associative algebras. (Rus

7 (1981), no. 1, 34-41. (A. A. Iskander) 82;08012 08B15 (16A06)

Ton Tran Cong Notes on some relationships between the Galerkin, Papkovich-Neuber and Naghdi-Hsu solutions in linear elasticity. Mech. Res. Comm. 8 (1981), no. 4, 207-211. (From the introduction) 82k:73008 73C02

(From the introduction) 82k:73008 73C02
 Toof, David J. (with Braverman, Jerome D.) An application of the Fibonacci search technique to determine optimal sample size in a Bayesian decision problem. A collection of manuscripts related to the Fibonacci sequence, pp. 137-145, Fibonacci Assoc., Santa Clara, Calfi, 1980. (Authors' summary) 82k:52016 62C10 (62F15)
 Toom, A. L. Stable and attractive trajectories in multicomponent systems. Multicomponent random systems, pp. 549-575, Advances in Probability and Related Topics, 6, Dekker, New York, 1980. (Kenji Onaga) 82k:93064 93D99
 Toomer, G. J. (with Sachs, J.) Otto Neugebauer, bibliography, 1925-1979. Centaurus 22 (1978/79), no. 4, 258-280. (Editors) 82k:01138 01A70

Hipparchus' empirical basis for his lunar mean motions. Special issue dedicated to Olaf Pedersen on his sixtieth birthday. A historical footnote to Olaf Pedersen, Survey of the Almagest, pp. 161–164 [Odense Univ. Press, Odense, 1974; MR 56 #11687]. rus 24 (1980), 97-109. (Giovanna Derenzini) 82h:01011 01A20 (85-03)

Topèli, V. A. On the asymptotics of the probability of the continuation of critical general branching processes. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 1, 55–57. (Harry I. Cohn) 824:60167 60J80

n. Com) Bazzorov Good Composition of the Arnaudov, Ja. N.) Sur la représentation binaire des catégories polyadiques. Studia Sci. Math. Hungar. 13 (1978), no. 3-4, 245-252 (1981). (From the text) 82g:18006 18D05 (From the text) 82g:18006 18D05

(with Arnaudov, Ja. N.) Quelques liens entre les ⟨n⟩-catégories et les (n)-catégories.

An. Ştiin; Univ. "Al. I. Cuza" laşi Sect. I a Mat. (N.S.) 26 (1980), no. 2, 261–265.

(From the text) 82c:18002 18A05

(with Peeva, K.) Mathematical automata theory: a categorical approach. (Russian. English summary) With a loose English translation. Problems Control I

Theory/Problemy Upravlen. Teor. Inform. 9 (1980), no. 2, 141-161. (David C. Rine) 82a:68106 68D30

Töpfer, Hans-Joachim (with Volk, Wolfgang) Die numerische Behandlun Integralgleichungen zweiter Art mittels Splinefunktionen. (English sur treatment of integral equations (Workshop, Math. Res. Inst., Oberwolfach, 1979), pp. 228-243, Internat. Ser. Numer. Math., 53, Birkhäuser, Basel, 1980. (Rolf Leis) 82f:65141 65R20

itsch, Ernst See Kraft, Victor, 82i:01071

Topp, Jerzy Bemerkungen zu Kernen der paaren Graphen. Demonstratio Math. 13 (1980). no. 4, 835-838. (W. G. Brown) 82k:05057 05C20 (90D05)

Topper, David R. "To reason by means of images": J. J. Thomson and the mechanical picture of nature. Ann. of Sci. 37 (1980), no. 1, 31-57. (J. J. Cross) 82g:01028 01A55

Toppila, Sakari On the length of asymptotic paths of entire functions of order zero. Ann Acad. Sci. Fenn. Ser. A I Math. 5 (1980), no. 1, 13-15. (A. Edrei) 82a:30040 30D3. (30D20)

On exceptional values of functions meromorphic outside a linear set. Ann. Acad. Sci. Fenn. Ser. A 1 Math. 5 (1980), no. 1, 115-119. (I. V. Ostrovskii) 82e:30036 30D35

Picard sets for meromorphic functions with a deficient value. Ann. Acad. Sci. Fenn. Ser. A I Math. 5 (1980), no. 2, 263-300. (J. Winkler (Zbl 456:30027)) 82h:30030 30D35

Topsoe, F. (with Hoffmann-Jørgensen, J.) Analytic spaces and their application. Analytic sets (Conf., University Coll., Univ. Londo n, 1978), pp. 317-401, Academic Press, on, Londo London, 1980. (See 82m:03063) 04A15 (03E15)

Toraldo di Francia, G. (with Dalla Chiara Scabia, Maria Luisa) Formal analysis of physical theories. Problems in the foundations of physics (Proc. Internat. School Phys. "Enrico Fermi", Course LXXII, Varenna, 1977), pp. 134-201, North-Holland, Amsterdam, 1979. (See 82m:81003) 81B05 ms in the four See also Probi ions of physics, 82m:81003

anzos, Fausto A. Approximation of compact star-shaped sets by special families.
(Spanish. English summary) Rev. Un. Mat. Argentina 29 (1979/80), no. 1-2, 49-54. (H. W. Guggenheimer) 824:52007 52A30

Torasso, Pierre Quantification géométrique et représentations de SL (R). (English

summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 3, A185-A188. (Author's summary) 82j:22013 22E45 (58F06)

Sur le caractère de la représentation de Shale-Weil de $Mp(n, \mathbb{R})$ et $Sp(n, \mathbb{C})$. Math. Ann. 252 (1980), no. 1, 53-86. (Jouko Mickelsson) 82a:22019 22E46 chinsky, Alberto Weighted norm inequalities for the Littlewood-Paley function g_{λ}^{α} .

Harmonic analysis in Euclidean spaces (Proc. Sympos. Pure Math., Williams Coll., Williamstown, Mass., 1978), Part 1, pp. 125–131, Proc. Sympos. Pure Math., XXXV, Part 1, Amer. Math. Soc., Providence, R.I., 1979. (Wo-Sang Young) 82b:42017 42B25 (42B30)

Tordirašku, S. S. (with Kovarskii, V. A.; Perel'man, N. F.; Averbuh, I. S.; Baranov, S. A.) ★Неадмабатические переходы в свлыюм электроматнитном поле. (Russian)
[Nonadiabatic transitions in a strong electromagnetic field] "Śtiinca", Kishinev, 1980.

175 pp. (Publisher's description) 82f:81098 81K05 (76X05, 82A35) elli, Alessandro A remark on a free boundary problem. (Italian summary) Istit.

Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 354-359 (1981). (Michael J. O'Carroll) 82m:76061 76S05 (35R35, 49A29)

838

(with Caffarelli, Luis A.; Friedman, Avner) The free boundary for a fourth order ational inequality. Illinois J. Math. 25 (1981), no. 3, 402-422. (Erich Mierser 49A29 (35R35) 82i:49007

Toren, M. (with Solan, A.) Rotating compressible flow over the edge of a finite disk. Trans. ASME Ser. E J. Appl. Mech. 48 (1981), no. 2, 249-254. (Authors' summary.) 82j:76068 76N99 (76U05)

gašev, Aleksandar Extreme values of integrals of some bell shaped classes of functions.

Mat. Vesnik 3(16)(31) (1979), no. 1, 99-108. (B. K. Lahiri) 82d:26016 26E99 Characteristic operator functions on Wachs spaces. Publ. Inst. Math. (Beograd) (N.S.) 27(41) (1980), 287-296. (Dan Timotin) 82k:47027 47A99

Torgersen, Erik N. Deviations from total information and from total ignorance as meas

of information. Mathematical statistics, pp. 315-322, Banach Center Publ., 6, PWN, Warsaw, 1980. (I. Vajda) 82k:62009 62B10

Measures of information based on comparison with total information and with total orance. Ann. Statist. 9 (1981), no. 3, 638-657. (Dieter Mussmann) 82h:62012 62B10 (62B15)

(with Stepniak, Czesław) Comparison of linear models with partially known covariances with respect to unbiased estimation. Scand. J. Statist. 8 (1981), no. 3, 183-184. (Authors' summary) 82m:62160 62J10

Torkington, J. A. (with Gordon, Manfred) Improvements in the random walk model of polymer chains. Graph theory and combinatorics (Proc. Conf., Open Univ., Milton Keynes, 1978), pp. 49-61, Res. Notes in Math., 34, Pitman, San Francisco, Calif., 1979. (Leopold Flatto) 82g:60023 60D05 (05C38, 60J15, 92A40)

Törnebohm, Håkan Paradigms in fields of research. The logic and epistemology of scientific

change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn. 30 (1978), no. 2-4, 62-90 (1979). (See 82i:00024) 00A25 (03A05)

Toro, Emilio (with Liang, Joseph J.) On the periods of the cyclotomic field. Abh. Math. Sem. Univ. Hamburg 50 (1980), 127-134. (Ezra Brown) 82d:12003 12A35

dze, A. F. (with Georgobiani, D. A.) Solution of rectangular games by the Monte Carlo method. (Russian) Trudy Vyčisl. Centra Akad. Nauk Gruzin. SSR 20 (1980), no. 2
 Mat. Tehn. Kibernet., 5-10. (M. Maňas) 82f:90102 90D05
 A method for estimating parameters of functional dependence. (Russian) Trudy

Vyčisl. Centra Akad. Nauk Gruzin. SSR 20 (1980), no. 2 Mat. Tehn. Kibernet., 63-78. (Ryszard Zieliński) 82e-62048 62F10

Torondžadze, T. A. (with Čitašvili, R. Ja.) On the equivalence of weakly and strongly regular stochastic differential equations. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 98 (1980), no. 1, 37-40. (K. R. Parthasarathy) 60H10 (60J65)

(with Čitašvili, R. Ja.) On one-dimensional stochastic differential equations with unit diffusion coefficient. Structure of solutions. Stochastics 4 (1980/81), no. 4, 281-315. (J. Szpirglas) 82h:60115 60H10

Torošelidze, I. A. (with Izjumova, D. V.) Oscillation theorems for some second-order nonlinear ordinary differential equations. (Russian. Georgian and English summaries) Proceedings of the I. N. Vekua Institute of Applied Mathematics, 8 (Russian), pp. 13-23, 162-163, Tbilis. Gos. Univ., Tbilisi, 1980. (L. M. Kuks) 82g:34037 34C10

Torrecillas Jover, B. *Haz estructura sobre el espectro de un anillo no conmutativo. (Spanish) [The structure sheaf over the spectrum of a noncommutative ring] Álxebra [Algebra], 31. Universidad de Santiago de Compostela, Departamento de Álgebra y Fundamentos, Santiago de Compostela, 1980. vi+103 pp. ISBN 84-7191-225-2 (A. Verschoren) 82g:16026 16A63 (18E35)

Torrejón, Ricardo (with Kirk, W. A.) Asymptotically nonexpansive semigroups in Banach spaces. Nonlinear Anal. 3 (1979), no. 1, 111-121 (1978). (T. C. Lim) 82a:47062 47H20 (47H09, 47H10)

On the common fixed points of a commutative family of nonlinear mappings. Nonlinear Anal. 5 (1981), no. 1, 47-51. (V. Istrățescu) 82f:47071 47H10

Torrez, William C. (with Cogburn, Robert) Birth and death processes with random environments in continuous time. J. Appl. Probab. 18 (1981), no. 1, 19-30. (Dean H. Fearn) 82a:60123 60J80 (92A15)

Torrigiani, Marcello A property of the associative means in a graph. (Italian) Proceedings of the First AMASES Meeting (Pisa, 1977) (Italian), pp. 367-382, Giappichelli, Turin, 1979. (Maria Ferro) 82a:05081 05C99
Torsney, B. (with Silvey, Samuel David; Titterington, D. M.) An algorithm for optimal

designs on a finite design space. Optimal design theory. Comm. Statist. A-Theory Methods 7 (1978), no. 14, 1379-1389. (See 82g:62106) 62K05

madaune-Tort, Monique See Madaune-Tort, Monique Tortora, Roberto (with Criscuolo, Giovanni; Kwok, Chung Mo; Mowshowitz, Abbe) The group and the minimal polynomial of a graph. J. Combin. Theory Ser. B 29 (1980), no. 3, 293-302. (C. Y. Chao) 82d:05066 05C25 (05C50, 20B25)

Tortrat, Albert Lois stables dans un groupe. (English summary) Ann. Inst. H. Poincaré Sect. B (N.S.) 17 (1981), no. 1, 51-61. (Wilfried Hazod) 82m:60016 60B15 (60E07) (with Vahanija, N. N.; Tarieladze, V. I.) Continuity of random linear fu

(Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 1, 172–178. (D. Preiss) 82g:60010 60B11 (28C20, 46A99) Preiss) 82g:60010

Toruńczyk, Henryk (with Dobrowolski, Tadeusz) On metric linear spaces homeomorphic to 1₂ and compact convex sets homeomorphic to Q. (Russian summary) Bull. Acad. Polon. Sci. Ser. Sci. Math. 27 (1979), no. 11-12. 883-887 (1981). (R. R. Summerhiil) 82i:57010 57N20 (54C55, 58B05)

No infinite-dimensional locally compact ANR is a topological group. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979).

Topology Proc. 4 (1979), no. 1, 173–176 (1980). (John J. Walsh) 82a:57014 (22D05)

Characterizations of infinite-dimensional manifolds. (Polish) Wiadom. Mat. (2) 22, no. 1, 39-43 (1979). (Editors) 82i:57015 57N20

Characterizing Hilbert space topology. Fund. Math. 111 (1981), no. 3, 247-262. (Ross Geoghegan) 82i:57016 57N20 (46C99, 58B05)

(with Heisey, R. E.) On the topology of direct limits of ANRs. Pacific J. Math. 93 (1981), no. 2, 307–312. (Gerard A. Venema) 82k:57010 57N20 (54C55, 58B20)

Torven, S. Modified Korteweg-de Vries equation for propagating double layers in plant

Phys. Rev. Lett. 47 (1981), no. 15, 1053-1056. (Author's summary) 82i:76103

Tory, E. M. (with Weiner, Howard J.; Pickard, David K.; Tanemura, Masaharu; Hori, Motoo) Further comments on: "Sequential random packing in the plane" [J. Appl. Probab. 15 (1978), no. 4, 803-814; MR 80a:60015] by Weiner. J. Appl. Probab. 17 (1980), no. 3, 878-892. (Adrian Baddeley) 82m:60021 60D05

48, Y. (with Okubo, Susumu) Erratum: "Duffin-Kemmer formulation of gauge theories"

y. (with Okubo, Susumu) Erratum: "Duffin-Kemmer formulation of gauge theories"
 [Phys. Rev. D (3) 20 (1979), no. 2, 462–473; MR 80f:81083]. Phys. Rev. D (3) 23 (1981), no. 6, 1468. (Editors) 82d:81092
 81E15 (53C05)

Toscani, Giuseppe (with Bertoluzza, Carlo) Generalized derivative and laws of composition in information theory. (Italian) Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 84–91 (1981). (B. Forte) 82g:39006 39B40 (94A15) 84-91 (1981). (B. Forte) 82g:39006 39B40 (94A15)

An approach to white noise via wide-sense stationary processes with piecewise

stant sample functions. (Italian summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 2,

309-315. (T. Hida) 82f:60080 60G10 (60F99, 60G15)

Tosi, M. P. (with Pastore, G.; Senatore, G.) Short-range correlations in multicomponer plasmas. Phys. Lett. A 84 (1981), no. 7, 369-370. (Authors' summary) 82k:82032 82A45

Tosi, Piero Intuitive proofs and first-order derivations: some notes on the metamathematics of first-order number theory. Italian studies in the philosophy of science, pp. 137-152, Boston Studies Philos. Sci., 47, Reidel, Dordrecht, 1981. (Herman R. Jervell) 82j:03073 03F05 (03F30)

Tošić, Dobrilo D. Some series of a product of Bessel functions. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 105-110 (1981). (B. R. Bhonsle) 82i:33011 33A40

Tošić, Ratko An optimal identification algorithm for some subclasses of monotone Boolean functions. (Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 115–121 (1980). (W. Greblicki) 82m:94062 94C10

On a class of D-complete OSPK and complete error-correcting codes.
(Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 123-126 (1980). (Prem Nath) 82j:94017 94B05

(with Ušan, Janez; Surla, Dušan) A method for constructing a system of orthogonal Latin squares, codes and k-seminets. (Russian. Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 191-197 (1980). (J. Dénes) 82d:05036 05B15 (20N05, 94B25)

An optimal search procedure. J. Statist. Plann. Inference 4 (1980), no. 2, 169-171. (Frank K. Hwang) 82b:62131 62N05 (05A05, 68E05, 90B40)

Tošov, N. (with Malevič, T. L.) The maximum of a Gaussian nonstationary process. (Russian) Random processes and mathematical statistics (Russian), pp. 88-95, 187-188, "Fan", Tashkent, 1978. (D. A. Darling) 824:60073 60G15

(with Malevič, T. L.) Bounds for the maximum of a homogeneous Gaussian field. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. No. 20 (1979), 76-90, 157. (Authors' summary) 82i:60065 60G15 (60G60)

fejes Tóth, G. See Fejes Tóth, G.

Tóth, Gábor On the triangularizability of planar differential systems without critical points. Studia Sci. Math. Hungar. 12 (1977), no. 3-4, 425-428 (1980). (A. A. Reinfelds) 82m:34042 34C20

On a transformation problem of autonomous differential systems from stability theoretical viewpoint. Studia Sci. Math. Hungar. 13 (1978), no. 3-4, 423-427 (1981). (Richard C. Swanson) 82k:58062 58F10 (34C20)

Counterexample on nonequivalent dynamical systems which have common translation. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 1173-1179, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (Ralph Abraham) 82b:58077 58F25 (54H20)

On homotopy classes of mappings into flat Riemannian manifolds. Publ. Math. Debrecen 28 (1981), no. 3-4, 231-245. (J. Eells) 82k:58038 58E20 (49F05, 53C20)

Toth, Imre Spekulationen über die Möglichkeit eines nicht euklidischen Raumes vor Einstein. Einstein Symposion, Berlin (1979), pp. 46-83, Lecture Notes in Phys., 100, Springer, Berlin, 1979. (Abe Shenitzer Bzes0003) 00AZ5 (01A20, 01A30, 51–03)
Aristote et les paradoxes de Zénon d'Élèe. Eleutheria 1979, no. 2, 304–309. (J.

01A20

Corcoran) 82m:01011

Wann und von wem wurde die nichteuklidische Geometrie begründet? Bemerkungen zu Hans Reichardts Gauß und die nichteuklidische Geometrie [Teubner, Leipzig, 1976; MR 58 #27040]. Arch. Internat. Hist. Sci. 30 (1980), no. 105, 192-205. (I. Grattan-Guinness) 01A55 (51-03)

Tóth, János (with Hárs, Vera) On the inverse problems of compartment system (Hungarian English summary) Alkalmaz Mat. Lapok 5 (1979), no. 1-2, 49-61. (Stefan Balint) 824:80036 80A30 (34A30)

Completeness in nonsimple and stable modal logics. Acta Cybernet. 4, no. 4, 377-382 (1980). (Audrey McKinney) 82c:03024 03R45

feies Toth, L. See Feies Toth, L.

Toth, Paolo (with Martello, Silvano) The 0-1 knapsack problem. Combinatorial imization (Lectures, Summer School, Urbino, 1977), pp. 237-279, Wiley, Chichester, 1979. (See 82a:90099) 90C10

(with Christofides, Nicos; Mingozzi, Aristide) The vehicle routing problem. natorial optimization (Lectures, Summer School, Urbino, 1977), pp. 315-338, Wiley, ster, 1979. (See 82a:90099) 90B05 Chichester, 1979. (See 82a:90099)

(with Christofides, Nicos; Mingozzi, Aristide) Loading problems. Combinatorial imization (Lectures, Summer School, Urbino, 1977), pp. 339–369, Wiley, Chichester, 1979. (See 82a:90099) 90799

Dynamic programming algorithms for the zero-one knapsack problem. (German nary) Computing 25 (1980), no. 1, 29-45. (Author's summary) 82j:90077

(with Martello, Silvano) Heuristic algorithms for the multiple knapsack problem. (German summary) Computing 27 (1981), no. 2, 93-112. (Authors' summary) 82j:90052

(with Christofides, Nicos; Mingozzi, Aristide) Exact algorithms for the vehicle routing problem, based on spanning tree and shortest path relaxations. Math.

Programming 20 (1981), no. 3, 255-282. (Authors' summary) 82i:90038 90B10 (with Christofides, Nicos; Mingozzi, Aristide) State-space relaxation procedures for

the computation of bounds to routing problems. Networks 11 (1981), no. 2, 145-164. (Authors' summary) 82k:90122 90C39 (90B10, 90C10) mization, 82a:90099

See also Combinatorial optim

kiss-Tóth, T. See Kiss-Tóth, T.

lk, V. On the strong summability by the (C, a)-means of Fourier series. Studia Sci. Math. Hungar. 12 (1977), no. 3-4, 429-443 (1980). (Włodzimierz Lenski) 821:42007 Totik, V. On the strong su

On the strong approximation of Fourier series. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 1-2, 151-172. (R. N. Mohapatra) 82c:42004 42A10

On the continuity of functions in connection with a problem of V. G. Krotov. (Russian summary) Anal. Math. 7 (1981), no. 1, 81-84. (S. N. Mukhopadhyay) 82h:26008 26A15 (42A50)

Toti Rigatelli, Laura A normal form theorem for impartial two-person games. (Italian) Matematiche (Catania) 32 (1977), no. 2, 285-298. (Đuro Kurepa) 82g:04002 (90D05)

Totkov, G. A. Converse theorems for onesided spline approximation. C. R. Acad. Bulgare Sci. 32 (1979), no. 7, 875-878. (Philip W. Smith) 82i:41017 41A15 (41A27)

Totsuji, Hiroo Distribution of charged particles near a charged hard wall in a uniform background. J. Chem. Phys. 75 (1981), no. 2, 871-874. (Author's summary) 82k:82038

Totten, Jim (with Buekenhout, Francis) A classification of linear spaces based on quadrangles. III. Geom. Dedicata 8 (1979), no. 4, 423-435. (Authors' summary) 82h:51017 51E20 (05B25)

(with Batten, Lynn Margaret) On a class of linear spaces with two consecutive line degrees. Ars Combin. 10 (1980), 107-114. (Stanley E. Payne) 82h:05012 (51A45)

Tou, Julius T. See Advances in information systems science, 82k:68001

Toubassi, E. (with Fuchs, László) On rank one mixed abelian groups with $p^{\omega+n}$ -projective p-components. Comment. Math. Univ. St. Paul. 29 (1980), no. 2, 135-143. (Otto Mutzbauer) 82c:20097 20K21

Toueg, Sam (with Bridges, William G.) On the impossibility of directed Moore graphs. J Combin. Theory Ser. B 29 (1980), no. 3, 339-341. (L. W. Beincke) 821:05044 (with Ullman, Jeffrey D.) Deadlock-free packet switching networks. SIAM J. 68B20 (94C10)

Comput. 10 (1981), no. 3, 594-611. (Authors' summary) 82h:68040 Fonctions composées différentiables: cas algébrique. Ann. Inst. Fourier (Grenoble) 30 (1980), no. 4, 51-74. (J. Bochnak) 82e:58020 58C25 (32B05) agou, Hirohumi (with Obayashi, Tetsuro) Creeping flow of a slightly rarefied gas past Fourier (Grenoble) 30 (1980), no. 4, 51-74, (J. Bochnak) 82e:58020

two equal touching spheres. J. Phys. Soc. Japan 49 (1980), no. 3, 1171-1179. (Authors' summary) 82a:76066 76P05

Toulouse, Gérard (with Poénaru, V.) Topological solitons and graded Lie algebras. Math. Phys. 20 (1979), no. 1, 13-19. (Authors' summary) 82c:82017

Symmetry and topology concepts for spin glasses and other glasses. Phys. Rep. 49 79), no. 2, 267-272. (Editors) 82j:82063 82A57 (55Q99) (1979), no. 2, 267-272. (Editors) 82j:82063

pin, Janick (with Chauvat, Danièle; Coelho, Michel; Corolleur, Annick; Delin, Danièle; Demars, Suzanne; Faucher, Alain; Gaud, Dominique; Gauyacq, Ginette; Guillement, Sylvie; Lacombe, Hélène; Le Coutaller, Fernande; Le Lay, Colette; Le Poche, Gabriel; Péault, Hervé) *Nombres entiers naturels. (French) [Natural numbers] Éléments de réflexion pour une approche à l'école élémentaire. [Reflections toward a pedagogical approach for elementary schools]. Nanta Iremica, 18. Université de Nantes, I.R.E.M. de Nantes, Nantes, 1979. 165 pp. ISBN 2-86300-003-9 (M. Kline) 82e:00001

Touré, Saliou Espaces homogènes moyennables et représentations des produits semi-directs. Analyse harmonique sur les groupes de Lie (Sém., Nancy-Strasbourg 1976-1978), II, pp. 568-617, Lecture Notes in Math., 739, Springer, Berlin, 1979. (Pierre Eymard) 82b:43004 43A07

irnemine, Georges (with Ciavaldini, Jean-François; Pogu, Marc) Étude de problèmes monotones posés dans des ouverts non bornés, estimation de l'erreur de troncature. (English summary) C. R. Acad. Sci. Paris Ser. I Math. 292 (1981), no. 7, 397–400. (Authors' summary) 82b:49010 49A29 (49D30, 76N10)

issaint, G. T. (with Devroye, Luc) A note on linear expected time algorithms for finding convex hulls. (German summary) Computing 26 (1981), no. 4, 361-366. (Wolfgang Boehm) 82i:52008 52A20 (52-04, 60D05, 68C25)

(with Avis, David) An efficient algorithm for decomposing a polygon into star-shaped polygons. Pattern Recognition 13 (1981), no. 6, 395-398. (Wolfgang Boehm) 82m:68130 68G10 (52-04, 52A45, 57M20)

Toutenburg, H. (with Teräsvirta, Timo) A note on the limits of a modified Theil-estimator. Biometrical J. 22 (1980), no. 6, 561-562. (George P. H. Styan) 82e:62163

Nonlinear constraints for coefficients in linear models. Proceedings of the Sixth Conference on Probability Theory (Braşov, 1979), pp. 237-245, Ed. Acad. R.S. România, Bucharest, 1981. (Friedrich Pukelsheim) 82k:62211 62P20

apront-Touzé, M. See Chapront-Touzé, M.

Tovey, Craig A. (with West, Douglas B.) Semiantichains and unichain coverings in direct products of partial orders. SIAM J. Algebraic Discrete Methods 2 (1981), no. 3, 295-305. (R. P. Dilworth) 82h:06002 06A10 (06A05)

Tovstik, P. E. Free oscillations of long cylindrical shells. (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 207–216, 316, Leningrad, Univ., Leningrad, 1980. (D. P. Rašković) 82c:73064 73L20

vers. David A. Two ideals of an algebra closely related to its Frattini ideal. Arch. Math. (Basel) 35 (1980), no. 1-2, 112-120. (Ernest Stitzinger) 82c:17002

Dimension preserving lattice isomorphisms of Lie algebras. Comm. Algebra 8 (1980), no. 14, 1371–1386. (E. W. Wallace) 82b:17005 17B05 (17B40)

On Lie algebras in which modular pairs of subalgebras are permutable. J. Algebra 68 (1981), no. 2, 369-377. (Ernest Stitzinger) 82e:17010 17B05

Lattice isomorphisms of Lie algebras. Math. Proc. Cambridge Philos. Soc. 89 (1981),

no. 2, 285–292. (S. E. Bowser) 82i:17005 17B05 Townsend, D. W. (with Legg, D. A.) Essential numerical range in $B(l_1)$. Proc. Amer. Math. Soc. 81 (1981), no. 4, 541-545. (F. F. Bonsall) 82e:47007 47A12

d, James T. (with Ashby, F. Gregory) Decomposing the reaction time distribution:

re insertion and selective influence revisited. J. Math. Psych. 21 (1980), no. 2, 93-123. (Authors' summary) 82m:62241 62P15

nd, M. A. (with Johnson, G. E.) A generalized direct search acceptable technique for use with descent-type multivariate algorithms. J. Franklin Inst. 309 (1980), mo. 3, 163–177. (H. Mukai) 82b:49044 49D10 (65K05, 90C30)

mth. Paul (with Nicolai, H.; van Nieuwenhuizen, Peter) Comments on dimensional supergravity. Lett. Nuovo Cimento (2) 30 (1981), no. 10, 315–320. (W. t) 82m:83054 83E50 (58A99, 81G20) Cox) 82mc83054

(with Freedman, Daniel Z.) Antisymmetric tensor gauge theories and nonlines andels. Nuclear Phys. B 177 (1981), no. 2, 282-296. (Authors' summary) 82b:81133 81G25 (53B15, 81E99)

(with Deser, S.; Siegel, Warren) Higher rank representations of lower spin. Nuclear Phys. B 184 (1981), no. 2, 333-350. (Håkan Snellman) 82m:81048 81E10 (53C05,

(with Kugo, Taichiro) Symmetry restoration and gauge field dynamics in the CPⁿ⁻ model. Phys. Lett. B 101 (1981), no. 1-2, 82-84. (Authors' summary) 82±81158 81G20 (81E10)

(with Howe, P. S.; Stelle, K. S.) The vanishing volume of N=1 superspace. Phys. Lett. B 107 (1981), no. 6, 420-424. (Authors' summary) 82m:83053 83E50

multiagent statistical decision theory. Bayesian analysis in econometrics and statistics, pp. 169-194, Stud. Bayesian Econometrics, 1, North-Holland, Amsterdam, 1980. (See 82662176) 62C10

(with Harris, Milton) Resource allocation under asymmetric information.

Econometrica 49 (1981), no. 1, 33-64. (Authors' summary) 82h:90021 90A14 (62C10)

msend, S. P. Every 5-coloured map in the plane contains a monochrome unit. J. Combin. Theory Ser. A 30 (1981), no. 1, 114-115. (Ruth Bari) 82j:05060 (52A50)

Towsley, Don A statistical analysis of ARQ protocols operating in a nonindependent error environment. IEEE Trans. Comm. 29 (1981), no. 7, 971-981. (Author's summary) 94A15

Toya, Seiichi Changes of method of calculation in the periods of the Yuan and the Ming dynasties. (Japanese) Sügakushi Kenkyü No. 83 (1979), 1-29. (S. Hitotumatu) 82f:01010 01A25

Constant value 4142 of regular octagon described in "Jingō-ki". (Japanese) Sûgakushi Kenkyû No. 86 (1980), 8–13. (K. Masuda) 82j:01015 01A27

Constant values of circle described in Japanese math matical books at the early Edo period. (Japanese) Sûgakushi Kenkyû No. 87 (1980), 1-7 (1981). (K. Inoue) 82j:01016

Toyoda, Junichi (with Ito, Tetsuro; Kizawa, Makoto) Hierarchical data base organization for document information retrieval. Systems-Comput.-Controls 10 (1979), no. 2, 39-47 (1981). (From the summary) 824:68013 68B15 (68H05)

(with Wildermuth, Karl) Charged Schrödinger particle in a c-number radiation field. Phys. Rev. D (3) 22 (1980), no. 10, 2391-2399. (Authors' summary) 821-81132 81G10 (81C05, 81D30)

Toyoda, Toshihisa (with Ohtani, Kazuhiro) Minimax regret critical values for a preliminary test in pooling variances. J. Japan Statist. Soc. 8 (1978), no. 1, 15-20. (Authors summary) 82a:62039 62F03

Tovoizumi, Masao On the Diophantine equation $y^2 + D^m = 2^n$. Comment. Math. Univ. St. Paul. 27 (1978/79), no. 2, 105-111. (Leo J. Alex) 82m:10031

A note on the periods of elliptic functions. I, II. Comment. Math. Univ. St. Paul. 28 (1980), no. 1, 63-71, 101-106. (D. W. Masser) 82a:10036 10F35

Formulae for the values of zeta and L-functions at half integers. Tokyo J. Math. 4 (1981), no. 1, 193–201. (T. M. Apostol) 82h:10053 10H05 (10H08)

Toyooka, Yasuyuki An asymptotically efficient estimation procedure in time series regression model with uniformly modulated error process. Math. Japon. 25 (1980), no. 5, 525-532. (Tata Subba Rao) 82::62125 62M10

322-332. (1ata Subba Rao) 82c62125 62M10 Tozzi, Anna (with Gramellini, Maria Letizia) Final topological groups and coreflections. (Italian summary) Rend. Mat. (7) 1 (1981), no. 1, 139-145. (Temple H. Fay) 82i:18002

Tracy, C. A. (with Vaidya, H. G.) Crossover scaling function for the one-dimensional XY model at zero temperature. Phys. Lett. A 68 (1978), no. 3-4, 378–380. (Authors' summary) 82g82059 82A68 (82A25)

Tracy, D. S. (with Srivenkataramana, T.) Transforming the study variate after PPS sampling. Metron 37 (1979), no. 1-2, 175-181 (1980). (Authors' summary) 82m:62022 (with Gupta, Arjun K.) A study of the effects of truncation in bivariate normal

distribution. Biometrical J. 22 (1980), no. 7, 593-613. (Authors' summary) 82e:62078 (with Dwyer, P. S.) General expectation of partitional moment functions. (Spanish

nary) Rev. Tecn. Fac. Ingr. Univ. Zulia 3 (1980), no. 2, 213-239 (1981). (Authors' summary) 82m:62068 62F10

Traczyk, Tadeusz (with Romanowska, Anna B.) On commutative BCK-algebras. Math. Japon. 25 (1980), no. 5, 567-583. (Jerzy Kotas) 82g:06020 06D99 (03G25)
Trager, Barry M. Integration of simple radical extensions. Symbolic and algebraic

Computation (EUROSAM '79, Internal. Sympos., Marseille, 1979), pp. 408-414, Lecture Notes in Comput. Sci., 72, Springer, Berlin, 1979. (Michael F. Singer) 82j:12032 12H05 (68C20)

han, Donald H. Regions of convergence for a generalized Lambert series. Math. Mag. 54 (1981), no. 1, 28-32. (Shri Nivas Bhatt) 82e:40004 40A30 (30B10)

Trahtenbrot, B. A. Semantics and logic of algorithmic languages. (Russian) Semiotics and information science, No. 13 (Russian), pp. 47–85, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (Ryszard Janicki) 82e:68018 68B10 (68C01)

Trainor, L. E. H. (with Wise, Mark B.) Group theory and many-body diagrams. III.

Many-particle Green diagrams. Proc. Roy. Soc. London Ser. A 359 (1978), no. 1696, 111-119. (Authors' summary) 82b:81041 81C40

(with Goodwin, B. C.) The cleavage process in embryogenesis: a problem of typical biological form treated from a physical perspective. Special issue on physical concepts in tissue growth (Workshop, Neuenahr, 1979). Collect. Phenom. 3, no. 3-4, 259-272 (1981).

(Authors' summary) 82h:92004 92A05 (92A09)

Trajdos, Tadeusz See Schwartz, Laurent, 82c00003

Trajstman, A. C. A bounded growth population subjected to emigrations due to population ressure. J. Appl. Probab. 18 (1981), no. 3, 571-582. (J. D. Biggins) 82h:60164 (92A15)

Traddi, Lorenzo (with Massey, William S.) Links with free groups are trivial. Proc. Amer. Math. Soc. 82 (1981), no. 1, 155–156. (W. D. Neumann) 82i:57005 57M25
 Trampisch, H. J. Nichtparametrische Dichteschätzungen. Robust methods (25th Biometric

Colloq., Bad Nauheim, 1979) (German), pp. 14-26, Med. Inform. Statist., 20, Springer, Berlin, 1980. (See 82:62003) 62G05

Berlin, 1980. (See 82162003) 62C05

Tran, Lanh T. (with Puri, Madan L.) Empirical distribution functions and functions of order statistics for mixing random variables. J. Multivariate Anal. 10 (1980), no. 3, 405-425. (Jon A. Wellner) 82a:60034 60F05 (60F15, 62G30)

(with Puri, Madan L.) Invariance principles for rank statistics for testing

independence. Contributions to probability, pp. 267–282, Academic Press, New York, 1981. (T. Robertson) 82i:62075 62G30 (60F17)

nchiese, Susanna (with Nappi, Luigi) On the nonlinear Dirichlet problem in a plane angle. (Italian. English summary) Rend. Accad. Sci. Fis. Mat. Napoli (4) 47 (1980), 231-251 (1981). (M. Biroli) 82g:35042 35J65 (35B65)

ton Tran Cong See Ton Tran Cong

Tran Cong Liem (with Dagenais, Marcel G.) Numerical approximations of marginals from "well-behaved" joint posteriors. J. Statist. Comput. Simulation 12 (1980/81), no. 3-4, 157-173. (Authors' summary) 82h:62059 62F15 (65U05) 157-173. (Authors' summary) 82h:62059 62F15 (65U05)

lè düng Tráng See Lè Düng Tráng

Tränkle, E. (with Schrader, Robert) Analytic and numerical evidence from quantum field

theory for the hyperscaling relation $dv = 2\Delta - \gamma$ in the d=3 Ising model. J. Statist. Phys.

25 (1981), no. 2, 269-290. (Authors' summary) 82k:81105 81E25 (81-04) nsue, W. R. R. (with Kuperberg, Krystyna; Kuperberg, Włodzimierz) On the 2-homogeneity of Cartesian products. Fund. Math. 110 (1980), no. 2, 131-134. (C. E. Burgess) 82h:54043 54F20 (54B10)

usue, William R. (with Boyd, Michael W.) Properties of ultraproducts. Rend. Circ. Mat. Palermo (2) 28 (1979), no. 3, 387-397 (1980). (Stefan Heinrich) 82b:46021 46B99

Tran Van Nhung On the boundedness of the spectrum of some linear systems with stochastic perturbations. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 4, 413-422. (Halim Doss) 82g:60089 60H25 (93E15)

Tran Van Trung (with Janko, Zvonimir) On projective planes of order 12 which have a subplane of order 3. I. J. Combin. Theory Ser. A 29 (1980), no. 2, 254-256. (F. C. Piper) 51E15 (05B25)

(with Janko, Zvonimir) On projective planes of order twelve and twenty. Math. Z.

173 (1980), no. 2, 199–201. (F. C. Piper) 82t.51006 51E15 (05B25)
Plans projectifs d'ordre 16 ayant un groupe de Frobenius d'ordre 34. Math. Z. 175 (1980), no. 1, 97–102. (Dieter Jungnickel) 82a:05032 05B25

Eine Kennzeichnung der endlichen einfachen Gruppe J4 von Janko durch eine 2-lokale Untergruppe. Rend. Sem. Mat. Univ. Padova 62 (1980), 35–45. (Bernd Baumann) 82f:20035 20D05 (20D08)

(with Janko, Zvonimir) Projective planes of order 10 do not have a collineation of order 3. J. Reine Angew. Math. 325 (1981), 189-209. (Armin Herzer) 82h:51015 51E15 (05B05)

(with Janko, Zvonimir) Projective planes of order 12 do not have a nonabelian group of order 6 as a collineation group. J. Reine Angew. Math. 326 (1981), 152-157. (Dieter Jungnickel) 82j:51017 51E15 Jungnickel) 82j:51017

kov, V. A. (with Bogoljubov, N. N.; Išlinskii, A. Ju.; Kantorovič, L. V.; Sadovskii, B. N.; Sobolev, S. L.; Bobylev, N. A.) Mark Aleksandrovič Krasnosel'skii (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 215-220. (Editors) 82f:01079 01A70

Trappl, Robert See Progress in cybernetics and systems research, 82:00031
Traub, J. F. (with Woźniakowski, H.) Convergence and complexity of

interpolatory-Newton iteration in a Banach space. Comput. Math. Appl. 6 (1980), no. 4, 385-400. (B. Jankó) 82g-58012 58C15 (47H17, 65J15)

suber, Philip (with Gaveau, Bernard) Mesures et représentations non locales p groupes de Lie d'applications. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 10, A575-A578. (R. J. Plymen) 82m:22017 22E65 (58G32, 60G99, 81D25) (with Gaveau, Bernard) Une approche rigoureuse à la quantification locale du np de Yang-Mills avec cut-off. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 13, A673-A676. (Authors' summary) 82k:81051 81E10 (58D30)

(with Gaveau, Bernard) Constructions de diffusions et de mesures invariantes par le groupe de jauge sur l'espace des connexions. J. Funct. Anal. 38 (1980), no. 3, 324-341.

(Akira Asada) 82c.81042 81C35 (58D20, 58G11, 81E10)
Trautman, Andrzej Fiber bundles, gauge fields, and gravitation. General relativity and gravitation, Vol. 1, pp. 287–308, Plenum, New York, 1980. (P. K. Smrz) 82f.83080 83E10 (53C80, 81E10)

On groups of gauge transformations. Geometrical and topological methods in gauge theories (Proc. Canad. Math. Soc. Summer Res. Inst., McGill Univ., Montreal, Que., 1979), pp. 114-120, Lecture Notes in Phys., 129, Springer, Berlin, 1980. (Luc Vinet) 82a:81025 81E10 (53C05, 57S15, 83C99)

The gravitational field problem in Einstein's works. (Russian) Voprosy Istor. nan. i Tehn. 1980, no. 67-68, 15-22, 182. (Author's summary) 82j:83003

Radiation of energy and change in color of a point source of the Yang-Mills field. Phys. Rev. Lett. 46 (1981), no. 14, 875-877. (Author's summary) 82d:81114 (53C80)

michalska-Trautman, R. See Michalska-Trautman, R.

ann, Günther Zur Berechnung von Yang-Mills Potentialen durch holomorphe

Vektorbündel. Vector bundles and differential equations (Proc. Conf., Nice, 1979), pp. 183-249, Progress in Math., 7, Birkhäuser, Boston, Mass., 1980. (Werner Kleinert)

14F05 (14D20, 53C05, 81E10)

(with Siu, Yum Tong) Deformations of coherent analytic sheaves with compact supports. Mem. Amer. Math. Soc. 29 (1981), no. 238, iii+155 pp. (G. M. Henkin)

er, Rolf (with Kratz, W.) Zur Konvergenz von Funktionenreihen. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 99-104. (L. Leindler) 82d:40002 40A30 (42C15)

Mungar, 36 (1980), no. 1-2, 39-108. (L. Lexinos) and ordinary summability. J. Reine (with Cass, F. P.) On relations between strong and ordinary summability. J. Reine Math. 320 (1980). 137-141. (B. P. Mishra) 82g:40008 40F05 (40C05) Angew. Math. 320 (1980), 137-141. (B. P. Mishra) 82g:40008

(with Gawronski, Wolfgang; Shawyer, B. L. R.) A Banach space version of Okada's theorem on summability of power series. Period. Math. Hungar. 11 (1980), no. 4, 271–279. (D. C. Russell) 82d:40005 40C05 (30B10, 40A05)

(with Müller, Gerhard Otto) Fatou-Riesz theorems in general sequence spaces. Proc Edinburgh Math. Soc. (2) 23 (1980), no. 2, 199-205. (Hubert Tietz) 82c:40006

(with Stadtmüller, U.) Tauberian theorems for Laplace transforms in dimension D>1. J. Reine Angew. Math. 323 (1981), 127-138. (Sonja Lyttkens) 82i:44001 44A10 (40E10)

(with Indlekofer, Karl-Heinz) Fortsetzbare aquivalente Potenzreihen. Publ. Math. Debrecen 28 (1981), no. 1-2, 25-30. (G. Halász) 82m:30006 30B10 (30B40)

Travaglini, Giancarlo Dirichlet kernels and failure of localization principle for compact

groups. (Italian summary) Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 111-116 (1981). (John F. Price) 82m:43014 43A50

(with Giulini, Saverio) L^p-estimates for matrix coefficients of irreducible representations of compact groups. Proc. Amer. Math. Soc. 80 (1980), no. 3, 448-450. (Richard Mosak) 82b:22024 22E45 (43A75)

Travers, D. (with Abadie, J.) Une approche simplifié de la méthode de Box et Jenkins pour l'analyse et la prévision des séries temporelles unidimensionnelles. I. (English summary) RAIRO Rech. Opér. 14 (1980), no. 4, 355-380. (Authors' summary) 82b:62108 62M10 (90A20)

Travis, Curtis C. (with Gentry, R. D.) The existence and extremal characterization of eigenvalues for an nth order multiple point boundary value problem. Ann. Mat. Pura Appl. (4) 126 (1980), 223-232 (1981). (Krishna M. Das) 82g:34023 34B25 (34B10.

(with Post, Wilfred M.; DeAngelis, D. L.; Perkowski, J.) Analysis of compensatory Leslie matrix models for competing species. Theoret. Population Biol. 18 (1980), no. 1, 16-30. (Ju. I. Ljubič) 821:92040 92A15 (15A48)

(with Post, Wilfred M.; DeAngelis, D. L.) Evolution of mutualism between species. Differential equations and applications in ecology, epidemics, and population problems (Claremont, Calif., 1981), pp. 183-201, Academic Press, New York, 1981. (See 82m:92003) 92A17

(with Post, Wilfred M.) Global stability in ecological models with continuous time delay. Integral and functional differential equations (Proc. Conf., West Virginia Univ., Morgantown, W. Va., 1979), pp. 241-250, Lecture Notes in Pure and Appl. Math., 67, Dekker, New York, 1981. (Howard B. Stauffer) 82j:92056 92A15 (34K20, 45J05, 92A15 (34K20, 45J05,

Regularity of solutions to an inhomogeneous differential equation in Banach space. Integral and functional differential equations (Proc. Conf., West Virginia Univ.

Morgantown, W. Va., 1979), pp. 259-267, Lecture Notes in Pure and Appl. Math., 67, Dekker, New York, 1981. (G. F. Webb) 82j:34059a 34G10 (47D05) (with Haddock, A. Glen) On structural identification. Math. Biosci. 56 (1981),

no. 3-4, 157-173. (J. P. Kernevez) 82m:92038 92A09 (93B30)

Differentiability of weak solutions to an abstract inhomogeneous differential nation. Proc. Amer. Math. Soc. 82 (1981), no. 3, 425-430. (G. F. Webb) 82j:34059b

(with Yoshida, Norio) Oscillation criteria for third order hyperbolic characteristic initial value problems. *Proc. Roy. Soc. Edinburgh Sect. A* 88 (1981), no. 1-2, 135–140. (E. S. Noussair) 82i:35014 35B05 (35L75)

Travis, Larry (with Kellogg, Charles) Reasoning with data in a deductively augmented data management system. Advances in data base theory, Vol. 1 (Proc. Workshop, Toulouse, 1979), pp. 261-295, Plenum, New York, 1981. (See 82a:68040) 68R15

Travkin, Ju. 1. A method for solving a mixed problem of elasticity theory for a strip. Prikl. Meh. 16 (1980), no. 7, 73-81 (Russian); translated as Soviet Appl. Mech. 16 (1980), no. 7, 612-618 (1981). (Author's summary) 82a:73010 73C35 (35C99)

Travkin, S. I. Distribution of the number of maximal objects in partially ordered systems of

comparison. (Russian) Expert estimates. Voprosy Kibernet. (Moscow) No. 58 (1979), 109-117. (G. O. H. Katona) 82a:90020 90A08 (05A15, 06A10, 60C05) Travkin, Yu. I. See Travkin, Ju. I.

Trávníček, Luděk (with Nečas, Jindřich) Evolutionary variational inequalities and applications in plasticity. (Czech summary) With a loose Russian summa (1980), no. 4, 241–256. (Hélène Lanchon) 82e:49021 49A29 (73E99) mmary. Apl. Mat. 25

Traynor, Tim (with Fleischer, Isidore) Equivalence of group-valued measures on an abstract ynor, 1111 (with Piescher, Islands) Equivalence of group - Islands (1880), no. 11-12, 1416. (Russian summary) Bull. Acad. Polon. Sci. Ser. Sci. Math. 28 (1980), no. 11-12, 549-556 (1981). (Przemysław Kranz) 82m:28021 28B10 (06C99, 46G10)

549-556 (1981). (Przemysław Kranz) 82m:28021 28B10 (06C99, 46G10)
Trebels, Walter (with Bavinck, H.) On M_g multipliers for Jacobi expansions. Fourier analysis and approximation theory (Proc. Colloq., Budapest, 1976), Vol. I, pp. 101-112, Colloq. Math. Soc. János Bolyai, 19, North-Holland, Amsterdam, 1978. (Authors' introduction) 82c:42013 42A45

(with Gasper, George) Multiplier criteria of Hörmander type for Jacobi expansions. Studia Math. 68 (1980), no. 2, 187-197. (T. S. Chihara) 82b:42019

Trebilcott, Kathy (with Tomber, Marvin L.; Norris, Diane M.; Reynolds, Mary; Balzer, Cindy; Terry, Tamara; Corvell, Hellen; Ordway, Judy) A nonassociative algebra bibliography. Proceedings of the Second Workshop on Lie-Admissible Formulations (Sci. Center, Harvard Univ., Cambridge, Mass., 1979), Part B. Hadronic J. 3 (1979/80), no. 1, 507-725. (J. Dieudonné) 82i:17001 17-02 (00A15)

Trebin, H.-R. Investigation of defects in ordered media by methods of algebraic topology. Proceedings of the Conference on Kristallographische Gruppen (Univ. Bielefeld, Bielefeld, 1979), Part II. Match No. 10 (1981), 211-222. (Author's summary) 82k:82044 82A57 (53C05, 55P99, 58E07)

Treble, John G. Comment on: "Pricing under spatial competition and spatial monopoly" [Econometrica 45 (1977), no. 6, 1329–1338; MR 58 #15036] by D. R. Capozza and R. Van Order. With a reply by Capozza and Van Order. Econometrica 48 (1980), no. 5, 1327–1329. (Editors) 82m:90043 90A14

Treccani, Giulio (with Szegő, G. P.) What you should know about real-valued functions but were afraid to ask. Nonlinear optimization (Proc. Internat. Summer School, Univ.

mo, Bergamo, 1979), pp. 471-486, Birkhäuser, Boston, Mass., 1980. (T. Y. Li)

82e:58019 58C25 (26805, 90C30)

Treder, Hans-Jürgen (with Yourgrau, Wolfgang) On general-relativistic and gauge field theories. Found. Phys. 8 (1978), no. 9-10, 695-708. (Editors) 82i:83063 83D05 (53C60, 81E99)

(with Yourgrau, Wolfgang) Dirac's classical theory of electrons in the unitary field theory of Einstein with teleparallelism. Phys. Lett. A 68 (1978), no. 5-6, 415-417. (Authors' summary) 82b:83073 83E99

On the problem of physical meaning of quantization of gravitational fields. Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein, Vol. I, II, pp. 783-806, Johnson, New York, 1979. (See 82b:83002) Die teleskopischen Prinzipien der Gravitationstheorie. (English summary)

Machsches Prinzip, Mach-Einsteinsche Relativität der Trägheit und die Hertzsche Mechanik. Ann. Physik (7) 36 (1979), no. 1, 4–19. (Jean Chevalier) 82a:83001 (01A55, 49H05)

Einsteins hermitesche Relativitätstheorie als Unifikation von Gravo- und

Chromodynamik. (English summary) Ann. Physik (7) 37 (1980), no. 4, 250-258. (P. K. Smrz) 82b:83074 83E99 (81G05)

Einheitliche Feldtheorie mit Fernparallelismus und Diracs Elektrodynamik. V. Die asymptotische Form der statischen Felder in der einheitlichen Feldtheorie mit Fernparallelismus. (English summary) Ann. Physik (7) 37 (1980), no. 5, 357-359. (Z. Janković) 82j:83067 83E99 (83C50)

On noncovariant geometrization of the combined Einstein-Maxwell fields in general relativity. Tensor (N.S.) 34 (1980), no. 2, 109-112. (P. C. Vaidya) 82f:83054 (53B50, 83E15)

Trefethen, Lloyd N. Computation and application of Schwarz-Christoffel transformations Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 165-171, ARO Rep. 80, 3, U. S. Army Res. Office, Research Triangle Park, N.C., 1980. (D. Gaier) 82d:36012 30C30 (65E05)

Treiner, J. (with Krivine, H.) An expansion of the moments of powers of a Fermi

distribution. J. Math. Phys. 22 (1981), no. 11, 2484-2485. (Authors' summary) 82m-81087 81G35

Treisman, Michel (with Grimmett, Geoffrey) On taking up position in a group: a continuous-time Markov model for biased random movement. British J. Math. Statist. Psych. 33 (1980), no. 2, 247-261. (Authors' summary) 82a:60106 60J20 (92A20)

Tremaine, Scott (with Goldreich, Peter) Disk-satellite interactions. Astrophys. J. 241 (1980), no. 1, part 1, 425-441. (Ram Krishan Sharma) 82æ70010 70F15 (70M05.

(with Goldreich, Peter) The origin of the eccentricities of the rings of Uranus Astrophys. J. 243 (1980/81), no. 3, part 1, 1062-1075. (Authors' summary) 82c:85006 85A99 (70F15)

Trenbath, Brian R. (with Comins, Hugh N.) Subinjurious maintenance strategies for optimal control of nematodes. Renewable resource manangement (Proc. Workshop, Univ. Canterbury, Christchurch, 1980), pp. 189-205, Lecture Notes in Biomath., 40, Springer, Berlin, 1981. (See 82k:90001) 90A30

Trench, William F. An oscillation condition for differential equations of arbitrary order.

Proc. Amer. Math. Soc. 82 (1981), no. 4, 548–552. (С. A. Swanson) 82;:34031 34C10

Trenogin, V. A. ★Функциональный анализ. (Russian) [Functional analysis] "Nauka",

Mascow, 1980. 496 pp. (Ion Chitescu) 82k:46001 46-01 (47-01, 58-01, 65Jxx) (with Razumerko, B. G.) Regularization of approximation schemes in the case of a Fredholm equation. (Russian) Differencial nye Uravnenija 16 (1980), no. 6, 1132-1134, 1150-1151. (G. Marinescu) 82c:47013 47A50 (65J10)

(with Sidorov, N. A.) Regularization of linear controls on the basis of perturbation theory. (Russian) Differencial nye Uravnenija 16 (1980), no. 11, 2039–2049, 2110. (V. G. Romanov) 82a:47011 47A50 (49D20, 65J10)

Trent, Tavan T. New conditions for subnormality. Pacific J. Math. 93 (1981), no. 2, 459-464. (John B. Conway) 82i:47038 47B20

A Müntz-Szász theorem for $C(\overline{D})$. Proc. Amer. Math. Soc. 83 (1981), no. 2, 296-298. (S. Fisher) 82h:46071 46J10 (30E10)

(with Moore, Robert L.; Rogers, Donald D.) A note on intertwining M-hyponormal operators. Proc. Amer. Math. Soc. 83 (1981), no. 3, 514-516. (Mehdi Radjabalipour) 47B20

Trepat, A. (with Gardenes, E.) Fundamentals of SIGLA, an interval computing system over the completed set of intervals. (German summary) Computing 24 (1980), no. 2-3, 161–179. (Authors' summary) 82h:65035 65G10

Tresser, C. (with Coullet, P.; Arneodo, A.) Bifurcation and transition toward stochasticity for dissipative dynamical systems. Intrinsic stochasticity in plasmas (Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 341–363, École Polytech., Palaiseau, 1979.

(Michael J. Field) 82c:58036 58F13 (58F14) (with Arneodo, A.; Coullet, P.) A renormalization group with periodic behaviour. Phys. Lett. A 70 (1979), no. 2, 74-76. (Authors' summary) 82e:82002 (with Coullet, P.; Arneodo, A.) Transition to turbulence for doubly periodic flows. Phys. Lett. A 77 (1980), no. 5, 327-331. (Authors' summary) 82a:58036

(with Langford, W. F.; Arneodo, A.; Coullet, P.; Coste, Jean) A mechanism for a soft mode instability. Phys. Lett. A 78 (1980), no. 1, 11-14. (Marco Antonio Teixeira) 82k:58074 58F14 (35B35, 70K40)

(with Arneodo, A.; Coullet, P.) Occurrence of strange attractors in

three-dimensional Volterra equations. Phys. Lett. A 79 (1980), no. 4, 259-263. (Michael I Field) 82i-58077 58F13

(with Coullet, P.) Some universal aspects of the transition to stochasticity for nonconservative dynamical systems. Field theory, quantization and statistical physics, pp. 249–261, Math. Phys. Appl. Math., 6, Reidel, Dordrecht, 1981. (Frederick R. Marotto) 82h:58026 58F13 (82A05) 58F13 (82A05)

(with Arneodo, A.; Coullet, P.) Possible new strange attractors with spiral structure. Comm. Math. Phys. 79 (1981), no. 4, 573-579. (Frederick R. Marotto) 82k:58066 58F13 (34C35)

(with Brot, C.; Coste, Jean) Random walks with sign reversals and the intrinsic angular momentum behaviour on lattices. (French summary) J. Physique 42 (1981), no. 3, 427-435. (Authors' summary) 82c:82163 82A67 (60K35)

(with Arneodo, A.; Coullet, P.) A possible new mechanism for the onset of alence. Phys. Lett. A 81 (1981), no. 4, 197-201. (J. K. Hale) 82f:58057 (76F99)

th (with Metz, Charles) The exponential Radon transform. SIAM J. Appl.

Teoret. Mat. Fiz. 44 (1980), no. 2, 194-208. (Z. Janković) 82f:83003a 83A05 (70F99

(with Gaida, R. P.; Ključkovskii, Ju. B.) Lagrangian classical relativistic mechanics. Particle systems with direct interaction. II. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 2, 180-198. (Z. Janković) 821:83003b 83A05 (70F99, 70H35)
Trefjakov, N. V. (with Gol'Stein, E. G.) Modified Lagrange functions of a convex.

Pret pasov, N. V. (with Cost stein, E. C.) Procuring Largage functions of a convex programming problem. (Russian) Ekonom. i Mat. Metody 16 (1980), no. 4, 772-777. (I. Maruşciac) 821:99078 90C25
Tret'jakov, V. A. Some properties of mappings in space associated with the algebra of bicomplex numbers in modulus. (Russian) Application of functional analysis in approximation theory (Russian), pp. 129-136, 163, Kalinin. Gos. Univ., Kalinin, 1979. (Toma V. Tonev) 828:30060 30G35

On the properties of some elementary functions that are defined on the algebra of bicomplex numbers. (Russian) Mathematical analysis and the theory of functions olex numbers. (Russian) Mathematical analysis and the theory of functions an), pp. 99-106, Moskov. Oblast. Ped. Inst., Moscow, 1980. (Toma V. Tonev) 82i:3004 30G35 (78A35)

Tret'jakov, V. E. (with Krasovskii, N. N.) Saddle point of a stochastic differential game. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 3, 534-539. (Claudia Simie 821-93033 93E05 (90D25)

Tretkoff, Marvin D. The Fermat surface and its periods. Recent developments in several complex variables (Proc. Conf., Princeton Univ., Princeton, N. J., 1979), pp. 413-428, Ann. of Math. Studies, 100, Princeton Univ. Press, Princeton, N. J., 1981. (H. Mizuno) 14J25 (32G20)

(with Haimo, Franklin Tepper) Enlarging a free subgroup of a symmetric ely. Proc. Amer. Math. Soc. 82 (1981), no. 1, 31-35. (R. C. Lyndon) 82c:20 20B35 (20F05)

ical Society Transl ns, Ser. 2, 82a:0 See also Ar

Treve, Y. M. (with Manley, O. P.) A possible strange attractor in MHD flow. Intrinsic stochasticity in plasmas (Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 393-402, École Polytech., Palaiseau, 1979. (J. S. Joel) 82e:76076 76W05 (58F13) (with Foias, Ciprian) Minimum number of modes for the approximation of the solutions of the Navier-Stokes equations in two and three dimensions. Phys. Lett. A 85 (1981), no. 1, 35-37. (Authors' summary) 82j:76052 76F99 (76D05)

Trèves, François *Introduction to pseudodifferential and Fourier integral operators. Vol.

1. Pseudodifferential operators. The University Series in Mathematics. Plenum Press, New York-London, 1980. xxvii + 299 + xi pp. ISBN 0-306-40403-6 (Vesselin M. Petkov) 35Sxx (47G05, 58G15)

★Introduction to pseudodifferential and Fourier integral operators. Vol. 2. Fourier integral operators. The University Series in Mathematics. Plenum Press, New York-London, 1980. xiv+301-649+xi pp. ISBN 0-306-40404-4 (Vesselin M. Petkov) 58G15 (35Sxx, 47G05)

(with Baouendi, M. S.) A property of the functions and distributions annihilated by a locally integrable system of complex vector fields. Ann. of Math. (2) 113 (1981), no. 2, 387-421. (Michael Langenbruch) 82f:35057 35H05 (35F05, 58G05)

Erratum to: "Study of a model in the theory of complexes of pseudodifferential operators" [Ann. of Math. (2) 104 (1976), no. 2, 269-324; MR 54 #14014]. Ann. of Math. (2) 113 (1981), no. 2, 423. (From the text) 82i:35044 35H05 (58G15)

Treybig, L. B. Separation by finite sets in connected, continuous images of ordered pacta. Proc. Amer. Math. Soc. 74 (1979), no. 2, 326-328. (B. J. Pearson) 82a:54063 54F20 (54C05, 54F05, 54F50)

"Extending" maps of arcs to maps of ordered continua. Topology and order structures, Part 1 (Lubbock, Tex., 1980), pp. 83-93, Math. Centre Tracts, 142, Math. Centrum, Amsterdam, 1981. (L. E. Ward, Jr.) 82j:54076 54F25 (06F30, 54C99,

bui tuong Tri See Bui Tuong Tri

Triantafyllidis, N. Bifurcation phenomena in pure bending. J. Mech. Phys. Solids 28 (1980), no. 3-4, 221-245. (R. R. Huilgol) 82c:73039 73H05 (58E07, 58E30)

httaphyllon, Deborah Diller Invariants of finite groups acting nonlinearly on rational function fields. *J. Pure Appl. Algebra* 18 (1980), no. 3, 315–331. (W.-D. Geyer) 12F10 (14L30)

Trias, A. (with Gambini, R.) Exact solutions of the motion equations for a classical spinning particle with radiation damping. J. Phys. A 14 (1981), no. 3, 621-629. (Authors' summary) 824:78015 78A35 (78A40)

(with Gambini, R.) Geometrical origin of gauge theories. Phys. Rev. D (3) 23 (1981), 2, 553-555. (Authors' summary) 82b:81690 81E99 (58B20) o. 2, 553-555. (Authors' summary) 82b:81090

Tribel, H. See Triebel, Hans
Tricerri, Franco (with Vanhecke, Lieven) Curvature tensors on almost Hermitian manifolds. Trans. Amer. Math. Soc. 267 (1981), no. 2, 365-397. (Georgi Gančev) 82j:53071 53C15 (53C55)

Trick, Timothy N. (with Hajj, Ibrahim N.; Yang, Ping) Avoiding zero pivots in the modified nodal approach. IEEE Trans. Circuits and Systems 28 (1981), no. 4, 271–279. (Siegmar Gerber) 82g:94024 94C05 (90C08, 94C30)

Tricomi. Francesco Giacomo Retrospective look at Italian mathematics of the 20th century. (Italian) Rend. Accad. Naz. XL (5) 3 (1977/78), 125-128 (1979). (Editors) 82e:01076 01A60 (01A73)

See also Fettis, Henry E., 82g:65007a and Stuart, S. N., 82g:65007b

Triebel, Hans ★Spaces of Besov-Hardy-Sobolev type. Teubner-Texte zur Mathematik. With German, French and Russian summaries. BSB B. G. Teubner Verlagsgesellschaft, Leipzig, 1978. 207 pp. (Per Nilsson) 82g:46071 46E35 (42B25) (with Kufner, Alois) A generalization of the Hardy inequality. (Russian) Theory of

cubature formulas and the application of functional analysis to problems of mathematical physics (Russian), pp. 61–68, 166, Trudy Sem. S. L. Soboleva, No. 1, 1978, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1978. (Editors) 824:46034 46E35

Recent developments in the theory of function spaces and linear regular elliptic differential equations. Nonlinear analysis, function spaces and applications (Proc. Spring School, Horni Bradlo, 1978), pp. 149-175, Teubner, Leipzig, 1979. (See 81e:46001) 46E35

Maximal inequalities, Fourier multipliers, Littlewood-Paley theorems, and approximations by entire analytic functions in weighted spaces. (Russian summary)

Anal. Math. 6 (1980), no. 1, 87-103. (M. Jodeit, Jr.) 82g;46067 46E30 (42B25)

(with Carl, Bernd) Inequalities between eigenvalues, entropy numbers, and related tities of compact operators in Banach spaces. Math. Ann. 251 (1980), no. 2, 129-133. (A. A. Laptev) 82h:47022 47B05

Spline bases and spline representations in function spaces. Arch. Math. (Basel) 36

(1981), no. 4, 348–359. (Colin Bennett) 82i:46055 46E35 (41A15)
(with Edmunds, David E.) Entropy numbers for noncompact selfadjoint operators in Hilbert spaces. Math. Nachr. 100 (1981), 213–219. (N. Tija) 82i:47033 47B15

Complex interpolation and Fourier multipliers for the spaces B_n^s Besov-Hardy-Sobolev type: the case $0 , <math>0 < q \le \infty$. Math. Z. 176 (1981), no. 4, 495-510. (Hans G. Feichtinger) 82j:42016 42B30 (42B15, 46M35)

Triflet, T. (with Green, H. S.) Mathematical modelling of nervous systems. Math.

Modelling 1 (1980), no. 1, 41-61. (Authors' summary) 82j:92015

Trilonov, D. A. (with Nikolov, B.) SU(2)-coherent states of quantum systems. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 3, 309–312. (A. H. Kuškulei) 82k:81041 81D30 (22E45, 81C40)

Trigg, Avetta (with Trigg, Charles W.) 1979 and associated primes. A collection of manuscripts related to the Fibonacci sequence, pp. 91-92, Fibonacci Assoc., Santa Clara, Calif., 1980. (Editors) 82g:10019 10A30

Trigg, Charles W. 101 faces of 1979. A collection of manuscripts related to the Fibe ence, p. 88, Fibonacci Assoc., Santa Clara, Calif., 1980. (Editors) 82g:10016 10A30

The powerful 1979. A collection of manuscripts related to the Fibon icci sequence, 93, 10A45 Fibonacci Assoc., Santa Clara, Calif., 1980. (Editors) 82g:10032

A miscellary of 1979 curiosa. A collection of manuscripts related to the Fibonacci sequence, pp. 87-88, Fibonacci Assoc., Santa Clara, Calif., 1980. (Editors) 82g:10015

Determinants related to 1979. A collection of manuscripts related to the Fibonacci sequence, pp. 89-90, Fibonacci Assoc., Santa Clara, Calif., 1980. (Editors) 82g:10017

Reiterative routines applied to 1979. A collection of manuscripts related to the Fibonacci sequence, pp. 90-91, Fibonacci Assoc., Santa Clara, Calif., 1980. (Editors)

(with Trigg, Avetta) 1979 and associated primes. A collection of manuscripts related the Fibonacci sequence, pp. 91-92, Fibonacci Assoc., Santa Clara, Calif., 1980. (Editors) 82g:10019 10A30

Antimagic pentagrams with line sums in arithmetic progression, $\Delta = 3$. A collection of manuscripts related to the Fibonacci sequence, pp. 124-127, Fibonacci Assoc., Santa Clara, Calif., 1980. (D. A. Klarner) 82i:10017 10A50 (05B99)

Square repdigits. J. Recreational Math. 13 (1980/81), no. 3, 181-182. (From the mary) 82b:10011 10A30

A family of sixteenth order magic squares. J. Recreational Math. 13 (1980/81), no. 4, 269-273. (From the text) 82j:05041 05B30 (05B15)

Magic cuboctahedrons. The math tical Gardner, pp. 270-273, Wadsworth, 05B30 (52A25)

Belmont, Calif., 1981. (See 82b:00003) A nine-digit prime array. J. Recreational Math. 14 (1981/82), no. 1, 28-29, (From the text) 82h:10013

Special nine-digit palindromic primes. J. Recreational Math. 14 (1981/82), no. 1, 30-34. (Editors) 82i:10008 10A30

9 and 10 distinct digits in pentagonal numbers. J. Recreational Math. 14 (1981/82), no. 1, 41-44. (From the text) 82h:10016 10A40

Triggiani, Roberto Addendum: "A note on the lack of exact controllability for mild solutions in Banach spaces" [SIAM J. Control Optim. 15 (1977), no. 3, 407-411; MR 55 #8942]. SIAM J. Control Optim. 18 (1980), no. 1, 98-99. (Constantin Varsan) 82a:93013 93B05

(with Lasiecka, Irena) A cosine operator approach to modeling $L_2(0, T;$ $L_2(\Gamma)$)—boundary input hyperbolic equations. Appl. Math. Optim. 7 (1981), no. 1,

35-93. (Vesselin M. Petkov) 82b:35097 351.20 (93C20)

Trigub, R. M. Absolute convergence of Fourier integrals, summability of Fourier series and approximation by polynomials of functions on a torus. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 6, 1378-1409, 1439. (D. K. Ugulava) 82d:42011

Trillas Ruiz, Enrique (with Alsina, Claudi) ★Introducción a los espacios métricos generalizados. (Spanish) [Introduction to generalized metric spaces] Serie Universitaria, 49. Fundación Juan March, Madrid, 1978. 46 pp. ISBN 84-7075-077-0 (B. Schweizer) 51K99 (08A02, 54E99, 60B99)

(with Riera, T.) Note for the study of a concept of multivalued entropy for a finite fuzzy set. Proceedings of the First World Conference on Mathematics at the Service of Man rcelona, 1977), Vol. I, pp. 472-500, Univ. Politec., Barcelona, 1980. (S. Guiașu) Ra 82i:94031 94D05 (94A17)

Trimble, S. Y. (with Shah, Swarupchand M.) Analytic functions with univalent derivatives. Indian J. Math. 20 (1978), no. 3, 265-299. (M. S. Robertson) 82a:30016 (30C55)

Trimper, S. On the dynamics of the Ising model in a transverse field. Phys. Lett. A 66 (1978), no. 1, 71-73. (Author's summary) 82b:82092

Two-dimensional Heisenberg model and pseudoparticle solutions. Phys. Lett. A 70 (1979), no. 2, 114-116. (V. Z. Enol'skii) 82h:82093 82A67 (82A05)

Trinajstić, N. (with Džonova-Jerman-Blažič, B.; Mohar, B.) Algorithms for symbolic computation in chemistry: computing the acyclic polynomial of molecular graph. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. III, pp. 395-403, Reidel, Dordrecht, 1980. (Authors' summary) 82m:92093 92A40 (05C99, 68C20)

Trinks, Wolfgang Über B. Buchbergers Verfahren, Systeme algebraischer Gleichungen zu lösen. (English summary) J. Number Theory 10 (1978), no. 4, 475-488. (L. Carlitz)

13B25 (12-04)

- Tripathi, Amarendra Nath The spherically symmetric exterior field in isotropic coordinates Math. Ed. (Siwan) 14 (1980), no. 4, 55-60. (Author's summary) 82c:83018 (83C10)
- Tripathi, L. M. (with Singh, A. P.) A study of double Fourier series by Nörlund summability. Nederl. Akad. Wetensch. Indag. Math. 43 (1981), no. 1, 139-143. (Tikam Singh) 82g:42012 42B05 (40G05)
- Tripathi, N. K. (with Davison, Edward J.) Decentralized tuning regulators: an application No solve the load and frequency control problem for a large power system. Large Scale Systems 1 (1980), no. 1, 3–15. (Authors' summary) 821:93061 93D15
- Tripathi, Ram C. (with Michalek, Joel E.) The effect of errors in diagnosis and measurement on the estimation of the probability of an event. J. Amer. Statist. Assoc. 75 (1980), no. 371, 713-721. (Vitalijus Pikelis) 82m:62134 62H30
- Tripathi, T. N. Lagrange polynomials for Laguerre abscissas. Indian J. Math. 21 (1979), no. 1, 69-72. (R. C. Varma) 82c:33021 33A65
- Tripathy, D. N. (with Bose, S. K.) The path integral method and the large quantum number behaviour of the energy levels of coupled anharmonic oscillators. Phys. Lett. A 73 (1979), no. 5-6, 380-382. (Aubrey Truman) 82d:81044 81C35
- Tripathy, N. Some theorems concerning the absolute Hausdorff summability of Fourier series and allied series. Indian J. Math. 16 (1974), no. 2, 97-127. (From the text) 82c:42008 42A24 (40G05)
 - Application of absolute Hausdorff means to Fourier series. Indian J. Math. 16 (1974), no. 3, 157-172. (Editors) 82f:40013 40G05
 - Limitation theorems for Hausdorff means. Indian J. Math. 21 (1979), no. 1, 39-47. (B. P. Mishra) 82j:40007 40G05
- Triščenko, E. K. Asymptotic behavior of the risk of a Bayes estimate for multidimensional Gaussian observations. (Russian) Methods of information transmission and processing (Russian), pp. 73–80, 116, "Nauka", Moscow, 1980. (A. L. Rukhin) 82g:62055 62F12

 Trivedi, Kishor S. (with Sigmon, Timothy M.) Optimal design of linear storage hierarchies. tion transmission and processing
- J. Assoc. Comput. Mach. 28 (1981), no. 2, 270-288. (Authors' summary) 82d:68015
- Trivedi, Madhusudan C. (with Mudholkar, Govind S.) A Gaussian approximation to the distribution of the sample variance for nonnormal populations. J. Amer. Statist. Assoc. 76 (1981), no. 374, 479–485. (Authors' summary) 82h:62034 62E20
- redi, P. K. Some discrete approximations to divisia integral indices. *Internat. Econ. Rev.* 22 (1981), no. 1, 71-77. (From the introduction) 821:90029 90A99
- Trivedi, T. N. (with Dwivedi, A. P.) Some further dual series equations involving generalised Bateman K-functions. Ganita 28 (1977), 87-94. (Ram Kishore Saxena) 82m:45009 45F10 (33A30, 33A40)
- Trlifaj, L. Relations between the wave solutions and the Jost solutions of the energy shell for local central potentials. Czechoslovak J. Phys. B 31 (1981), no. 9, 969-976. (Author's mary) 82i:81129 81F05
- Trnková, Věra See Šedivá-Trnková, Věra
- Troallic, Jean-Pierre Une approche nouvelle de la presque-périodicité faible. Semigroup Forum 22 (1981), no. 3, 247-255. (A. Derighetti) 82f:43009 43A60 (22A15, 22A20) Trocenko, D. A. Nonrigid analytic surfaces of revolution. (Russian) Sibirsk. Mat. Z. 21
- (1980), no. 5, 100-108, 190. (A. V. Pogorelov) 82e:53095 53C45 Properties of regions with a nonsmooth boundary. (Russian) Sibirsk. Mat. Z. 22 30C60 (28A75) (1981), no. 4, 221-224, 232. (Matti Vuorinen) 82h:30015
- Troch, I. Optimization and other nonclassical concepts in system modelling. analysis and simulation, 1980 (Proc. Internat. Sympos., Berlin, 1980), pp. 106-112, Math. Research, 5, Akademie-Verlag, Berlin, 1980. (Author's summary) 82g:92009 (58C28, 93A10)
- On the interval of disconjugacy of linear autonomous differential equations. SIAM
- J. Math. Anal. 12 (1981), no. 1, 78–89. (W. J. Kim) 82f:34037 34C10
 Trochu, F. (with Delfour, M. C.; Hager, William W.) Discontinuous Galerkin methods for ordinary differential equations. Math. Comp. 36 (1981), no. 154, 455–473. (I. Norman 65L10 (65N30)
- Trockel, Walter (with Dierker, Egbert; Dierker, Hildegard) Smoothing demand by aggregation with respect to wealth. J. Math. Econom. 7 (1980), no. 3, 227-247. (G. Chichilnisky) 82a:90014 90A06 (58C27, 58E17)
- elstra, A. S. Extended bar induction of type zero. The Kleene Symposium (Proc. Sympos., Univ. Wisconsin, Madison, Wis., 1978), pp. 277-316, Stud. Logic Foundations Math., 101, North-Holland, Amsterdam, 1980. (Carlo Cellucci) 821:03054 03F55 Intuitionistic extensions of the reals. Nieuw Arch. Wisk. (3) 28 (1980), no. 1, 63-113.
 - (J. R. Moschovakis) 82a:03060 03F55 The interplay between logic and mathematics: intuitionism. Modern logic-a survey.
- pp. 197-221, Synthese Library, 149, Reidel, Dordrecht, 1981. (See 82f:03002)
 Troelstra, R. See Fel'dman, I. A., 82d:47034
- Troesch, B. A. A severe problem for two-point boundary value routines. Codes for boundary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 356-363, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 82b:65074) 65L10 (76W05)
 - Optimization of nested polygons. J. Optim. Theory Appl. 31 (1980), no. 1, 7–16. (Balder von Hohenbalken) 82g:52004 52A10 (49B40, 90C99)
- Trofimljuk, O. T. (with Alzenberg, N. N.) Shift, convolution, and correlation function of discrete signals in an arbitrary basis. (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 1, 47-51. (From the text) 82b:94003 94A05
- Trofimov, A. A. ★ Основы горной геометрии (геометрия шедр). (Russian) [Foundations of mining geometry (geometry of mineral resources)] Moskov. Gos. Univ., Moscow, 1980. 224 pp. (Publisher's description) 82g:86019 86A60 (51M99, 86A20)
- Trofimov, E. I. Completely randomized procedures for discrimination of hypothe (Russian) Issled. Prikl. Mat. No. 6 (1979), 83-91. (Paul Deheuvels) 82k:62012
- Trofimov, P. M. Some realizations of the method of feasible directions. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 27 Metody Mat.
- Programmir. i Priložen (1979), 66-73, 127. (Author's summary) 82m:90142 iov, V. I. The growth functions of finitely generated semigroups. Semigroup Forum 21 (1980), no. 4, 351-360. (From the text) 82g:20094 20M10
- Trofimov, V. M. (with Vlasov, V. F.; Kolmogorov, A. N.; Ponomarenko, V. G.; Judin, D. B.) Aleksandr Filippovič Timan (on the occasion of his sixtieth birthday). (Russian)

- Uspehi Mat. Nauk 36 (1981), no. 2(218), 221-226. (Editors) 82f:01153
- Trofimov, V. V. Imbedding of finite groups by regular elements in compact Lie groups. (Russian) Trudy Sem. Vektor. Tenzor. Anal. No. 19 (1979), 178-201. (R. O. Nazarjan) 22E20 82b-22015
 - (with Fomenko, A. T.) A method of Hamiltonian flow construction on symmetric spaces and the integrability of some hydrodynamic systems. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1349-1353. (V. Oproiu) 82b:58038 58F05
 - Euler equations on finite-dimensional solvable Lie groups. (Russian) Izv. Akad. uk SSSR Ser. Mat. 44 (1980), no. 5, 1191-1199, 1215. (V. Oproju) 82e:70006 70E15 (58F07)
- Tröger, G. (with Robaschik, D.; Wieczorek, E.) Light-cone expansion of matrix elements of current commutators. Lett. Math. Phys. 4 (1980), no. 1, 53-60. (Authors' summary) 82c:81064 81D15 (22E70, 32A15)
- oger, H. Über chaotisches Verhalten mechanischer Systeme. Z. Angew. Math. Mech. 58 (1978), no. 6, 182-183. (Editors) 82d:58049 58F13
- Heteroklinische Punkte und das Pendel mit periodisch erregtem Aufhängepunkt. Z. ew. Math. Mech. 59 (1979), no. 5, T158-T160. (J. S. Joel) 82h:70000
- nko, V. S. Some relativized P-algebras of multiplace functions. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 6, 85-86. (O. Kopeček) 82e:08001
- Troianiello, Giovanni M. Unilateral Dirichlet problems of the nonvariational type Mat. Pura Appl. (4) 122 (1979), 365-381. (Emmanuele di Benedetto) 821s:35052 35J25 (35R35, 49A29, 49D29)
- Troisi, Mario (with Infantino, Roberto) Degenerate elliptic operators in domains of Re. (Italian. English summary) Boll. Un. Mat. Ital. B (5) 17 (1980), no. 1, 186-203. (Authors' summary) 82j:35072 35J70 (47F05)
- Trojan, J. M. Tight bounds on the complexity index of one-point iterations. Comput. Math. Appl. 6 (1980), no. 4, 433-441. (Author's summary) 82e:68045 68C25 (65H10, 90C30)
- Trojan, V. N. A statistical algorithm for recursive estimation of parameters of seismic waves. (Russian) Questions in the dynamical theory of seismic wave propagation, No. X pp. 173–183, 215, "Nauka" Leningrad. Otdel., Leningrad, 1981. (See 82k:86002) 65Q05 (86A15)
- embetta, Maurizio Convergence structures by filters. Proceedings of the Meeting on General Topology (Univ. Trieste, Trieste, 1978), pp. 159-161, Univ. degli Studi Trieste, Trieste, 1981. (See 82f:54001) 54A20
- Tromp, H. A semiheuristic algorithm for efficient worst-case analysis. 1979 International Internatio Symposium on Circuits and Systems (Tokyo, 1979), pp. 276-279, IEEE, New York, 1979. (See 82e:94002) 90C35
- du'o'ng Trong Nhân See Du'o'ng Trong Nhân
- vũ Trọng Tuần See Vũ Trọng Tuần
- majewska-Tronowicz, Jadwiga See Majewska-Tronowicz, Jadwiga
- ak, Bogdan On division with the remainder in $K[x_1, \dots, x_k]$. Demonstratio Math. 13 (1980), no. 2, 343-354. (Maurice Mignotte) 82c:12019 12E05
- Tropfke, Johannes * Bibliographie zur Geschichte der Elementarmathematik. (German) [Bibliography to History of elementary mathematics] Reprint of the bibliography from History of elementary mathematics, Vol. 1 [fourth edition, de Gruyter, Berlin, 1980; MR 81j:01004]. Deutsches Museum f\(\tilde{u}\) die Geschichte der Naturwissenschaften und der Technik, Forschungsinstitut, Munich, 1979. pp. 661-725. (Editors) 82k:00012 00A15 (01A05)
- Tropinin, V. N. Calculations of the phase of a dual turn for some types of gravitational fields. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 10, 94-95. (From the text) 826-83075 **83F05**
- Tropp, Henry S. Kenneth O. May, July 8, 1915-December 1, 1977. Isis 70 (1979), no. 253, 419-422. (Editors) 82e:01103 01A70
- Trotman, D. J. A. (with Navarro Aznar, V.) Whitney regularity and generic wings. (French summary) Ann. Inst. Fourier (Grenoble) 31 (1981), no. 2, v, 87-111. (A. Verona) 58A35 (57R99, 58C27)
- Trottenberg, Ulrich (with Winter, Gerd) On faces and W-irreducible operators in finite-dimensional linear spaces. Linear Algebra Appl. 33 (1980), 87-109. (Robert Recurrency, 87e-15016. 15A48 (47B55) Beauwens) 82e:15016
- Trotter, L. E., Jr. (with Giles, Rick; Oyama, T.) Related necessary conditions for completing partial Latin squares. J. Combin. Theory Ser. A 29 (1980), no. 1, 20-31.
 (Derbian F. Hsu) 82g:05024 05B15 (90C10)
- (with Huang, H. C.) A technique for determining blocking and anti-blocking polyhedral descriptions. Combinatorial optimization. Math. Programming Stud. No. 12 (1980), 197-205. (Klaus Lommatzsch) 82g:90066 90C05 (05B30, 52A20)

 Trotter, William T., Jr. (with Maurer, Stephen B.; Rabinovitch, Issie) Partially ordered sets
- with equal rank and dimension. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 627-637. (Authors' summary) 82h:06004
 - (with Maurer, Stephen B.; Rabinovitch, Issie) Large minimal realizers of a partial order, II. Discrete Math. 31 (1980), no. 3, 297-313. (Author's review (W.T.T.)) 82a:06002
 - (with Maurer, Stephen B.; Rabinovitch, Issie) A generalization of Turán's theorem to directed graphs. Discrete Math. 32 (1980), no. 2, 167-189. (Aldo G. S. Ventre) 05C35 (04A05, 05C20, 06A10)
 - Stacks and splits of partially ordered sets. Discrete Math. 35 (1981), 229-256. (J. C. Ault) 82i:06003 06A10
- Troudet, T. (with Arvieu, R.) Shapes of nuclear configurations in a cranked harmonic oscillator model. Ann. Physics 134 (1981), no. 1, 1-44. (Authors' summary) 82i:81159 81G35 (58F14)
- On the extended Thomas-Fermi approximation to the cranked harmonic oscillator. Phys. Lett. B 99 (1981), no. 6, 437-443. (Author's summary) 824:81163 81G35
- **Troue, Jacques** Solution of the recurrent equation $u_{n+1} = 2u_n u_{n-1} + u_{n-3}$. A collection of manuscripts related to the Fibonacci sequence, pp. 18–19, Fibonacci Assoc., Santa Clara,
- Calif., 1980. (Editors) 82g:10024 10A35 (10B05)

 Troup, G. J. (with Perlman, H. S.) Coherent states and Fock states at very high average photon numbers. Austral. J. Phys. 34 (1981), no. 4, 357–360. (Authors' summary) 82k81182 81L05 (81D30)

- (with Deakin, M. A. B.) The logical status of thermodynamic proofs of mathematical rems. Phys. Lett. A 83 (1981), no. 6, 239-240. (Lawrence Sklar) 82i:00026
- utman, J. L. (with Hrusa, W.) Elementary characterization of classical minima. Amer. Math. Monthly 83 (1981), no. 5, 321-327. (R. Osserman) 82f:49001 49-01 (53-01)
- Paul B. (with Hutchinson, Joan P.) Some pigeonhole principle results extener. Math. Monthly 87 (1980), no. 8, 648-651. (W. D. Wei) 82g:05016 05A99 mbridge, C. W. Applications of integral equation methods to the numerical solution of magnetostatic and eddy-current problems. Finite elements in electrical and magnetic field problems, pp. 191–213, Wiley, Chichester, 1980. (R. Kress) 82c:78009 78A30
- Troy, William C. (with Klaasen, Gene A.) The stability of traveling wave front solutions of a reaction-diffusion systems. SIAM J. Appl. Math. 41 (1981), no. 1, 145-167. (Piero de Mottoni) 822;35063 35K55 (92A10, 92A15) Mottoni) 82j:35063
- Troya, J. M. (with Vaquero, A.; Sánchez P., J. M.) Linear arrangement of a digraph.
- Troya, J. M. (with Vaquero, A.; Sanchez P., J. M.) Linear arrangement of a digram.
 Second International Conference on Information Sciences and Systems (Univ. Patrax, Patrax, 1979), Vol. II, pp. 70–79, Reidel, Dordrecht, 1980. (See 824:93002) 68C25
 Trubnikov, B. A. (with Slezin, Ju. B.; Sanolienko, B. I.; Storčeus, A. V.) On the theory of deep volcanic tremor. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 6, 1337–1340.
 (From the text) 82i:86005 86A15
- vitz, E. (with Deift, P.; Lund, F.) Nonlinear wave equations and constrained harmonic motion. Comm. Math. Phys. 74 (1980), no. 2, 141-188. (Hélène Airault) 35Q20 (14K20, 58F07, 81C05)
- (with Deift, P.) An identity as (with Deift, P.) An identity among squares of eigenfunctions. Comm. Pure Appl. Math. 34 (1981), no. 5, 713-717. (H. Hochstadt) 82g:34022 34B25 (14K20, 34B30) (with Deift, P.) A continuum limit of matrix inverse problems. SIAM J. Math. Anal.
- 12 (1981), no. 6, 799-818. (Authors' summary) 82m:65037 65F99
 ckenbrodt, A. Zur Vernachlässigung höherfrequenter Schwingungsformen bei
 mechanischen Systemen. [On neglecting high frequency oscillation modes in mechan tems] Z. Angew. Math. Mech. 61 (1981), no. 4, T65-T67. (Author's introduction) 73K12 (70J99)
- nger, Neil S. On the first eigenvalue of nonuniformly elliptic boundary value roblems. Math. Z. 174 (1980), no. 3, 227–232. (Z. C. Motteler) 82b:35114 (35J65)
- Harnack inequalities for nonuniformly elliptic divergence structure equations.

 Invent. Math. 64 (1981), no. 3, 517-531. (D. E. Edmunds) 82m:35051 35J60 (53C45)
- True, Hans (with Ladyženskaja, Olga A.; Solonnikov, V. A.) Résolution des équations de Stokes et Navier-Stokes dans des tuyaux infinis. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 4, 251-254. (Authors' summary) 82c:35066 35Q10
- emper, K. Complement total unimodularity. Linear Algebra Appl. 30 (1980), 77-92. (Marvin Marcus) 82e:15014 15A39
 - (with Soun, Y.) Single commodity representation of multicommodity networks. SIAM J. Algebraic Discrete Methods 1 (1980), no. 3, 348-358. (A. K. Dewdney) 90B10 (05C20)
- dell, Clifford Proof that my work estimate implies the Clausius-Planck inequality. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 68 (1980), no. 3, 191–199. (P. A. Goodinson) 82k:80002 80A10
- Rapport sur le pli cacheté no. 126, paquet présenté à l'Académie des Sciences dans la ance du 1er octobre 1827, par M. Cauchy, et contenant le mémoire: "Sur l'équilibre et le mouvement intérieur d'un corps solide considéré comme un système de molécules distinctes les unes des autres". C. R. Acad. Sci. Paris Vie Académique 291 (1980), no. 5-8, 33-46. (J. Dieudonné) 82e:01070 01A55
- Truhil'o, R. (with Vasilevskii, N. L.) On the theory of φ-operators in matrix algebras of operators. (Russian) Linear operators. Mat. Issled. No. 54 (1980), 3-15, 164. (A. S. Dynin) 82h:47015 47A53 (47C05, 58G12)
- ini, P. (with Cassinelli, G.) Toward a generalized probability theory: conditional probabilities. Problems in the foundations of physics (Proc. Internat. School Phys. "Enrico Fermi", Course LXXII, Varenna, 1977), pp. 125–133, North-Holland, Amsterdam, 1979. (See 82m:81003) 81B10 (82A05)
 - (with Biedenharn, L. C.; Cassinelli, G.) Imprimitivity theorem and quaternionic quantum mechanics. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part B. Hadronic J. 4
- (1980/81), no. 3, 981-994. (Authors' summary) 82h:81056 81C99 (22D30, 81D05) (with Biedenharn, L. C.) A comment on the dynamics of M_3^8 . Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part B. Hadronic J. 4 (1980/81), no. 3, 995-1017. (Authors' summary) 82h:81057
- 81C99 (17C10) Truvan, Aubrey The polygonal path formulation of the Feynman path integrals (Proc. Internat. Colloq., Marseille, 1978), pp. 73-102, Lecture Notes in Phys., 106, Springer, Berlin, 1979. (R. Høegh-Krohn) 824:81051 81C35 (58D30) (with Elworthy, David) The classical limit of quantum mechanics in a curved space
- background. Functional integration theory and applications (Proc. Colloq., nin-la-Neuve, 1979), pp. 65-87, Plenum, New York, 1980. (Editors) 82h:81043 81C35 (58D30, 58G32)
- ner, M. R. Reconstructing pictures from projections: on the convergence of the ART algorithm with relaxation. (German summary) Computing 26 (1981), no. 3, 189-195.
- aggrithm win relaxation. (Verman augment)
 (Author's summary) 821-88996 68G10

 mper, Manfred Un principe variationnel pour les géodésiques affines et le transport de Jacobi d'une forme de Pfaff. (English summary) C. R. Acad. Sci. Paris Sèr. A-B 291 (1980), no. 11, A615-A618. (Karsten Grove) 82c:58016 58E10 (with Schattner, Ruprecht) World vectors, Jacobi vectors and Jacobi one-forms on a
 - ifold with a linear symmetric connection. J. Phys. A 14 (1981), no. 9, 2345-2352. (C. Dodson) 82i:53030 53B05 (53B20, 83C99) T. J. Dodson) 82i:53030
- ngô việt Trung See Ngô Việt Trung tran van Trung See Tran Van Trung
- Trunov, N. V. (with Serstnev, A. N.) On the general theory of integration with respect to a weight in algebras of operators. I. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1978. no. 7(194), 79-88. (József Szücs) 82a:46079a 46L50
 - (with Serstnev, A. N.) On the general theory of integration with respect to a weight in algebras of operators. II. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1978, no. 12, 88-98. (József Szücs) 82x:46079b 46L50

- mutative analogue of the space L_p. (Russian) Izv. Vysš. Učebn. Zaved.
- Matematika 1979, no. 11, 69-77. (T. A. Sarymsakov) 82a-46080 461.50 ong, T. K. (with Reed, I. S.) Simple proof of the continued fraction algorithm for decoding Reed-Solomon codes. Proc. Inst. Electr. Engrs. 125 (1978), no. 12, 1318–1320. (Authors' summary) 82m:94039 94B15
- (with Miller, Robert L.; Reed, I. S.) A theorem for computing primitive elements in the field of complex integers of a characteristic Mersenne prime. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 1, 119-120. (Bart Rice) 82b:12022 12C15
- (with Reed, I. S.; Benjauthrit, B.) Addendum to: "A new hybrid algorithm for computing a fast discrete Fourier transform" [IEEE Trans. Comput. 28 (1979), no. 7, -492; MR 80e:68078] by Reed and Truong. IEEE Trans. Comput. 30 (1981), no. 6,
- 454. (From the text) 82h:68051 68C05 (10-04, 65T05) (with Reed, I. S.; Miller, Robert L.; Huang, J. P.) Fast transforms for decoding Reed-Solomon codes. Proc. IEE-F 128 (1981), no. 1, 9-14. (Prem Nath) 82j:94020
- T. T. (with Schotte, K. D.) Phase transition of one-dimensional Coulomb system.
 Phys. Rev. A (3) 22 (1980), no. 5, 2183-2188. (Authors' summary) 82c:82038 82A25
 (with Schotte, K. D.) Inhomogeneous eight-vertex system and the one-dimensional ni gas. Phys. Rev. Lett. 47 (1981), no. 5, 285-288. (Authors' summary) 82g:82023 82A25 (82A15, 82A67)
- Truong Cong Nghè (with Yamamuro, S.) Locally convex spaces, differentiation and manifolds. Special issue dedicated to Władysław Orlicz on the occasion of his seventy-fifth birthday. Comment. Math. Special Issue 2 (1979), 329-338. (Theodore S. 58C20 (46G05) Bolis) 82e:58017
- ong-Van, Benoît Une généralisation du théorème de Kolmogorov-Aronszajn. Process V-bornes q-dimensionnels: domaine spectral—dilatations stationnaires. Ann. Inst. H. Poincaré Sect. B (N.S.) 17 (1981), no. 1, 31-49. (C. C. Heyde) 82h:60069 60G12
 - Un critère pour que l'opérateur retard d'un processus ARIMA saisonnier soit linéaire et borné. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 5, 331-334. (Author's summary) 82d:62141 62M10
 - Espace autoreproduisant d'une mesure spectrale et intégrales de Hellinger: applications aux processus. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292
- (1981), no. 17, 841-844. (Author's summary) 82g:60051 60G10 (60B15)

 Truppov, V. A. Affine geometry of the manifold E(0, n-1, 2n-2) associated with a first-order partial differential equation. (Russian) Differential geometry of ho spaces (Russian), pp. 110–122, Irkutsk. Gos. Univ., Irkutsk, 1979. (A. Goetz) 82c:53011
 53A15 (35F05, 53B05)
- The fundamental connection of the manifold E(0, n-1, 2n-2). (Russian) Differential geometry of homogeneous spaces (Russian), pp. 123-127, Irkutsk. Gos. Univ.,
- Irkutsk, 1979. (A. Goetz) 82c:53012 53A15 (53B05) Truskova, N. F. (with Vukajlović, F. R.) Algebra of the incomplete integrals of the quantum-mechanical two-center problem. Jadernaja Fiz. 32 (1980), no. 1, 118-127 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 1, 62-66 (1981). (Authors' summary) 82h:81026 81C05 (81D05, 81G55)
- Trusov, A. F. Asymptotic stability of nonstationary difference schemes. (Russian) Ural. Gos. Univ. Mat. Zap. 12 (1979), no. 1, 132-147, 159. (J. Albrycht) 82e:39004 (65005)
- Trusov, P. V. (with Njašin, Ju. I.) An approach to control of the level of residual stresses. (Russian) Differencial'nye Uravnenija 16 (1980), no. 3, 483-491, 573. (Petr Procházka) 82a:73063 73U05
- Trustrum, G. B. (with Goldie, Charles M.) On slow decrease. J. London Math. Soc. (2) 22
- (1980), no. 3, 486–494. (D. Leviatan) 821-40006 40E99
 szczyński, Mirosław An algorithm of finding an acyclic f-graph for a family of sets.
 Fund. Inform. (4) 3 (1980), no. 3, 379–395. (Author's summary) 82a:68131 68E10 A simple algorithm for finding a cycle of length greater than three and without diagonals. (German summary) Computing 27 (1981), no. 1, 89-91. (Author's summary) 82i:68070 68E10 (05C38)
- Trutney, V. M. Convolution equations in convex domains of cone type in Cⁿ. (Russian) Some problems of multidimensional complex analysis (Russian), pp. 161–172, 269–270, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Fiz., Krasnoyarsk, 1980. (M. Dostal) 82h:32004 32A15 (46F15)
- Trutovskii, V. B. On the question of the mathematical description of systems. (Russian anie 1978, no. 2, 69-81, 96. (Wolfgang Feitscher) 82a:68179 (04A05, 93A10)
- Trutt, David (with de Branges, Louis) Quantum Cesàro operators. Topics in function analysis (essays dedicated to M. G. Krein on the occasion of his 70th birthday), pp. 1-24, Advances in Math., Suppl. Studies, 3, Academic Press, New York, 1978. (Richard E. Frankfurt) 82e:47039 47B38 (46E20, 47B37)
 - (with de Branges, Louis) Orthogonal Newton polynomials. Adv. in Math. 37 (1980), no. 3, 251-271. (D. A. Herrero) 82j:33018 33A65 (42C05)
- Truzzi, Marcello (with Harary, Frank) The graph of the zodiac: on the persistence of the scientific paradigm of astrology. J. Combin. Inform. System Sci. 4 (1979), no. 2, 147-160. (J. S. Joel) 82e:00004 00A05 (05C99)
- Tryhuk, Václav (with Radochová, Drahoslava) Die asymptotischen Formeln für die Lösungen der kanonischen Differentialgleichung 3. Ordnung. Arch. Math. (Brno) 16 (1980), no. 1, 51-58. (E. Meister) 82d:34059 34D05 (34E05)
 - The most general transformation of homogeneous linear differential retarded equations of the first order. Arch. Math. (Brno) 16 (1980), no. 4, 225-230. (Tadeusz Dłotko) 82f:34088 34K05
- Trynkin, Ju. V. Smoothness of the Bellman function. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1981, no. 1, 7-11, 106. (P. Rutkauskas) 82g:49025 49(20)
- Tsahek, L. K. See Cabek, L. K.
- e-Tsadik, Girma See Wolde-Tsadik, Girma
- Tsagas, Grigorios Some properties of a special Einstein manifold. Ann. Mat. Pura Appl. (4) 124 (1980), 381–391. (David Blair) 82b:53065 53C25 (53C20)

 Tsai, Long Lieh (with Chin, Francis Y.) On J-maximal and J-minimal flow-shop schedules.
- J. Assoc. Comput. Mach. 28 (1981), no. 3, 462-476. (Authors' summary) 82m:90087 90B35 (68C25)

Tsai, Long Yi See Ts'ai, Lung I

Tsai, Lun (with Ng, Peter A.) The design and implementation of a scheme for large ordered indices. Internat. J. Comput. Inform. Sci. 9 (1980), no. 5, 407-434. (Authors' summary) 82b:68016 68B15 (68H05)

Ts'ai, Lung I Periodic solutions of nonlinear elliptic equations. Socchow J. Math. 5 (1979), 129–140. (Russell C. Thompson) 82m:35052 35J65 (35B10, 58E05)
Tsalenko, M. Sh. See Calenko, M. S.

(with Martin, H. O.) Renormalization group specific heat and magnetization of the Ising ferromagnet in cubic and hypercubic lattices. Z. Phys. B 44 (1981), no. 4, 325-331. (Authors' summary) 82m:82017 82A25 (82A68)

masphyros, G. (with Andrianopoulos, N.; Theocaris, P. S.) An algorithm for the numerical inversion of Mellin transform by using Laguerre polynomials. Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 25 (1980), no. 3, 489–495. (P. M. Gupta) 82;65093 65R10

(with Theocaris, P. S.) Méthode générale de quadrature des intégrales du type Cauchy. Rev. Roumaine Sci. Tech. Sér. Méc. Appl. 25 (1980), no. 6, 839–856. (Authors' summary) 82h:65019 65D30

ardis, Michael (with Mason, D. P.) Magnetohydrodynamics in a Riemann-Cartan ace-time. Gen. Relativity Gravitation 13 (1981), no. 2, 123-134. (P. C. Vaidya) 83C55 (76W05, 83E10)

Methods for deriving solutions in generalized theories of gravitation: the Einstein-Cartan theory. Phys. Rev. D (3) 24 (1981), no. 6, 1451-1457. (Author's summary) 82h:83065 83E10

Tsao, How Jan On the risk performance of Bayes empirical Bayes procedures for classification between N(-1,1) and N(1,1). Statist. Neerlandica 34 (1980), no. 4,

197-208. (James Berger) 82f:62023 62C12
Tsao, Hung Sheng (with Shei, Sun-Sheng) Scalar quantum chromodynamics in two nd the parton model. Nuclear Phys. B 141 (1978), no. 4, 445-466. (Authors' summary) 82i:81139 81G05

Ts'ao, Liang Chi A note on the cofinal problem for Hilbert modular groups. Chinese J.

Math. 8 (1980), no. 1, 61-62. (J. Spilker) 821:10028 10D07 (10D20, 20H05)
o, Nai Kuan The numerical instability of Bini's algorithm. Inform. Process. Lett. 12 (1981), no. 1, 17-19. (Author's introduction) 82i:65029 65F30

On the orthogonal factorization and its updating in band-structured matrix computations. J. Franklin Inst. 311 (1981), no. 6, 355-381. (E. R. Hansen) 82h:65026 65F10

Tsaregradskiy, I. P. See Caregradskii, I. P.

Tsarpalias, A. (with Negrepontis, S.) A nonlinear version of the Amir-Lindenstrauss method. Israel J. Math. 38 (1981), no. 1-2, 82-94. (Y. Benyamini) 82f:46018 46B20 A combinatorial theorem. J. Combin. Theory Ser. A 30 (1981), no. 2, 158-168. (N. H. Williams) 82j:04003 04A20 (05A05, 28A12)

Tsay, Yih T. (with Shieh, Leang San) State-space approach for self-tuning feedback control with pole assignment. Proc. IEE-D 128 (1981), no. 3, 93-101. (Authors' summary) 82e:93087 93D15

Tscherning, C. C. Comparison of some methods for the detailed representation of the earth's gravity field. Rev. Geophys. Space Phys. 19 (1981), no. 1, 213-221. (Author's summary) 82h:86007 86A20

ntcheva, S. See Čukova-Dančeva, S.

Tschudi, Hans Rudolf (with Hirsbrunner, Béat) On the kinetics of condensation through homogeneous nucleation. Helv. Phys. Acta 54 (1981/82), no. 1, 85-105. (Authors' summary) 82h:82034 82A50

Tse, Edison (with Rouhani, Ramine) Bounding the behavior of positive dynamic systems. J. Econom. Dynamics Control 2 (1980), no. 3, 283-299. (M. Ali Khan) 82e:93005 93A15 (58F13, 58F30)

(with Rouhani, Ramine) Structural design for classes of positive linear systems. IEEE Trans. Systems Man Cybernet. 11 (1981), no. 2, 126-134. (Authors' summary) 824-90039 90A16

Tsebers, A. O. See Cebers, A. O.

Tseytlin, A. A. See Ceitlin, A. A.

Tsiatis, Anastasios A. A large sample study of Cox's regression model. Ann. Statist. 9 (1981), no. 1, 93-108. (H. K. Hsieh) 82g:62036 62E20

The asymptotic joint distribution of the efficient scores test for the proportional hazards model calculated over time. Biometrika 68 (1981), no. 1, 311-315. (R. D. Gill) 82h:62183 62P10

Tsing, Nam Kiu On the shape of the generalized numerical ranges. Linear as Algebra 10 (1981), no. 3, 173-182. (Thomas H. Foregger) 82m:15026 15A60
Tsinganos, Kanaris C. Magnetohydrodynamic equilibrium. I. Exact solutions of the

equations. Astrophys. J. 245 (1981), no. 2, part 1, 764-782. (Salvatore Rionero) 82g:76047 76W05 (76E25, 85A30)

Tsirulnikov, Bella On conservation of barrelledness properties in locally convex spaces. (French summary) Bull. Soc. Roy. Sci. Liège 49 (1980), no. 1-2, 5-25. (T. Husain) 46A20 (46A07)

(with De Wilde, Marc) Barrelled spaces with a B-complete completion. Manuscripta Math. 33 (1980/81), no. 3-4, 411-427. (H. Hogbe-Nlend) 82e:46007 46A07

Remarkable hyperplanes in locally convex spaces of dimension at most c. Canad. Math. Bull. 24 (1981), no. 3, 369-371. (M. Valdivia) 82k:46003 46A05 Tsokos, Chris P. (with Padgett, W. J.) Estimation of reliability for a class of life

distributions with a stochastic parameter. Metron 34 (1976), no. 3-4, 333-359 (1979). (Authors' summary) 82es2162 62N05 (Authors' summary) 82e:62162

(with Hess, James; Kagiwada, Harriet; Kalaba, Robert; Spingarn, K.) Optimal tactics for close support operations. II. Degraded com nications with line ynamics. Appl. Math. Comput. 5 (1979), no. 3, 199-212. (Josef Kaška) 90D35 (90A05, 90D45)

(with Rust, A., III) Recent developments in nonparametric estimation of probability density. Applied stochastic processes (Proc. Conf., Unio. Georgia, Athens, Ga., 1978), pp. 269-281, Academic Press, New York, 1980. (T. Robertson) 82e:62061 62G05

(with Hess, James; Kagiwada, Harriet; Kalaba, Robert; Spingarn, K.) Optimal tactics for close support operations. III. Degraded intelligence and commun Appl. Math. Comput. 6 (1980), no. 3, 217-228. (Josef Kaška) 82d:90147e

(with Bean, Steven J.) Developments in nonparametric density estimation. (French ary) Internat. Statist. Rev. 48 (1980), no. 3, 267-287. (Gilbert Walter) 82g:62058 62G05

(with Hess, James; Kagiwada, Harriet; Kalaba, Robert; Spingarn, K.) Optimal tactics for close support operations. I. Degraded communications. J. Optim. Theory Appl. 30 (1980), no. 1, 89-98. (Josef Kaška) 824-90147a 90D35 (90A05, 90D45)

(with Hess, James; Kagiwada, Harriet; Kalaba, Robert; Spingarn, K.) Optimal tactics for close support operations. IV. Perfect intelligence and communications unications. Optim. Theory Appl. 30 (1980), no. 2, 309-318. (Josef Kaška) 824:901474 (90A05, 90D45)

(with Rao, A. N. V.) Controllability of stochastic systems with random delay. Math. Nachr. 96 (1980), 151-157. (Authors' summary) 82f:93082 93E15 (93B05)

(with Rao, A. N. V.) Sensitivity analysis of the Bayesian estimators of the intensity parameter and reliability function of the Poisson failure model. (Italian and French aries) Statistica (Bologna) 40 (1980), no. 3, 309-328. (Authors' summary) 82h-62132 62N05

Tsou, S. T. (with Hughston, L. P.) The twistor QQQQ meson spectrum. Advances in twistor theory, pp. 209–214, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 81G20

Tsoubells, Dimitri (with Batakis, Nikos A.) Dual description of a spacetime in the Einstein and Einstein-Cartan theories. Phys. Lett. A 85 (1981), no. 5, 261-262. (Editors) 82j:83056 83E10 (83C55)

Tsu, K. The surface-tension and surface-wandering problem. Phys. Lett. A 84 (1981), no. 7, 378-382. (Author's summary) 82:81121 81E99 (82A25)

Tsuboi, Kenji Eta invariants and conformal immersions. Publ. Res. Inst. Math. Sci. 17 58G25 (53C42) (1981), no. 1, 201-214. (Tetsuro Kawasaki) 82g:58094

Tsuboi, Syoji On the sheaves of holomorphic vector fields on surfaces with ordinary singularities in a projective space. III. Sci. Rep. Kagoshima Univ. No. 27 (1978), 21-41. (R. R. Simha (Zbl 393:14005)) 82g:32025 32G13

Tsuboi, Takashi Foliations with trivial F-subgroups. Topology 18 (1979), no. 3, 223-233. (From the text) 82d:57017 57R30

(with Morita, Shigeyuki) The Godbillon-Vey class of codimension one foliation without holonomy. Topology 19 (1980), no. 1, 43-49. (From the text) 82d:57015

touchi, Akio A note on completeness of the space of continuous functions. J. Hokka Univ. Ed. Sect. II A 31 (1980/81), no. 2, 61-62. (Denny Gulick) 82lt:46045 46El

Tsuchida, Elichiro (with Fujita, Teruaki) On the stress concentration around a hemi-oblate spheroidal pit in a semi-infinite body. Bull. JSME 24 (1981), no. 187, 15-21. (Authors' summary) 824:73014 73C45

Tsuchikura, Tamotsu (with Okuyama, Yasuo) On the absolute Riesz summability of orthogonal series. (Russian summary) Anal. Math. 7 (1981), no. 3, 199–208. (K. Tandori)

82k:42008 42A28 (42C15)
Tsuchiya, Masaaki On the stochastic differential equation for a Brownian motion with oblique reflection on the half plane. Proceedings of the International Symposium on Stochastic Differential Equations (Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1976), pp. 427–436, Wiley, New York, 1978. (C. Park) 824:60112 60H10 (60165) Smooth and monotonic approximation to potentials and Itô's formula for diffusion processes on R^d. Ann. Sci. Kanazawa Univ. 15 (1978), 11–18 (1979). (Author's

Parametrix of diffusion equations with boundary conditions. Ann. Sci. Kanazawa Univ. 17 (1980), 1–11 (1981). (S. R. S. Varadhan) 82g:35046 35K20 (58G32, 60360) schiya, Nobuo Leaves of finite depth Japan. J. Math. (N.S.) 6 (1980), no. 2, 343–364. (John Cantwell) 82g:57011 57R30

Tsuchiya, Takeshi Control system synthesis method with constraints and its application. (Japanese. English summary) Systems and Control 25 (1981), no. 4, 241-248. (Author's mary) 82h:93032 93B50

Tsuda, Ichiro (with Tomita, Kazuhisa) Chaos in the Belousov-Zhabotinsky reaction in a flow system. Phys. Lett. A 71 (1979), no. 5-6, 489-492. (John J. Tyson) 82h:58059 58F13 (92A09, 92A40)

(with Tomita, Kazuhisa) Towards the interpretation of Hudson's experiment on the Belousov-Zhabotinsky reaction-chaos due to delocalization. Progr. Theoret. Phys. 64 (1980), no. 4, 1138-1160. (John J. Tyson) 82f:58063 58F13 (80A30, 92A09)

(with Tomita, Kazuhisa) Towards the interpretation of the global bifurcation structure of the Lorenz system. A simple one-dimensional model. Progr. Theoret. Phys. Suppl. No. 69 (1980), 185-199 (1981). (D. L. Rod) 82i:58046 58F13

Tsuda, Yoshihiro (with Tamura, Hideyuki; Sueoka, Atsuo) Higher approximation of steady oscillations in nonlinear systems with single degree of freedom (suggested multiharmonic balance method). Bull. JSME 24 (1981), no. 195, 1616-1625. (Authors' summary) 926-70013 70K99 82f:70013 70K99

Tsui, Kam Wah Simultaneous estimation of several Poisson parameters under squared error

loss. Ann. Inst. Statist. Math. 33 (1981), no. 2, 215-223. (I. Olkin) 82i:62018 Tsui, M. (with Paidoussis, M. P.; Issid, N. T.) Parametric resonance oscillations of flexible slender cylinders in harmonically perturbed axial flow. I. Theory. Trans. ASME Ser. E.J. Appl. Mech. 47 (1980), no. 4, 709-714. (Authors' summary) 82a:73025 73J06

Tsui, Sze Kai Compact derivations on von Neumann algebras. Canad. Math. Bull. 24 (1981), no. 1, 87–90. (E. Størmer) 82g:46106 46L10

(with Fong, Che Kao) A note on positive operators. J. Operator Theory 5 (1981), no. 1, 73-76. (K. K. Oberai) 824:47002 47A05

Central sequences associated with a state. Proc. Amer. Math. Soc. 82 (1981), no. 1, 76-80. (P. J. Stacey) 82b:46082 46L30

Tsuji, Hajime On the neighbourhood of a Hopf surface. Proc. Japan Acad. Ser. A Math 32J15 (32G10)

Sci. 57 (1981), no. 7, 359-362. (Author's introduction) 82m:32023 A note on symmetric norming functions. Mem. Fac. Sci. Kôchi Univ. Ser. A Math. 2 (1981), 13-16. (A. Pietsch) 82h:47043 47D25 (46A45)

Intermediate norm ideals of Mitjagin's type. Mem. Fac. Sci. Köchi Univ. Ser. A Math. 2 (1981), 17-27. (A. Pietsch) 82h:47044 47D25 (47B10)

Tsuji, Kazuhiko (with Fujita, Shohei; Fukao, Takeshi) Topological equivalence of state spaces in the interconnected power system in emergency control. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 163–166, IEEE, New York, 1979. 93A15 (58F10)

AUTHOR INDEX

Tsuji, Tadashi A characterization of homogeneous self-dual cones. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 3, 185–187. (From the text) 82i:32060 32M10 (53C35)
Tsuji, Takumi (with Kageyama, Sanpei) Some bounds on balanced block designs. J. Statist. Plann. Inference 4 (1980), no. 2, 155–167. (S. Mejza) 82d:05027 05B05 (62K10)

kabe, Masayuki (with Sannomiya, Nobuo) A method for decomposing mixed-integer linear programming problems with angular structure. Internat. J. Systems Sci. 12 (1981), no. 9, 1031–1043. (Authors' summary) 82m:90122 90C10 (90C05)

nto. 3, 1031-1095. (Autnors summary) 82m:90122 90C10 (90C05)
Tsukada, Karumi Eigenvalues of the Laplacian on Calabi-Eckmann manifolds. J. Math.
Soc. Japan 33 (1981), no. 4, 673-691. (Bang-yen Chen) 82j:58111 58G25 (32C10)
Tsukiyama, Kouzou A remark on fibre homotopy equivalences. Illinois J. Math. 24 (1980),
no. 4, 554-559. (Donald W. Kahn) 82c:55007 55P10 (55R05)

Tsukiyama, Shuji (with Kuh, Ernest S.; Shirakawa, Isao) An algorithm for single-row routing with prescribed street congestions. IEEE Trans. Circuits and Systems 27 (1980), no. 9, 765–772. (Authors' summary) 82a:94132 94C99

(with Shirakawa, Isao; Ozaki, H.; Ariyoshi, Hiromu) An algorithm to enu cutsets of a graph in linear time per cutset. J. Assoc. Comput. Mach. 27 (1980), no. 4, 619-632. (Authors' summary) 82x:68132 68E10 (68C25)

no, Yoshimichi Localization of differential operators and holo the solutions. Hiroshima Math. J. 10 (1980), no. 3, 539-551 Hiroshima Math. J. 10 (1980), no. 3, 539-551. (Manfred W. Kracht) 824:35029 35B60 (32D99)

Holomorphic continuation of solutions of partial differential equations across the tiple characteristic surface. J. Math. Soc. Japan 32 (1980), no. 2, 285-299. (J. rara) 82f:35029 35B60 (32A99)

Localization of differential operators and the uniqueness of the Cauchy problem.

Osaka J. Math. 17 (1980), no. 3, 751–762. (Monty Strauss) 82b:35003 35A07

moda, Shuichiro The structure of open algebraic surfaces and its application to plane curves. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 4, 230–232. (Daniel

Comenetz) 82i:14021 14J10

rkov, V. I. See Curkov, V. I.

Tsuruta, Kunio On linear integro-differential equations in a Banach space. Tokyo J. Math. 3 (1980), no. 2, 331-352. (Gustaf Gripenberg) 82g:45026 45N05 (45D05, 47G05) Regularity of solutions to an abstract inhomogeneous linear integro-differential quation. Math. Japon. 26 (1981), no. 1, 65-76. (James V. Herod) 82hc45010 45105

Tsutakawa, R. K. (with Dempster, A. P.; Rubin, Donald B.) Estimation in covarian components models. J. Amer. Statist. Assoc. 76 (1981), no. 374, 341-353. (Authors' summary) 82k:62116 62J10

ni, Masayoshi On solutions of Liouville's equation. J. Math. Anal. Appl. 76 (1980), no. 1, 116-123. (A. Degasperis) 82i:35161 35Q20 (58F07, 81C05)
(with Hayashi, Nakao) Classical solutions of nonlinear Schrödinger equations in higher dimensions. Math. Z. 177 (1981), no. 2, 217-234. (R. Glassey) 82m:35136 35O20 (81C05)

Tsuyoshi, Matsuo ★Realization theory of continuous-time dynamical systems. Lecture Notes in Control and Information Sciences, 32. Springer-Verlag, Berlin-New York, 1981. vi + 329 pp. ISBN 3-540-10682-0 (Allen Tannenbaum) 82j:93012

Tsybakov, B. S. See Cybakov, B. S. Tsypkin, A. G. See Cypkin, A. G. Tsypkin, Ya. Z. See Cypkin, Ja. Z. lovich, V. N. See Cytovič, V. N. ly hoang Tu See Ly Hoang Tu

Tu, Gui Zhang (with Qin, Meng Zhao) Relationship between symmetries and conservation laws of nonlinear evolution equations. (Chinese. English summary) Kexue Tongbao 24 (1979), no. 20, 913-917. (Tai Ping Liu) 82m:35100 35L65 (58F07)

Canonical forms of a class of ternary forms over GF(2). (Chinese) Acta Math. Sinica 23 (1980), no. 1, 1-10. (From the introduction) 82j:94018a 94B05

The enumeration of certain code words of the third-order Reed-Muller code (Chinese) Acta Math. Sinica 23 (1980), no. 1, 11-22. (From the introduction) 82i:94018b

A commutativity theorem of partial differential operators. Comm. Math. Phys. 77 (1980), no. 3, 289-297. (Sergiu Aizicovici) 82b:47060 47F05 (12H05, 35K22, 58F07) On the similarity solution of evolution equation $u_t = H(x, t, u, u_x, u_{xx}, \cdots)$. Lett. Math. Phys. 4 (1980), no. 4, 347-355. (S. Cinquini) 82d:35017 35A30 (35Q99, 58A15)

(with Qin, Meng Zhao) The invariant groups and conservation laws of nonlinear evolution equations-an approach of symmetric function. Sci. Sinica 24 (1981), no. 1, 13-26. (Ryogo Hirota) 82e:35076 35Q20 (35L65)

Tu, Tung Sheng See Du, Dong Sheng pham dinh Tuan See Pham Dinh Tuan vũ trọng Tuần See Vũ Trọng Tuần Tuan, Hsio Fu See Duan, Xue Fu hong Tuan, R. See Hong Tuan, R. Tuann, S. Y. (with Lee, S. S.; Sengupta, Subrata; Lee, C. R.) Application of

three-dimensional, free-surface model to shallow tidal waters. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Unio., Bethlehem, Pa., 1979), pp. 359-367, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82e:76015 76B15 (65P05, 86A05)

Tucci Scarselli, Sandra (with Pagliuca Raugei, Anna Maria) Z-sequenceable groups.
(Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66
(1979), no. 2, 97–102. (Franco Migliorini) 82g:20050 20D99

Tuchinsky, Philip M. (with Rickey, V. Frederick) An application of geography to mathematics: history of the integral of the secant. Math. Mag. 53 (1980), no. 3, 162–166. (Bertram Ross) 82g:01019 01A45 (26-03)

Tuck, E. O. Application and solution of Cauchy singular integral equations. Application and numerical solution of integral equations (Proc. Sem., Australian Nat. Univ., Canberra, 1978), pp. 21-49, Monographs Textbooks Mech. Solids Fluids: Mech. Anal., 6, Sijthoff & off, Alphen aan den Rijn, 1980. (F.-O. Speck) 82c:45003 45-02 (65R20, 76G99, 78A25)

Tucke, V. See Tutschke, Wolfgang
Tucker, Alan *Applied combinatorics. John Wiley & Sons, Inc., New York, 1980. ix+385 pp. ISBN 0-471-04766-X (Volker Strehl) 82f:05001 05-01 (05A15, 05Cxx, 68E10, 90B10, 90C35, 90D05)

Tucker, C. T. Positive operators on spaces of Baire functions. Illinois J. Math. 25 (1981), no. 2, 295-301. (Peter Dodds) 82i:47055 47B55 (46E05)

cker, Howard G. Joint limit laws of sample moments of a symm Probab. 8 (1980), no. 5, 991-998. (M. G. Hahn) 82c:60045 60F05

(with Wright, Larry A.) An integral strong law of large numbers for processes with ependent increments. Israel J. Math. 38 (1981), no. 3, 177-181. (W. E. Pruitt) 82e:60116 60J30 (60F15)

Tucker, J. V. Computing in algebraic systems. Recursion theory: its generalisation and applications (Proc. Logic Colloq., Univ. Leeds, Leeds, 1979), pp. 215-235, London Math. Soc. Lecture Note Ser., 45, Cambridge Univ. Press, Cambridge, 1980. (R. A. Di Paola) c. Lecture Note Ser 03D75 (03D80, 68B10, 68D30)

(with Stoltenberg-Hansen, Viggo) Computing roots of unity in fields. Bull. London Math. Soc. 12 (1980), no. 6, 463-471. (A. Nerode) 82d:03074 03D45 (12A45)

Computability and the algebra of fields: some affine constructions. J. Symbolic Logic 45 (1980), no. 1, 103-120. (John W. Berry) 82a:03027 03C57 (03B25, 03D45,

(with Moldestad, J.; Stoltenberg-Hansen, Viggo) Finite algorithmic procedures and inductive definability. Math. Scand. 46 (1980), no. 1, 62-76. (Gabriel Lolli) 82d:03077a

(with Moldestad, J.; Stoltenberg-Hansen, Viggo) Finite algorithmic procedures and computation theories. Math. Scand. 46 (1980), no. 1, 77-94. (Gabriel Lolli) 82d:03077b 03D75 (03D70)

Tucker, Jerry H. (with Tapia, Moiez A.) Correction to: "Complete solution of Boolean equations" [IEEE Trans. Comput. 29 (1980), no. 7, 662-665; MR 81h:94036]. IEEE equations [IEEE Trains. Comput. 30 (1981), no. 1, 87. (Editors) 82a:94121 94C10
cker, R. W. (with Dereli, T.) A class of exact supergravity solutions. Phys. Lett. B 97

(1980), no. 3-4, 396-400. (Bernard S. Kay) 82f:83083 83E99 (83C15, 83C45)

Affine transformations and the geometry of superspace. J. Math. Phys. 22 (1981), no. 2, 422–429. (Author's summary) 824:83066 83E99 (53C10, 53C80)

(with Benn, I. M.) Extended Lorentz invariance and field theory. J. Phys. A 14 (1981), no. 7, 1745-1759, (A. O. Barut) 82i:81108 81E99

(with Dereli, T.) Exact neutrino solutions in the presence of torsion. Phys. Lett. A 82 (1981), no. 5, 229-231. (Authors' summary) 82c:83062 83E10

(with Dereli, T.) A note on a generalisation of Weyl's theory of gravitation. J. Phys. A 15 (1982), no. 1, L7-L11. (Authors' summary) 82m:83039 83D05

Tucker, Thomas W. Some results on the genus of a group. J. Graph Theory 5 (1981), no. 3, 337-338. (A. T. White) 82j:05055 05C10 (05C25, 20D60)

337-538. (A. I. White) appropriate the control of the control o no. 6, 1346-1350. (K. Wódkiewicz) 82h:78020 78A45

Diffraction of an acoustic wave by two spherical segments. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 5, 75-78. (Author's 76Q05 summary) 82g:76033

Tuckwell, Henry C. Population growth with large random fluctuations. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 109–118, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (Author's summary) 82h:92039 92A15

(with Wan, Frederick Y. M.) The response of a nerve cylinder to spatially distributed white noise inputs. J. Theoret. Biol. 87 (1980), no. 2, 275–295. (Authors' summary) 82h:92023 92A09

Evidence of soliton-like behavior of solitary waves in a nonlinear reaction-diffusion system. SIAM J. Appl. Math. 39 (1980), no. 2, 310-322. (Jagdish Chandra) 82b:35084

(with Hanson, Floyd B.) Logistic growth with random density independent disasters. Theoret. Population Biol. 19 (1981), no. 1, 1-18. (Authors' summary) 82b:92039 92A17 (58F40)

nguyễn Tư Cường See Nguyễn Tư Cường

Tudor, Constantin Remarks on the martingale problem in the two-dimensional time parameter. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 10, 1551–1556. (Dominique Lépingle) 82j:60076 60G44 (60H10)

Tudor, Gh. (with Crstici, B.; Neagu, M.) Construction of certain classes of solutions of certain functional equations. (Romanian. French summary) Bul. Ştiinţ. Tehn. Inst. Politehn. "Traian Vuia" Timişoara 24(38) (1979), no. 2, 33-35. (B. Schweizer) 82m:39007

sie, Consta ntin On a certain vibrational problem. (Romanian summary) Studia Univ. Babeş-Bolyai Math. 25 (1980), no. 2, 16-21. (From the introduction) 82g:70045 (34C15)

Tudron, Thomas N. Instability of constant Yang-Mills fields generated by constant gauge potentials. Phys. Rev. D (3) 22 (1980), no. 10, 2566-2568. (Author's sum 82b:81075 81E10 (53C05)

Tuev, S. V. The placing of points of collection of a distributed resource on a straight line. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 2, 172-174, 223 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 2, 131-133 (1981). (Author's summary) 82i:90036

naev, A. A. Self-injective rings. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 12, 71-74. (L. Bican) 82j:16039 16A52

Poorly projective modules. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 5, 109-113, 191. (L. Bican) 82f:16023 16A50 (16A33)

Distributive modules. (Russian) Uspehi Mat. Nauk 35 (1980), no. 5(215), 245-246. 16A53 (16A44) (Chr. U. Jensen) 82h:16021

Rings over which all cyclic modules are poorly injective. (Russian. English sum Trudy Sem. Petrovsk. No. 6 (1981), 257-262. (J. Jirásko) 82m:16021 16A52

Tugnait, Jitendra K. Identification and model approximation for continuous-time systems non finite parameter sets. IEEE Trans. Automat. Control 25 (1980), no. 6, 1202–1206. (From the introduction) 82e:93121 93E12

Stability of optimum linear estimators of stochastic signals in white multiplicative noise. IEEE Trans. Automat. Control 26 (1981), no. 3, 757-761. (Author's summary) 93E12

Asymptotic stability of the MMSE linear filter for systems with uncertain observations. IEEE Trans. Inform. Theory 27 (1981), no. 2, 247-250. (Author's nary) 82i:93077 93E11

Convergence of continuous-time partitioned adaptive state estimators. Internat. J. Control 33 (1981), no. 5, 923-933. (Author's summary) 82e:93105 93E10

Tuhliev, K. Fourier coefficients and best approximations of a class of convergence systems.

(Russian. Tajiki summary) Dokl. Akad. Nauk Tadžik. SSR 23 (1980), no. 11, 615–619.

(J. Németh) 82h:42008 42A16 (42A24)

Tukalevs'ka, N. I. (with Lučka, A. Ju.) An iteration-projection method of solution of

integral equations, based on the collocation method. (Russian) Some questions of the optimal realization of algorithms (Russian), pp. 36-39, 55, Preprint 79, 34, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. (See 82e:68011) 45L05

(with Lučka, A. Ju.) A projection-iteration method for solving integral equations that is based on interpolation splines. (Russian) Ukrain. Mat. Z. 31 (1979), no. 6, 683-691, 766. (R. S. Anderssen) 82d:65087 65R20

See also Computational aspects in applied program packages, 82f:90057

Tukey, John W. Can we predict where "time series" should go next? Directions in time series (Proc. Meeting, Iowa State Univ., Ames, Iowa, 1978), pp. 1-31, Inst. Math. Statist., Hayward, Calif., 1980. (Author's summary) 82h:62165 62M10 (62M15)

Tukia, Pekka The planar Schönflies theorem for Lipschitz maps. Ann. Acad. Sci. Fenn.

Ser. A I Math. 5 (1980), no. 1, 49-72. (David C. Wilson) 82e:57003 57N05 (57N35,

On two-dimensional quasiconformal groups. Ann. Acad. Sci. Fenn. Ser. A I Math. 5 (1980), no. 1, 73-78. (Kari Hag) 82c:30031 30C60 (with Väisälä, Jussi) Quasisymmetric embeddings of metric spaces. Ann. Acad. Sci.

Fenn. Ser. A I Math. 5 (1980), no. 1, 97-114. (S. B. Agard) 82g:30038 30C60 (54C99)

Tulaeva, S. V. (with Odekov, O. A.) On the possibility of constructing a formal theory for geological formations. (Russian. Turkmen summary) Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk 1980, no. 5, 95-105. (J. S. Joel) 82f:86004 (93A13)

cu Tulcea, C. See Ionescu Tulcea, C.

Tulczyjew, W. M. (with Benenti, Sergio) The geometrical meaning and globalization of the Hamilton-Jacobi method. Differential geometrical methods in mathematical physics (Proc. manca, 1979), pp. 9-21, Lecture Notes in Math., 836, Conf., Aix-en-Provence / Sala

Springer, Berlin, 1980. (H. Rund) 82:58040 58F05 (70H20)

The Euler-Lagrange resolution. Differential geometrical methods in mathematical physics (Proc. Conf., Aix-en-Provence/Salamanca, 1979), pp. 22-48, Lecture Notes in Math., 836, Springer, Berlin, 1980. (Demeter Krupka) 82g:58005 58A10 (58E15)

Homogeneous symplectic formulation of field dynamics and the Poincaré-Cartan form. Differential geometrical methods in mathematical physics (Proc. Conf., Aix-en-Provence/Salamanca, 1979), pp. 484-497, Lecture Notes in Math., 836, Springer,

Berlin, 1980. (Demeter Krupka) 82g:58034 58F05 (70G99) (with Dedecker, P.) Spectral sequences and the inverse problem of the calculus of

variations. Differential geometrical methods in mathematical physics (Proc. Conf.,

Alix-en-Proceee/Salamaca, 1979), pp. 498–503, Lecture Notes in Math., 836, Springer, Berlin, 1980, (A. M. Vinogradov) 82:58038 SE30 (49F99)

Gauge independent formulation of dynamics of charged extended objects. (French summary) Ann. Inst. H. Poincaré Sect. A (N.S.) 34 (1981), no. 1, 25-43. (Andrzej

Trautman) 82c:70021 70G35 (58F05, 81E99) Tuler, Randy Arithmetic sums that determine linear characters on $\Gamma(N)$. Pacific J. Math. 90 (1980), no. 2, 469-473. (A. I. Vinogradov) 82d:10055 10G15 (10D07)

Subgroups of SL₂Z generated by elementary matrices. *Proc. Roy. Soc. Edinburg Sect. A* **88** (1981), no. 1-2, 43–47. (Joseph B. Dennin, Jr.) **82k:10026** 10D07 (15A3

ipani, Sauro On continuous and invariant measures for a transformation. (Italian. English summary) Rend. Mat. (6) 12 (1979), no. 2, 249–256. (Michael Keane) 82i:28007

Tuljaganova, M. I. Multidimensional analogues of a problem of Luo Geng Hua. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1981, no. 1, 38-43, 91-92. (A. I. Vinogradov) 82i:10057 10H20

Tuljapurkar, S. D. (with Orzack, Steven Hecht) Population dynamics in variable vironments. I. Long-run growth rates and extinction. Theoret. Population Biol. 18 (1980), no. 3, 314-342. (Howard B. Stauffer) 82k:92056 92A15 (60J70)

Tulley McAuley, Patricia (with Ungar, Gerald S.) A local-nonglobal Hurewicz fibration. Collog. Math. 41 (1979), no. 1, 73-77. (Authors' introduction) 82j:55021

Tulovskii, V. N. Propagation of singularities of operators with characteristics of constant multiplicity. (Russian) Trudy Moskov. Mat. Obšč. 39 (1979), 113-134, 236. (Vesselin M. 35S05 (58G15) Petkov) 82m:35150

Tulp, Jan H. (with van Ouwerkerk, Hendrik J.; Piceni, Hans A. L.; Roufs, Jacques A. J.; Blommaert, Frans J. J.) Instabilities in a continuous medium model for the retina. Biol. Cybernet. 39 (1980/81), no. 1, 11-14. (Authors' summary) 82j:92064 92A27 (92A09)

nanov, V. I. (with Gorbunov, V. A.) A class of lattices of quasivarieties. (Rus Algebra i Logika 19 (1980), no. 1, 59-80, 132-133. (V. N. Salii) 82f:08011 (08C15)

markin, A. G. Completeness of certain systems of functions. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 2, 81-82. (N. T. Anisimova) 82a:42022 42C30

Tumašev, G. G. (with Aksent'ev, L. A.; Il'inskii, N. B.; Nužin, M. T.; Salimov, R. B.) The theory of inverse boundary value problems for analytic functions and its applications. (Russian) Mathematical analysis, Vol. 18 (Russian), pp. 67-124, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (V. Mićić) 82d:30038

onis, V. (with Matulis, V.; Pliuškevičius, R. A.) Some works of Lithe mathematicians on mathematical logic and programming. (Russian. Lithuanian and English summaries) Litovsk. Mat. Sb. 20 (1980), no. 3, 19-27, 216. (Authors' summary) 01A65 (01A73, 90-03, 90Cxx)

min, A. M. (with Žigulev, V. N.; Sidorenko, N. V.) Generation of waves of instability in a boundary layer by external turbulence. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 6, 43-49, 138. (Authors' summary) 82h:76024 76E99 (76F99)

ncel, Selim Conditional pressure and coding. Israel J. Math. 39 (1981), no. 1-2, 101-112. (R. L. Adler) 82j:28012 28D20

Tung, Chia Chi Minimal equations, global reducibility of holomorphic functions, and relative rationality of analytic sets. Rend. Sem. Mat. Univ. Padova 63 (1980), 127–143.
(A. Hirschowitz) 82e:32004 32A10 (32B10)

Tung, S. H. Extension of Bernstein's theorem. Proc. Amer. Math. Soc. 83 (1981), no. 1, 103–106. (P. Agranovič) 82k:32013 32A15 (30E10, 32A30)

Tunjak, V. N. (with Karakura, F.) SO(3) gauge fields with respect to localization of triad rotations. (Russian. English summary) Verci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 1, 95-100, 140. (Authors' summary) 82h:83064 83D05 (53C05)

mell, Jerrold Artin's conjecture for representations of octahedral type. Bu Math. Soc. (N.S.) 5 (1981), no. 2, 173-175. (Stephen Gelbart) 82j:12015 (10D40, 10D45)

Tuohy, Sylvester L. (with Levine, Lawrence E.) Correcting for initial conditions in multitime problems. SIAM J. Appl. Math. 41 (1981), no. 2, 301–305. (Authors' summary) 82h:65056 65L05

Tuomela, Raimo Scientific change and approximation. The logic and epistemology of scientific change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn. 30 (1978), no. 2-4, 265-297 (1979), (See 82i:00024) 00A25 (03A05)

Analogy and distance. Z. Allgemeine Wissenschaftstheorie 11 (1980), no. 2, 276-291. (Manfred Kochen) 82f:92054 92A27 (00A69) Inductive explanation. Synthese 48 (1981), no. 2, 257-294. (Philip L. Quinn)

03B48 (03A05, 60A05)

See also Logic and epister ogy of scientific change, 82i:00024

bui Tuong Tri See Bui Tuong Tri

Tupitsyn, Victor G. On the maximum value of a quadratic form over binary sequences. Combinatorics 79 (Proc. Colloq., Univ. Montréal, Montreal, Que., 1979), Part II. Ann.

Discrete Math. 9 (1980), 277-282. (Heiko Harborth) 82c:05069 05C50 (10E25)

Tupper, B. O. J. The equivalence of electromagnetic fields and viscous fluids in general relativity. J. Math. Phys. 22 (1981), no. 11, 2666-2673. (A. Raychaudhuri) 82m:83026 83C50 (83C55)

Turaev, K. The number of characteristic directions of a three-dimensional polynomial system of the second degree of homogeneity. (Russian) Research in mathematics and hysics (Russian), pp. 96-102, 147, Taškent. Gos. Ped. Inst., Tashkent, 1979. (J. S. Joel) 82c:34034 34C05

Turakainen, Paavo On nonstochastic languages and homomorphic images of stochastic Inform. Sci. 24 (1981), no. 3, 229-253. (Author's summary) 82i:68053 68F10 (68D25, 68F15)

Turán, György (with Győri, Ervin) Stack of pancakes. Studia Sci. Math. Hungar. 13 (1978), no. 1-2, 133-137 (1981). (Mauro Cerasoli) 82m:05002 05A05 (05A20)

Turán, Pál To the memory of the mathematicians who were victims of Fascism. (Hungarian) Mat. Lapok 25 (1974), no. 3-4, 259-263 (1977). (Editors) 82a:01026 01A60 (01A70) On some open problems of approximation theory. P. Turán memorial vo Translated from the Hungarian by P. Szüsz. J. Approx. Theory 29 (1980), no. 1, 23-85. (P. Vértesi) 82e:41003 41-02

See also Lorentz, G. G., 82b:41002; Obituary: Turán, Pál, 82c:01066; Papers: Turán's problems, 82c:41004; Erdős, Paul, 82f:01090a; Halász, G., 82f:01090b; Bibliography: Turán, Paul, 82f:01090c and Erdős, Paul, 82f:01091

Turban, Loic s-state Potts model on a Cayley tree. Phys. Lett. A 78 (1980), no. 4, 404-406. (Author's summary) 82c:82041 82A25

Turbé, Nicole Sur la propagation d'ondes dans des milieux élastiques périodiques. (English mmary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 119–122. (Author's nmary) 82i:73016 73D99 summary) 82i:73016

Averaging of a nonlinear integro-differential equation. Nonlinear Anal. 5 (1981), no. 5, 499-508. (O. Diekmann) 82d:34103 34K25 (45J05)

Turbin, A. F. (with Koroljuk, V. S.) ★Математические основы фазового укрупнения сложных систем. (Russian) [Mathematical foundations of phase extension of systems] "Naukova Dumka", Kieo, 1978. 218 pp. (I. Cuculescu) 82a:60113 (81C20, 93E15)

Limit theorems and asymptotic expansions for singularly perturbed semigroups of operators. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 18, 13-41. (B. V. Loginov) 82g:47833 47D05 (34G10, 47A55)

(with Zbyrko, M. D.; Kuznecov, V. N.) Semi-Markov model for analyzing reliability of system with restorable protection. Automat. i Telemeh. 1980, no. 6, 175-185 (Russia English summary); translated as Automat. Remote Control 41 (1980), no. 6, part 2, 879-887. (J. Chandramohan) 82k:60183 60K15

Abstract potential operators of strongly ergodic Markov processes. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 11, 28-31. (I. Cuculescu) 60J25

(with Kuznecov, V. N.; Caturjan, G. Ž.) Semi-Markov models of renewable systems (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1981, no. 11, 44 pp. (M. Skalsky) 82m:60112 60K15

Turbiner, A. V. (with Popov, V. S.; Eleckii, V. L.) Higher orders of perturbation theory and summation of series in quantum mechanics and field theory. Z. Eksper. Teoret. Fiz. 74 (1978), no. 2, 445-465 (Russian); translated as Soviet Phys. JETP 47 (1978), no. 2, 232-242. (Authors' summary) 82c:81032 81C12 (40G10)

A new approach to the eigenvalue problem in quantum mecha perturbation theory for rising potentials. J. Phys. A 14 (1981), no. 7, 1641-1649. (Iraj 81C12 (41A58, 65N25) Hormozdiari) 82i:81036

Tureak, L. I. (with Sidlovskii, V. P.) On the equations of motion of a stratified liquid (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 2, 317-321. 82a:76087 (35020)

Turcanu, Angela Some applications of duality. Variational inequalities and opti problems (Proc. Summer School, Constanța, 1979), pp. 287-299, Minist. Ed. 90C30 (49D30, 49D37)

Învățămiîntului, Constanța, 1979. (Pierre Loridan) 82g:90075 Turchetti, G. (with Barnsley, M. F.) Rigorous bounds for charge densities from form factor data. Phys. Rev. C (3) 20 (1979), no. 3, 1175-1185. (Authors' summary) 82g:81112 81G35 (44A60)

(with Barnsley, M. F.) Bounding methods in nuclear physics. Comput. Phys. Col

22 (1981), no. 2-3, 325–343. (Authors' summary) 82j:81062 81G35 (65D15, 81H10)

Turert, B. (with Pach, A. J.; Smith, M. A.) Flat Orlicz spaces. Proc. Amer. Math. Soc. 81 (1981), no. 4, 528–530. (Y. Benyamini) 82f:46031 46E30 (46B25)

Turgeon, J. (with Kotzig, Anton) Sur l'existence de petites composantes dans tout système parfait d'ensembles de differences. Combinatorics 79 (Proc. Colloq., Univ. Montréal, Montreal, Que., 1979), Part I. Ann. Discrete Math. 8 (1980), 71-75. (Jean-Claude rmond) 82c:05023 05B10 (05C99)

isco Javier Modèles locaux des 3-formes fermées transitives sur les 5-variétés; cas où dim $\ell = 6$ et dimE = 2. (English summary) [Local models of transitive closed 3-forms on 5-manifolds; the case when dim $\ell = 6$ and dimE = 2] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 2, 159-161. (Author's summary) 82k:58005

ng, Alan M. See Good, Irving J., 82c:01049
nici, Mihai Cantor's intersection theorem and noncompactness measures. Topology. Vol. II (Proc. Fourth Collog., Budapest, 1978), pp. 1181-1183, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (J. van der Slot) 82d:54044 54H05

Fixed points of implicit contractions via Cantor's intersection theorem. (Romanian mary) Bul. Inst. Politehn. Iaşi Secţ. I 26(30) (1980), no. 1-2, 65-68. (Author's ary) 824:54057 54H25

Invariant polygonal domains for a class of functional-differential equations. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 4, 429–434. (Bhagat Singh) 82h:34104 34K15

Maximal elements in a class of order complete metric spaces. Math. Japon. 25 (1980), no. 5, 511–517. (B. T. Sims) 82e-54027 54E50 (06F30)

Multivalued contractions and applications to functional-differential equations. Ac Math. Acad. Sci. Hungar. 37 (1981), no. 1-3, 147–151. (R. E. Smithson) 82h:54083 54H25 (34K05, 54C60)

A singular perturbation method for a system of function An. Ştiint. Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 27 (1981), no. 1, 103-108. (Curtis C. Travis) 826:34109 34K25

Function Lipschitzian mappings on convex metric spaces. Comment. Math. Univ. Carolin. 22 (1981), no. 2, 289-303. (Fred W. Roush) 82i:54054 54E99 (49A51, 54H20, 58C15)

Order noncompactness measures on abstract metric spaces. Math. Sem. Notes Kobe Univ. 9 (1981), no. 1, 219-230. (S. A. Naimpally) 82m:54061 54H25

alities via maximal ele ement techniques. Nonlinear Anal. 5 (1981),

no. 7, 757-763. (V. Lakshmikantham) 82g:34014 34A40 (34G99)
Time-dependent invariant polygonal domains for a class of function Time-dependent invariant polygonal domains for a class of functional-differential ations. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 2, 339-345. (C. Corduneanu) 82i:34079 34K05 (34K15)

Turk, J. W. M. Feolynomial values and almost powers. Afdeling Zuivere Wiskunde [Department of Pure Mathematics], 143. Mathematisch Centrum, Amsterdam, 1980. i+10 pp. (T. N. Shorey) 82e:10060 10F10

Multiplicative properties of integers in short intervals. Nederl. Akad. Wetensch. lag. Math. 42 (1980), no. 4, 429-436. (K. Ramachandra) 82a:10052 10H25

Turkel, Eli (with Bayliss, Alvin) Radiation boundary conditions for wave-like equations Comm. Pure Appl. Math. 33 (1980), no. 6, 707-725. (David Gottlieb) 82b:65091

(with Gottlieb, David) On time discretizations for spectral methods. Stud. Appl. Math. 63 (1980), no. 1, 67-86. (Robert Pearson) 82j:65083 65N30

(with Gottlieb, David; Orszag, Steven A.) Stability of pseudospectral and

finite-difference methods for variable coefficient problems. Math. Comp. 37 (1981), no. 156, 293-305. (Authors' summary) 82i:65054 65M10

(with Jameson, A.) Implicit schemes and LU decompositions. Math. Comp. 37 (1981), no. 156, 385-397. (Authors' summary) 82:65055 65M10 (65F05)

ngton, Bruce (with Friedman, Avner) The oblateness of an axisymmetric rotating fluid. Indiana Univ. Math. J. 29 (1980), no. 5, 777-792. (M. N. L. Narasimhan) 76U05 82c:76104

Height estimates for exterior problems of capillarity type. Pacific J. Math. 88 (1980),

no. 2, 517-540. (Klaus Steffen) 82i:35070 35J65 (49F10)

Turmatov, T. Application of the Newton-Kantorovič method to the solution of a system of singular integral equations. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 5, 4-8. (R. V. Duduchava) 82h:45014 45G05 (65R20)

ambetov, R. N. Extension and reduction of the range in modular quaternion arithmetic. (Russian) Theory of coding and complexity of calculations (Russian),

pp. 195-207, 224, "Nauka" Kazah. SSR, Alma-Ata, 1980. (Author's summary) 68C20 (68C05, 68G05)

(with Pak, I. T.) The kernel in nonpositional quaternion arithmetic. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1980, no. 5, 74-77, 88. (Authors' summary) 82h:94033 94B99

Turnbull, Bruce W. (with Hayre, Lakhbir S.) A class of simple approximate sequential tests

for adaptive comparison of two treatments. Comm. Statist. A—Theory Methods 10 (1981), no. 22, 2339–2360. (Authors' summary) 82ms62183 62L05

Turner, Barbara Fourier's seventeen lines problem. Math. Mag. 53 (1980), no. 4, 217–219. (Louis Charbonneau) 82:e01025a 01A50 (05B30, 51E30)

(with Warner, Ken) The structure and geometry of 4×4 pandiagonal matrices.

Discrete Math. 34 (1981), no. 3, 301–310. (C. A. Rowley) 82f:20012 20B25 (05B99)

Turner, J. Stewart (with Huppert, Herbert E.) Double-diffusive convection. 25th

anniversary issue: editorial reflections on the development of fluid mechanics. J. Fluid 76R99 Mech. 106 (1981), 299-329. (See 82g:76002)

Turner, J. W. (with Malek-Mansour, M.; van den Broeck, C.; Nicolis, G.) Asymptotic properties of Markovian master equations. Ann. Physics 131 (1981), no. 2, 283-313.

(Koichiro Matsuno) 824:82042 82A35 (58E07, 80A30)

Ther, James D. (with Junkins, John L.) On the analogy between orbital dynamics and rigid body dynamics. J. Astronaut. Sci. 27 (1979), no. 4, 345-358. (Authors' summary) 70E99 (58F40)

Turner, R. E. (with Snider, R. F.) Superoperator methods of calculating cross sections. III. Unified description of classical and quantal scattering. (French summary) Canad. J. Phys. 58 (1980), no. 8, 1171–1182. (Jean-Paul Marchand) 82b:81105 81F05 (81C99) (with Snider, R. F.) A phase space moment method for classical and quantal dynamics. (French summary) Canad. J. Phys. 59 (1981), no. 3, 457-470. (Authors' nary) 824:70032 70G35 (35Q20, 58F05, 81C99)

rner, Robert H. (with Agec, William S.; Dunn, Barbara A.) Iterated Schönberg approximation and its application. Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 173–196, ARO

Rep. 80, 3, U. S. Army Res. Office, Research Triangle Park, N.C., 1980. (From the summary) 82e:65013 65D10 mary) 82e:65013

Turnovec, František Test problems for mathematical programming software. Sixth ference on Mathematical Methods in Economics (Vitte, 1980) (German), pp. 63–6 inarberichte, 29, Humboldt Univ., Berlin, 1980. (Author's summary) 824:90115 pp. 63-67, 90C30

Turnovsky, Stephen J. (with Gray, Malcolm R.) The consistent specification of adaptive expectations in continuous time models: information lags and finite forecast horizons. J. Econom. Dynamics Control 2 (1980), no. 4, 303-328. (Authors' summary) 824:90036

ist, Mark A. (with Poorzahedy, Hossain) Approximate algorithms for the discrete network design problem. Transportation Res. Part B 16 (1982), no. 1, 45–55. (Authors' summary) 82k-90657 90B20 (90C35)

Turo, Jan On the existence and uniqueness of solution of some stochastic functional integral equations in two independent variables. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 7, 1131-1139. (M. Métivier) 82j:60117 60H25

On a nonlinear random functional integral equation in two independent variables. (Serbo-Croatian summary) Glas. Mat. Ser. III 16(36) (1981), no. 1, 167–177. (A. I. Dale) 60H20 (45N05) 82k:60137

olla, R. (with Calvani, M.) Singularities in the $\delta=3$ Tomimatsu-Sato space-time. Lett. 83C20 (83F05) Nuovo Cimento (2) 28 (1980), no. 14, 492-496. (Editors) 82d:83020 (with Calvani, M.) Complete description of photon trajectories in the Kerr-Newm space-time. J. Phys. A 14 (1981), no. 8, 1931-1942. (J. D. McCrea) 82h:83008 (83C15)

Turowicz, Andrzej See Górecki, Henryk; et al., 82e:01089 and Biography: Stark, Marceli, 82e:01080

Turowski, Janusz Generalized equations for electromechanical and electrodynamic energy conversion. (Polish, French, German and Russian summaries) Rozprawy Elektrotech. 26 (1980), no. 4, 911-927. (Ll. G. Chambers) 82m:78023 78A55 (49A22)

Turrini, Cristina Parametrization of the linear spaces of a quadric hypersurface. (Italian. English summary) Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 366-372 (1981).

(D. Gallarati) 82k:14003 14A25

Turrisi, E. (with Giambò, Sebastiano) Waves of discontinuity and conditions of exceptionality in isotropic hypoelastic media of degree zero. (Italian. English summary) Atti Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur. 56 (1978), 105-117 (1980). (Authors' summary) 824:73018 73D99 (35L99)

Turschner, H. (with Sauermann, G.) Variational principle for derivation of macroscopic ons. J. Statist. Phys. 25 (1981), no. 3, 459-473. (Authors' summary) 82j:82025 82A15

Turski, Lukasz A. Instability of the finite amplitude spin wave in the continuous Heisenberg chain. Phys. Lett. A 74 (1979), no. 5, 343-345. (Author's summary and From the text) 82i:82067 82A67 Hydrodynamical description of the continuous Heisenberg chain. Canad. J. Phys. 59

(1981), no. 4, 511-514. (Author's summary) 82d:82015 82A05 sumov, Akbar On the ideological collision of the philosophical and the theological (on the example of the creative work of Ibn Sinā). (Russian. English summary) Voprosy Filos. 1980, no. 7, 62-75, 187. (Author's summary) 82f:01020 01A30

Tursunov, M. A system of differential equations with singular coefficients. (Russian. Tajiki ary) Dokl. Akad. Nauk Tadžik. SSR 23 (1980), no. 11, 620-624. (Enrico Obrecht) 35J45

Tursynbekov, O. S. An inverse problem for an equation of mixed type. (Russian) Inverse problems for differential equations of mathematical physics (Russian), pp. 87-93, 158, Akad. Nauk SSSR Sibirsk. Otdel., Vyčisl. Centr, Novosibirsk, 1978. (Megumi Saigo) 35M05 (35R30)

Turull, A. (with Robinson, G. R.) On finite groups with a certain Sylow normalizer. J. Algebra 68 (1981), no. 1, 144-154, (Thomas Laffev) 82e:20045 20D10

Turyn, Lawrence Sturm-Liouville problems with several parameters. J. Differential

Equations 38 (1980), no. 2, 239–259. (Patrick J. Browne) 82d:34036 34B25

Turzański, Marian Remarks on superextensions. Colloq. Math. 43 (1980), no. 2, 243–249 (1981). (J. van Mill) 82h:54037 54D35

Turzik, Daniel (with Nešetřil, Jaroslav; Poljak, Svatopluk) Amalgamation of matroids and its applications. J. Combin. Theory Ser. B 31 (1981), no. 1, 9-22. (John H. Mason) 82k:05080 05C55 (05B35, 05C65)

Turzyński, Antoni On a subclass of starlike functions. (Polish and Russian sum Zeszyty Nauk. Politech. Łódz. Mat. No. 11 (1978), 73-79. (Evelyn M. Silvia) 82k:30017 30C45 (30C75)

Tuschik, Hans-Peter (with Baudisch, Andreas; Seese, Detlef G.; Weese, Martin)

★Decidability and generalized quantifiers. Mathematical Research, 3. Akademie-Verlag,
Berlin, 1980. xii + 235 pp. (A. B. Slomson) 82i:03048 03C80 (03B25, 03C60, 05C05, 06A05, 20K99)

Tuševa, L. A. On the analysis of iteration difference schemes for hyperbolic systems of equations. (Russian) Numerical analysis (Russian), pp. 83-93, 136, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Teoret. i Prikl. Meh., Novosibirsk, 1978. (G. I. Sulhanišvili) 65M10 (65N20, 76N99)

ed at-Tusi See Sharaf al-Din Muzaffar ibn Muh sharāf al-din muzaffār ibn muha at-Tusi

Tuškina, T. A. (with Sohranskaja, V. S.) An experiment in parallelization of computational processes modeled by bilogical graphs. (Russian) Numerical methods and questions in the organization of calculations. 5. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 111 (1981), 162–176, 238. (Authors' summary) 82h:68039 68B20 (05C99, 68E10, 68J10)

taniwskyj, J. I. (with Carmi, S.) Linear stability of modulated finite gap Taylor flow Proceedings of the 16th Midwestern Mechanics Conference (Kansas State Univ., Manhattan, Kan., 1979), pp. 155–159, Develop. in Mech., 10, Kansas St. Univ., Manhattan, Kan., 1979. (Authors' summary) 82e:76052

nguen Tu Than' See Nguen Tu Than' Tutschke, Wolfgang The Riemann-Hilbert problem for nonlinear systems of first-order equations of elliptic type. (Russian) Differential and integral equa problems (Russian), pp. 257-261, Tbilis. Gos. Univ., Tbilisi, 1979. (S. A. Tersenov) 82j:35068 35165 (30E25)

Reduction of the problem of linear conjugation for first-order nonlinear elliptic systems in the plane to an analogous problem for holomorphic functions. Analytic functions, Kozubnik 1979 (Proc. Seventh Conf., Kozubnik, 1979), pp. 446-455, Lecture Notes in Math., 798, Springer, Berlin, 1980. (Manfred W. Kracht) 82b:35009 (30E25, 35A05, 35J45)

Boundary value problems for generalized analytic functions of several complex rariables. Ann. Polon. Math. 39 (1981), 227-238. (J. Kajiwara) 82f:30053 30G20 (32A30, 35A20, 35C99)

Tutte, William T. Dissections into equilateral triangles. The mathematical Gardner, pp. 127-139, Wadsworth, Belmont, Calif., 1981. (See 82b:00003) 05C38 (05B45) Graph factors. Combinatorica 1 (1981), no. 1, 79-97. (Ian Anderson) 82i:05060

See also Nash-Williams, C. St. J. A., 82e:01079; Smith, Codric A. B., 82e:01101 and Bibliography: Tutte, William T., 82e:01108

ng Tuy See Hoàng Tuy

1987

Tuy, Heang Reconstruction of a three-dimensional object from a limited range of views. J. Math. Anal. Appl. 80 (1981), no. 2, 598-616. (Ulrich Oppel) 82g:44007 (28A35, 53C65)

dão quang Tuyên See Đão Quang Tuyên Tuyev, S. V. See Tuev, S. V.

See Tužilin, A. A.

Tuzik, A. I. Infinite systems of linear algebraic equations with coefficients of power growth. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1979, no. 6, 5-9, 138. (Jozef Mikloško) 82e:65046 65F99 (15A24, 65L10)

(with Kudrjavceva, T. D.) Some analysis and synthesis problems in general systems theory. Aviomat. i Telemeh. 1978, no. 11, 129-137 (Russian); translated as Automat. Remote Control 39 (1978), no. 11(2), 1685-1692 (1979). (Authors' summary) 82e:93033

Tuzov, A. N. Generalized solvable groups in which all the serving subgroups of maximal abelian normal subgroups have complements. (Russian) Constructive description of groups with properties prescribed on their subgroups (Russian), pp. 77-85, 145, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (Ja. P. Sysak) 82g:20066 20F19 (20E28)

Tuzov, V. A. A method of describing programming languages. (Russian) Dokl. Akad. Nauk. SSSR 250 (1980), no. 3, 581-584. (From the text) 82h:68008 68B05 (68F05)

Tverdohlebov, A. S. (with Višnevskil, V. M.) Models of closed networks with lockout for analyzing multiprogramming computers. Automat. i Telemeh. 1980, no. 5, 172–179 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 5, part 2, 728–733. (Authors' summary) 82h:68058 68C15 (68B20, 90B22)

(with Schwarz, Gideon) On the reciprocity of proximity relations. J. Ma Psych. 22 (1980), no. 3, 157-175. (Byron J. T. Morgan) 82f:92050 92A25 (04A99,

nan, Daniel) The framing of decisions and the psychology of choice. Science 211 (1981), no. 4481, 453-458. (Authors' summary) 82c:92029 (90A05)

Tweedie, R. L. Perturbations of countable Markov chains and processes. Ann. Inst. Statist. Math. 32 (1980), no. 2, 283-290. (Martin I. Goldstein) 82a:60104 60J10 (60J05)

(with Arjas, E.; Nummelin, E.) Semi-Markov processes on a general state space: α-theory and quasistationarity. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 2, 187-200. (Authors' summary) 82j:60166 60K15

(with Athreya, K. B.; Vere-Jones, D.) Asymptotic behaviour of point processes with Markov-dependent intervals. Math. Nachr. 99 (1980), 301–313. (Masao Mori) 60G55 (60J27, 60K05)

Criteria for ergodicity, exponential ergodicity and strong ergodicity of Markov processes. J. Appl. Probab. 18 (1981), no. 1, 122-130. (Esa Nummelin) 82b:60092

Twizell, E. H. (with Khaliq, A. Q. M.) One-step multiderivative methods for first order ordinary differential equations. BIT 21 (1981), no. 4, 518-527. (Authors' summary) 82m:65069 65L05

Twomey, J. B. (with Holland, F.) Conditions for membership of Hardy spaces. Aspects of contemporary complex analysis (Proc. NATO Adv. Study Inst., Univ. Durham, Durh. 1979), pp. 425-433, Academic Press, London, 1980. (J. A. Cima) 82h:30035 30D5 (with Holland, F.) Integral means of functions with positive real part. Canad. J. Math. 32 (1980), no. 4, 1008-1020. (T. H. MacGregor) 82h:30037 30D50 (30D55)

An integral mean inequality for starlike functions. Mathematika 28 (1981), no. 1, 88-98. (Herb Silverman) 82k:30018 30C45

Tyagi, B. N. On a class of variance balanced block designs. J. Statist. Plann. Inference 3 (1979), no. 4, 333-336 (1980). (Henry Beker) 82a:62122 62K10

(1979), no. 4, 333-336 (1980). (Henry Becker) 82862122 62R.10
Tyagi, R. S. (with Subba Rao, Gita; Mishra, R. K.) Calculation of the minimum energy conformation of biomolecules using a global optimization technique. I. Methodology and application to a model molecular fragment (normal pentane). J. Theoret. Biol. 90 (1981), no. 3, 377-389. (Authors' summary) 82e:92059a 92A40 (81G55 90C30)

(with Subba Rao, Gita; Mishra, R. K.) Calculation of the minimum energy conformation of biomolecules using a global optimization technique. II. Conformation of N-acetylglycine N-methyl amide, a model dipeptide unit. J. Theoret. Biol. 90 (1981), no. 3, 391-395. (Authors' summary) 82e:92059b 92A40 (81G55, 90C30)

Even more about gauge theories in 1+1 dimensions. Phys. Lett. B 99 (1981), no. 3, 218-220. (Author's summary) 82c:81095 81E10 (81G05, 81L05)

Tyc, Zygmunt (with Sadlok, Zbigniew) Remarks on rapidly increasing distributions. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 11-12, 833-837 (1981). (Ioana Ciorănescu) 82i:46058 46F10 (33A65)

Tydeman, John (with Mitchell, Robert) A note on the Kounias and Marin method of best linear Bonferroni bounds. SIAM J. Appl. Math. 39 (1980), no. 1, 173-177. (Stratis

Kounias) 82e:60031 60E15 (90C05)

Tygel, Martin (with Singh, Prem) On some univalent functions in the unit disc. Indian J. Pure Appl. Math. 12 (1981), no. 4, 513-520. (D. R. Wilken) 82k:30024

Tyler, David E. Asymptotic inference for eigenvectors. Ann. Statist. 9 (1981), no. 4, 725-736. (Nariaki Sugiura) 82m:62117 62H10

Tylikowski, A. Dynamic stability of a nonlinear rectangular plate. Proceedings of the VIIIth International Conference on Nonlinear Oscillations, Vol. II (Prague, 1978), pp. 715-720, Academia, Prague, 1979. (Author's summary) 82k:73050 73K12 (73K35)

Tymchatyn, E. D. (with Grispolakis, Joachim) On the existence of arcs in rational curves.

Fund. Math. 108 (1980), no. 1, 23-26. (Lee Mohler) 82c:54030 54F20 (54F50) (with Grispolakis, Joachim) Irreducible continua with degenerate end-tranch arcwise accessibility in hyperspaces. Fund. Math. 110 (1980), no. 2, 117-130. (Jözef 54F50 (54B20) Krasinkiewicz) 82b:54049

(with Grispolakis, Joachim) Continua which are images of weakly confluent mappings only. II. Houston J. Math. 6 (1980), no. 3, 375–387. (M. M. McWaters) 82k-54052 54F15 (54C10)

On absolutely essential mappings. Houston J. Math. 7 (1981), no. 1, 137–145. (T. Mačkowiak) 82m:54008 54C10 (54F99)

(with Oversteegen, Lex G.) On atriodic tree-like continua. Proc. Amer. Math. Soc. 83 (1981), no. 1, 201-204. (James T. Rogers, Jr.) 82h:54058 54F20 (54B20, 54F50,

(with Hunt, John H. V.) A theorem on involutions on unicoherent spaces. Quart. Math. Oxford Ser. (2) 32 (1981), no. 125, 57-67. (Jerry F. Williams) 82j:54083 (with Grispolakis, Joachim) On confluent mappings and essential mappings—a survey. Rocky Mountain J. Math. 11 (1981), no. 1, 131-153. (Józef Krasinkiewicz) 82k:54055 54F20 (54C10)

Tymoczko, Thomas Computers, proofs and mathematicians: a philosophical investigation of the four-color proof. Math. Mag. 53 (1980), no. 3, 131–138. (Mario Bunge) 82e:00031 00A25 (03A05, 05C15, 68K05)

Tynianskii, N. T. (with Vasil'ev. N. S.) Hierarchical differential games. (Russian) Differential, noncooperative, cooperative and statistical games (Russian), pp. 3-25, 106, Kalinin. Gos. Univ., Kalinin, 1979. (E. G. Al'breht) 82b:90130 90D05

(with Sučkov, A. P.) Existence of a solution in linear differential games with general constraints on controls. (Russian) Existence of solutions, stability and informedness in game theory (Russian), pp. 104–109, 112, Kalinin. Gos. Univ., Kalinin, 1979. (F. M. Kirillova) 82a:90188 90D25

mov, M. See Tonnov, M.

Tyrer Jones, J. Mary On isomorphisms of direct powers. Word problems, II (Conf. on Decision Problems in Algebra, Oxford, 1976), pp. 215-245, Stud. Logic Foundations Math., 95, North-Holland, Amsterdam, 1980. (A. H. M. Hoare) 821:20068 20F99

Tyrtyšnikov, E. E. (with Voevodin, V. V.; Svešnikov, A. G.) An effective numerical method for solving an integral equation of the second kind in problems of electrodynamics. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1980, no. 1, 14-26, 72. (R. Smarzewski) 82e:65136 65R20 (78A45)

Tylkevič, R. I. Pronormal regular subgroups of a finite symmetric group. (Russian) Modules and linear groups. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 103 (1980), 132-139, 160. (A. A. Kondrat'ev) 82g:20011 20B35

Туškevič, V. А. ★Некоторые вопросы теории устойчивости функционально-дифференциальных уравнений. (Russian) [Some questions of the theory of stability of functional-differential equations] "Naukova Dumka", Kiev, 1981. 79 pp. (J. K. Hale) 82m:34074 34K20

Tyson, John J. (with Fife, Paul C.) Target patterns in a realistic model of the Belousov-Zhabotinskii reaction. J. Chem. Phys. 73 (1980), no. 5, 2224-2237. (Authors' summary) 82a:80004 80A30 (58F14, 92A09)

Tyssa, A. (with Westerlund, T.) Remarks on: "Asymptotic behavior of the extended Kalman filter as a parameter estimator for linear systems" [IEEE Trans. Automat. Control 24 (1979), no. 1, 36-50; MR 80b:93149] by L. Ljung. IEEE Trans. Automat. Control 25 (1980), no. 5, 1011-1012. (Authors' summary) 82a:93063 93E11

Tyugu, E. H. (with Harf, M. Ja.) Algorithms of structured synthesis of programs. Programmirovanie 1980, no. 4, 3-13, 95 (Russian); translated as Programming as Comput. Software 6 (1980), no. 4, 165-175 (1981). (Authors' summary) 82f:68013

Tyuptsov, A. D. See Tjupcov, A. D.

Tzafestas, S. G. (with Stavroulakis, Peter) Optimal control of distributed-parameter systems via the matrix minimum principle. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. II, pp. 399-407,

Reidel, Dordrecht, 1980. (Authors' summary) 82d:93072 93E20 (with Stavroulakis, Peter) Partitioning approach to adaptive distributed-parameter filtering. Ricerche Automat. 11 (1980), no. 1, 51-71 (1981). (R. S. Bucy) 82m:93091 93E11 (93E10)

A note on: "Parameter adaptive control of stochastic distributed systems" [Internat. J. Systems Sci. 11 (1980), no. 12, 1397-1433; MR 81m:93090]. Internat. J. Systems Sci. 12 (1981), no. 5, 655-656. (Editors) 82j:93060 93E20

Tzafriri, L. (with Johnson, William B.; Maurey, B.; Schechtman, G.) Symmetric structures in Banach spaces. Mem. Amer. Math. Soc. 19 (1979), no. 217, v + 298 pp. (Z. Chanturia (Zbl 421:46023)) 82j:46025 46B25 (46E30, 47B38)

(with Lindenstrauss, J.) On the isomorphic classification of injective Banach lattices. Mathematical analysis and applications, Part B, pp. 489-498, Advances in Math., Suppl. Studies, 7b, Academic Press, New York, 1981. (G. Schechtman) 82k:46033 46B30 (with König, Hermann) Some estimates for type and cotype constants. Math. Ann.

256 (1981), no. 1, 85–94. (Gilles Pisier) **82**; **46022** 46B20 (47B10, 60B11) **Tzanakis, Nicholas** On the integer solutions of the equations $X^3 + Y^{12} = U^6 + X^3 + Y^6 = U^{18} + V^6$. *Eleutheria* **1979**, no. 2, 549–553. (S. P. Mohanty) **82**h: **10025** 10B15

A new proof of a theorem in trigonometry. Eleutheria 1979, no. 2, 554-560. (C. F. Moppert) 82h:51030 51M20

munes, Nicolaos S. (with Avgeris, T. G.) A new approach to the estimation of continuous spectra. Kybernetes 10 (1981), no. 2, 123–133. (Authors' summary) 82d:94031 94A17 See also Conference: Information Sciences and Systems, 82d:93002; 82d:93003 and 82d:94002

Tzarina, M. See Țarină, Marian

Tze, Hsiung Chia (with Jafarizadeh, M. A.; Snyder, M.) Quaternionic multi-S4 instantons in general covariant SU(2) Yang-Mills and HP(n) 0-models. Nuclear Phys. B 176 (1980), no. 1, 221-242. (M. I. Monastyrskii) 82c:81083 81E10 (32M99, 58E20)

(with Gipson, John M.) Possible heavy solitons in the strongly coupled Higgs sect Nuclear Phys. B 183 (1981), no. 3, 524-546. (K. S. Viswanathan) 82h:81144 (81E99)

alario, J. Cardinal discrete splines. Applicable Anal. 11 (1980/81), no. 2, 85-101. (M. Marsden) 82bc41012 41A15 Tzvelik, A. M. See Cvelik, A. M.

- Uba, P. (with Vainikko, G.) A piecewise polynomial approximation to the solution of an integral equation with weakly singular kernel. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 4, 431–438. (Authors' summary) 82h:65100 65R20 (45L10) ida, Fuichi Real analytic SL(n, C) actions. Bull. Yamagata Univ. Natur. Sci. 10 (1980),
- no. 1, 1-14. (Raymond Barre) 82e:57023 57\$25
 - Real analytic SL(n, R) actions on spheres. Tohoku Math. J. (2) 33 (1981), no. 2, 145-175. (H.-T. Ku) 82±57039 57S20 (57S25)
- Uchida, Y. The control test and its application to the choice and the evaluation of alternative stochastic economic systems. Analysis and optim (Proc. Insernat. Conf., Univ. Oxford, Oxford, 1978), pp. London, 1980. (Author's introduction) 824:90044 90A19 pp. 523-535, Academic Press,
- he An identity for the divisor generating function arising from sorting J. Combin. Theory Ser. A 31 (1981), no. 2, 131-135. (Helmut Prodinger) 82k:05015 05A19 (05A15, 68E05)
- Uchiyama, Köhei Brownian first exit from and sojourn over one-sided moving bou plication. Z. Wahrsch. Verw. Gebiete 54 (1980), no. 1, 75-116. (Adhir K. Basu) 82c-60143 60165 (58G11, 58G32)
- Uchiyama, Kôichi Characteristic boun dary value problems for hyperbolic equations. Proc. n Acad. Ser. A Math. Sci. 57 (1981), no. 8, 398-402. (Alan Jeffrey) 82m:35095 35L35 (35E20)
- Uchiyama, Saburô On rational approximations to irrational numbers. Tsukuba J. Math. 4 (1980), no. 1, 1-7. (L. C. Eggan) 82j:10055 10F05 (10F35)
- Uçoluk, Metin Eine Methode unter Benutzung der Symmetrie für die Lösungen von elektrischen Netzwerken, deren Struktur symmetrisch, Quellen unsymmetrisch sind. mary) İstanbul Tek. Üniv. Bül. 33 (1980), no. 1, 88-110. (From the ну) 82а:94107 94C05
- Udarcev, E. P. (with Kas'janov, V. A.; Voicehovskaja, K. F.) Identification algorithms with nonlinear tunable models. (Russian) Kibernet. i Vyčisl. Tehn. No. 50 (1980), 95-101, 108. (Authors' summary) 82e:93085 93D15 (93B30)
 - (with Kas'janov, V. A.) Optimal implicit algorithms for identifying dynamical and statistical objects. (Russian) Kibernet. i Vyčisl. Tehn. No. 50 (1980), 101-103, 108. (Authors' summary) 826:49023 49C20
- Udayabaskaran, S. (with Srinivasan, S. K.) Stochastic perturbation of a stable deterministic plasma system. Phys. Lett. A 80 (1980), no. 5-6, 387-389. (Authors' summary) 82c:82082 82A45 (60H99)
- chini, Elisa Brinis See Udeschini Brinis, Elisa
- Udeschini, Paolo Linearized Hamiltonian equations of the Einsteinian gravitational field. (Italian) Ric. Mat. Univ. Parma (4) 5 (1979), part 2, 523–532 (1980). (Mauro Francaviglia) 82k:83012 83C25
 Udeschini Brinis, Elisa A natural scalar field in the Einstein gravitational theory. Gen.
- Relativity Gravitation 12 (1980), no. 6, 429-437. (Author's summary) 82b:83009
- Udilov, V. V. Miniversal deformation of complex orbits of systems of "input-output" type. (Russian) Complex control systems (Russian), pp. 3-10, 94, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. (Author's summary) 824:93013 93B05 (58F99)
- Udrişte, Constantin (with Dicu, Constantina) Properties of the pseudo-Riemannian manifold $(TM, G = g^C g^{D^-} g^V)$, constructed over the Riemannian manifold (M, g).

 Mathematica (Cluj) 21(44) (1979), no. 1, 33-41. (David Blair) 82m:53022 53B20
- wadia, F. E. A note on the reliability of redundant systems. *Appl. Math. Comput.* 8 (1981), no. 1, 35–49. (Author's summary) 82f:62182 62N05 (90B25)
 - Controllability, observability and identification of classical linear dynamic systems Solid Mech. Arch. 6 (1981), no. 2, 193-211. (From the introduction) 82i:70021 (70Q05, 93B05, 93B07, 93B30)
- Ueberhuber, Christoph W. (with Frank, Reinhard) Iterated defect correction for differential equations. I. Theoretical results. (German summary). Computing 20 (1978), no. 3, 207–228. (Authors' summary). 821:65075 65L05 (65L10)
 - Implementation of defect correction methods for stiff differential equations (German summary) Computing 23 (1979), no. 3, 205-232. (Author's summary) 82f:65076
 - (with Frank, Reinhard; Schneid, Josef) The concept of B-convergence
- Numer. Anal. 18 (1981), no. 5, 753-780. (Authors' summary) 82h:65054 65L05
 Ueckerdt, R. (with Akulenko, L. D.; Bolotnik, N. N.; Heimann, Bodo; Kaplunov, A. A.;
- Loose, H.) *Dynamik und optimale Schwingungstilgung in unwuchterregten Schwingsystemen. (German) [Dynamics and optimal damping of oscillations in oscillation systems generated by imbalance] With English and Russian summaries. Report 1980, 3. Aka demie der Wissenschaften der DDR, Institut für Mathematik, Berlin,
- 1980. 109 pp. (A. de Castro Brzezicki) 82e:70021 70K99 (93C15)
 Ueda, Hideharu Unicity theorems for entire functions. Kodai Math. J. 3 (1980), no. 2, 212-223. (S. Hellerstein) 82a:30041 30D35 (30D20)
 - Unicity theorems for meromorphic or entire functions. Kodai Math. J. 3 (1980),
- no. 3, 457-471. (Chung-Chun Yang) 82c:30048 30D35
 Ueda, Yoshisuke (with Akamatsu, Norio) Chaotically transitional phenomena in the forced egative-resistance oscillator. IEEE Trans. Circuits and Systems 28 (1981), no. 3,
- 217-224. (Frederick R. Marotto) 82h:58029 58F13 (34C27, 70K50) da, Yutaka (with Noguchi, Akira) On the relationship between the Zakharov-Shabat and Hirota-Oishi schemes for constructing various soliton solutions. Progr. Theoret. Phys. 64 (1980), no. 3, 794-802. (L. A. Takhtajan (Tahtadžjan)) 82c:35075 35O20 (35A25, 81(99)
- Uehara, M. (with Gomide, F. M.) Mach's principle in evolutionary universes with time varying temporal metric coefficient. Astrono om. and Astrophys. 95 (1981), no. 2, 362-365. (Authors' summary) 824:83069 83F05 (83C05)
- with Kugo, Taichiro) The form of BRS-invariant operators. Progr. Theoret. Theoret. Phys. 64 (1980), no. 4, 1395–1411. (R. Delbourgo) 82b:81131 81G20 (81E10)

 (with Kugo, Taichiro) Massless particle with spin j ≥ 1 implies the S-matrix symmetry. Progr. Theoret. Phys. 66 (1981), no. 3, 1044–1060. (Authors' summary) 82b:81080 81F15 (81D25)

- Uekawa, Yasuo On the concepts of factor intensities and the relation between commodity prices and factor rewards. General equilibrium, growth, and trade, pp. 333-346, Academic Press, New York, 1979. (From the introduction) 82d:90026 90A12
- ong Uen See Nguyen Thuong Uen
- Ueno, Kazushige A remark on the automorphism pseudogroup of a differential equation of immersion type. Publ. Res. Inst. Math. Sci. 15 (1979), no. 3, 787-796. (A. M. Vinogradov) 82e:58107 58H05 (57R32, 58G35)
- Ueno, Kenji Classification of algebraic varieties. II. Algebraic threefolds of parabolic type. Proceedings of the International Symposium on Algebraic Geometry (Kyoto Unic, Kyoto, 1977), pp. 693–708, Kinokuniya Book Store, Tokyo, 1978. (R. O. Wells, Jr.) 82f:14012 14D20 (14J30)
 - Birational geometry of algebraic threefolds. Journées de Géometrie Algébriq

 - matuonal geometry of algebraic Infectious. Journees de Geometre Algebraice d'Angers, Juillet 1979/Algebraic Geometry, Angers, 1979, pp. 311–323, Sijthoff & Noordhoff, Alphen aan den Rijn, 1980. (Iayant M. Shah) 82i:14026 14330 (14D20)
 On three-dimensional compact complex manifolds with nonpositive Kodaira dimension. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 10, 479–483. (Takao Estila) 873-3200. (AMS) Fujita) 82c:32030 32J99 (14J15)
- Ueno, Kimio Monodromy preserving deformation of linear differential equations with regular singular points. *Proc. Japan Acad. Ser. A Math. Sci.* **56** (1980), *no.* 3, 97–102. (R. Gérard) **82i:34012** 34A99 (32G99, 35Q20, 58A17)
 - Monodromy preserving deformation and its application to soliton theory. Pro Japan Acad. Ser. A Math. Sci. 56 (1980), no. 3, 103-108. (R. Gérard) 82f:34013 34A99 (32G99, 35Q20, 58A17)
- Ueno, Sueo Cauchy system for Fredholm resolvents with composite displacement kernels.
 J. Optim. Theory Appl. 32 (1980), no. 4, 451–461. (E. Meister) 82g:45004
 45B0 (65R20)
- Ueno, Tadashi Multidimensional wave equation and an associated group of operators on the boundary. J. Fac. Sci. Univ. Tokyo Sect. IA Math. 26 (1979), no. 3, 413–442. (Author's review (Zbl 432:35047)) 82g:35065 35L10 (47D10, 60J60)
- boundary 3. review (Zbl 432:35047) 82g:35065 351.10 (47D10, 60160) no. Y. Critical dynamics of the random spherical model. Phys. Lett. A 75 (1979/80), no. 5, 383-385. (Author's summary) 82d:82060 82A42 (82A67)
- Uesu, Kagumi (with Goto, Morikuni) Lie groups with left invariant metrics of nonnegative curvature. Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 1, 33-38. (Rolf Sulanke) 53C30 (22E15)
 - (with Goto, Morikuni) Left invariant Riemannian metrics on complex Lie groups. Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 1, 65-70. (Rolf Sulanke) 82i:53042 53C30 (32M05)
 - A note on: "Curvatures of left invariant metrics on Lie groups" [Adv. in Math. 21 (1976), no. 3, 293–329; MR 54 #12970] by J. Milnor. Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 1, 83–85. (Rolf Sulanke) 82m:53050 53C30 (22E15)
- Ueyama, Hiroshi Fluctuating hydrodynamic equations of mixed and of chemically reacting gases. J. Statist. Phys. 23 (1980), no. 4, 463-482. (Author's summary) 82a:82029 82A35 (76P05, 76R99, 80A30)
- Ugbebor, Olabisi O. Ergodic properties of Brownian motion. Proc. Edinburgh Math. Soc. (2) 23 (1980), no. 3, 331–340. (C. Park) 82i:60134 60J65
- Uglanov, A. V. Second-order parabolic differential equations for generalized measures on Hilbert space. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh.
- 1978, no. 1, 16-22. (From the text) 82a:35095 35R15 (35K99, 46G99) Surface integrals and differential equations on an infinite-dimensional space (Russian) Dokl. Akad. Nauk SSSR 247 (1979), no. 6, 1331-1335. (P. Ver Eecke)
- 82k:58026 58C35 (46G99) Surface integrals in a Banach space. (Russian) Mat. Sb. (N.S.) 110(152) (1979), no. 2, 189-217, 319. (P. Ver Eecke) 82k:58025 58C35 (46G99)
- Ugol'nikov, A. B. Synthesis of schemes and formulas in incomplete bases. (Russian) Dokl.
- Akad. Nauk SSSR 249 (1979), no. 1, 60-63. (From the text) 82d:94084 Ugowski, Henryk On a certain infinite system of semilinear evolution equations. Ann. Mat. Pura Appl. (4) 125 (1980), 337-347. (A. Pazy) 82c:34079 34G20 (45J05, 47H15)
- Ugulava, D. K. On a saturation problem in the space L_p(R*), 2<∞. (Russian) Trudy Vyčisl. Centra Akad. Nauk Gruzin. SSR 20 (1980), no. 1 Vyčisl. Mat. Programmirovanie, 9-20. (J. Szabados) 82a:41021 41A40 (41A35)</p>
- Uhl, J. J., Jr. Pettis's measurability theorem. Proceedings of the Conference on Integration, Topology, and Geometry in Linear Spaces (Univ. North Carolina, Chapel Hill, N.C., 1979), pp. 135–144, Contemp. Math., 2, Amer. Math. Soc., Providence, R.I., 1980. (S. D. Chatterji) 82m:28020 28B05 (46G10)
 - (with Gretsky, N. E.) Carleman and Korotkov operators on Banach spaces. Acta Sci. Math. (Szeged) 43 (1981), no. 1-2, 207-218. (A. C. Zaanen) 82i:47044 47B38 47B38
 - (with Andrews, Kevin T.) Weak compactness in $L_{\infty}(\mu, X)$. Indiana Univ. Math. J. 30 (1981), no. 6, 907-915. (J. Diestel) 82i:46024 46B25 (46E30)
- enbeck, George E. Reminiscences. (Bulgarian) Translated by N. Ahababjan. Fiz.-Mat. Spis. B"Igar. Akad. Nauk. 21(54) (1978), no. 2, 112-121. (Editors) 82e:01104 Some notes on the relation between fluid mechanics and statistical physics. Annual review of fluid mechanics, Vol. 12, pp. 1-9, Annual Reviews, Palo Alto, Calif., 1980. (R. K. Jain) 82i:82004 82-03 (01A70, 76-03)
 - Some reminiscences about Einstein's visits to Leiden. Some strangeness in th proportion (Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 524-525, Addison-Wesley, Reading, Mass., 1980. (See 82d:83002) 01A70
- Uhlenbeck, K. (with Sacks, Jonathan) The existence of minimal immersions of 2-spheres Ann. of Math. (2) 113 (1981), no. 1, 1-24. (John C. Wood) 82f:58035 58E12 (53C42.
 - Morse theory by perturbation methods with applications to harmonic may Amer. Math. Soc. 267 (1981), no. 2, 569-583. (John C. Wood) 82k:58029 58E05 (49F15, 58E20)
- brock, D. A. (with Hess, Harald; Schrader, Robert) Kato's inequality and the spectral distribution of Laplacians on compact Riemannian manifolds. J. Dif. (1980), no. 1, 27-37 (1981). (G. V. Rozenbljum) 82g:58090 58G25 Differential Geom. 15
- Uhlig, Dietmar On the synthesis of self-correcting networks. Proceedings of the Internation Congress of Mathematicians (Helsinki, 1978), pp. 987-993, Acad. Sci. Fennica, Helsinki, 1980 (Jan Grahowski) 82h-94048 94C15
- Uhlig, Frank Inertia and eigenvalue relations between symmetrized and symmetrizing

- matrices for the real and the general field case. Linear Algebra Appl. 35 (1981), 203-226.
- (Thomas L. Markham) 82g:15006 15A21 (01A55, 01A60) mann, Armin (with Alberti, Peter M.) Existence and density theorems for stochastic maps on commutative C*-algebras. Math. Nachr. 97 (1980), 279-295. (Man-Duen Choi) 82i:46087 46L05 (46L55)
- Uhlmann, W. (with Kuna, M.) A numerical method for small scale yielding crack problems occurring in a deformation theory. Numerical methods in fracture mechanics (Swansea, 1978), pp. 814-820, Univ. College Swansea, Swansea, 1978. (Authors' summary) 73M05
- 82m:73070 73MU5

 Uhovskii, M. R. Commutativity of finite-dimensional subalgebras of Lie algebras of vector fields that are solenoidal in a two-dimensional domain and tangent to its boundary. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk. 1980, no. 3,
- 31-34, 109. (I. Vaisman) 82b:53090 53C99 (17899, 58F99, 93B05)
 Uhrin, Béla Remark on Minkowski's theorem on convex bodies. (Hungarian) Mat. Lapok 28 (1977/80), no. 4, 323-325. (K. Győry) 82k:10031
- Ujihara, Kikuo Theory of an arbitrarily stratified optical cavity with output coupling. Rep. Univ. Electro-Comm. 31 (1980/81), no. 2, 175-188. (Author's summary) 82g:78025
- Ujiie, Katsumi (with Doi, Makoto) Round-robin queueing system with two input-sources Proc. Fac. Sci. Tokai Univ. 15 (1980), 63-69. (William Henderson) 82b:60120
- Ukegawa, Takasaburo On M-rings and general ZPI-rings. Proceedings of the 4th Symposium on Semigroups (Yamaguchi Univ., Yamaguchi, 1980), pp. 112–116, Yamaguchi Univ., Yamaguchi, 1980. (From the text) 82k:16044 16A66
- Ukita, Yoshimasa Hypothesis spaces and decomposition of sum of squares in linear models. Essays in probability and statistics, pp. 227-233, Shinko Tsusho, Tokyo, 1976. (Author's summary) 82h:62109 62J05
- Ukkonen, Esko Remarks on the nonexistence of some covering grammars. Theoretical computer science (Fourth GI Conf., Aachen, 1979), pp. 298-309, Lecture Notes in Comput. Sci., 67, Springer, Berlin, 1979. (Anton Nijholt) 82c:68056 68F25 (68F05)
 - On size bounds for deterministic parsers. Automata, languages and progr (Akko, 1981), pp. 218-228, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. 68F25
 - On the calculation of the effects of roundoff errors. ACM Trans. Math. Software 7 (1981), no. 3, 259-271. (Author's summary) 82i:65030 65G05
- Structure preserving elimination of null productions from context-free grammars. Theoret. Comput. Sci. 17 (1982), no. 1, 43–54. (Author's summary) 82m:68126 68F05
 Ulam, Stanislaw M. (with Kac, Mark) ★Mathematics and logic. Retrospect and prospects.
- Abridged reprint of the 1968 edition. Penguin Books, New York, 1979. 204 pp. ISBN 0-14-080387-4 (Editors) 82a:00007 00A05 (03A05)
- (with Chung, F. R. K.; Erdős, Paul; Graham, Ronald L.; Yao, F. Frances) Minimal decompositions of two graphs into pairwise isomorphic subgraphs. Proceedings of the Tenth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1979), pp. 3-18, Congress. Numer., XXIII-XXIV,
- Utilitas Math., Winnipeg, Man., 1979. (Donald L. Goldsmith) 82b:05080 05C35 anov, G. M. (with Petrov, B. N.; Ul'janov, S. V.) Dynamical systems with random and fuzzy structure. (Russian) Engineering cybernetics, Vol. 11 (Russian), pp. 3-76, 192, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (V. Ja. 93E03 (60H99, 80-02) Kreinovič) 82h:93063
 - (with Petrov, B. N.; Ul'janov, S. V.) Complexity of finite objects and informational control theory. (Russian) Engineering cybernetics, Vol. 11 (Russian), pp. 77-147, 192, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (V. Ja. 93E03 (03D15, 68C25) Kreinovič) 82h:93064
 - (with Petrov, B. N.; Ul'janov, S. V.) Informativeness of signals and compression of controlled information processes. (Russian) Engineering cybernetics, Vol. 13 (Russian), pp. 3-120, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980.
 (J. S. Joel) 82g:94003 94A15 (62B10, 62B20, 68C20, 93E10, 93E11, 94A05) 94A15 (62B10, 62B20, 68C20, 93E10, 93E11, 94A05)
 - Method of isochronous pointwise transformations in the theory of systems with variable structure. I. Avtomat. i Telemeh. 1980, no. 2, 45-55 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 2, part 1, 172-181. (P. J. Holmes) 34D05 (34H05, 58F13, 93C05)
 - Method of isochronous pointwise transformations in the theory of systems with variable structure. II. Avtomat. i Telemeh. 1980, no. 3, 46-50 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 3, part 1, 325-328. (P. J. Holmes) 82k:34056b 34D05 (34H05, 58F13, 93C10)
- Ulanovskii, M. A. Conformally complete Lorentz manifolds. (Russian) Ukrain. Geom. Sb. No. 24 (1981), 122-129, v. (A. K. Guc) 82m:53068 53C50
- Ulare, Saion (with Solomjak, M. Z.) Spaces dual to the spaces Λ_0 . (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 1, 113-115, 122. (Alan Shuchat) 82a:46029 46E15
- Ułasiewicz, Jędrzej (with Gawrych-Żukowski, Andrzej; Kotowski, Jerzy)
- Polyoptimierungsprobleme mit nicht konvexen Zielmengen. Wiss. Z. Tech. Univ. Dresden 29 (1980), no. 2, 427-429. (Klaus Lommatzsch) 824:90118 90C31
- Ulbrich, K.-H. Vollgraduierte Algebren. [Fully graded algebras] Abh. Math. Sem. Univ. Hamburg 51 (1981), 136-148. (H. Tominaga) 82m:16002 16A03 (16A74) Über nicht-kommutative abelsche Galoisalgebren. Comm. Algebra 9 (1981), no. 5, 553-559. (Kazuo Kishimoto) 82f:16006 16A24
- Ulbricht, Ralf Weighted sums of independent identically distributed random variables.

 Ann. Probab. 9 (1981), no. 4, 693–698. (M. D. Burke) 82j:60090 60G50 (46A45)

 Ülehla, I. (with Havliček, M.; Hořejši, J.) Eigenvalues of the Schrödinger operator via the
- Phys. Lett. A 82 (1981), no. 2, 64-66. (Authors' summary) Prüfer transformation. 82c-81026 81C05 (47A40)
- Ulery, Dana L. (with Giese, John H.; Khalil, Hatem M.) A general algorithm for generating families of difference approximations to linear partial differential equations. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 155-160, IMACS, New Brunswick, N.J., 1977. (See 82a:65004) 65N05
- Ul-Haq, Fazl See ul-Haq, Fazl Ul Haq, Masood See ul Haq, Masood

- Ul'janov, S. V. (with Petrov, B. N.; Ulanov, G. M.) Dynamical systems with random and fuzzy structure. (Russian) Engineering cybernetics, Vol. 11 (Russian), pp. 3–76, 192, Akad. Nauk SSSR, Vsesojus. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (V. Ja. Kreinovič) 82h:93063 93E03 (60H99, 80–02)
 - (with Petrov, B. N.; Ulanov, G. M.) Complexity of finite objects and informational control theory. (Russian) Engineering cybernetics, Vol. 11 (Russian), pp. 77-147, 192, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (V. Ja.
 - Kreinovič) 82h:93064 93E03 (03D15, 68C25)
 (with Petrov, B. N.; Ulanov, G. M.) Informativeness of signals and comp controlled information processes. (Russian) Engineering cybernetics, Vol. 13 (Russian), pp. 3-120, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (J. S. Joel) 82g:94003 94A15 (62B10, 62B20, 68C20, 93E10, 93E11, 94A05)
- UVjanov, V. V. Estimation of the convergence rate in the central limit theorem in a separable real Hilbert space. (Russian) Mat. Zametki 29 (1981), no. 1, 145-153, 157. (A. Ja. Dorogovcev) 82d:60020 60B12
- On improving estimates of the closeness of two distributions of sums of random variables with values in Banach spaces. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1981, no. 1, 50–57, 87. (S. A. Cobanjan) 82h:60019 60812 Ul'janova, V. I. (with Abramov, A. A.; Birger, E. S.; Konjuhova, N. B.) On methods of
- numerical solution of boundary value problems for systems of linear ordinary differential equations. Numerical methods (Third Collog., Keszthely, 1977), pp. 33-67, Collog. Math.
 - Soc. János Bolyai, 22, North-Holland, Amsterdam, 1980. (Editors) 823-65051 65L10 (with Abramov, A. A.; Ditkin, V. V.; Konjuhova, N. B.; Pariiskii, B. S.) The calculation of eigenvalues and eigenfunctions of ordinary differential equations with singularities. (Russian) 2. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 5, 1155-1173, 1358.
- Singulariuse, (Authors' summary) 82ac55062 65L15

 Ullah, Aman (with Srivastava, Virender Kumar) On Lindley-like mean correction in the proved estimation of linear regression models. Econom. Lett. 6 (1980), no. 1, 29-35. (H. Toutenburg) 82j:62051 62J02
 - The exact, large-sample and small-disturbance conditions of dominance of biased estimators in linear models. Econom. Lett. 6 (1980), no. 4, 339-344. (Author's summary) 82h:62110 62J05 (62P20)
- Ullah, Nazakat On the expansion of the single eigenvalue probability density function. J. Statist. Phys. 24 (1981), no. 3, 413-418. (Author's summary) 82d:81164
- Ullman, Jeffrey D. (with Aho, A. V.; Yannakakis, Mihalis) Modeling communications protocols by automata. 20th Annual Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 267-273, IEEE, New York, 1979. (See 82a:68004)
 - (with Maier, David: Mendelzon, Alberto O.: Sadri, Fereidoon) Adequacy of decompositions of relational databases. Advances in data base theory, Vol. 1 (Proc. Workshop, Toulouse, 1979), pp. 101-114, Plenum, New York, 1981. (See 82a:68040)
 - (with Beeri, Catriel; Mendelzon, Alberto O.; Sagiv, Yehoshua) Equivalence of relational database schemes. SIAM J. Comput. 10 (1981), no. 2, 352-370. (Authors' summary) 82m:68033 68B15
 - (with Aho, A. V.; Sagiv, Yehoshua; Szymanski, Thomas G.) Inferring a tree from lowest common ancestors with an application to the optimization of relational
 - expressions. SIAM J. Comput. 10 (1981), no. 3, 405-421. (Authors' summary) 82h:68015 68B15 (68C05)
- (with Toueg, Sam) Deadlock-free packet switching networks. SIAM J. Comput. 10 (1981), no. 3, 594-611. (Authors' summary) 82h:68040 68B20 (94C10)
- nan, Joseph L. (with Saff, E. B.; Varga, R. S.) Incomplete polynomials: an electrostatics approach. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 769-782, Academic Press, New York, 1980. (Manfred v. Golitschek) 82h:41009
- On orthogonal polynomials associated with the infinite interval. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 889-895, Academic Press, New York, 1980. (T. S. Chihara) 82c:42024 42C05
- Ullom, Stephen V. Galois module structure for intermediate extensions. J. London Math. Soc. (2) 22 (1980), no. 2, 204-214. (M. E. Keating) 82a:12007 12A57 (12A35, 12A70)
- Ullrich, Ch. (with Klatte, R.) On conversions between screens. (German sums Computing 24 (1980), no. 2-3, 107-114. (Authors' summary) 82h:65034 65G05 (with Klatte, R.) Complex sector arithmetic. (German summary) Computing 24 (1980), no. 2-3, 139-148. (Authors' summary) 82h:65051 65G10
- Ullrich, Hans Jürgen (with Geise, Gerhard) Geometrische Theorie der aufgelösten und unaufgelösten Mehrfachschnitte von Kossellinien für alle Kristallsysteme. Wiss. Z. Tech. Univ. Dresden 29 (1980), no. 6, 1291-1295. (Authors' summary) 82m:51024
- (52A43, 82A60) Ulrich, Bernd Torsion des Differentialmoduls und Kotangentenmodul von Kurvensingularitäten. [Torsion of the differential module and cotangent module of curve
- singularities] Arch. Math. (Basel) 36 (1981), no. 6, 510-523. (Markus Brodmann) 82i:13018 13D10 (13D25, 14H20)
- Ulrich, Dolph RMLC: solution to a problem left open by Lemmon. Notre Dame J. Formal Logic 22 (1981), no. 2, 187-189. (Robert P. McArthur) 82j:03024 03B45

 Strict implication in a sequence of extensions of \$4. Z. Math. Logik Grundlag. Math.
- 27 (1981), no. 3, 201-212. (Jerzy Perzanowski) 82h:03017 03B45 Ulrych, T. J. (with Ooe, M.) Autoregressive and mixed autoregressive-moving average models and spectra. Nonlinear methods of spectral analysis, pp. 73-125, Topics Appl. Phys., 34, Springer, Berlin, 1979. (See 82;62069) 62M10 (62M15) Phys., 34, Springer, Berlin, 1979. (See 82j:62069)
- Ulyanova, Valentyina I. See Ul'janova, V. I. Uma, S. N. Root space analysis for nondegenerate graded Lie algebras. Proceedings of the Conference on Probability, Stochastic Processes and Statistical Mechanics (Mysore, 1979), pp. 171-175, Matscience Rep., 97, Inst. Math. Sci., Madras, 1979. (Nigel B. Backhouse)
 - 17A70 (81C40) Representations of a pair of para-Bose operators using graded Lie algebraic method. Phys. Scripta 24 (1981), no. 6, 938-940. (Author's summary) 82m:81084 81G20
- ar, S. (with Habib, Anwar) On generalized Bernstein polynomials. Indian J. Pure Appl. Math. 11 (1980), no. 2, 177-189. (E. W. Chency) 32d:41028 41A36

- erusi, Prakash G. (with Gopalakrishna, H. S.) Coefficient estimates for some classes of spiral-like functions. *Indian J. Pure Appl. Math.* 11 (1980), no. 8, 1011–1017. (V. Linis) 82x3023 30C50 (30C45)
- On a generalized class of functions of bounded boundary rotation. (French summary)

 Rend. Mat. (7) 1 (1981), no. 1, 127-138. (Evelyn M. Silvia) 82i:30021 30C45 (30C70) arbanow, I. Description of a latticed cubature formula for multidimensional domains with smooth boundaries. (Russian) Voprosy Vyčisl. i Prikl. Mat. (Tashkent) No. 58 (1979), 6-13, 119. (A. Cojiu) 82a:65022 65D32
- naros, S. E. Asymptotic comparison of local probabilities of multidimensional hypergeometric and polynomial distributions. (Russian) Dokl. Akad. Nauk UzSSR 1981, no. 6, 9–12. (From the text) 82a:6903 60F05 naros, S. U. **Has6pannae rpyna. (Russian) [Selected works] Edited by A. A. Adhamov. With an introduction by M. S. Asimov and A. S. Sadykov. "Fan", Tashkent, 1978. 263 pp. (Editor's description) 82a:601676 01A75
- bach, Dule On characterizing generalized Bayes estimators for the natural parameter. J.

 Amer. Statist. Assoc. 75 (1980), no. 371, 729-733. (Arthur Cohen) 82b:62007 62C10
 - Bayes estimation with spherically symmetric, convex loss. Ann. Inst. Statist. Ma⁻⁻.

 33 (1981), no. 1, 81-90. (S. G. Maloševskii) 82j:62004 62C10 (62F15)

 A note on the median of a distribution. Ann. Inst. Statist. Math. 33 (1981), no. 1,

 - 135-140. (Zdzisław Rychik) 82e:60024 60E05 (62E15)
 On inference for a mixture of a Poisson and a degenerate distribution. Comm.
 Statist. A—Theory Methods 10 (1981), no. 3, 299-306. (Author's summary) 82d:62058
 - (with Ali, Mir Masoom; Hassanein, Khatab M.) Estimation of quantiles of exponential and double exponential distributions based on two order statistics. Con Statist. A-Theory Methods 10 (1981), no. 19, 1921-1932. (Authors' summary) 82i:62034
- 62E30 (62F10)
- (with Ali, Mir Masoom; Hassanein, Khatab M.) Estimating Pareto quantiles using two order statistics. Comm. Statist. A—Theory Methods 10 (1981), no. 19, 1933–1941. (Authors' summary) 82ic52077 62G30 (62F10)
- Umbetzanov, D. U. Investigation of almost-multiperiodic solutions of hyperbolic systems by means of reduction to canonical form. (Russian. Kazakh summary) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 1, 46-51, 86. (V. Durikovič) 82i:35110
- ra, Hiroshi On a property of symmetric products of a curve of genus 2. Proceedings of the International Symposium on Algebraic Geometry (Kyoto Unic., Kyoto, 1977), pp. 709-721, Kinokuniya Book Store, Tokyo, 1978. (Masaki Maruyama) 82c:14025 14H40 (14F05)
- eno, Takashi (with Kazama, Hideaki) On a certain holomorphic line bundle over a compact non-Kahler complex manifold. Math. Rep. Kyushu Univ. 12 (1979/80), no. 2, 93-102. (Andrew J. Sommese) 82&32024 32C35

 Umezawa, Hiroomi (with Semenoff, G.; Matsumoto, Hideki) A perturbative look at the
- dynamics of extended systems in quantum field theory. J. Math. Phys. 22 (1981), no. 10, 2208–2222. (Authors' summary) 82m:81066 81E99 (81D05) (with Yamanaka, H.; Matsumoto, Hideki) Role of the Wigner rotation in quantum
 - field theory with extended objects. Phys. Rev. D (3) 24 (1981), no. 10, 2607-2614.
 - (Authors' summary) 82k:81046 81E05 (with Hongoh, M.; Matsumoto, Hideki) The dynamical rearrangement of symmetry and the group contraction. Progr. Theoret. Phys. 65 (1981), no. 1, 315-337. (Authors' summary) 82e:81024 81D20 (22E70)
- Umezawa, M. Lorentz covariance of an extended object in the tree approximation. Rev. D (3) 24 (1981), no. 6, 1548-1561. (Author's summary) 82h:81116 81E99
- nezawa, Toshio (with Reade, Maxwell O.) Functions whose derivative has a positive real part. Collections of articles on mathematics and mathematical education pp. 103-108, Saitama Univ., Urawa, 1980. (W. C. Royster) 82k:30019
- See also Collection: Mathe
- Umezu, Mariko (with Hirose, Ken; Nagaoka, Kazuaki) Many-valued logic with truth values from finite lattices. Mem. School Sci. Engrg. Waseda Univ. No. 43 (1979),
- 147-162 (1980). (Henry Africk) **824:0303** 03B50 (03F05, 06B99) nirbekova, L. On the existence, uniqueness and analyticity of a Gibbs perturbation of an independent random field with infinite potential. (Russian) *Izv. Akad. Nauk UzSSR* Ser. Fiz.-Mat. Nauk 1981, no. 1, 44-50, 92. (Hans-Otto Georgii) 82j:82020 (60K35, 82A67)
- ov, G. A. (with Andrijanov, V. A.; Kogan, I. A.) Optimal control of a partially observable discrete Markov process. Avtomat. i Telemeh. 1980, no. 4, 143-150 (Russian English summary); translated as Automat. Remote Control 41 (1980), no. 4, part 2, 555-561. (Authors' summary) 82k-93077 93E20 (60J05)
- rihin, Ju. D. Reliability of a periodically controlled system. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1978, no. 6, 80-87 (Russian); translated as Engrg. Cybernetics 16 (1978),
- no. 6, 60-67. (Masanori Kodama) 82-60153 60K10 (62NOs)
 behauen, Rolf Recursive digital low-pass filters with predetermined phase or group delay and Chebyshev stopband attenuation. *IEEE Trans. Circuits and Systems* 28 (1981), no. 9, 905–912. (Author's summary) 82h:94006 94A05
- e-Ung, S. See Sae-Ung, S.
- Ungar, Gerald S. (with Tulley McAuley, Patricia) A local-nonglobal Hurewicz fibration.
 Colloq. Math. 41 (1979), no. 1, 73-77. (Authors' introduction) 82j:55021 55R05
 Ungar, Peter (with McKelvey, Richard D.; Ordeshook, Peter C.) Conditions for voting
- equilibria in continuous voter distributions. SIAM J. Appl. Math. 39 (1980), no. 1, 161-168. (J. H. Blau) 82d:90014 90A08
- Ungar, Sime Shape bundles. Topology Appl. 12 (1981), no. 1, 89-99. (Ross Geoghegan) 82e:55030 55R65 (55P55)
- Unguru, P. (with Balan, Trandafir T.; Balaceanu, Constantin) On the quality of functioning of biosystems: numerical evaluation. (Romanian. English summary) An. Univ. Craiova Mat. Fiz.-Chim. 7 (1979), 51-58. (Authors' summary) 82g:92004 92A05
- Unguru, Sabetai (with Rowe, David E.) Does the quadratic equation have Greek roots? A study of "geometric algebra", "application of areas", and related problems. *Libertas Math.* 1 (1981), 1–49. (C. M. Taisbak) 82m:01012 01A20

- Uninskii, A. P. The magnitude of deviation of a solution of a certain type of equation from its corresponding values on the boundary. (Russian) Partial differential equation Conf., Novosibirsk, 1978) (Russian), pp. 154–155, 253, "Nauka" Sibirsk. Otdel.,
- Nocoaibirsk, 1980. (Author's summary) 82a:35019 35B99
 Unni, K. R. (with Sivasubramanian, K.) On the space of functions whose nth differences satisfy Lipschitz condition. Math. Rep. Toyama Univ. 4 (1981), 7-27. (J. B. Prolla)
- (with Puttamadaiah, C.) On orthogonality in s.i.p. spaces. Tsukuba J. Math. 5 (1981), no. 1, 15-19. (Shaligram Singh) 82k:46036 46C99 (46B99)
 Uno, Saeko (with Shizuma, Ryoji) Poincare's last geometric theorem. (Japanese. English
- summary) Sci. Rep. Tokyo Woman's Christian Univ. No. 48-52 (1979), 571-583 (1980). (A. Morimoto) 82;54090 54H20 (01A60, 55M20, 58F10)
- berger, A. Les opérateurs métadifférentiels. Complex analysis, microle relativistic quantum theory (Proc. Internat. Colloq., Centre Phys., Les Houkes, 1979), pp. 205–241, Lecture Notes in Phys., 126, Springer, Berlin, 1980. (Vesselin M. Petkov) 35S05 (47G05, 58G15)
 - Quantification de certains espaces hermitiens symétriques. S
 - Goulaouic-Schwartz, 1979–1980 (French), Exp. No. 16, 13 pp. Ecole Polytech., Palaiseau, 1980. (Virgil Obădeanu) 82e:58045 58F06 (58G15, 81C05)
- win, S. D. Nontrivial field configurations in five-dimensional relativity. Phys. Lett. B 103 (1981), no. 1, 18-20. (Author's summary) 82f:83081 83E15 (58F07) (with Davies, P. C. W.) Why is the cosmological constant so small? Proc. Roy. Soc.
 - on Ser. A 377 (1981), no. 1769, 147-149. (Authors' summary) 82h:83073 (83C47)
- dhyay, M. D. (with Sharma, Ashok K.) Strictly complete spaces. Ganita 29 (1978), 151-173. (W. W. Comfort) 82j:54058 54E52 (54A20)
 - (with Nivas, Ram) On some special nullity spaces. (Spa
 - Mexicana Cienc. Tecn. 13 (1979), no. 35-38, 1, 41-47. (F. Brickell) 82a:53025 (with Nivas, Ram) r-invariant immersions. An. Univ. Timişoara Ser. Ştiinţ. Mat. 17 (1979), no. 2, 169-177. (Y. Tashiro) 82b:53046 53C15 (53B25)
 - (with Agarwal, A. K.) On a generalised r-contact structure in a complex Demonstratio Math. 14 (1981), no. 1, 11-18. (Stere Ianus) 82h:53057
- Upadhyaya, K. S. (with Khare, H. C.; Ambar, Mata) Density strength and differential onary hydromagnetic shock wave in a thermally conducting gas. Indic J. Math. 17 (1975), no. 2, 81-91. (From the introduction) 82e:76074 761.05 (351.67.
- lhyaya, Ratna Some problems on complete lift of an F(k,k-2)-structure. Ganita 30 (1979), no. 1-2, 120-126. (Jin Suk Pak) 82h:53058 53C15
- ham, Mary H. Right localizable multiplicative sets and prime ideals of FBN rings.

 Comm. Algebra 9 (1981), no. 10, 1093-1103. (B. J. Müller) 82i:16005 16A08 (16A33 16A08 (16A33)
- meier, Harald Automorphism groups of Jordan (*-algebras. Math. Z. 176 (1981), no. 1, 21–34. (E. Størmer) 82g:46102 46L05 (17C65)
- Uppuluri, V. R. Rao Prime numbers treated as a Markov chain. Essays in probability and statistics, pp. 645-650, Shinko Tsusho, Tokyo, 1976. (William A. Beyer) 82d:10003 10-04 (10A25, 65C10)
 - (with Patil, S. A.) Sampling proportional to random size. Proceedings of the Second ernational Conference on Mathematical Modelling (St. Louis, Mo., 1979), Vol. I, II, pp. 501-510, Univ. Missouri-Rolla, Rolla, Mo., 1980. (Authors' sum nary) 82a:62031 62E15
- Upreti, Rita (with Joshi, J. M. C.) On the representation of functions as generalized Laplace integrals. Indian J. Pure Appl. Math. 12 (1981), no. 7, 856-864. (V. P. Mainra) 82k:44003 44A10
- Upstill, C. (with Berry, M. V.; Chambers, R. G.; Large, M. D.; Walmsley, J. C.)
 Wavefront dislocations in the Aharonov-Bohm effect and its water wave analogue. (French summary) European J. Phys. 1 (1980), no. 3, 154-162. (Authors' summary) 82h:81007 81B05 (58C28, 58G15, 76B15)
- Upton, G. J. G. (with Sarlvik, B.) A loyalty-distance model for voting change. J. Roy. Statist. Soc. Ser. A 144 (1981), no. 2, 247-259. (Authors' summary) 82i:92038 (90A08)
- al-Uqlidisi, Abu al-Hasan Ahmad ibn Ibrāhim See Anbouba, Adel, 82b:0100
- nama, Kiichi (with Yamafuji, Kaoru; Toko, Kiyoshi) Time-dependent
- Ginzburg-Landau equations for hard-mode instabilities. J. Phys. Soc. Japan 50 (1981), no. 11, 3819-3825. (Authors' summary) 82k:58077 58F14 (92A09)
- llegaddi, Basappa A. (with Sarangi, Sangappa M.) On the radius of univalence of certain analytic functions. J. Karnatak Univ. Sci. 23 (1978), 18–24. (Edward J. Moulis, Jr.) 82c:30015 30C45
 - (with Sarangi, Sangappa M.) The radius of convexity and starlikeness for certain classes of analytic functions with negative coefficients. II. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 67 (1979), no. 1-2, 16-20 (1980). (Herb Silverman) 82k:30016 30C45
- Urastaev, D. D. Injective objects in the category of rigid commutative bands of algebras. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 4, 82-84. (From the introduction) 82j:06020 06B99 (18B35, 18B99, 20M50)
- Urata, Toshio Holomorphic automorphisms and cancellation theorems. Nagoya Math. J. 81
- (1981), 91-103. (W. Kaup) 82h:32029 32M05 (32C15)
 Urban, Paul See Field theory and strong interactions, 82e:81001 and Quarks and leptons as fundamental particles, 82f:81003
- Urbanek, Friedrich J. An O(log n) algorithm for computing the nth element of the solution of a difference equation. Inform. Process. Lett. 11 (1980), no. 2, 66-67. (Yuri Breitbart) 68C05 (10-04, 10A35, 10A40)
- Urbaniec, Krzysztof ★Optymalizacja w projektowaniu aparatury procesowej. (Polish) [Optimization in the design of processing equipment] Wydawnictwa Naukowo-Techniczne (WNT), Warsaw, 1979. 268 pp. ISBN 83-204-0125-9 (Author's summary) 82e:49001
- Urbanik, Kasimierz An axiomatic definition of information. (French summary) Information theory (Proc. Internat. CNRS Colloq., Cachan, 1977) (French), pp. 99-112, Colloques Internat. CNRS, 276, CNRS, Paris, 1978. (A. A. Mullin) 82a:94033 94A15 (03G10)
- Urbańska, Władysława On absolute convergence of series of expected values of Fourier coefficients of random functions. I. Fasc. Math. No. 12 (1980), 103-112. (Tamotsu Tsuchikura) 82e:42009 42A28 (60G17)

Urbański, Ryszard (with Orlicz, Władysław) A generalization of the Brooks-Jewett theorem. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 1-2, 55-59 (1981). (J. D. Knowles) 82i:28013 28B10 (with Hudzik, H.; Musielak, Julian) Some extensions of the Riesz-Thorin theorem to

physics in the Ukraine (Russian), pp. 31–43, 175, "Naukova Dumka", Kiev, 1978. (Author's summary) 82c01068 01A74

Urchs, Max Peter Kripke-style semantics for Jakkowski's system Q_t. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 10 (1981), no. 1, 24–29. (David Makinson) 82g:03030

03B45 (03B60)

Semantische Typen für klassische Modallogiken. Wiss. Z. Martin-Luther-Unio. Halle-Wittenberg Math.-Natur. Reihe 30 (1981), no. 1, 71–80. (L. L. Maksimova) 82m:03021 03B45

Urjas'ev, S. P. One method of step regulation for the e-subgradient method. (Russian) Behavior of systems in random media (Russian), pp. 76-84, 95, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Author's summary) 82a:90125 90C25

(with Efremov, I. I.) Application of methods of gradient type with smoothing to the problem of cavitation flow around thin profiles. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 11, 40-43. (Authors' summary) 82e:76011

Urmetzer, N. (with Monien, Burkhard; Vornberger, O.) A consideration of the travelling-salesman problem using the assignment problem. (German summary) Discrete structures and algorithms (Proc. Conf., Berlin, 1979), pp. 167-179, Hanser, Munich, 1980.

(Authors' summary) 82e:90065 90C10 (05C38, 68C25) Uroev, V. M. The Cauchy problem for equations of Schrödinger type. (Russian. English summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1980, no. 6, 28–32, 117. (Sergiu

Aizicovici) 82c35034 35K22 (35110, 81C05)
 de Urries, F. J. (with Quiros, M.; Hoyos, J.; Mazón, M. L.; Rodriguez, E.) Geometrical structure of Faddeev-Popov fields and invariance properties of gauge theories. J. Math. Phys. 22 (1981), no. 8, 1767-1774. (Authors' summary) 82m:81057 81E10 (53C80)

Urrutia, Luis F. A new exact solution of classical supergravity. Phys. Lett. B 102 (1981), no. 6, 393-396. (Author's summary) 82f:83093 83E99

hiriart-Urruty, J.-B. See Hiriart-Urruty, J.-B.

Ursell, F. Irregular frequencies and the motion of floating bodies. J. Fluid Mech. 105 (1981), 143-156. (Author's summary) 82f:76010 76R99

Ursianu, E. See Bibby, John, 82i:62107

Ursianu, Radu On a property of the finite extensions of the Laskerian rings. (Romanian summary) Bul. Inst. Politehn. Bucureşti Ser. Chim.-Metal. 43 (1981), no. 1, 9-12. (J. W. Brewer) 82m:13009 13C99 (13A15)

Ursini, Aldo On some Stone spaces. (Italian summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 1, 90–92. (E. Halfar) 82d:54041 54F65 (06A12)

Ursul, M. I. See Kasch, Friedrich, 82m:16001

Urumov, Viktor Exact solution of "three-dimensional" Ising model with four-spin interaction. Phys. Lett. A 78 (1980), no. 1, 95-97. (Author's summary) 82d:82090 82A67 (82A68)

Urusov, A. I. Equivalence of finite-difference operators when their kernels are identical. (Russian) Numerical analysis (Russian), pp. 94-98, 136, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Teoret. i Prikl. Meh., Novosibirsk, 1978. (Murli M. Gupta) 82a:65096

(with Sokin, Ju. I.; Janenko, N. N.) Qualitative investigation of difference schemes by the differential approximation method. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 5, 8-16, 203. (Jarosław Jeleń) 82i:65013 65D15 (41A60)

Urusov, I. D. Stability of periodic solutions during parametric excitation of oscillations in a multimass rotor. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 2, 350-352. (O. Ja. Savčenko) 82g:70044 70J10 (34D20)

Ury, L. Extending compatible uniformities. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 1185-1209, Colloq. Math. Soc. János Bolyai, 23, North-Hollai Amsterdam, 1980. (Thomas E. Gantner) 82g:54043 54E15

Ury, László Optimal decomposition of linear automata. Automata, languages and programming (Sixth Colloq., Graz, 1979), pp. 659-667, Lecture Notes in Comput. Sci., 71, Springer, Berlin, 1979. (E. A. Primenko) 82a:68095 68D15

Uryson, P. S. See Arboleda, L. C., St. 282:01039
Uryu, Hitoshi The Cauchy problem for weakly hyperbolic equations. Comm. Partial Differential Equations 5 (1980), no. 1, 23-40. (V. V. Kovrižkin) 82h:35069a 35L99 (with Nakamura, Gen) Parametrix of certain weakly hyperbolic operators. Com Partial Differential Equations 5 (1980), no. 8, 837-896. (J. Kisyński) 82a:35061 35L (35\$10)

The Cauchy problem for weakly hyperbolic equations. II. Infinite degenerate case. Tokyo J. Math. 3 (1980), no. 1, 99-113. (V. V. Kovrižkin) 82h:35069b 35L99

Usakov, N. G. Some inequalities for characteristic functions of one-vertex distributions. (Russian. English sum Lukacs) 82j:60022 mary) Teor. Verojatnost. i Primenen. 26 (1981), no. 3, 606-609. (E. 60E05

Usami, Yoko A note on height of exceptional character degrees. Osaka J. Math. 17 (1980),

no. 3, 793-799. (A. O. Morris) 82a:20014 20C15 Usan, Janez (with Stojaković, Zoran) On a maximal system of functional equations on

quasigroups. (Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 8 (1978), 53-57. (Editors) 82h:20107 20N05 (39B50) k. 8 (1978), 53-57. (Editors) 82b:20107 20N05 (39B50) (with Šešelja, B.; Vojvodić, Gradimir D.) Generalized ordering and partitions. Mat. Vesnik 3(16)(31) (1979), no. 2, 241-247. (Derek C. J. Burgess) 82j:06010

(with Stojaković, Zoran) D-complete orthogonal systems of partial quasigroups. (Russian. Serbo-Croatian summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 175-184 (1980). (Petr Němec) 82;20130 20N99 (with Stojaković, Zoran) A classification of finite partial quasigroup

(Serbo-Croatian summary) Unio. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 185–190 (1980). (Petr Nemec) 82j:20131 20N99

(with Tošić, Ratko; Surla, Dušan) A method for constructing a system of orthogonal

Latin squares, codes and k-seminets. (Russian. Serbo-Croatian sum sary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 191-197 (1980). (J. Dénes) 824:05036 05B15 (20N05, 94B25)

Usanetašvili, M. A. A mixed boundary value problem for the equation $y^m u_{xx} + u_{yy} = 0$. (Russian. Georgian and English summaries) Proceedings of the I. N. Vekua Institute of Applied Mathematics, 7 (Russian), pp. 110-139, 148, Tbillis. Gos. Univ., Tbilisi, 1980. (S. A. Tersenov) 82h3.5907 35M05 (35J70)

Uscinski, B. J. Parabolic moment equations and acoustic propagation through internal waves. Proc. Roy. Soc. London Ser. A 372 (1980), no. 1748, 117-148. (From the

summary) 82f:76031 76Q05 (86A05)

summary) 82:76051 /04U3 (00AU3)
Usenko, V. V. (with Muhin, V. S.) Some matrix relations and their application in the solution of structural problems. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 482 (1980), 19–23, 133. (Authors' summary) 82g:93011 93B15

Ushida, Akio (with Sakamoto, Akio) Newton method for obtaining periodic solution of piecewise-linear oscillators. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 46–47, IEEE, New York, 1979. (See 82e:94002) 58F21

Ushijima, Teruo Note on the error estimate for the Newmark-\$\beta\$ method applied to the second order linear evolution equation of hyperbolic type. Mem. Numer. Math. No. 7 65J10 (34G10, 47A50, 65L05) (1980), 53-66. (W. C. Rheinboldt) 82g:65030

Ushiki, Shigehiro (with Yamaguti, Masaya) Discretisation of differential equation as chaos. Boundary and interior layers—computational and asymptotic methods (Proc. Computational) chaos. Boundary and interior layers—computational and asymptotic methods (Proc. Corl., Trinity College, Dublin, 1980), pp. 179–189, Boole, Dún Laoghaire, 1980. (From the summary) 82i:65051 65L20

(with Yamaguti, Masaya) Discrétisation et chaos. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 14, A637-A640. (D. L. Rod) 824:58050

Sur les liasons-cols des systèmes dynamiques analytiques. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 7, A447-A449. (D. R. J. Chillingworth) 82b:58045 58F10 (58C10, 58C25)

ons of unstable manifolds. Proc. Japan Acad. Ser. A Math. Sci. 56 Analytic expressi

(1980), no. 6, 239-244. (G. R. Belickii) 82a:58028 58F10 (58F14) (with Yamaguti, Masaya) Chaos in numerical analysis of ordinary differential equations. Phys. D 3 (1981), no. 3, 618-626. (Authors' summary) 82j:58085 (65L05)

Ushio, Kazuhiko Bipartite decomposition of complete multipartite graphs. Hiroshima Math. J. 11 (1981), no. 2, 321-345. (A. Rosa) 82m:05076 05C70 (05B30)

Ushizawa, Kenji (with Sugiyama, Takakazu) Distribution of smaller latent root on bivariate normal distribution and its numerical calculations. Bull. Fac. Sci. Engrg. Chuo Univ. 23 (1980), 73-81. (Nariaki Sugiura) 82h:62983 62H10

Approximate distributions of the coefficient of variation and their evaluation. ese. English summary) Proc. Inst. Statist. Math. 27 (1980), no. 1, 45-52. han Choi) 82c:62029 62E15 (Keewhan Choi) 82c:62029

Usjukina, N. I. (with Belokurov, V. V.) Double logarithmic asymptotics of vertex functions in quantum chromodynamics. I. (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 2, 147-156. (Authors' summary) 82c:81140 81G05

aliev, A. (with Bahramov, B. M.) Some problems for an elastic layer under the action of a pulsating transverse elastic wave. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 12, 15-17. (B. A. Bondarenko) 82g:73018 73D25

Usmani, Riaz A. (with Warsi, S. A.) Quintic spline solutions of boundary value problems. Comput. Math. Appl. 6 (1980), no. 2, 197-203. (H. Werner) 82c:65052

(with Warsi, S. A.) Smooth spline solutions for boundary value problems in plate deflection theory. Comput. Math. Appl. 6 (1980), no. 2, 205-211. (Authors' summary) 73K30 (65L10)

(with Isa, Mohammad; Meek, D. S.) On quintic spline solution for a two-point boundary value problem involving a third order differential equation. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. II

(Winnipeg, Man., 1980). Congr. Numer. 31 (1981), 77-93. (From the introduction) 82m:65072 65L10

ov, Š. M. (with Ajupov, Š. A.) R-topologies in OJ-algebras. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 8, 3-4. (From the text) 82j:17021 17C65 (6899, 46L9)
Usmanov, Z. D. (with Haitov, T. I.) Determination of a subset of initial data generating the critical state of a collection with a model variant of renewal. (Russian. Tajiki summary)

Dokl. Akad. Nauk Tadžik. SSR 23 (1980), no. 5, 235-237. (K. L. Juščenko) 82e:68059 68D37

Usol'cev, L. P. An unimprovable estimate for the rate of convergence to the normal law and the asymptotic behavior of large deviations in a special case of the Fortet-Katz theorem. (Russian) Kuibyšev. Gos. Ped. Inst. Naučn. Trudy 215 (1978), Issled. po Additionoi Teor. Čisel, 45-76. (S. A. Book) 82a:60037 60F10 (10K30, 60F05)

Uspenskii, S. V. (with Il'in, V. P.) Some questions on the theory of imbedding of classes of differentiable functions. (Russian) Theory of cubature formulas and numeric mathematics (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 207-220, 255, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Authors' summary) 82m:46030 46E35

See also Partial differential equations, 82i:35003 and Theory of cubature formulas and the application of functional analysis to problems of mathematical physics, 82j:55001
Ustimenko-Bakumovskii, V. A. Strongly regular graphs invariant with respect to groups

 $\{\gamma_n\}^{r_n}$ when $n \ge 3$. (Russian) Computations in algebra and combinatorial analysis (Russian), pp. 101–113, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1978. (H. Salzmann) 82f:05053 05C25 (05B05, 51E05, 68E10)

(with Suščans'kiĭ, V. Î.) Characterization of types of Boolean functions. (Russian) Computations in algebra, number theory and combinatorics (Russian), pp. 47-59, 86-87, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (Jürgen Dassow) 82h:94029

Groups of automorphisms of strongly regular graphs that are invariant with respect to exponentiation of symmetric groups. (Russian) Computations in algebra, number theory and combinatorics (Russian), pp. 59-72, 87, Akad. Nauk Ukrain. SSR, Inst.

Interry and communerics (Kassan), pp. 3-12, of, Andel Noda Cortain. SSA, 788.
Kibernet, Kieo, 1980. (A. Schleiermacher) 82ge9049 05C25 (20825)
(with Kalužnin, L. A.; Sulkans'kii, V. I.) Operation of exponentiation in the theory of permutation groups and its applications. (Russian). Sixth All-Union Symposium on Group Theory (Cerkassy, 1978) (Russian), pp. 135-146, 222, "Naukova Dumka", Kieo, 1980. (V. D. Mazurov) 82g-20003 20B07

- el, Ali Süleyman Construction of branching diffusion processes and their optimiochastic control. Appl. Math. Optim. 7 (1981), no. 1, 11-33. (H. Hering) 82d:60148 60J60 (60J80, 93E20)
 - Formule de Feynman-Kac stochastique. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 12, 595-597. (Author's summary) 82f:60129 60H05
- Usabakunov, R. (with Džanybekov, Č.) ★Математика терминдеринии оруса-кыргыза cōarūrū. (Russian) [Russian-Kirghiz dictionary of mathematical terms] "Ilim", Frunze, 1978. 502 pp. (Editors) 22x-00010 00A20

 Usai, Sampei Note on the example of Kinef. Mem. Fac. Sci. Kōchi Univ. Ser. A Math. 1 (1980), 1-3. (Fabrizio Catanese) 82b:14005 14C30 (14J25, 32J25)
- - Period map of surfaces with $p_g = c_1^2 = 1$ and K ample. Mem. Fac. Sci. Kôchi Univ. Ser. A Math. 2 (1981), 37-73. (C. A. M. Peters) 82e:14040 32J15 (14J15)
- Utegenov, K. Hyperbolic approximation of equations of filtration of a two-phase incompressible fluid. (Russian) Čisl. Metody Meh. Splain. Sredy 11 (1980), no. 2 Mat. Modelirovanie, 106–122. (Author's introduction) 82j:76080 76S05

 Utepbergenov, M. On the theory of pseudoregular singularities of degenerate equations.
- (Russian) Differencial'nye Uravnenija 17 (1981), no. 5, 941-943, 960. (Author's
- summary) 82m:35061 35J70 Utkin, E. N. (with Vasilenko, Ju. G.; Kuznecov, E. N.; L'vov, V. S.; Nesterihin, Ju. E.; Sobolev, V. S.; Spektor, M. D.; Timohin, S. A.; Smoilov, N. F.) Generation of Taylor vortices in a Couette flow. (Russian) Ž. Prikl. Meh. i Tehn. Fiz. 1980, no. 2, 58-64, 173. (M. Yanowitch) 824:76053 76E99
- Utkin, Joanna On the formation of equations of elastic rods. Bull. Acad. Polon. Sci. Sér.
- Sci. Tech. 26 (1978), no. 7, 625-630. (Author's summary) 824:73040

 Utkin, V. I. (with Breger, A. M.; Butkovskii, A. G.; Kubyškin, V. A.) Sliding modes for control of distributed-parameter entities subjected to a mobile multicycle signal. Avionat. I Telemeh. 1990, no. 3, 72–83 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 3, part 1, 346–355. (Authors' summary)
 - Principles of identification on sliding regimes. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 3, 558-561. (From the text) 82i;3030 93B30
- Utku, Senol Error computation in numerical solutions of linear boundary value problems. Proceedings of the Second Internation nal Conference on Mathematical Modelling (St. Louis, Mo., 1979), Vol. I, II, pp. 285-294, Univ. Missouri-Rolla, Rolla, Mo., 1980. (Stephen W. Brady) 82b:65105 65N15 (65N30)
- Utreras Diaz, Florencio I. Optimal smoothing of noisy data using spline functions. SIAM J. Sci. Statist. Comput. 2 (1981), no. 3, 349-362. (Author's summary) 82m:65012
- On computing robust splines and applications. SIAM J. Sci.
 Statist. Comput. 2 (1981), no. 2, 153-163. (Author's summary) 82f:65010 651
 Utseha, L. G. (with Rosenfel'd, B. A.) Some mathematical discoveries in al-Birūni's ws. J. Hist. Arabic Sci. 4 (1980), no. 2, 332-336. (E. S. Kennedy) 82k:01014
- Uttersrud, U. (with Ellis, A. J.; Rao, T. S. S. R. K.; Roy, A. K.) Facial characterizations of
- complex Lindenstrauss spaces. Trans. Amer. Math. Soc. 268 (1981), no. 1, 173–186. (A. J. Lazar) 82j-46015 46B10 (46A55) Utts, Jessica M. (with Hettmansperger, Thomas P.) A robust class of tests and estimates for multivariate location. J. Amer. Statist. Assoc. 75 (1980), no. 372, 939–946. (Steven J.
- Schwager) 82k:62103 62H15 (62F35, 62G10) W. R. The existence of solutions of a third-order boundary value problem. Nonlinear Anal. 5 (1981), no. 4, 445-448. (James R. Ward, Jr.) 82d:34024 34B15
- Uvarov, O. V. A way of calculating the characteristic functional of solutions of stochastic partial differential equations. (Russian) Mathematical methods of cybernetics (Russian), pp. 22-27, 89-90, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (Author's
- summary) 822c35100 35R60 (35Q10, 60H15, 93E15)
 Uvarov, V. B. (with Nikiforov, A. F.; Novikov, V. G.) Solution of the Schrödinger eq for bound states by the inverse iterative method. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 42, 15 pp. (Authors' introduction) 82j:65091 65P05 (81F05)
- Uy, Marilou (with Roumasset, James) Piece rates, time rates, and teams: explaining patterns in the employment relation. J. Econom. Behavior Organization 1 (1980), no. 4,
- 343-360. (Authors' summary) 82b:90027 90A12

 Uyenoyama, Marcy K. (with Bengtsson, Bengt O.) Towards a genetic theory for the evolution of the sex ratio. II. Haplodiploid and diploid models with sibling and parental control of the brood sex ratio and brood size. Theoret. Population Biol. 20 (1981), no. 1, 57-79. (Authors' summary) 82h:92027 92A10
- Uzdenov, O. M. (with Baranova, V. A.) Normal and binormal congruences of lines of three-dimensional non-Euclidean and Euclidean spaces. (Russian). Geometry of imbedded manifolds (Russian), pp. 80-84, Moskov. Gos. Ped. Inst., Moscow, 1978. (Josef Vala) 82e-53023 53A25
- Uzelac, K. (with Jullien, R.; Pfeuty, Pierre; Moussa, P.) The Yang-Lee edge singularity studied by a four-level quantum renormalization-group blocking method. (French summary) J. Physique 42 (1981), no. 8, 1075-1080. (Authors' summary) 82i:82024
- Uzgider, Erdogan Effect of external damping on the stability of columns subjected to an exponentially decaying axial force pulse. (Turkish summary) İstanbul Tek. Üniv. Bül. 33 (1980), no. 1, 14-35. (Author's summary) 82c:73040 73H10

-V-

- correa V., A. See Correa V., A. fajardo V., Sergio See Fajardo V., Sergio
- Vaaler, Jeffrey D. (with Bennett, Colin; Rudnick, Karl) Best uniform approximation by linear fractional transformations. J. Approx. Theory 25 (1979), no. 3, 204–224. (J. S. Byrnes) 82b:41017 41A20 (41A30, 41A50)
 On linear forms and Diophantine approximation. Pacific J. Math. 90 (1980), no. 2, 475–482. (A. C. Woods) 82j:1065 10F35 (10E99, 10F37)

- (with Graham, S. W.) A class of extremal functions for the Fourier transform. ns. Amer. Math. Soc. 265 (1981), no. 1, 283-302. (Kenneth A. Jukes) 82i:42008 42A38 (10H30)
- nanen, Jouko On Hanf numbers of unbounded logics. Proceedings from 5th Scandinavian Logic Symposium (Aalborg, 1979), pp. 309–328, Aalborg Unic. Press, Aalborg, 1979. (Alan Mekler) 82h:03034 03C80 (03C95)
 - (with Anapolitanos, D. A.) On the axiomatizability of the notion of an omorphism of a finite order. Z. Math. Logik Grundlag. Math. 26 (1980), no. 5, 433-437. (W. Hodges) 82b:03070 03C68
 - 433-43f. (W. Hodges) 84004000 03Coo (with Anapolitanos, D. A.) Decidability of some logics with free quantifier variables. Z. Math. Logik Grandlag. Math. 27 (1981), no. 1, 17-22. (A. B. Slomson) 82d:03059 03C80 (03B25)
- Väänänen, Keijo On linear forms of a certain class of G-functions and p-adic G-functions. Acta Arith. 36 (1980), no. 3, 273-295. (Yuval Z. Flicker) 82b:10045 10F37 On transcendental numbers. (Finnish. English sun nmary) Arkhimedes 32 (1980),
- On transcendental numbers. (Finnish. English summary) ATRIUMEUR 34 (1904), no. 3, 165–174. (T. Metsänkyla) 828:10043 10F35 (01A60)

 Vaarmann, O. On a class of Levenberg-Marquardt-type methods. (Estonian and Russian summaries) Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. 29 (1980), no. 3, 233-240. (M.
- Z. Nashed) 82f:65068 65115 (47H17, 90C30)
 Vaccaro, Vittorio Giorgio Electromagnetic diffraction from a right-angled wedge with soft conditions on one face. (French and German summaries) Optica Acta 28 (1981), no. 3, 293-311. (Author's summary) 82h:78019 78A45
- Vaclavik, J. (with Weibel, E. S.) Quasilinear theory without the random phase approximation. Phys. Fluids 24 (1981), no. 3, 413-417. (Authors' summary) 82a:76096
- Vačov, D. Historical calendar of physics for 1978. (Bulgarian) Fiz.-Mat. Spis. B"lgar. Akad. Nauk. 21(54) (1978), no. 4, 312-317 (1979). (Editors) 82c:01055 Anniversaries in physics history for 1980. (Bulgarian) Fiz.-Mat. Spis. B"lgar. Akad. Nauk. 23(56) (1980/81), no. 1, 59-61. (E. Stipanić) 82m:01071 01A70
 - See also Planck, Max, 82e:01099; Dirac, Paul Adrien Maurice, 82f:01062 and Anniversary: Death of Maxwell, James Clerk, 82f:01160
- Vagabov, A. I. Multidimensional mixed problem for a hyperbolic system. (Russian) Azerbaidžan. Gos. Univ. Učen. Zap. 1978, no. 1, 43-47. (From the text) 82g:35066
 - Uniform convergence of multiple Fourier series in the principal functions of differential operators. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 12, 3-5. (Jan Bochenek) 82k:35087
 - Expansions into multiple series, connected with a third-order operator on the plane (Russian, Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 1, 16-18. (B. Hellwig) 82i;35137 35P10 (1981), no. 1, 16-18. (B. Hellwig) 82i:35137
 - On the question of the completeness of a system of eigenfunctions of nonregular ordinary differential equations. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 1, 15-18. (M. Otelbaev) 82g:34025 34B25
- Vaganov, A. O. (with Fedotkin, M. A.) Study of queueing systems with instantaneous reswitching of a device on the basis of an inquiry of one of several conflict flows. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 2, 60-68, 220 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 2, 53-61 (1981). (Takehisa Fujisawa) 82f:60228 (90B20, 90B22)
- Vagaršakian, A. A. Uniqueness theorems for bounded analytic functions and their application in the theory of approximation. (Russian. Armenian and English . Akad. Nauk Armjan. SSR Ser. Mat. 12 (1977), no. 5, 345-357, 415. (V. P. Havin) 824:30035 30E10
 - Boundary properties of some classes with weights. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 71 (1980), no. 4, 204-208. (H. Triebel) 82e:46051
- On the uniqueness of analytic functions, increasing near the boundary. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 16 (1981), 30D99 no. 1, 3-24, 82. (D. M. Campbell) 82g:30061 30D99

 Vaglini, G. (with De Francesco, N.) On the decomposition of parallel computations.
- Parallel computers—parallel mathematics (Munich, 1977), pp. 221-224, North-Holland, Amsterdam, 1977. (See 82k:68003) 68B20
- Vagner, V. Estimation of the sum of a nonabsolutely convergent series. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 4, 15-19, 115. (Author's summary) 82h:65003 65C05 (65F05)
- Vagner, V. V. Restrictive sums of exterior operatives and their natural extension. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1979, no. 2, 7-24. (I. S. Ponizovskii) 82f:08005
 - See also Efimov, N. V.; et al., 82h:01047
- Vahabov, S. Two mathematical models of al-Biruni. (Russian) Istor.-Mat. Issled. No. 25 (1980), 328-334, 380. (E. S. Kennedy) 82k:01015 01A30
- anija, N. N. *Probability distributions on linear spaces. Translated from the Russian by I. I. Kotlarski. North-Holland Series in Probability and Applied Mathematics. by I. Rodianski, Potter-Ionaland Series in Producing and Applied Mathematics. North-Holland Publishing Co., New York-Amsterdam, 1981. xv + 123 pp. 15BN 0-444-00577-3 (Editors) 822:660015 60B11 (60E05) (with Tarieladze, V. I.; Tortrat, Albert) Continuity of random linear functions. (Russian, English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 1, 172–178. (D.
 - Preiss) 82g:60010 60B11 (28C20, 46A99)
- Vaher, F. S. A property of bounded approximation in separable Banach spaces. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 6, 1301-1306. (Yury Girshovich) 82c:46021
 - (with Pličko, A. M.) The bounded approximation property and linear finite-dimensional regularizability. (Russian) Ukrain. Mat. Z. 33 (1981), no. 2, 167-171. (I. K. Marek) 82h:46033 46B20 (47A99)
- Vahgel't, A. F. (with Borisov, A. A.; Nakorjakov, V. E.) Propagation of long-wave perturbations of finite amplitude in aerosol media. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 5, 33-38, 203. (N. N. Janenko) 82e:76068 76T05 (76Q05)
- Vahrameev, S. A. Theorem on the alternative for a nonstationary differential encounter-evasion game. Prikl. Mat. Meh. 42 (1978), no. 6, 1123-1126 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 6, 1232-1236 (1980). (Author's

summary) 82m:90195 90D42 (90D25)

1982

Vahrenkamp, Richard ★Wachstumsprozesse in linearen Technologien. (German) [Growth processes in linear technologies] Mathematical Systems in Economics, 47. Verlagsgruppe Athenäum/Hain/Scriptor/Hanstein, Königstein/Ts., 1980. 236 pp. ISBN 3-445-01963-0 (From the introduction) 82j:90020

Multiterminal network flows and applications. (German summary) Z. Oper. Res.

Ser. A-B 25 (1981), no. 5, 133–142. (Author's summary) 82m:90075 90B10 hrušev, V. A. A boundary value problem for a fifth-order nonlinear equation. (Russian) Application of the methods of functional analysis to problems of mathematical physics and numerical analysis (Russian), pp. 27-31, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1979. (From the text) 82b;35037 35G30 (35D05)

man, A. A. (with Suščans'kil, V. I.) Cortege operations on permutation groups. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 10, 19-21, 93. (Authors' summary) 82m:20004 20B99

Vaidya, D. P. (with Tewari, U. B.; Dutta, M.) Multipliers of group algebras of vector-valued functions. Proc. Amer. Math. Soc. 81 (1981), no. 2, 223-229. (Olusola Akinyele) 82c:43003 43A22 (43A20)

Vaidya, H. G. (with Tracy, C. A.) Crossover scaling function for the one-dimensional XY model at zero temperature. Phys. Lett. A 68 (1978), no. 3-4, 378-380. (Authors' summary) 82g:82059 82A68 (82A25)

Vaidya, Vinay G. (with Alexandro, Frank J., Jr.) Evaluation of some mathematical models for tumor growth. Internat. J. Bio-Med. Comput. 13 (1982), no. 1, 19-35. (Authors' summary) 82m:92017 92A07

Vaillant, Jean (with Schiltz, Dominique: Wagschal, Claude) Problème de Cauchy ramifié à caractéristiques multiples en involution. Seminar on Hyperbolic and Holomorphic Partial Differential Equations, 1979-1980 (French), Exp. No. 10, 5 pp., Univ. Paris VI, Paris, 1980. (From the text) 82j:35004 35A20 (with Schiltz, Dominique; Wagschal, Claude) Problème de Cauchy ramifié à

caractéristiques multiples en involution. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 13, A659-A662. (Authors' summary) 82a:35062 35L30

perg, B. R. Stabilization of the solutions of exterior problems for hyperbolic systems. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 109–110, 251, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Author's summary) 82b:35103 35L55 35L55

Vainberg, V. M. (with Alliluev, S. P.; Eleckii, V. L.; Popov, V. S.) Logarithmic perturbation theory for excited levels. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1392-1396. (From the text) 82k:81014 81C12

Vainer, V. G. (with Zaicev, I. D.; Gubnickii, S. B.) Algorithms for solution of various modifications of the "problem of crossing the road". (Russian) Mathematical methods of cybernetics (Russian), pp. 60-65, 91, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (Authors' introduction) 82h:92055 92A20 (90C35, 94C15)

Ju. L.; Kirillov, A. A.; Paljutkin, V. G.; Hacet, B. I.; Eidel'man, S. D.) Georgii Isaakovič Kac. (Russian) Uspehi Mat. Nauk 34 (1979), no. 2(206), 185-188. (Editors) 01A70

Vainikko, G. Error estimates of the successive approximation method for ill-posed problems. Automat. i Telemeh. 1980, no. 3, 84–92 (Russian. English summary); translate as Automat. Remote Control 41 (1980), no. 3, part 1, 356–363. (Erich Bohl) 82j:65034 ary): translated

(with Pedas, A.) The properties of solutions of weakly singular integral equations. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 4, 419-430. (Martin Costabel) 82i:45014

(with Uba, P.) A piecewise polynomial approximation to the solution of an integral equation with weakly singular kernel. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 4, 431-438. (Authors' summary) 82k:65100 65R20 (45L10)

inio, Reino Local connectedness in Cauchy space theory. Acta (1981), no. 1, 19 pp. (Roman Frič) 82c:54024 54E15 (54B30) Acta Acad. Abo. Ser. B 41

Vainsencher, Israel The enumerative calculus of Schubert. (Portuguese) Proceedings of the Eleventh Brazilian Mathematical Colloquium (Poços de Caldas, 1977), Vol. I (Portuguese), pp. 135-144, Inst. Mat. Pura Apl., Rio de Janeiro, 1978. (Editors) 82c:14040

nshtein, A. D. See Vainštein, A. D. nshtein, A. I. See Vainštein, A. I.

Vainshtein, S. I. See Vainštein, S. I. Vainštein, A. D. Dichotomy method in certain minimax problems on graphs. Automat. i Telemeh. 1980, no. 8, 85-87 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 8, part 1, 1111-1113 (1981). (A. J. Schwenk) 82i:68043 (05C35)

Vainstein, A. G. (with Gorelik, E. M.; Efremovič, V. A.) On metric foliations. (Russian) Trudy Sem. Vektor. Tenzor. Anal. No. 20 (1981), 55-65. (P. G. Walczak) 82h:53085 53C99 (55R99)

Vainštein, A. I. (with Zaharov, V. I.; Novikov, V. A.; Šifman, M. A.) Asymptotic freedom in quantum mechanics. Jadernaja Fiz. 32 (1980), no. 6, 1622-1635 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 6, 840-847 (1981). (Authors' summary) 82m:81016 81C05 (81G05)

Vainštein, F. S. On algebraic methods in the structural theory of complex systems. (Russian) Modeling languages and software for hybrid computer systems. Voprosy Kibernet. (Mascow) No. 46 (1978), 131–138. (Ju. G. Borisovič) 82f:93002 93A05 (92A20, (Mascow) No. 46 (1978), 131-138. (Ju. G. Borisovič) 82f:93002 93A10)

instein, S. I. A unique approach in the nonlinear theory of a turbulent dynamo. Magni Gidrodinamika No. 2 (1980), 3-9 (Russian); translated as Magnetohydrodynamics 16 (1980), no. 2, 111-116. (R. K. Gupta) 82h:76045 76W05 (76F99)

Väisälä, Jussi (with Tukia, Pekka) Quasisymmetric embeddings of metric spaces. Ann.

Acad. Sci. Fenn. Ser. A 1 Math. 5 (1980), no. 1, 97-114. (S. B. Agard) 82g:30038 30C60 (54C99)

A theorem of the Borsuk-Ulam type for maps into nonmanifolds. Topology 20

(1981), no. 3, 319–322. (Gencho Skordev) 821:55004 55M20

Quasisymmetric embeddings in Euclidean spaces. Trans. Amer. Math. Soc. 264
(1981), no. 1, 191–204. (Uri Srebro) 821:30031 30C60 (28A75, 54C25, 54E40, 57N45)

sbord, É. M. (with Žukovskii, V. I.) *Введение в дифференциальные игры нескольких лиц и их приложения. (Russian) [Introduction to differential n-person

games and their applications! "Sovet, Radio", Moscow, 1980, 304 pp. (J. M. Skowroński) 90D25 (93D05)

Vaish, Satendra Kumar On the logarithmic proximate orders. Pure Appl. Math. Sci. 10 (1979), no. 1-2, 17-21. (O. P. Juneja) 82e:30030 30D15 (with Srivastava, G. S.) On the mean values of an entire function and its derivatives.

Tamkang J. Math. 10 (1979), no. 2, 189-195. (P. K. Jain) 82b:31008 31B10 (30D15) On the mean values of an entire Dirichlet series of order zero. Ann. Polon. Math. 37 (1980), no. 2, 149-155. (P. K. Jain) 82b:30004 30B50 (30D15)

(with Gupta, S. C.) Logarithmic mean of an entire Dirichlet series. Publ. Inst. Math. (Beograd) (N.S.) 27(41) (1980), 297-302. (Silvio Massa) 82h:30004 30B50 (30D20) Logarithmic order and logarithmic type of entire Dirichlet series. Rev. Roumain. Math. Pures Appl. 25 (1980), no. 9, 1417-1422. (W. K. Hayman) 82j:30003 Generalized logarithmic means of an entire Dirichlet series of order zero. II. Rev. umaine Math. Pures Appl. 25 (1980), no. 10, 1557-1562. (R. P. Boas, Jr.) 821:30004

A theorem on the means of an entire Dirichlet series of order zero. Riv. Mat. Univ.

Parma (4) 6 (1980), 397-400 (1981). (Shlomo Strelitz) 82j:30002 30B50 (30D15) shnavi, V. K. (with Kriegel, H. P.; Wood, Derick) Height-balanced 2-3 trees. (German summary) Computing 21 (1978/79), no. 3, 195-211. (Authors' sum 68E10 (05C05)

Vaisman, Izu A coordinatewise formulation of geometric quantization. Ann. Inst. H. Poincaré Sect. A (N.S.) 31 (1979), no. 1, 5-24. (Author's summary) 82c:81062 81D05 (58F06)

*Foundations of three-dimensional Euclidean geometry. Monographs and Textbooks in Pure and Applied Math., 56. Marcel Dekker, Inc., New York-Basel, 1980. ix + 268 pp. ISBN 0-8247-6901-5 (D. B. Persic) 82h:51002 51-01 (51M05)

Vajda, Igor Stability of variable length coding. (French summary) Information theory (Proc. Internat. CNRS Collog., Cachan, 1977) (French), pp. 285-294, Colloques Internat. CNRS,

276, CNRS, Paris, 1978. (Michele Elia) 82a:94083 94A29 (94B45)

Vajda, Sándor Structural equivalence of linear systems and compartmental models. Math.

Biosci. 55 (1981), no. 1-2, 39-64. (Author's summary) 82h:93027 93B30 (92A09)

Vakhania, N. N. See Vahanija, N. N.

Vakhrameev, S. A. See Vahrameev, S. A.

Vakulenko, A. A. Representation of dislocations and cracks in an elastic body by

elementary singularities. (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 90-97, 309-310, Leningrad. Univ., Leningrad, 1980. (L. P. Lebedev) 82e:73083

nko, A. F. Unitary regularization in the many-particle scattering problem. (Russian) Dokl. Akad. Nauk SSSR 249 (1979), no. 4, 825-828. (Woodford W. Zachary) 82b:81109 81F10 (35P25)

On a variant of the compactness criterion of A. Weil. (Russian. English summary) Boundary value problems of mathematical physics and related questions in the theory of functions, 11. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 84 (1979), 23–25, 310, 317. (A. S. Dynin) 82b:22020 22E30 (47B05)

ulenko, S. A. (with Molotkov, I. A.) Nonlinear longitudinal waves in inhomogeneous rods. (Russian. English summary) Interference waves in layered media, I. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 99 (1980), 64–73, 158. (V. M. Babič) 73D35 (35L70, 35Q20)

(with Ljaško, Ī. Ī.; Demčenko, V. F.) A variant of the method of splitting the equations of viscous incompressible fluid dynamics on Lagrangian-Euler grids. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 7, 43–47. (Authors' summary) 82k:76007 76A60 (65P05, 76D99)

Valabrega, Elda Gibellato More on the reals of Jean Dieudonnė. (Italian. English summary) Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur. 113 (1979), no. 3-4, 193-196. (H. Schwerdtfeger) 82h:12019 12D05

Schwerdunger) 222:12019 121009
Stabrega, Paolo (with Greco, Silvio) On the theory of adjoints. Algebraic geometry (Proc. Summer Meeting, Univ. Copenhagen, Copenhagen, 1978), pp. 98–123, Lecture Notes in Math., 732, Springer, Berlin, 1979. (Fabrizio Catanese) 82e:14015 14C20

Valadier, Michel Sur l'espérance conditionnelle multivoque non convexe. Ann. Inst. H. Poincaré Sect. B (N.S.) 16 (1980), no. 2, 109-116. (Giulianella Coletti) 82a:60009 60A10

On conditional expectation of random sets. Ann. Mat. Pura Appl. (4) 126 (1980), 81–91 (1981). (T. Robertson) 82h:60028 60D05 (60B11)

Structure des atomes conditionnels d'un espace de probabilité. Travaux Sém. Anal. Convexe 10 (1980), no. 1, exp. no. 1, 17 pp. (Jan Pachl) 82f:28002

Régularisation s.c.i., relaxation et théorèmes bang-bang, (English summary) [Closedness, relaxation and bang-bang theorems] C. R. Acad. Sci. Paris Ser. I Math. 293 (1981), no. 2, 115-116. (Author's summary) 82m:49019 49A36

Valdes, Jose (with Cornous, K. A.) A queueing system with mixed priorities. (Spanish) Investigación Oper. No. 2-3 (1980), 103-110. (From the text) 82m:60123 (90B22)

(with Cornous, K. A.) A queueing system of three Poisson flows with mixed priority. (Spanish) Investigación Oper. No. 2-3 (1980), 111-117. (From the text) 82m:60124 60K25

Valdivia, Manuel On Suslin locally convex spaces. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fls. Natur. Madrid 72 (1978), no. 2, 215–220. (R. Aguiló-Fuster) 46A99 (28A05)

Representations of the spaces Θ(Ω) and Θ'(Ω). (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 72 (1978), no. 3, 385-414. (J. B. Cooper) 46F05 (46A12)

A representation of the space $\mathfrak{P}_+(\mathfrak{Q})$. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 72 (1978), no. 4, 559–571. (J. B. Cooper) 82m:46038 46F05 (46A12)

Quotients of echelon spaces. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 2, 169-183. (R. Aguiló-Fuster) 82i:46017

Some properties of echelon spaces. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 3, 389-400. (R. Aguiló-Fuster) 82i:46018

40E10 (34-30)
 On certain infinitely differentiable function spaces. Séminaire Pierre Lelong-Henri Skoda (Analyse). Années 1978/79 (French), pp. 310-316, Lecture Notes in Math., 822, Springer, Berlin, 1980. (P. A. Kucment) 82±46042 46E10 (46F05)
 A representation of the space 9(K). J. Reine Angew. Math. 320 (1980), 97-98. (Olaf von Grudzinski) 82±46052 46F05 (46A06)

Interpolation in certain function spaces. Proc. Roy. Irish Acad. Sect. A 80 (1980), no. 2, 173–189. (Jorge Mujica) 221:64067 46G20 (32D05)

Spaces of Radon measures. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 1, 91–98. (B. Rodriguez-Salinas) 82e-46040

On the space $\mathfrak{D}_0(\Omega)$. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 5, 835-863. (J. Horváth) 82j:46053 46F05 (46A45)

Un suprabarrelled spaces. Functional analysis, holomorphy, and approximation theory (Proc. Sem., Univ. Fed. Rio de Janeiro, Rio de Janeiro, 1978), pp. 572–580, Lecture Notes in Math., \$43, Springer, Berlin, 1981. (R. H. Lohman) 82h:46003 46A07

Convex sets in metrizable spaces. Arch. Math. (Basel) 36 (1981), no. 3, 244-254. (T. Husain) 82g:46014 46A25

A representation of the space θ_M . Math. Z. 177 (1981), no. 4, 463-478. (Klaus-Dieter Bierstedt) 82:46057 46F05 (46E10, 46M05)

(with Perez Carreras, Pedro) On totally barreled spaces. Math. Z. 178 (1981), no. 2, 263-269. (T. Husain) 82m-46002 46A07

On quasinormable echelon spaces. Proc. Edinburgh Math. Soc. (2) 24 (1981), no. 1, 73-80. (E. Dubinsky) 82k:46012 46A45

Valeev, K. G. The theory of nonlinear projectors of solutions. (Russian) Asymptotic methods theory of nonlinear oscillations (Proc. All-Union Conf. Asymptotic Methods in ear Mech., Katsiveli, 1977) (Russian), pp. 13–26, 272, "Naukova Dumka", Kico, in the theory of non 34C99 (34A34)

1879. (R. F. Datko) 82g-34661 34C99 (34A34)

(with Finin, G. S.) Functional equations for optimal equation control synthesis of a nonlinear discrete dynamic system. (Russian) Qualitative investigations of functional differential equations (Russian), pp. 5–16, 181, "Naukova Dumka", Kiev, 1980. (Authors' summary) 82f-93037 93C10 (39A12)

(with Mitropol'skii, Ju. A.; Finin, G. S.) Numerical synthesis of optimal control for linear steady-state systems. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 4, 75 no. (A. Vanèček) 824:49040 49F99 (93B50)

(with Finin, G. S.) Numerical synthesis of optimal regulators for nonlinear discrete ntrol systems. (Russian) Kibernet. i Vyčisl. Tehn. No. 49 (1980), 32-39, 98. (Authors' mary) 82c:49031 49E15 (65K10, 93E25)

(with Mitropol'skii, Ju. A.; Finin, G. S.) Application of the optimal manifold principle to the synthesis of optimal regulators. (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 4, 796–799. (Constantin Vårsan) 82g:49040 49F22

(with Finin, G. S.) On the splitting of a matrix spectrum. (Russian. English namary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 8, 7-10, 96. (Zdeněk Dostál)

15A21 (65F15)

Valeeva, R. T. (with Belevec, P. S.) A class of dynamic systems with an algebraic limit cycle. (Russian) Kuibyšev. Gos. Ped. Inst. Naučn. Trudy 232 (1979), Differencial. Uravnenija i Mat. Fiz. No. 1, 5-8. (Ju. A. Melencova) 82e:34030 34C05 (58F21)

with Felevec, P. S.) Qualitative investigation of dynamic systems $dx/dt = P_3(x,y)$, $dy/dt = Q_3(x,y)$ that have algebraic integrals in the form of a circle and a straight line. artial differential equations, pp. 15-24, Rjazan. Gos. Ped. Inst., Ryazan, 1980.

(A. A. Reinfelds) 82m-34027 34C05 lent, Tullio (with Zampieri, Giuseppe) The differentiability of an operator connected with a class of quasilinear differential systems. (Italian. English summary) Rend. Sem. Mat. Univ. Padova 57 (1977), 311-322 (1978). (J. Daneš) 82f:35053 35F20 (47F05) On the differentiability of Nemyckii operators (Italian. English summary) Atiu Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 65 (1978), no. 1-2, 15–26 (1979). (J.

Horváth) 82:47083 47H99 (46E35)
Valenta, Ja. (with Matoušek, I.; Plundrová, I.; Šatra, M.) Identification of the elastic-plastic response of solid bodies using the finite-element method. (Russian. English ry) Adv. in Mech. 2 (1979), no. 2, 101-144. (Authors' summary) 82c:73029 73E99 (65N30)

nti, Santi (with Amaducci, Tullio) Sur une méthode de résolution de l'équation fonctionnelle $f(x+1) = \varphi(x)f(x)$. (Italian summary) Istit. Lombardo Accad. Sci. Lett. Rend. A 112 (1978), no. 2, 362-366 (1979). (A. Climescu) 82e:39002 39A10

ntine, J. E. (with Andalafte, E. Z.; Wayment, S. G.) Triangle median properties which characterize Banach spaces. Houston J. Math. 5 (1979), no. 3, 307-312. (V. Zizler) 82c:46016 46B20

ntini, Françoise A. (with Landau, Mayer; Tabary, F.) Un modèle mathématique pour l'évaluation des com des nerveuses des muscles dans la marche normale. (English mmary) Rev. CETHEDEC No. 59 (1979), 11-36. (H. A. Lauwerier) 82a:92014 92A09 (70B99)

(with Landau, Mayer) Formalisation mathématique de la contraction musculaire squelettique. (English summary) C. R. Acad. Sci. Paris Sér. III Sci. Vie 292 (1981), no. 12, 745-748. (Editors) 82h:92016 92A09 (34C15)

(with Landau, Mayer) Construction, mathematical study and numerical simulation im turnover model during skeletal muscle contraction. Internat. J. Bio-Med. 92A09 (34A10)

Comput. 13 (1982), no. 1, 49-68. (Authors' summary) 82m:92030 92A09 (34 Valentini, Robert C. (with Madan, Manohar L.) A hauptsatz of L. E. Dickson and Artin-Schreier extensions. J. Reine Angew. Math. 318 (1980), 156-177. (Sudesh

Khanduja) 82e:12030 12F20

Valenza, Antoine (with Blass, Jean-Paul) Sur la densité des mesures positives sur R. Rend. Circ. Mat. Palermo (2) 26 (1977), no. 1-3, 69-90 (1978). (Ion Chițescu) 82c:28008a 28A15 (26A24)

(with Blass, Jean-Paul) Dérivée approximative d'une mesure positive sur R, théorème de décomposition. (English summary) C. R. Acad. Sci. Paris Sér. A-B 289 (1979), no. 12, A597-A600. (Ion Chitescu) 82c:28008b 28A15 (26A24)

enza, Robert J. Strongly determined subgroups. Comm. Algebra 9 (1981), no. 6, 669-677. (Gary L. Peterson) 82e:20012 20C05 (16A26)

Valerio, Vladimiro On the partitioned matrix $\binom{0}{4}$, $\binom{0}{4}$ and its associated system AX = T, A*Y + QX = Z. (French summary) RAIRO Anal. Numér. 15 (1981), no. 2, 177–184. (Thomas L. Markham) 82i:15007 15A09 (65F05)

va, Marie Professor Karel Rektorys awarded National Prize. Czechoslovak Math. J.

29(104) (1979), no. 4, 665-667. (Editors) 821:01151 01A70

Valette, Alain Tilings of the plane by topological disks. Geom. Dedicata 11 (1981), no. 4, 447-454. (Joseph Zaks) 82m:05032 05B45 (52A45)

ette, J. (with Goursaud, J.-M.; Osterburg, James; Pascaud, J. L.) Points fixes des anneaux réguliers auto-injectifs à gauche. Comm. Algebra 9 (1981), no. 13, 1343-1394. (K. R. Goodearl (Zbl 438:16008)) 82k:16046 16A72 (16A52)

iant, Leslie G. Negation can be exponentially powerful. Theoret. Comput. Sci. 12 (1980), no. 3, 303-314. (Claus-Peter Schnorr) 82a:68088 68C25 (94C10) no. 3, 303-314. (Claus-Peter Schnorr) 82a:68088

(with Lev, Gavriela Freund; Pippenger, Nicholas) A fast parallel algorithm for routing in permutation networks. IEEE Trans. Comput. 30 (1981), no. 2, 93-100. (Authors' summary) 82m:68055 68B20 (68C25, 94C15)

Universality considerations in VLSI circuits. IEEE Trans. Comput. 30 (1981), no. 2, 135-140. (Author's summary) 82a:94128 94C15 (68E10)

Valiant, W. G. (with Schrijver, A.) On lower bounds for permanents. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 4, 425–427. (H. Minc) 82a-15904

Valid, Roger ★ Mechanics of continuous media and analysis of structures. Translated from the French by the author. With a foreword by Paul Germain. North-Holland Series in Applied Mathematics and Mechanics, 26. North-Holland Publishing Co., Amsterdam-New York, 1981. xiii+357 pp. ISBN 0-444-86150-5 (Vadim Komkov) 82k:73040

Le principe de l'énergie complémentaire en théorie non linéaire des coques. (English nmary) Translated as Rech. Aérospat. (English) 1981, no. 1, 47-57. Rech. Aérospat.

1981, no. 1, 43-53. (Author's summary) 82d:73070 731.99 (73G65)
Valk, Rüdiger (with Berthelot, G.; Roucairol, Gérard P.) Reductions of nets and parallel programs. Net theory and applications (Proc. Adv. Course General Net Theory Processes Systems, Hamburg, 1979), pp. 277-290, Lecture Notes in Comput. Sci., 84, Springer, Berlin, 1980. (Siegmar Gerber) 82a:68109 68D40 (68B20, 68D90)

(with Vidal-Naquet, Guy) Petri nets and regular languages. J. Comput. System Sci. 23 (1981), no. 3, 299-325. (Authors' summary) 82m:68109 68D90 (68F10)

kovskaja, V. I. The stress state of infinite plates with a circular aperture, heated along the edge, under the action of a temperature field that is random with respect to time. (Russian) Analytic methods for investigating nonlinear oscillations (Russian), pp. 12-19. 178, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (Author's summary) 82h:73009

(with Leniuk, M. P.) Vibration of rods under the action of random heat fluxes. (Russian. English summary) Vyčisl. Prikl. Mat. (Kiev) No. 42 (1980), 3-12, 162.

(Authors' summary) 82d:73041 73K05 (73U05)

Vallander, S. S. One system of automata with local interactions. Multicomponent random systems, pp. 577-587, Advances in Probability and Related Topics, 6, Dekker, New York, 1980. (Author's summary) 82m:68100 68D05 (10K10, 28C10, 60F17)

Statistical mechanics of e-continuous models. I. Definition and ground states (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 3,

Valleuri, M. (with Carlucci, D.) The use of simplified models for stability analysis of large-scale systems. IEEE Trans. Automat. Control 26 (1981), no. 2, 543-545. (Authors' summary 82e:93089 93D25 (93A15)
de la Vallée Poussin, Charles See Correspondence: Baire, René, 82i:01041
Vallet, Cl. (with Mairlot, Fernand E.; Godart, Odon; Le Guyader, H.; Ferré, M.; Moulin,

Th.) Symposium: Notion de Temps et Cybernétique. Cybernetica 24 (1981), no. 2, 89-120. (Editors) 82h:93002 93A10

Valli, Alberto Uniqueness theorems for compressible viscous fluids, especially when the Stokes relation holds. (Italian summary) Boll. Un. Mat. Ital. C (5) 18 (1981), no. 1, 317-325. (From the text) 82i:76061 76N10 (35Q10)

Vallières, Michel (with Klein, Abraham) Relationship between the Bohr collective Hamiltonian and the interacting-boson model. Phys. Rev. Lett. 46 (1981), no. 9. 586-590. (Authors' summary) **82a:81054** 81G35

Vallon, M. T. Conformal tensor interactions. (Italian and Russian summaries) Nu nto B (11) 60 (1980), no. 2, 156-164. (Author's summary) 82g:81042

Valls, Oriol T. (with Mazenko, Gene F.; Nolan, Michael J.) Real-space dynamic renormalization group. I. General formalism. *Phys. Rev. B* (3) **22** (1980), *no.* 3, 1263–1274. (Richard S. Ellis) **82c:82031** 82A25 (82A67)

(with Mazenko, Gene F.; Nolan, Michael J.) Real-space dynamic renormalization group. II. Simple examples. Phys. Rev. B (3) 22 (1980), no. 3, 1275-1285. (Richard S. Ellis) 82c:82032 82A25 (82A67)

Valton, Michel (with Guillaume, Jean-Louis; Hoffmann, Patrick; Roger, Claudine) Algèbres de Lie sous-jacentes à la hiérarchie B.B.G.K.Y. (Bogolioubov, Born, Green, Kirkwood, Yvon). (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 4, B105-B108. (Authors' summary) 82x82008 82A05 (17B60)

sescu, Ilie On the maximal outer function of a semispectral mea Joensuu 1978 (Proc. Colloq., Univ. Joensuu, Joensuu, 1978), pp. 409-416, Lecture Notes in Math., 747, Springer, Berlin, 1979. (Dumitru Gaspar) 82b:47050 47B99 (30D55,

(with Suciu, Ion) Fatou and Szegő theorems for operator-valued functions. Romanian-Finnish Seminar on Complex Analysis (Proc., Bucharest, 1976), pp. 656-673, Lecture Notes in Math., 743, Springer, Berlin, 1979. (Dumitru Gaspar) 82b:47017 47A68 (30D55, 47A45)

Valverde, Llorenç Sur les informations conditionnelles sans F-composabilité. (English summary) Seminar on Mathematical Statistics. Publ. U. E. R. Math. Pures Appl. IRMA 1 (1979), no. 4, Exp. No. V, 10 pp. (Author's summary) 82d:94023

Valz-Gris, F. (with Quartapelle, L.) Projection conditions on the vorticity in viscous incompressible flows. Internat. J. Numer. Methods Fluids 1 (1981), no. 2, 129–144. (Authors' summary) 82g:76015 76D05 (65P05, 76A60)

nanamurthy, M. K. (with Reilly, I. L.) On hereditarily Lindelöf spaces. Bull. Austral. Math. Soc. 21 (1980), no. 3, 357–362. (R. M. Stephenson, Jr.) 82a:54034 54D20 (with Gauld, David B.; Reilly, I. L.) On normal subspaces. Bull. Austral. Math. Soc. 23 (1981), no. 1, 1-4. (Paul Bankston) 82e:54021

cao long Van See Cao Long Van čan dyk Van See Čan Dyk Van đô long Vân See Đô Long Vân ky dang Van See Ky Dang Van

mg-Van, Benoît See Truong-Van, Benoît nagas, V. V. (with Chacón, E.; Moshinsky, M.) Confrontation of macroscopic and microscopic nuclear collective models. J. Math. Phys. 22 (1981), no. 3, 605-622. (J.-P. Antoine) 82j:81059 81G30 (81H10)

uja, N. (with Ketkar, R. D.) R-projective modules over a semiperfect ring. Cas Math. Bull. 24 (1981), no. 3, 365-367. (J. Jirásko) 82m:16018 16A50

en Van Bao See Nguen Van Bao Van Beijeren, Henk See van Beijeren, Henk

Van Benthem, J. F. A. K. See van Benthem, J. F. A. K.

Vanbreugel, Michel (with Jamy, Claude; Potel, Alain) Programmation par polyalgorithmes: présentation et exemples de réalisation. (English summary) Translated as Rech. Aérospat. (English) 1980, no. 6, 77–90. Rech. Aérospat. 1980, no. 6, 445–458. (Authors' summary) 82b-49052 49D45 (90C30)

Vance, Richard R. The effect of dispersal on population size in a temporally varying environment. Theoret. Population Biol. 18 (1980), no. 3, 343-362. (Author's summary) 82e:92041 92A15 (58F14)

Van Ceulen, Ludolph See van Ceulen, Ludolp n Văn Chu'o'ng See Phan Văn Chu'o'ng Vančura, Zdeněk See Drábek, Karel, 82a:01029

Van Cutsem, Bernard (with Baille, Alain) ★Problèmes de probabilités et de statistiques. (French) [Problems of probability and statistics] Agrégation de mathématiques années 1972-1978 avec rappels de cours. [Agrégation examination in mathematics 1972-1978 with course reviews]. Masson, Paris, 1980. 229 pp. ISBN 2-225-66748-9 (Yves Lepage) 82g:60001 60-01 (00A07, 62-01)

Van Daele, A. See van Daele, A. Van Dalen, D. See van Dalen, D. nguyễn Văn Đạo See Nguyễn Văn Đạo Van de Lune, J. See van de Lune, J. Van den Berg, Imme See van den Berg, It Van den Berg, M. See van den Berg, M.

Van den Bergh, N. General solutions for a static isotropic metric in the Brans-Dicke gravitational theory. Gen. Relativity Gravitation 12 (1980), no. 10, 863-869. (Author's summary) 82a:83048 83D05

Vanden Berghe, G. (with De Meyer, H. E.) An alternative derivation of transition amplitudes for time-dependent harmonic oscillators. J. Math. Phys. 22 (1981), no. 7, 1423-1424. (M. A. Rashid) 82i:81056 81C99

Van den Bos, A. See van den Bos, A. Van den Bril, Luc Carrés exacts de Hilton dans des contextes non abéliens. Ann. Sci. Math. Québec 4 (1980), no. 2, 153-173. (Marta C. Bunge) 82i:18004 18A99 (18D99)

den Brink, D. J. (with Kamat, M. P.; Watson, Layne T.) An assessment of quasi-Newton sparse update techniques for nonlinear structural analysis. Comp Methods Appl. Mech. Engrg. 26 (1981), no. 3, 363-375. (Authors' summary) 82f:65061 65H10 (73K25)

Van den Brink, Wulfert P. See van den Brink, Wulfert P. Van den Broeck, C. See van den Broeck, C.

len-Broeck, Jean-Marc (with Keller, Joseph B.) Deformation of a bubble or drop in a uniform flow. J. Fluid Mech. 101 (1980), no. 4, 673-686. (Authors' summary) 82c:76013

(with Miksis, Michael; Keller, Joseph B.) Axisymmetric bubble or drop in a uniform w. J. Fluid Mech. 108 (1981), 89-100. (Authors' summary) 82]:76010 76B10 (76B40)

(viith Keller, Joseph B.) Shape of a sail in a flow. Phys. Fluids 24 (1981), no. 3,
 552-553. (Authors' summary) 82a:73024 73J05 (76B99)
 Deformation of a liquid surface by an impinging gas jet. SIAM J. Appl. Math. 41 (1981), no. 2, 306-309. (Author's summary) 82:76011 76B10
 Van den Broek, P. M. See van den Broek, P. M.

Vanden Cruyce, Patricia (with Delandtsheer, Anne) Orbits of edge-to-edge tilings by equilateral triangles, squares and regular hexagons. J. Geom. 15 (1980), no. 2, 119-139. (R. Bantegnie) 82g:52012 52A45 (05B45)

Van den Doel, R. See van den Doel, R. Van den Dries, Lou See van den Dries, Lou

Van den Driessche, P. See van den Driessche, P. Van den Essen, Arno See van den Essen, Arno Vanderbauwhede, A. Symmetry and bifurcation near families of solutions. J. Differential Equations 36 (1980), no. 2, 173–187. (J. K. Hale) 82a:34050 34C15 (58E07) Symmetry and bifurcation from multiple eigenvalues. Ordinary and partial differential equations (Proc. Sixth Conf., Univ. Dundee, Dundee, 1980), pp. 356–365.

Lecture Notes in Math., 846, Springer, Berlin, 1981. (B. V. Loginov) 824:58034

erbei, R. J. The optimal choice of a subset of a population. Math. Oper. Res. 5 (1980), no. 4, 481-486. (Adhir K. Basu) 82d:62126 62L05

(with Mandelbaum, A.) Optimal stopping and supermartingales over partially ordered sets. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 2, 253-264. (Annie Millet) 60G40 (60J10)

Van der Bellen, Alexander (with Sertel, Murat R.) On the routewise application of choice.
J. Econom. Theory 22 (1980), no. 3, 423-438. (Dennis J. Packard) 82h:90010 90A06

Van der Blij, F. See van der Blij, F.

Van der Corput, J. G. See van der Corput, J. G. Van der Cruyssen, P. Linear difference equations and generalized continued fractions. summary) Computing 22 (1979), no. 3, 269–278. (Author's summary) 9 65Q05 (30B70, 39A10, 40A15) 82e:65129

Van der Duyn Schouten, F. A. See van der Duyn Schouten, F. A.

Van der Heyden, Ludo Scheduling jobs with exponential processing and arrival times on identical processors so as to minimize the expected makespan. Math. Oper. Res. 6 (1981), no. 2, 305-312. (Author's summary) 82f:90652 90B35 Van der Hoek, G. See van der Hoek, G.

Van der Houwen, P. J. See van der Houwen, P. J. Van der Kallen, Wilberd See van der Kallen, Wilbe

Van der Laan, Gerard See van der Laan, Gerard

Van der Laan, P. See van der Laan, P.

Van der Lugt, Anna See van der Lugt, Anna
Van der Meer, A. See van der Meer, A.
Vandermeer, John Indirect mutualism: variations on a theme by Stephen Levine. Amer. Natur. 116 (1980), no. 3, 441-448. (Ronald E. Harrell) 82i:92037

Van der Meer, P. J. C. See van der Meer, P. J. C. Van der Merwe, Alwyn See van der Merwe, Alwyn

Van der Merwe, P. du T. See van der Merwe, P. du T.

Van der Meulen, Edward See van der Meulen, Edward

Van der Mey, G. See van der Mey, G.

Van der Pauw, L. J. See van der Pauw, L. J.

Van der Poel, W. L. See van der Poel, W. L.
Van der Poorten, Alfred J. Some wonderful formulae ... footnotes to Apéry's proof of the irrationality of ζ(3). Séminaire Delange-Pisot-Poitou, 20e année: 1978/1979. Théorie des sbres, Fasc. 2 (French), Exp. No. 29, 7 pp., Secrétariat Math., Paris, 1980. (F. Beukers) 10F35 (10-01)

(with Glass, J. P.; Loxton, J. H.) Identifying a rational function. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 5, 279-284. (Authors' summary) 82m:10018 10A35

Van der Put, Marius See van der Put, Marius

Van der Steen, J. See van der Steen, J. Van der Veen, B. See van der Veen, B.

Vanderveken, Daniel A strong completeness theorem for pragmatics. Z. Math. Logik Grundlag. Math. 27 (1981), no. 2, 151-160. (Scott K. Lehmann) 82h:03018 03B45 (03B65)

Van der Vet, Robert Peter See van der Vet, Robert Peter

Vandervoort, Peter O. The equilibrium of a galactic bar. Astrophys. J. 240 (1980), no. 2, part 1, 478–487. (Author's summary) 82bc85004
 85A05 (76U05)
 The nonaxisymmetric configurations of uniformly rotating polytropes. Astrophys. J. 241 (1980), no. 1, part 1, 316–333. (R. M. Gundersen) 82ac85005
 85A05 (76U05)

Van der Waals, J. D. See van der Waals, J. D.

Van der Waas, S. D. See van der Waerden, B. L. Van der Walt, Andries P. J. See van der Walt, Andries P. J. Van der Walt, P. See van der Walt, P.

Van der Weide, Th. P. See van der Weide, Th. P.

Van der Weiden, A. J. J. See van der Weiden, A. J. J. Van der Werff, Terry J. See van der Werff, Terry J.

Van de Vegte, J. (with Argoun, M. B.) Diagonal dominance design by Bode plots and root loci. Internat. J. Control 33 (1981), no. 3, 543-554. 82c:93011 93B40 (93B15)

Van de Vel, Marcel See van de Vel, Marcel

Van de Velde-Schlick, Barbara F. B. See van de Velde-Schlick, Barbara F. B.

Van de Ven, A. On the 2-connectedness of very ample divisors on a surface. Duke Math. J. 46 (1979), no. 2, 403-407. (Ulf Persson) 82i:14032 14J10 (14C20)
Twenty years of classifying algebraic vector bundles. Journées de Géometrie

Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers, 1979, pp. 3-20, Sijthoff & Noordhoff, Alphen aan den Rijn, 1980. (M. Schneider) 82e:14026 14F05 (81E10)

Van de Ven, M. P. A. See van de Ven, M. P. A. Van de Vooren, A. I. See van de Vooren, A. I.

Vandewalle, Joos (with De Man, Hugo J.; Rabaey, Jan) Time, frequency, and z-domain modified nodal analysis of switched-capacitor networks. IEEE Trans. Circuits and Systems 28 (1981), no. 3, 186-195. (Authors' summary) 82a:94124 94C10

(with De Man, Hugo J.; Rabaey, Jan) The adjoint switched capacitor network and its application to frequency, noise and sensitivity analysis. Internat. J. Circuit Theory Appl. 9 (1981), no. 1, 77-88. (Authors' summary) 82a:94108 94C05

Appl. 9 (1961), no. 1, 77-85. (Authors summary) 824259108 2000.

(with Staar, Jan) How to obtain a simple inverse Z-transform of a rational function of z. Proc. IEE-D 128 (1981), no. 6, 275-278. (Authors' summary) 824265118 65R10

Van de Water, Henk ' See van de Water, Henk Van Dijk, Herman K. See van Dijk, Herma

Van Dommelen, L. L. See van Dommelen, L. L. kuak Van Dong See Kuak Van Dong See Kuak Van Dong Van Dooren, Paul M. (with Bart, H.; Gohberg, Israel; Kaashoek, M. A.) Factorizations of transfer functions. SIAM J. Control Optim. 18 (1980), no. 6, 675–696. (Peter Lancaster) 47A68 (65F30) 82e:47024

(with Delosme, J.-M.; Genin, Yves V.; Morf, Martin) Σ-contractive embeddings and interpretation of some algorithms for recursive estimation. Fourteenth Asilon Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 25-28, IEEE, New York, 1981. (See 824:93001) 94A05

The generalized eigenstructure problem in linear system theory. IEEE Trans. mat. Control 26 (1981), no. 1, 111-129. (Author's summary) \$2c:65025

(with Silverman, Leonard M.) A system theoretic interpretation for GCD extraction. IEEE Trans. Automat. Control 26 (1981), no. 6, 1273-1276. (Authors' summary)
82m-93050 93C05 (15A23)

(with Dewilde, Patrick) Minimal cascade factorization of real and complex rational transfer matrices. IEEE Trans. Circuits and Systems 28 (1981), no. 5, 390-400. (Authors' summary) 82d:94064 94C05 (65F30)

Van Dooren, René See van Dooren, Ren Van Doorn, Erik A. See van Doorn, Erik A. Van Douwen, Eric K. See van Douwen, Eric K.

tổng Văn Đức See Tổng Văn Đức

Van Dulst, D. See van Dulst, D.

Van Dyke, Milton See Barenblatt, G. I., 82c:76001b; Annual review of fluid mechanics, 82l:76001 and Annual review of fluid mechanics, 82m:76001

Vanecek, David J. (with Janz, Robert D.; Field, Richard J.) Composite double oscillation

in a modified version of the Oregonator model of the Belousov-Zhabo Chem. Phys. 73 (1980), no. 7, 3132-3138. (John J. Tyson) 82h:92048 nator model of the Belousov-Zhabotinsky reaction. 92A40 (34C15, Van Eeden, Constance See van Eeden, Co Van Eldik, Peter See van Eldik, Peter

Ri, J. C. (with Shehadeh, N. M.) Signal parameter optimization for the impulsive noise channel. Second Intern ce on Inform tion Sciences and Systems (Univ. Patras, Patras, 1979), Vol. I, pp. 269-281, Reidel, Dordrecht, 1980. (Authors' summary)

Van Ende Boas, Peter See van Ende Boas, Peter Van Enden, M. H. See van Enden, M. H. Van Enter, A. C. D. See van Enter, A. C. D.

Van Erkelens, H. See van Erkelens, H. Van Est, Willem T. See van Est, Willem T. Van Fraassen, Bas C. See van Fraassen, Bas C.

ngeldère, Joseph Séparation et propriété d'intersection relative. (English summa Soc. Roy. Sci. Liège 49 (1980), no. 3-4, 144-163. (J. Borwein) 82b:52008 (90C25)

(with Bair, Jacques) Équivalences concernant la séparation de plusieurs cônes vexes. Comment. Math. Univ. Carolin. 21 (1980), no. 3, 535-549. (Z. Nádeník) convexes. Con

 82a:5002 52A20 (90C25)
 Van Gigch, J. P. (with Kramer, N. J. T. A.) A taxonomy of systems science. Internat. J. Man-Mach. Stud. 14 (1981), no. 2, 179–191. (Authors' summary) 82d:92001 92–01 (00A69, 93A10)

Van Gils, Stephan See van Gils, Stephan
Vangipuram, S. An asymptotic formula in the theory of partitions into kth powers.
Proceedings of the Conference on Number Theory (Mysore, 1979), pp. 205–217, Matscience Rep., 101, Inst. Math. Sci., Madras, 1980. (From the introduction) 82g:10033 (05A15, 05A17)

Van Groesen, E. W. See van Groesen, E. W. Van Haeringen, H. See van Haeringen, H. Van Harten, Aart See van Harten, Aart

hecke, Lieven (with Gray, Alfred) Power series expansions, differential geometry of geodesic spheres and tubes, and mean-value theorems. Geometry and differential geometry (Proc. Conf., Univ. Haifa, Haifa, 1979), pp. 252–259, Lecture Notes in Math., 792, Springer, Berlin, 1980. (T. Okubo) 82b:53028 53B21 (53C20)

(with Gray, Alfred) The area of geodesic discs in surfaces. (Dutch. English summary) Med. Konink. Acad. Wetensch. België 42 (1980), no. 1, 17 pp. (C. Thas) 82h:53058 53C22 (53C20)

1-harmonic spaces are harmonic. Bull. London Math. Soc. 13 (1981), no. 5, 409-411.

(T. J. Willmore) 82j:53079 53C25
A note on harmonic spaces. Bull. London Math. Soc. 13 (1981), no. 6, 545-546. (A.

Gray) 82m:53025 53B20

(with Chen, Bang-yen) Differential geometry of geodesic spheres. J. Reine Angew. Math. 325 (1981), 28-67. (A. Gray) 82m:53038 53C20 (with Tricerri, Franco) Curvature tensors on almost Hermitian manifolds. Trans.

Math. Soc. 267 (1981), no. 2, 365-397. (Georgi Gančev) 82j:53071 (53C55)

Van Hee, K. M. See van Hee, K. M.

Van Helden, Albert Huygens and the astronomers. Studies on Christiaan Huygens (Sympos., Amsterdam, 1979), pp. 147-165, Swets & Zeitlinger, Lisse, 1980. (See 82m:01036) 01A45

Vanheuverzwijn, Paul Semigroups of quasifree completely positive maps on the boson algebra. Mathematical problems in the quantum theory of irreversible processes (Naples, 1978), pp. 163-178, Lab. Cibernet. CNR, Naples, 1978. (See 82j:82003) (461.55)

(with Demoen, Bart) Implementable positive maps on standard forms. J. Funct. Anal. 38 (1980), no. 3, 354-365. (E. Størmer) 82c:46076 46L10

A note on the stochastic lattice-gas model. J. Phys. A 14 (1981), no. 5, 1149–1158. (Author's summary) 82482016 82A05 (60K35, 82A67) nyen Van Hô See Nguyễn Văn Hô

hỗ Van Hoà See Hỗ Van Hoà

Van Hoom, M. H. See van Hoom, M. H. Van Horn, H. M. (with Richardson, M. B.; Savedoff, M. P.) A code for general relativistic stellar evolution. Astrophys. J. Suppl. 39 (1979), no. 1, 29-48. (Authors' summary) 82h:85004 85A15 (85-04)

le Van Hot See Le Van Hot

Van Houwelingen, Hans See van Houwelingen, Hans Van Houwelingen, J. C. See van Houwelingen, J. C.

nguyen Van Huu See Nguyen Van Huu dihn Van Huynh See Dihn Van Huynh fung Van Hyong See Fung Van Hyong

Van Invogen, Peter See van Inwagen, Peter Van Kampen, N. G. See van Kampen, N. G. Inoang Van Lai See Hoang Van Lai nguyen Van Lam See Nguyen Van Lam Van Leeuwen, E. H. See van Leeuwen, E. H.

Van Leeuwen, J. M. J. See van Leeuwen, J. M. J.

Van Leeuwen, Jan See van Leeuwen, Jan Van Leeuwen, L. C. A. See van Leeuwen, L. C. A.

Van Leeuwen, W. A. See van Leeuwen, W. A.

Van Lint, Jacobus Hendricus See van Lint, Jacob

Van Loan, Charles (with Golub, Gene H.) Total least squares. Smoothing techniques for curve estimation (Proc. Workshop, Heidelberg, 1979), pp. 69-76, Lecture Notes in Math., 757, Springer, Berlin, 1979. (Valery Fedorov) 82a:65013

Van Loon, J. N. M. See van Loon, J. N. M. Van Maanen, J. A. See van Maanen, J. A.

Van Mill, Jan See van Mill, Jan

Van Moeseke, Paul See van Moeseke, Paul nguyễn Văn Ngọc See Nguyễn Văn Ngọc tran Van Nhung See Tran Van Nhung

izen, Peter See van Nie

Van Nuffelen, Cyriel Directed weighted hypergraphs. Bull. Soc. Math. Belg. Sér. B 31 (1979), no. 2, 147–151. (Chong-Keang Lim) 82h:05100 05C65 (05C20)
 Van Order, R. See Treble, John G., 82m:90043

Van Ouwerkerk, Hendrik J. See van Ouwerkerk, Hendrik J.

Van Oystaeyen, F. See van Oystaeyen, F. Van Praag, Bernard M. S. See van Praag, Bernard M. S.

Van riang, Sernard M. S. Servan Prang, Sernard M. S.
 Vanquickenborne, L. G. (with Ceulemans, A.) On the evaluation of matrix elements of symmetry operators in a determinantal basis. Chem. Phys. Lett. 75 (1980), no. 3, 494-496. (Authors' summary) 82:e81159 81G40 (15A90)
 Van Rees, G. H. J. (with Mullin, R. C.; Schellenberg, P. J.; Vanstone, S. A.) On the construction of perpendicular arrays. Utilitas Math. 18 (1980), 141-160. (T. G. Ostrom)

05B15

(with Stanton, R. G.; Eades, Peter; Cowan, D. D.) Computation of some exact g-coverings. Utilitas Math. 18 (1980), 269–282. (J. Spencer) 82h:05052 05B40

See also Proceedings: Southeastern Conference on Combinatorics, Graph Theory and

ing, 82b:05004

Van Rhijn, Johan G. See van Rhijn, John

Van Rootselaar, Bob See van Rootselaar, Bob Van Rossum, H. See van Rossum, H.

Van Ryzin, John (with de Alba, Enrique) An empirical Bayes approach to outliers: shifted mean case. Recent developments in statistical inference and data analysis (Proc. Internat. Conf., Inst. Statist. Math., Tokyo, 1979), pp. 33-44, North-Holland, Amsterdam, 1980. (V. 62C12

(with de Alba, Enrique) An empirical Bayes approach to outliers. J. Statist. Plans Inference 4 (1980), no. 3, 217-236. (Françoise Garcia-Schaeffer) 82a:62018 62C12

(with Koul, Hira L.; Susarla, V.) Regression analysis with randomly right-censored data. Ann. Statist. 9 (1981), no. 6, 1276–1288. (Eswar G. Phadia) 82k:62132 See also Classification and clustering, 82d:62108 Van Saarloos, W. See van Saarloos, W.

Van Schuppen, J. H. (with Willems, Jan C.) Stochastic systems and the problem of state space realization. Geometrical methods for the study of linear systems (Proc. NATO Adv. Study Inst., Harvard Univ., Cambridge, Mass., 1979), pp. 283-313, NATO Adv. Study Ser., Ser. C: Math. Phys. Sci., 62, Reidel, Dordrecht, 1980. (Guy Ruckebusch) 93E03 82h:93065

(with Kumar, P. R.) On Nash equilibrium solutions in stochastic dynamic games IEEE Trans. Automat. Control 25 (1980), no. 6, 1146-1149. (Tamer Başar) 82j:93042 93E05 (90D25)

(with Kumar, P. R.) On the optimal control of stochastic systems with an

exponential-of-integral performance index. J. Math. Anal. Appl. 80 (1981), no. 2, 312–332. (Authors' summary) 82f:93090 93E20 nsteenkiste, G. C. Simulation of environmental systems: an academic exercise? Systems analysis and simulation, 1980 (Proc. Internat. Sympos., Berlin, 1980), pp. 83-95, Math.

Research, 5, Akademie-Verlag, Berlin, 1980. (Author's summary) 82g:92056 (00A69) Vanston, Lawrence K. (with Barnes, J. Wesley) Scheduling jobs with linear delay penalties

and sequence dependent setup costs. Oper. Res. 29 (1981), no. 1, 146-160. (Authors' summary) 82b:90062 90B35

Vanstone, J. R. Tensor concomitants of order zero. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 3, 155-159. (J. D. Zund) 82h:53023 53A55

stone, S. A. (with Rosa, Alexander; Schellenberg, P. J.) Generalized starter and adder constructions for Howell designs. Proceedings of the Tenth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1979), pp. 833-842, Congress. Numer., XXIII-XXIV, Utilitas Math., Winnipeg, Man., 1979. (R. C. Mullin) 82e:05037 05B15 (05B30)

Resolvable r, \u03b4-designs and the Fisher inequality. J. Austral. Math. Soc. Ser. A 28 (1979), no. 4, 471–478. (D. K. Ray-Chaudhuri) 82cd5022 05805 (05830) (with Fuji-Hara, R.) On automorphisms of doubly resolvable designs. Comb

thematics, VII (Proc. Seventh Australian Conf., Univ. Newcastle, Newcastle, 1979), pp. 29-36, Lecture Notes in Math., 829, Springer, Berlin, 1980. (R. C. Mullin) 82e:05034 05B15 (05B05)

(with Fuji-Hara, R.) On the spectrum of doubly resolvable Kirkman systems. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. I. Congr. Numer. 28 (1980), 399-407. (Katherine Heinrich) 82j:05039 05B30 (05B05) (with Mathon, R.) Doubly resolvable Kirkman systems. Proceedings of the Eleventh

Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 611-625. (W. H. Mills) 82e:05030 05B05 (05B25) (with Schellenberg, P. J.) The existence of Howell designs of side 2n and order

2n+2. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 879-887. (William B. Poucher) 82k:05037 05B30 (05B15)

(with Mullin, R. C.; Schellenberg, P. J.; Van Rees, G. H. J.) On the construction of endicular arrays. Utilitas Math. 18 (1980), 141-160. (T. G. Ostrom) 82a:05024

(with Gardner, Ben) Some results on irreducible (r,λ) -designs. Utilitas Math. 18 (1980), 291-300. (R. C. Mullin) 824:05045 05B30 (05B05) (with Schellenberg, P. J.; Stinson, D. R.; Yates, J. W.) The existence of Howell

designs of side n+1 and order 2n. Combinatorica 1 (1981), no. 3, 289-301. (W. D. Wallis) 82m:05028 05B30 (05B15)

vo Van Tan See Vo Van Tan lệ Văn Thiệm See Lê Văn Thiêm

nguyễn Văn Thu See Nguyễn Văn Thu Van Tilborg, Henk C. A. See van Tilborg, Henk C. A.

tran Van Trung See Tran Van Trung Van Veenendaal, Wouter See van Veene

Van Veldhuizen, M. See van Veldhuizen, M.

Van Velsen, J. F. C. See van Velsen, J. F. C. Van Vleck, F. S. (with Himmelberg, C. J.; Parthasarathy, T.) On measurable relations.

Fund. Math. 111 (1981), no. 2, 161-167. (J. C. Oxtoby) 82c:28011 28A20 (58C06) Van Vleck, John Hasbrouck See Obituary: Van Vleck, John Hasbrouck, 82b:01069
Van Vliet, Dirck See van Vliet, Dirck

Van Vliet, J. C. See van Vliet, J. C.

Van Weert, Ch. G. See van Weert, Ch. G.

Van Wouwe, J. M. See van Wouwe, J. M.

Vanzani, V. (with Cattapan, G.; Lovitch, L.) Minimally connected N-body equations for transition operators. Nuovo Cimento A (11) 59 (1980), no. 2, 141-150. (A. Corciovei) 81F20 (32A45, 45L05, 45M05)

(with Cattapan, G.) The coupled-channel method and the integral-equation formalism for nuclear rearrangement reactions. (Italian and Russian summaries) Nuovo Cimento A (11) 62 (1981), no. 3, 226-237. (Authors' summary) 82i:81131

Van Zuijlen, M. C. A. See van Zuijlen, M. C. A. Vanžura, J. On the geometry and topology of manifolds over algebras. Vorträge von der Tagung Geometrie und Anwendungen (Gaussig, 1977), pp. 133-136, Weiterbildungszentrum Math. Kybernet. Rechentech., 28, Tech. Univ. Dresden, Dresden, 1978. (From the text) 53C10 (58H15)

Van Zwet, W. R. See van Zwet, W. R.

Vaona, G. L. (with Pellegrino, Consolato) A method for estimating the parameters of models of mono- and bi-exponential type. (Italian. English summary) Riv. Mat. Univ. Parma (4) 6 (1980), 167–176 (1981). (J. Tiago de Oliveira) 82h:62049 62F10

Vapnjarskii, I. B. Stability of the solution of standardization and unification problems relation to the accuracy of their approximation. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 3, 640-647, 812. (Z. Waksman) 82f:90086 90C30 (90C11)

(with Troya, J. M.; Sánchez P., J. M.) Linear arrangement of a digraph. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. II, pp. 70–79, Reidel, Dordrecht, 1980. (See 82d:93002) 68C25

Varadan, Vasundara V. See Acoustic, electromagnetic and elastic wave scattering-focus on the T-matrix approach, 82h:78002

Varadan, Vijay K. See Acoustic, electromagnetic and elastic wave scattering-focus on the T-matrix approach, 82h:78002

Varadarajan, V. S. (with Duistermaat, J. J.; Kolk, J. A. C.) Spectra of compact locally

symmetric manifolds of negative curvature. Invent. Math. 52 (1979), no. 1, 27-93. (P. 58G25 (10D40, 43A85) Wintgen) 82a:58050a

(with Duistermaat, J. J.; Kolk, J. A. C.) Erratum: "Spectra of compact locally symmetric manifolds of negative curvature". Invent. Math. 54 (1979), no. 1, 101. (P. 58G25 (10D40, 43A85) Wintgen) 82a:58050b

Varadhan, S. R. S. (with Chung, Kai Lai) Kac functional and Schrödinger equation. Stud Math. 68 (1980), no. 3, 249-260. (Mark Pinsky) 82d:60145 60J57 (60J65, 81C20)

Varah, J. M. Numerical parameter estimation in differential equations. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. I (Winnipeg, Man., 1980). Congr. Numer. 30 (1981), 173-194. (From the text) 82m:65080 651.99

asastry, T. S., 82e:01020 and Shukla, Kripa Shankar, 82m:01020

Varaiya, Pravin (with Borkar, Vivek) Adaptive control of Markov chains. I. Finite parameter set. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 744-749, IEEE, New York, 1979. (Authors'

mary) 82g:93051 93E20 (with Elliott, Robert J.) A sufficient condition for the optimal control of a partially observed stochastic system. Analysis and optimisation of stochastic systems (Proc.

Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 11-20, Academic Press, London, 1980. (Yaakov Yavin) 82e-93129 93E20 (Yaakov Yavin) 82e:93129 (with Walrand, Jean) Interconnections of Markov chains and quasireversible queuing networks. Stochastic Process. Appl. 10 (1980), no. 2, 209-219. (Robert D. Foley)

82d:60188 60K25 (60J10) (with Sastry, Shankar) Coherency for interconnected power systems. IEEE Trans. Automat. Control 26 (1981), no. 1, 218-226. (Authors' summary) 82b:94036 (93C15)

(with Borkar, Vivek) Finite chain approximation for a continuous stochastic control problem. IEEE Trans. Automat. Control 26 (1981), no. 2, 466-470. (Authors' summary)

s2e-93126 93E20 93E20
reenko, A. N. The integrality of the limit of the integral of the curvature along the boundary of an isolated singularity of a surface in C². (Russian) Uspehi Mat. Nauk 33 (1978), no. 6(204), 199-200. (H. Tornehave) 82i:32036 32C40
Asymptotic behavior of holomorphic forms determines a mixed Hodge structure.

(Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 5, 1035-1038. (Helmut Hamm) 82g:14010 14B05 (14C30, 32C40, 58A14)

On the monodromy operator in vanishing cohomology and the multiplication operator by f in the local ring, (Russian) Dokl. Akad. Nauk SSSR 260 (1981), no. 2, 272-276. (Helmut Hamm) 82k:14005 14B05 (14D05)
Asymptotic Hodge structure on vanishing cohomology. (Russian) Izv. Akad. Nauk

. Mat. 45 (1981), no. 3, 540-591, 688. (I. Dolgachev) 82m:32007 32B30 (14F40, 32G20, 57R45)

Obstructions to local equivalence of distributions. Mat. Zametki 29 (1981), no. 6, 939-947, 957. (G. N. Himšiašvili) 82k:58012 58A30 (32B15)

Vardi, M. Y. (with Beeri, Catriel) On the properties of join dependencies. Advances in data base theory, Vol. 1 (Proc. Workshop, Toulouse, 1979), pp. 25–71, Plenum, New York, 1981. (See 82a:68040) 68B15

(with Beeri, Catriel) The implication problem for data dependencies (extended abstract). Automata, languages and programming (Akko, 1981), pp. 73–85, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (See 82i:68003) 68B15 (68C25)

dulakis, Antonis I. G. Right divisors of numerator polynomial matrices and (A, B)-invariant subspaces. Internat. J. Control 32 (1980), no. 5, 867–890. (Clyde F. Martin) 82a:93030 93C05 (15A23)

On the structure of maximal (A, B)-invariant subspaces: a polynomial matrix approach. IEEE Trans. Automat. Control 26 (1981), no. 2, 422-428. (Author's summary) 93C35

On the state feedback diagonal decoupling of linear systems described by

(A, B, C, E) quadruples. Internat. J. Control 34 (1981), no. 6, 1153–1161. (Author's summary) 82m:93046 93B55

Varea, Vicente R. The X-Frattini of a finite group. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 72 (1978), no. 2, 249-266. (M.ª Jesús Iranzo) 20D10 (20D25)

Varecza, Árpád Methods for determination of principle bounds of ordering algorithm (Hungarian. English summary) Alkalmaz. Mat. Lapok 5 (1979), no. 1-2, 191-202 (Author's summary) 82a:68117 68E05

Varecza, L. Equivalence relations defined by automorphism groups. Mat. Vesnik 3(16)(31)

(1979), no. 3, 351–355. (M. Gould) **82c:08002** 08A35 A Galois correspondence for universal algebras. *Mat. Vesnik* **3(16)(31)** (1979), no. 4, 525–528. (Editors) **82b:08005** 08A35

Vareh, N. V. (with Sevelo, V. M.; Grical, A. G.) Investigation of oscillation properties of solutions of systems of differential and differential-difference equations (survey).

(Russian) An investigation of differential and differential-difference equations (Russian), pp. 157-183, 192, Akad. Nauk Ukrain. SSR, Inst. Mat., Kieo, 1980. (A. Halanay)

82j:34075 34K15 (34C10)
Varela, Fernando (with Corona, Carlos) Sur les C⁰-perturbations de la forme de contact canonique de la sphère S^{2p+1}. (English summary) C. R. Acad. Sci. Paris Sèr. A-B 291 (1980), no. 12, A643-A646. (Frans Cantrijn) 82g:58003 58A10

ga, A. A Schur method for pole assignment. IEEE Trans. Automat. Control 26 (1981), no. 2, 517–519. (Author's summary) 82e:93043 93B55

(with Sima, V.) Numerically stable algorithm for transfer function matrix evaluation. Internat. J. Control 33 (1981), no. 6, 1123-1133. (From the introduction) 82h:93036

On stabilization algorithms for linear time-invariant systems. (German and French summaries) Rev. Roumaine Sci. Tech. Sér. Électrotech. Énergét. 26 (1981), no. 1, 115-124, vii, ix. (Author's summary) 82i:93060 93D15

Varga, Gy. Nonzero eigenvalues of singular matrices, Jordan normal form of matrices. Numerical methods (Third Collog., Keszthely, 1977), pp. 619-624, Colloq. Math. Soc. János Bolyai, 22, North-Holland, Amsterdam, 1980. (Ludwig Elsner) 82b:65027

Varga, L. Synthesis of abstract algorithms. Acta Cybernet. 5 (1980/81), no. 1, 59-76.

(Author's summary) 82m:68031 68B10

Varga, R. S. (with de Bruin, M. G.; Saff, E. B.) On two conjectures on the zeros of generalized Bessel polynomials. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 261-266, Academic Press, New York, 1980. (J. P. Singhal) 33A65

(with Saff, E. B.; Ullman, Joseph L.) Incomplete polynomials: an electrostatics approach. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 769-782, Academic Press, New York, 1980. (Manfred v. Golitschek) 82h:41009 41A10

(with Saff, E. B.) Remarks on some conjectures of G. G. Lorentz. J. Approx. Theory

30 (1980), no. 1, 29-36. (A. Sharma) 82e:41040 41A50 (41A10)
(with Cavaretta, A. S., Jr.; Sharma, Ambikeshwar) Interpolation in the roots of nity: an extension of a theorem of J. L. Walsh. Resultate Math. 3 (1980), no. 2, 155-191. (R. Vermes) 82j:30049 30E05 (30E10, 41A05)

(with de Bruin, M. G.; Saff, E. B.) On the zeros of generalized Bessel polynomials. I, Nederl. Akad. Wetensch. Indag. Math. 43 (1981), no. 1, 1-13, 14-25. (M. E.

Muldoon) 82d:33015 33A40 (41A21)
(with Anderson, Ned; Saff, E. B.) An extension of the Eneström-Kakeya theorem and its sharpness. SIAM J. Math. Anal. 12 (1981), no. 1, 10-22. (M. Marden) 82b:30007 30C15 (90C05)

Varga, Z. Saddle points of vector-valued functions. (Russian) Existence of solutions, stability and informedness in game theory (Russian), pp. 3-19, 110, Kalinin. Gos. Univ., Kalinin, 1979. (A. B. Kuržanskii) 824:90136 90D12

(with Silin, D. B.) Pareto optimality in vector spaces. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1981, no. 4, 28-31, 55. (Françoise Berquier) 82m:49012 49A27 (90D25)

driguez-Vargas, A. M. See Rodriguez-Vargas, A. M.

 Varignon, Pierre See Tjulina, I. A., 82a:01018
 Varilly, Joseph C. Dilation of a nonquasifree dissipative evolution. Lett. Math. Phys. 5 (1981), no. 2, 113-116. (Gérard G. Emch) 82m:82014 82A15 (46L60)

risco, Ada (with Cherubini, Alessandra) o-reflexive separative semigroups. (Italian. English summary) Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 280-290 (1981). 20M10 (M. Gould) 82i:20073

(with Cherubini, Alessandra) On conditionally commutative semigroups. Semigroup Forum 23 (1981), no. 1, 15-24. (B. Ponděliček) 82i:20071 20M10 (20M14) (with Cherubini, Alessandra) Semigroups whose proper subsemigroups are

ommutative. Semigroup Forum 23 (1981), no. 1, 35-48. (B. Ponděliček) 82i:20072 20M10 (20F99)

Varlaky, P. (with Raibman, N. S.) Subjective variance functions from a posteriori information and their application in the identification problem for nonlinear systems. I. Automat. i Telemeh. 1979, no. 9, 43–51 (Russian. English summary); translated as Automat. Remote Control 40 (1979), no. 9, part 1, 1292-1299 (1980). (Authors' summary) 93E12 (92A25, 93C10)

(with Raibman, N. S.) Subjective variance functions from a posteriori information and their application in the identification problem for nonlinear systems. II. Automat. i Telemeh. 1979, no. 10, 32-41 (Russian. English summary); translated as Auton Control 40 (1979), no. 10, part 1, 1427-1434 (1980). (Authors' summary) 82i:93086b 93E12 (92A25, 93C10)

Variamov, V. V. (with Gabov, S. A.) Application of Watson's method to a problem of the theory of waves on the surface of a heavy fluid. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 76B15 (35C20) (1980), no. 4, 965-978, 1085. (S. S. Titov) 82c:76018

Varley, Robert Vector bundles on cones over projective schemes. Invent. Math. 62 (1980/81), no. 1, 15-22. (P. E. Newstead) 82j:14015 14F05 (14F15)

(with Carlson, Robert) Grassmannian subvarieties arising in the spectral theory of ordinary differential operators. J. Reine Angew. Math. 320 (1980), 32-43. (A. M. Vinogradov) 82e:34020 34B25 (47A10) Vinogradov) 82e:34020

Varma, A. K. (with Szabados, József) Inequalities for derivatives of polynomials having real

zeros. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 881-887, Academic Press, New York, 1980. (William N. Everitt) 82b:26017 (26D10, 41A17)

(26D10, 41A17)

(with Prasad, Jagdish) An interpolatory rational approximation. Approximation theory and applications (Proc. Workshop, Technion—Israel Inst. Tech., Haifa, 1980), pp. 319-327, Academic Press, New York, 1981. (P. Vertesi) 82g:41005

41A05 (41A20)

(with Prasad, Jaedish) A study of some interpolatory processes based on the roots of (with Prasad, Jagdish) A study of some interpolatory processes based on the roots of gendre polynomials. J. Approx. Theory 31 (1981), no. 3, 244-252. (J. Szabados) 41A05 (41A10)

Derivatives of polynomials with positive coefficients. Proc. Amer. (1981), no. 1, 107-112. (M. Tomić) 82j:26014 26C05 (26D05, 41A17)

Varma, Arvind (with Huang, Daniel T.-J.) Steady-state multiplicity of a nonadiabatic bubble column with fast reactions. AIChE J. 27 (1981), no. 1, 111–120. (Richard J. Field) 82:80012 80A30 (58F14, 92A40)

(with Huang, Daniel T.-J.) Steady-state and dynamic behavior of fast gas-liquid reactions in nonadiabatic continuous stirred tank reactors. Chem. Engrg. J. 21 (1981), no. 1, 47-57. (Jesús Hernández) 82c:80023 80A30 (35B32, 58E07)

rma, Badri N. (with Alspach, Brian) Decomposing complete graphs into cycles of length $2p^e$. Combinatorics 79 (Proc. Colloq., Univ. Montreal, Montreal, Que., 1979), Part II. Ann. Discrete Math. 9 (1980), 155–162. (D. Sotteau) 82h:05087 05C38

ma, Ram K. (with Rao, N. Nagesha) Modified Korteweg - de Vries equation for spatially inhomogeneous plasmas. Phys. Lett. A 70 (1979), no. 1, 9-11. (D. ter Haar) 82c:82081

ma, S. K. (with Moharir, P. S.) A new class of orthonormal transforms. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 3, part 1, 452–454. (Authors' summary)

arna, Ja. P. (with Cirulis, T.) Stress state for shells of revolution with dyn metric loading. (Russian) Lato. Mat. Ežegodnik No. 25 (1981), 133-142, 249. athors' summary) 82m:73066 73L99

Varoglu, Erol (with Finn, W. D. Liam) An efficient solution for heat transport problems Numerical methods in thermal problems (Proc. First Internat. Conf., Univ. College, Swansea, 1979), pp. 371-380, Pineridge, Swansea, 1979. (See 82g:80001) 76R99

(with Finn, W. D. Liam) Space-time finite elements incorporating characteristics for the Burgers equation. Internat. J. Numer. Methods Engrg. 16 (1980), Special Issue, 171-184. (R. Schumann) 82x35093 35Q20 (65N30)

Varol, Y. L. On a subset of all the permutations of n marks. Comput. J. 23 (1980), no. 4, 344-346. (Author's summary) 82j:68053 68E05 (05A05, 10K10)

Gebis (1970), (Nation 8 summary) appeared to the phase kinetics of enzyme reactions. J. Theoret. Biol. 89 (1981), no. 1, 1–17. (John J. Tyson) 82m:80006a 80A30 (34A30, 92A09) (with Galvez, J.; Canovas, F. Garcia) II. Transient phase of two-substrate enzyme systems. J. Theoret. Biol. 89 (1981), no. 1, 19–35. (John J. Tyson) 82m:80006b 80A30

(with Galvez, J.; Carmona, F. G.) III. Kinetics of enzyme reactions with inactivation J. Theoret. Biol. 89 (1981), no. 1, 37-44. (John J. Tyson) 82m:80006c 80A30 (34A30, 92A09)

as Th. (with Gundy, Richard F.) Les transformations de Riesz et les intégrales stochastiques (English summary) C. R. Acad. Sci. Paris Sér. A-B 289 (1979), no. 1, A13-A16. (Maurizio Pratelli) 82e:60089 60H05 (60J65)
Aspects of probabilistic Littlewood-Paley theory. J. Funct. Anal. 38 (1980), no. 1, 25-60. (D. L. Burkholder) 82e:42016 42B25 (47D07, 60G46)
The Helson-Sægé theorem and A_p-functions for Brownian motion and several variables. J. Funct. Anal. 39 (1980), no. 1, 85-121. (Mou-Hsiung Chang) 82a:60069

60G46 (46J10, 60J65)

Zeros of H^p functions in several complex variables. Pacific J. Math. 88 (1980), no. 1, 189-246. (B. A. Taylor) 824:32004 32A35

A probabilistic proof of the Garnett-Jones theorem on BMO. Pacific J. Math. 90 (1980), no. 1, 201-221. (Mou-Hsiung Chang) 82f:60181 60J65 (42B30, 46E99, 60G46) Probabilistic approach to some problems in complex analysis. (French summary Bull. Sci. Math. (2) 105 (1981), no. 2, 181-224. (Jean-Louis Ducourtioux) 82k:32025

32A35 (60G46) Fonctions de la classe BMO et solution du problème $\bar{\partial}_h$ au bord des domaines pseudoconvexes. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 35–38. (Author's summary) 82b:32008 32A35 (32A45)

Diffusion sur une variété riemannienne à courbure non négative. (English summary) [Diffusion on a nonnegatively curved Riemannian manifold] C. R. Acad. Sci. Paris Sér. ath. 293 (1981), no. 3, 213-214. (Author's summary) 82k:58101 58G32 (53C20,

58G25, 60J60) Varshney, O. P. On a Tauberian theorem for absolute Nörlund summability Math. 20 (1978), no. 3, 201-209. (E. Reimers) 82e:40009 40E05 (40G05)

shah, V. P. (with Kesarwani, R. N.) Four-term WKBJ approximation and its application to Varshni V and Lennard-Jones potentials. (French summary) Canad. J. Phys. 58 (1980), no. 3, 363–369. (Authors' summary) 82e:81013 81C15 (34E20)

(with Kesarwani, R. N.) Eigenvalues of an anharmonic oscillator. J. Math. Phys. 22 (1981), no. 9, 1983–1989. (Authors' summary) 82i:81038 81C15 (41A60) (with Kesarwani, R. N.) Improved variational solution of the Thomas-Fermi

on for atoms. Phys. Rev. A (3) 23 (1981), no. 3, 991-998. (Authors' summary) 82c:81162 81G45

(with Kesarwani, R. N.) The quantum pendulum in the WKBJ approximation. J. Math. Phys. 23 (1982), no. 1, 92-95. (Authors' summary) 82m:81022 simašvili, K. V. (with Demkov, Ju. N.; Ostrovskii, V. N.) Inverse scattering problem in the eikonal approximation. Jadernaja Fiz. 31 (1980), no. 3, 816-820 (Russian); translated as Soviet J. Nuclear Phys. 31 (1980), no. 3, 421-424 (1981). (Authors' summary)

82c:31127 81F05 Vartak, M. N. (with Rao, P. R.) Solutions of some graph equations. J. Combin. Inform. System Sci. 5 (1980), no. 2, 112-117. (E. A. Nordhaus) 82c:05062 05C35 (05C99) (with Rao, P. R.) On the characterization of the line graphs of some graph products.

Ars Combin. 11 (1981), 107-121. (Slobodan Simić) 82m:05084 05C99 (akidze, Š. I. (with Matveev, V. A.) Bogoljubov transformation in the problem of nassive particle capture by the quantum field. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 346-357. (Authors' summary) 82b:81118 81F20

Vasavada, M. H. (with Mehta, R. D.) Tensor product of URM algebras. Mat. Vesnik 4(17)(32) (1980), no. 2, 169-173. (W. Żelazko) 82f:46075 46M05 (46J10) Vaščenko, L. F. (with Kajuk, Ja. F.) Geometric nonlinear deformation of soft shells under a

nonsymmetric load. Prikl. Meh. 16 (1980), no. 8, 16-23 (Russian); translated as Soviet Appl. Mech. 16 (1980), no. 8, 665-671. (From the introduction) 82d:73061

Vasconcelos, Elinalva V. (with Tölke, Jürgen) Eine Raumbewegung mit nur kubischen Bahnkurven. Österreich. Akad. Wiss. Math.-Natur. Kl. Sitzungsber. II 188 (1979), no. 8-10, 407-415. (K. Strubecker) 821:53013 53A17

concelos, Wolmer V. (with Simis, Aron) The syzygies of the conormal module. A Math. 103 (1981), no. 2, 203-224. (Jürgen Herzog) 82i:13016 13C15 (13D25)

(with Bumby, Richard T.; Sontage, Eduardo D.; Sussmann, H. J.) Remarks on the pole-shifting problem over rings. J. Pure Appl. Algebra 20 (1981), no. 2, 113–127. (Valeriu Prepelija) 82:93006 93B05 (93B55, 93D15) (with Andrade, José F.; Simis, Aron) On the grade of some ideals. Manuscripta

Math. 34 (1981), no. 2-3, 241-254. (Jürgen Herzog) 82j:13015 13D05 (13C05) (with Simis, Aron) On the dimension and integrality of symmetric algebras. Math. Z. 177 (1981), no. 3, 341-358. (Jürgen Herzog) 82i:13017 13C15 (13D25)

iek, Karol On the error exponent for ergodic Markov source. Kybernetika (Prague) 16 (1980), no. 4, 318-329. (Abul Basar Khan) 82f:94010 94A17 (62M05)

enko, V. P. Decomposition and separation of n-ary relations. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 412 (1979), 15-19, 154. (T. Katriñák) 82a:04002 04A05 (08A02, 93A10)

(with Frolov, A. B.) Algorithms of decomposition of logical functions and n-ary relations. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 412 (1979), 19-25, 154. (Authors' summary) 82a:94125 94C10

enkova, N. V. (with Komogorov, V. V.; Mednickii, V. G.) A convex programming problem with separable variables. (Russian) Ekonom. i Mat. Metody 16 (1980), no. 4, 778-784. (I. B. Medvedovskii) 82b:90090 90C25 (49D27)

ko, L. F. See Vaščenko, L. F.

Vasić, Petar M. (with Lacković, Ivan B.) Notes on convex functions. II. On continuous linear operators defined on a cone of convex functions. Univ. Beograd. Publ Elektrotehn. Fak. Ser. Mat. Fiz. No. 602-633 (1978), 53-59 (1979). (E. F. Beckenbach) 26A51 (26D10, 26D15)

(with Lacković, Ivan B.) Notes on convex functions. III. On the Fourier coefficients of a convex function. Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 602-633 (1978), 93-95 (1979). (E. F. Beckenbach) 82a:26009b 26A51 (26D05)

(with Pečarić, Josip E.) On the Jensen inequality for monotone functions. II. An. Univ. Timişoara Ser. Ştiinţ. Mat. 18 (1980), no. 1, 95-104. (Paul R. Beesack) 82j:26020 26D15 (26A48, 26A51)

(with Pečarić, Josip E.) Notes on some inequalities for convex sequences and for k-convex functions. Mat. Vesnik 4(17)(32) (1980), no. 1, 133-138. (D. C. Russell) 26D15 (26A51)

ilach, Serge See Vasilache, Sergi

Vasilache, Mariana (with Rusu, I.; Marica, Carmen; Eftimescu, Cornelia) Representation of the shadows in the plane axial reference system. (Romanian. French summary) Bul. Inst. Politehn. Iași Sect. I 26(30) (1980), no. 1-2, 75-79. (O. Bottema) 82g:51030

silache, Sergiu Direct limits in the categories of nonfinitary heterogeneous algebras. Rend. Circ. Mat. Palermo (2) 28 (19° 9), no. 3, 337-350 (1980). (Jiří Adámek) 82c:08010b 08C05 (18A30)

Inductive (direct) limits in the categories of heterogeneous algebras and of abstract automata. Rend. Circ. Mat. Palermo (2) 28 (1979), no. 3, 377-386 (1980). (Jiří Adámek) 08C05 (18A30)

Algebraic method for solving systems of linear differential equations with variable coefficients. SIAM J. Math. Anal. 12 (1981), no. 1, 23-39. (R. A. Struble) 82c:34014

Vasil'čenko, A. A. Korovkin systems in some function spaces. (Russian) Studies in functional analysis (Russian), pp. 6-14, i, Ural. Gos. Univ., Sverdlovsk, 1978. (N. I. Skiba) 82c:46031 46E15 (41A36)

o, A. T. (with Grigorenko, Ja. M.; Pankratova, N. D.) Solution of problems of statics of laminated shells in a three-dimensional formulation. (Russian. English summary) Vyčisl. Prikl. Mat. (Kiev) No. 43 (1981), 123-132, 160. (Authors' summary)

Vasilenko, G. N. On the weak continuity of Jacobians. (Russian) Sibirsk. Mat. Ž. 22 (1981),

no. 3, 35-41, 236. (Françoise Berquier) 82j:49012 49A50 silenko, Ju. G. (with Kuznecov, E. N.; L'vov, V. S.; Nesterihin, Ju. E.; Sobolev, V. S.; Spektor, M. D.; Timohin, S. A.; Utkin, E. N.; Šmošlov, N. F.) Generation of Taylor vortices in a Couette flow. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 2, 58-64, 173. (M. Yanowitch) 824:76053 76E99

nko, V. A. (with Zjuzin, M. V.) Processing of experimental data with an application of averagings that preserve polynomial, trigonometric or exponential functions. (Russian)
Theory of cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978) un), pp. 56-58, 250, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (See 82d:65003) 65D10

Vasilescu, F.-H. Commuting systems of operators and integral homomorphisms. Complex analysis Joensuu 1978 (Proc. Colloq., Unio. Joensuu, Joensuu, 1978), pp. 417–427, Lecture Notes in Math., 747, Springer, Berlin, 1979. (Jürgen Leiterer) 82e:47022 47A60

Special perturbations of the 8-operators. An. Stiint. Univ. "Al. I. Cuza" Iaşi Sect. I Mat. (N.S.) 25 (1979), suppl., 179-184. (From the introduction) 82e:47023 (32F20, 35N15)

A duality theorem for distinguished mappings. Bull. Math. Soc. Sci. Math. R. S. umanie (N.S.) 24(72) (1980), no. 3, 327-330. (T. A. Gillespie) 82j:46016 46B10 (47A05)

Spectral mapping theorem for the local spectrum. Czechoslovak Math. J. 30(105) (1980), no. 1, 28-35. (E. R. Deal) 82k:47022 47A60 (47A10)

The stability of the Euler characteristic for Hilbert complexes. (1980), no. 2, 109-116. (Jürgen Leiterer) 82c:32022 32F99 (35N15, 47A53)

il'ev, A. A. Approximation by splines of an arbitrary defect with two-sided constraints.

(Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 4, 20-27, 115. (A. A. Pekarskil) 82h:41018 41A15

Vasil'ev, A. M. Differential algebra. Contravariant analytical methods in differential if'ev, A. M. Differential algebra. Contravariant analytical methods in differential geometry. (Russian). Problems in geometry, Vol. 10 (Russian), pp. 5-23, 224, VINITI, Moscow, 1978. (I. Vanžura) 821:59005 58A15 (58A20, 58H15) (with Kitanin, A. L.) Periodic perturbation of the degenerate discrete level. (Russian. English summary) Vestnik Leningrad. Univ. Fiz. Him. 1980, vyp. 1, 5-12, 123.

(Woodford W. Zachary) 82h:81034 81C12 (35P25, 81C05)

Vasil'ev, B. A. A plane stationary problem of the theory of heat conduction for polygonal domains with a boundary condition of the third kind. (Russian) Differencial nye
Uravnenija 17 (1981), no. 9, 1656-1660, 1725. (Author's summary) 82m:35015 35C15

Vasil'ev, D. G. Asymptotic behavior of the distribution function of a spectrum of

 pseudodifferential operators with parameters. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 3, 65-66. (A. A. Laptev) 82b;35121 35F20 (47G05, 58G25)
 Vasil'er, F. P. (with Kovács, Margit) Regularization of ill-posed extremal problems using penalty functions of a general form. (Russian. English summary). Problems of numerical alysis and systems programming (Russian), pp. 19-41, 91-92, Comp. Center

analysis and systems programming (Cassis), pp.
Universities, Budapest, 1980. (O. V. Vasil'ev) 82e-49051 49D30
(with Jacimovic, M. D.) Iterative regularization of the conditional gradient method and the Newton method in the case of not precisely given input data. (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 2, 265–269. (V. V. Vasin) 82a:65036 65J10

(with Hromova, L. N.; Jačimovič, M. D.) Iterative regularization of a third-order minimization method. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1981, no. 1, 31–36, 86. (C. Ilioi) 82g:49032 49D30 (90C25)

(with Jačimovič, M. D.) Iterative regularization of the Newton method. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 3, 775-778, 813. (C. Ilioi) 82j:49030 (65K10)

Vasil'ee, Ju. P. On the question of description by computer of finite groups into which an amalgam of groups is imbedded. (Russian) Computations in algebra and combinatorial analysis (Russian), pp. 190-207, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1978. (S. S. Leviščenko) 82h:20030 20D99 (20-04)

"Gauge" form of description of massless fields with arbitrary spin. Vasil'ev, M. A. ernaja Fiz. 32 (1980), no. 3, 855-861 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 3, 439-443 (1981). (Author's summary) 82g:81109 81G20 (81D25) Vasil'ev, N. B. (with Kozlov, O. K.) Reversible Markov chains with local interaction.

Multicomponent random systems, pp. 451-469, Advances in Probability and Related Topics, 6, Dekker, New York, 1980. (Hermann Rost) 82c:60180 60K35 (60J25)

Vasil'ev, N. I. (with Klokovs, J.) The use of Čebyšev polynomials for calculation of integrals. (Russian) Latv. Mat. Ežegodnik No. 23 (1979), 220-236, 276. (R. Smarzewski) 65D30 (33A65, 41A55)

Application of Čebyšev polynomials to the calculation of double integrals. (Russian) Law. Mat. Ežegodnik No. 24 (1980), 3-11, 257. (R. Smarzewski) 82g:65015 65D30

Vasil'ev, N. S. (with Tynjanskii, N. T.) Hierarchical differential games. (Russian) Differential, noncooperative, cooperative and statistical games (Russian), pp. 3-25, 106, Kalinin. Gos. Univ., Kalinin, 1979. (E. G. Al'breht) 82b:90130 90D05

Vasil'ev, S. N. (with Teregulov, A. E.) Theorems on stability. (Russian) Vector-value Ljapunoo functions and their construction (Russian), pp. 269-280, 288, "Nauka" Sibirsk.
Otdel., Novosibirsk, 1980. (Wolfgang Hahn) 821:34059 34D20
Vasil'ev, S. V. (with Verigin, N. N.) Thermohydrodynamic state of underground steam

generators. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 6, 1356-1361. (I. R. Juhnovs'kii) 82e:80006 80A20 (86A99)

Vasil'ev, V. A. (with Kravčuk, A. S.) Numerical methods of solving the contact problem for finite linearly and nonlinearly elastic bodies. Prikl. Meh. 16 (1980), no. 6, 9-15 (Russian); translated as Soviet Appl. Mech. 16 (1980), no. 6, 462-467 (1981). (Ranjit S. 73T05 (65N30, 73K25)

On a class of imputations in cooperative games. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 2, 265-268. (Author's introduction) 82g:90083 90D12 (90A14)

Vasil'ev, V. Z. (with Aguf, E. I.) First fundamental problem for a layer with a circular hole. Izv. Akad. Nauk SSSR Meh. Toerd. Tela 15 (1980), no. 4, 68-77 (Russian); translated as Mech. Solids 15 (1980), no. 4, 49-56. (Authors' summary) 82i:73006 73C02

Vasil'eva, A. B. On the question of critical cases for singularly perturbed equations. (Russian) Approximate methods for investigating differential equations and their applications, No. 4 (Russian), pp. 3-9, 132, Kuibyšev. Gos. Univ., Kuybyshev, 1978. (Gapurolla Dairov) 82g:34087 34E20 (34D20)

(with Kuraev, N. M.) A one-sided stable case of a singularly perturbed equation. (Russian) Approximate methods for investigating differential equations and their applications, No. 4 (Russian), pp. 10–19, 132, Kulbyšev. Gos. Univ., Kuybyshev, 1978. (Gapurolla Dairov) 82g:34080 34E05 (34D20)

(with Dvorjaninov, S. V.) Periodic solutions of singularly perturbed equations of parabolic type. (Russian) Kuibyšev. Gos. Ped. Inst. Naučn. Trudy 232 (1979), Differencial. Uravnenija i Mat. Fiz. No. 1, 145-154. (V. Ďurikovič) 82b:35085

(with Faminskaja, M. V.) Investigation of a nonlinear optimal control problem by the method of the theory of singular perturbations (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 6, 1295–1298. (A. Halanay) 82j:49002 49A10 (34E15, 49B10)

Vasil'eva, G. V. Multidimensional elliptic systems with small terms. (Russian) Differencial nye Uravnenija 16 (1980), no. 1, 164-166, 190. (O. John) 82b:35054

Vasil'eva, L. G. A differential game of evasion. (Russian) Differential, nonco cooperative and statistical games (Russian), pp. 26–33, 106, Kalinin. Gos. Univ., Kalinin, 1979. (E. G. Al'breht) 82e:90125

A nonlinear differential game of evasion. (Russian) Existence of solutions, stability and informedness in game theory (Russian), pp. 20-28, 110, Kalinin. Gos. Univ., Kalinin, 1979. (Hans-Jürgen Albrand) 82e:90126 90D25

(with Lagunov, V. N.) Solution of a problem of correction of a nonlinear controllable process. (Russian) Existence of solutions, stability and informedness in game theory (Russian), pp. 81-89, 111, Kalinin. Gos. Univ., Kalinin, 1979. (Claudia Simionescu) Vasileva, M. (with Pavlov, E. V.) Sectional curvature in a space over a Clifford algebra. (Bulgarian. Russian and English summaries) Plovdiv. Univ. Naučn. Trud. 16 (1978), no. 1, 417-431 (1980). (M. C. Chaki) 82j:53078 53C25

Vasil'eva, T. G. (with Smyšljaeva, L. G.) Optimal estimate of a prediction in the case of first-order perturbations. (Russian. Kazakh summary) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 1, 36-41, 86. (O. A. Glonti) 82h:60076 60G35 (62M20, 93B30)

Vasilevič, Ju. V. A plane mixed problem of thermoelasticity for a plane with a reinforced aperture. (Russian) Vestnik Beloruss. Gos. Univ. Ser. J 1980, no. 3, 40-44, 78-79. (M. Sokołowski) 82m:73012 73C45 (30C20, 73C25)

(with Prusov, I. A.) A variant of the representation of general formulas of the theory of elasticity of an orthotropic body. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1981, no. 3, 39-45, 79. (Authors' summary) 82k:73010 73C03

Vasilevskii, N. L. On an algebra generated by two-dimensional integral operators with continuous coefficients in a subdomain of the unit disc. J. Integral Equations 2 (1980), no. 2, 111-116. (Ju. I. Karlovič) 82e:47044 47B38 (45P05, 47G05)

(with Trubil'o, R.) On the theory of φ-operators in matrix algebras of operators. (Russian) Linear operators. Mat. Issled. No. 54 (1980), 3–15, 164. (A. S. Dynin) 47A53 (47C05, 58G12)

Banach algebras that are generated by certain two-dimensional integral operators. I. (Russian) Math. Nachr. 96 (1980), 245-255. (P. A. Kučment) 82d:47053 47G05 (45P05, 47A53)

On the theory of symbols for Banach algebras of operators that generalize algebras of

singular integral operators. (Russian) Differencial nye Uravnenija 17 (1981), no. 4, 678-688, 765-766. (È. V. Kissin) 82m47024 47B38 (45E99, 46H05, 47G05, 58G15) (with Spitkovskii, I. M.) On the algebra generated by two projectors. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 8, 10-13, 96. (Authors' summary) 82k:47063 47D25 (47A50, 47C05)

Vasilevskii, V. S. (with Smirnov, Ju. F.; Filippov, G. F.) Generating function for the full basis of the irreducible representation of the group Sp(6, R). Jadernaja Fiz. 32 (1980), no 4, 987-997 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 4, 510-515 (1981). (M. K. F. Wong) 82i:81156 81G30 (22E70)

Vasilišin, S. A. Approximate solution of a nonlinear partial differential equation by the averaging method. (Russian) Asymptotic methods of nonlinear mechanics (Russian), pp. 185-188, 200, Akad. Nauk Ukrain. SSR, Inst. Mat., Kieo, 1979. (Author's summary) 82e:35020 35C20

Vasii'jan, M. A. Projective differential geometry of one-parameter hyperbands. (Russian) Differential geometry (Russian), pp. 38-45, 139, Kalinin. Gos. Univ., Kalinin, 1977. (Author's summary) 82e:53021 53A20

Vasilyev, N. See Vasil'ev, N. B.

Vasin, A. A. (with Gurvič, V. A.) Coalition situations of equilibrium in metagames. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1980, no. 3, 38-44, 69-70. (Authors' summary) 82m:90172 90D12

Vasin, Ju. G. (with Batiščev, D. I.) Interaction systems in problems of optimization and classification. (Russian) Current state of the theory of operations research (Russian), pp. 404-450, "Nauka", Moscow, 1979. (See 821:90002) 65K10

, V. V. (with Ageev, A. L.) Convergence of the generalized method of residuals and its discrete approximations. (Russian) Ural. Gos. Univ. Mat. Zap. 11 (1978/79), no. 4, 3-18, 130. (J. Albrycht) 82k:65032 65J05 (41A65, 49D99)

Vasina, N. V. Theory of curves in an Appell space of parabolic type. (Russian) Studies in cometry and algebra (Russian), pp. 16-23, Kirgiz. Gos. Univ., Frunze, 1978. (Author's troduction) 82e:53027 53A40 introduction) 82e:53027

Vasiu, A. (with Groze, V.) Affine structures over an arbitrary ring. (Rom Studia Univ. Babez-Bolyai Math. 25 (1980), no. 1, 28-31. (F. Radó) 82h:51013 Vasjunin, V. I. Circular projections of sets that occur in the theory of interpolation. (Russian. English summary) Investigations on linear operators and the theory of

functions, IX. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 92 (1979), 51-59, 318. (D. L. Berman) 82b:30040 30E05

Vaškas, P. Ju. (with Navickis, K. V.) Geometry of ruled manifolds and the theory of nets. (Russian, Lithuanian and English summaries) Lisovsk. Mat. Sb. 20 (1980), no. 3, 77-81, 217. (Vladislav Goldberg) 82c:53002 53Axx (01A65, 01A73) 217. (Vladislav Goldberg) 82c:53002

Vaskevič, V. L. On the convergence of Euler-Maclaurin quadrature formulas on a class of smooth functions. (Russian) Dokl. Akad. Nauk SSSR 260 (1981), no. 5, 1040-1043.

(Yury Girshovich) 82m:41028 41A55 (65D32)
Vasquez, Alphonse T. (with Raymond, Frank) 3-manifolds whose universal coverings are Lie groups. Topology Appl. 12 (1981), no. 2, 161-179. (W. D. Neumann) 82i:57011 57N10 (22E40, 55R55, 57S15)

Vassiliou, P.-C. G. A random walk between two random absorbing barriers. Second International Conference on Information Sciences and Systems (Univ. Patras, 1979), Vol. 11, pp. 174-181, Reidel, Dordrecht, 1980. (Neil S. Barnett) 82f:60160

On the limiting behaviour of a nonhomogeneous Markov chain model in manpo systems. Biometrika 68 (1981), no. 2, 557-561. (R. L. Tweedie) 82k:60160 (60F05)

deva, H. L. (with Dhar, R. K.) L1(I, X) with order convolution. Proc. Amer. Math. 46J99 (43A20) Soc. 83 (1981), no. 3, 499-505. (G. P. Johnson) 82j:46070

udeva, R. (with Pakshirajan, R. P.) A functional law of the iterated logarithm for a class of subordinators. Ann. Probab. 9 (1981), no. 6, 1012-1018. (Manfred Denker) 82k:60068 60F17

sudevan, R. (with Mond, B.) On approximation by linear positive operators. J. Approx Theory 30 (1980), no. 4, 334-336. (Sheldon Eisenberg) 82k:41014 41A36 (41A25)

Vatel', I. A. (with Curkov, V. I.) A two-level system with stochastic parameter constraints. Automat. i Telemeh. 1980, no. 2, 117-124 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 2, part 2, 232-237. (Authors' summary) 90B05 (90A11, 90C15)

Vatsala, A. S. (with Lakshmikantham, V.) Quasisolutions and monotone method for systems of nonlinear boundary value problems. J. Math. Anal. Appl. 79 (1981), no. 1, 38-47. (Yiannis Sficas) 82b:34025 34B15

Vatsya, S. R. (with Pritchard, H. O.) Some analytic properties of the master equation for unimolecular reaction. Proc. Roy. Soc. London Ser. A 375 (1981), no. 1762, 409-424. (Richard J. Field) 82m:80007 80A30 (82A35)

tann, v. A. A class of critical neuman-trains brainching processes with several types of particles. (Russian. English summary) Teor. Vergiotnost. i Primenen. 25 (1980), no. 4, 771–781. (Harry I. Cohn) 824:60168 60180 (with Lapalme, Guy) Une implantation efficace de l'ordonnancement conditionnel. (English summary) [An efficient implementation of conditional scheduling] RAIRO Inform. 15 (1981), no. 3, 255–285. (Authors' summary) 824:68014 68B20 Vancouleurs, Gerard On the extragalactic distance scale and the Hubble constant. Some

strangeness in the proportion (Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 416–422, Addison-Wesley, Reading, Mass., 1980. (See 82d:83002) 85A40 (83F05)

cham, Hubert (with Greville, T. N. E.) Smoothest local interpolation formulas for equally spaced data. Transactions of the Twenty-seventh Conference of Army Mathematicians (West Point, N.Y., 1981), pp. 265–282, ARO Rep. 82, 1, U. S. Army Res. Office, Research Triangle Park, N.C., 1982. (See 821:00010) 65D05 (92A15)

n, Loy O. (with Campbell, William H.; Mohler, Lee) A Cook-Ingram-type characterization of indecomposability for tree-like continua. Proceedings of the 1977 Topology Conference (Louisiana State Univ., Baton Rouge, La., 1977), II. Topology Proc. 2 (1977), no. 2, 383–399 (1978). (From the text) 82i-54057 54F20 ghan, Nick H. Relations between classes of ideals in a domain. IV. J. Natur. Sci. Math. 17 (1977), no. 2, 1–5. (J. L. Mott) 82a:13003 13A17 (13A18)

Japan, R. C. An elementary method in prime number theory. Acta Arith. 37 (1980), 111–115. (J. Knopfmacher) \$2e.10055 10H20

A ternary additive problem. Proc. London Math. Soc. (3) 41 (1980), no. 3, 516–532. (S. P. Mohanty) \$2b:10066 10J10

n-Lee, M. R. (with Wiegold, James) Countable locally nilpotent groups of finite exponent without maximal subgroups. Bull. London Math. Soc. 13 (1981), no. 1, 45–46. (John S. Wilson) 82f:20066 20F50 (20F28)

might, Robert See Proceedings: Tarski Symposium, 82b:03006
muse, C. (with Sak, J.) Erratum: "Non-Ising-like effects in the liquid-vapor transition:
equations of state" [Phys. Rev. A (3) 21 (1980), no. 6, 2099–2114; MR 81c:82012]. Phys. Rev. A (3) 23 (1981), no. 3, 1562. (Editors) 82c:82042 82A25

es Finitude d'espaces d'états liés pour certains systèmes quantiques Séminaire Paul Krèe, 4e année: 1977-1978. Équations aux dérivées partielles en din infinie, Exp. No. 9, 9 pp., Secrétariat Math., Paris, 1979. (Akira Asada) 82f:35151 35P99 (58G32, 81E10)

★Problèmes d'analyse. (French) [Problems in analysis] Agrégation de mathématiques avec rappels de cours. [Mathematics examinations with course revisions] on. Masson, Paris, 1981. ii + 247 pp. ISBN 2-225-74195-6 (Editors) 82k:00006 00A07

Varilov, N. A. Bruhat decomposition for subgroups containing a group of diagonal matrices.
 (Russian) Modules and linear groups. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 103 (1980), 20–30, 155. (G. A. Soifer) 82g:20072 20G15

(with Dybkova, E. V.) Subgroups of the general symplectic group containing the group of diagonal matrices. (Russian) Modules and linear groups. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 103 (1980), 31-47, 155-156. (Authors' nary) 82h:20054 20G35 (10C30)

On subgroups of the general linear group over a semilocal ring containing a group of diagonal matrices. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 1, 10–15, 119. (Ernst-Wilhelm Zink) 82g:20073 20G35 (10C30)

Vavilov, V. V. (with López Lagomasino, Guillermo; Prohorov, V. A.) An inverse problem for the rows of a Padé table. (Russian) Mat. Sb. (N.S.) 110(152) (1979), no. 1, 117-127, 160. (F. I. Ibragimov) 82e:41026 41A21 (30E10)

See also Hayman, Walter Kurt; et al., 82a:31001

zquez, Juan Luis (with Véron, Laurent) Removable sir ngularities of some strongly nonlinear elliptic equations. Manuscripta Math. 33 (1980/81), no. 2, 129-144. (Z. C. Motteler) 82h:35059 35J60 (31B15)

requer, Luis (with Strauss, Walter A.) Existence of localized solutions for certain model field theories. J. Math. Phys. 22 (1981), no. 5, 1005–1009. (Hideo Soga) 82m:35050 35J60 (81E10)

quez, Rosa (with Kirlica, V. P.) On a problem of stochastic linear program wo-sided constraints. (Spanish) Investigación Oper. No. 27 (1979), 9-16. (Editors) 90C15 82a:90107

Vdovina, E. V. Construction of a system of differential equations having given closed curves as cycles and given points as equilibrium states. (Russian) Ural. Gos. Univ. Mat. Zap. 12 (1979), no. 1, 11-24, 155. (K. R. Schneider) 82e:34031 34C05

V. d. Werff, J. See v. d. Werff, J.

Vecchio, Giuseppe On certain integers associated to an ideal and questions of complete intersection. (Italian) Matematiche (Catania) 31 (1976), no. 2, 316-328 (1977). (Elsa Zatini) 82g:13002 13A15

o, Guido See Lo Vecchio, Gu

del Vecchio, Teresa See Del Vecchio, Teresa
 Vectomov, E. M. The module of all functions over a ring of continuous functions. (Russian)
 Mat. Zametki 28 (1980), no. 4, 481–490, 634. (Witold Wigslaw) 82b:16041 16A80

Ideals of rings of continuous functions. (Russian) Izv. Vysš. Učebn. Zaved Matematika 1981, no. 1, 3-10. (M. Abel) 82g:54024

Ved', Ju. A. (with Iskandarov, S.) A method of studying the boundedness of solutions of first-order Volterra linear integro-differential equations that are not solved with respect to the derivative. (Russian) Izv. Akad. Nauk Kirgiz. SSR 1981, no. 2, 3-5, 101. (C. Corduneanu) 82m:45015 45J05 (45M99)

Vedaldi, R. (with Diana, Giancarlo) On some sampling plans with three terminal decisions. (Italian. English and French summaries) Statistica (Bologna) 41 (1981), no. 1, 23-37. mary) 82h:62022 62D05 (Authors' sum

Vedenjapin, V. V. Anisotropic solutions of a nonlinear Boltzmann equation for Maxwell molecules. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 2, 338-342. (D. Ja. Petrina) 82g:82031 82A40 (45K05)

mikov, V. I. A space of pseudoframes. (Russian) Kaliningrad. Gos. Unit Differencial naja Geom. Mnogoobraz, Figur No. 10 (1979), 16-21, 161. (I. P. Egorov) 82a:53015 53A55

ve, Walter See Dalle-Vedove, Walter

Veech, William A. A Gauss measure on the set of interval exchange transformations. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 2, part 1, 696-697. (Author's summary) 82c:28041 28D99 (28C20, 54H20)

Safety stocks an example of theory and practice in O.R.

Oper. Res. 6 (1981), no. 4, 367-371. (Author's summary) 82b:90048
Veenendaal, Wouter See Nijkamp, Peter, 82c:90090
ramani, P. (with Pai, D. V.) Fixed-point theorems for multimappin Appl. Math. 11 (1980), no. 7, 891-896. (Authors' summary) 82k:54076 54H25 (54C60)

(with Pai, D. V.) Fixed point theorems for multimappings. Yokohama (1980), no. 1-2, 7-14. (R. E. Smithson) 82i:54079 54H25 (54C60, 54E15)

vers, Alan (with Downham, David Y.) A warning note on discrete growth models.

Math. Biosci. 54 (1981), no. 1-2, 25-30. (Authors' summary) 82i:92022 92A15

Vega, H. J. (with Babelon, O.; Viallet, C.-M.) Solutions of the factorization equation from Toda field theory. Nuclear Phys. B 190 (1981), no. 3, FS 3, 542-552. (Authors' summary) 82:81104 81E25 (58F07, 81F99, 82A68)

The nonlinear sigma model in the 1/N expansion and the inverse scattering transformation in the angular momentum. Phys. Lett. B 98 (1981), no. 4, 280-284. (Author's summary) 82d:81115 81E99

(with Maillet, J. M.) Renormalization character and quantum S-matrix for a classically integrable theory. Phys. Lett. B 101 (1981), no. 5, 302-306. (Authors' summary) 824:81093 81E15 (58F07, 81F15)

Vegh, Ludevit Hexagonal patterns as natural forms. Third Formator Sympo Mathematical Methods for the Analysis of Large-Scale Systems, pp. 45-61, Academia, Prague, 1979. (H. S. M. Coxeter) 82g:92010 92A05 (51M20, 52A45, 73P05)

van de Vegte, J. See Van de Vegte, J. beirão da Veiga, Hugo See Beirão da Veiga, Hugo

alte da Veiga, L. M. See Alte da Veiga, L. M. Vein, P. R. (with Dale, P.) Erratum: "Determinants, their derivatives and nonlinear differential equations" [J. Math. Anal. Appl. 74 (1980), no. 2, 599-634; MR 81f:15013]. J. Math. Anal. Appl. 78 (1980), no. 2, 674. (Editors) 82a:15005 15A15

Veissenberg, A. N. Algorithm for the derivation of Liapunov's function in the form of a sum of squares of integrals. Prikl. Mat. Meh. 42 (1978), no. 5, 946-949 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 5, 1032-1037 (1979). (E. K. H. Hoehn) 82k:34063

34D20 (65L20, 70E99)

Veit, Barbara A proof of the associated sheaf theorem by means of categorical logic. J. Symbolic Logic 46 (1981), no. 1, 45-55. (Lawrence Neff Stout) 82d:03103 (18B25)

Vejvoda, O. (with Straškraba, I.) Perturbed nonlinear abstract equations. Nonlinear Anal. 5 (1981), no. 3, 265-276. (Mieczyslaw Altman) 82g:47043 47H15 (34G20, 35L99)

Veklenko, B. A. The density matrix of a subsystem under conditions of thermody equilibrium. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 426 (1979), 42-50, 84. (O. K. Davtjan) 82f:82033 82A35 (81K05)

Veksler, A. I. (with Buhvalov, A. V.; Geiler, V. A.) Normed lattices. (Russian) Mathematical analysis, Vol. 18 (Russian), pp. 125–184, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (N. Popa) 82b:46019 46B30 (46–02,

P'-sets in regular spaces. Topology, Vol. II (Proc. Fourth Colloq., Budapest, 1978), pp. 1211-1225, Colloq. Math. Soc. János Bolyai, 23, North-Holland, Amsterdam, 1980. (J. Mioduszewski) 82b:54053 54G10 (55P40)

(with Zaharov, V. K.; Koldunov, A. V.) Spaces of continuous extended functions. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 6, 1301-1305. (A. I. Krivoručko) 54C40 (46E05)

Veksler, A. S. Statistical ergodic theorem and statistical convergence of martingales in symmetric spaces. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1981, no. 2, 11-16, 98. (W. A. Woyczyński) 82k:60008 60A10 (28D99, 47A35, 60F99)

Vekua, I. N. See Penkov, B., 82e:01098 and Haradze, E. K., 82f:01116

Vekua, N. P. (with Dorodnicyn, A. A.; Kupradze, V. D.; Lavrent'ev, M. A.; Litvinčuk, G. S.; Ebanoidze, T. A.) David Aleksandrovič Kveselava. Obituary. (Russian) Uspehi Mat. Nauk 35 (1980), no. 2(212), 197-200. (Editors) 82g:01076 01A70

(with Litvinčuk, G. S.; Nikol'skii, S. M.; Rogožin, V. S.; Samko, S. G.; Simonenko, I. B.; Hvedelidze, B. V.; Čerskii, Ju. I.) Fedor Dmitrievič Gahov. (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 193-194. (Editors) 82c:01056

van de Vel, Marcel (with van Mill, Jan) Subbases, convex sets, and hyperspaces. Pacific J. Math. 92 (1981), no. 2, 385-402. (V. P. Soltan) 82k:52007 52A01 (46A99)
 Velarde, M. G. (with de la Rubia, J.) Further evidence of a phase transition induced by

external noise. Phys. Lett. A 69 (1978/79), no. 4, 304-306. (Authors' summary) 82a:92016 92A09 (35K55, 82A25)

(with Antoranz, J. C.) Laser with saturable absorber and two-component Bénard convection: limit cycle behaviour. Phys. Lett. A 80 (1980), no. 4, 220-222. (Authors' summary) 82b:81158 81K05 (35K55, 65L05, 76El5)
sánchez-Velasco, E. See Sánchez-Velasco, E. gonzález-Velasco, Enrique A. See González-Velasco, Enrique A. van de Velde-Schlick, Barbara F. B. See Schlick, Moritz, 82b:03021

van Veldhuizen, M. D-stability. SIAM J. Numer. Anal. 18 (1981), no. 1, 45-64. (Kevin Burrage) 82e:65089 65L20

Mkamp, G. R. (with Bottema, O.) Zweigliedrige äquiforme ebene Bewegungen. Nederl.

Akad. Wetensch. Proc. Ser. B 84 (1981), no. 1, 21–26. (J. Hoschek) 82h:53014 53A17 53A17 Veldman, H. J. (with Hoede, C.) Contraction theorems in Hamiltonian graph theory

Discrete Math. 34 (1981), no. 1, 61-67. (Linda Lesniak-Foster) 82e:05095

Veldman, W. (with Gielen, W.; de Swart, Henricus Cornelius Maria) The continuu hypothesis in intuitionism. J. Symbolic Logic 46 (1981), no. 1, 121-136. (D. Nelson)

Velev, G. D. (with Duškov, P. N.) Approximate solution of a class of singular integro-differential equations. (Russian) Izv. Vyst. Učebn. Zaved. Matematika 1981, no. 2, 9–13. (Johannes Elschner) 82g:65066 65R20 (45J05)

Veleva, Anna (with Gešev, Atanas) Almost periodic solutions of a nonstationary priority

system of type $M_2(t)/M_2(t)$ /1/0. (Bulgarian Russian and English summaries) Ploediv. Univ. Naučn. Trud. 15 (1977), no. 1, 241-246 (1979). (From the text) 82m:60116

Vélez, William Yslas (with Madden, Daniel J.) A note on the normality of unramified, abelian extensions of quadratic extensions. Manuscripta Math. 30 (1979/80), no. 4, 343-349. (Toru Nakahara) 82e:12013 12A65

(with Norris, Michael J.) Structure theorems for radical extensions of fields. Acta Arith. 38 (1980/81), no. 2, 111-115. (Jack Sonn) \$2k:12022 12E10 (12E05) (with Gay, David A.) The torsion group of a radical extension. Pacific J. Math. 92

(1981), no. 2, 317-327. (B. Fein) 82h:12022 12F05

Velickin, V. N. Connections that are induced by framings of the surface $V_{a-2} \subset E_a$. (Russian) Geometry of imbedded manifolds (Russian), pp. 22–26, Moskov. Gos. Ped. Inst., Moscow, 1979. (D. Mekerov) 82f:53029 53B05

Veličko, N. V. (with Asanov, M. O.) Compact sets in C_p(X). (Russian) Comment. Math. Univ. Carolin. 22 (1981), no. 2, 254–266. (E. Halfar) 82g-46054 46E10 (54C35)
 Veliev, M. A. (with Kjazymov, D. K.) Approximate solution of a Goursat problem for

degenerate linear hyperbolic equations. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 1, 36-42. (C. 65N99 (49D35)

On the stability of the finite element method for parabolic equations. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 4, 3-6. (G. W. Hedstrom) 82m:65107 65N30

Veliev, O. A. Spectral expansion of differential operators with periodic complex-valued

coefficients. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 6, 13-17. (R. C. Gilbert) 82c:47058 47E05 (34B25)

(with Maksudov, F. G.) Spectral analysis of the Dirac operator with periodic complex-valued coefficients. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 2, 3-7. (From the text) 82f:47058

(with Maksudov, F. G.) Nonselfadjoint differential operators in the space of a vector function with periodic coefficients. (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 1, 26-30. (Boris Pavlov) 82h:34025 34B25 (47E05)

Veliev, S. G. (with Maksudov, F. G.) A nonlinear boundary value problem for the Dirac equation. I. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 37 (1981), no. 3, 6-9. (V. Šeda) 82j:34022 34B25 (34B15)

Velikin, V. L. (with Žensykbaev, A. A.; Motornyĭ, V. P.; Nikol'skiĭ, S. M.; Ruban, V. I.) Nikolaĭ Pavlovič Korneïčuk (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 209-213. (Editors) 82e:01105 01A70

ovič, L. L. Star-transitive graphs. (Russian) Mat. Zametki 28 (1980), no. 2, 265-270, 319. (P. Ungar) 82c:05055 05C25

319. (P. Ongar) & Convergence to a travelling wave in an initial-boundary value problem. Ordinary and partial differential equations (Proc. Sixth Conf., Unio. Dundee, Dundee, 1980), pp. 366–372, Lecture Notes in Math., 846, Springer, Berlin, 1981. (Jesús Hernández) 82k:35063 35K60 (92A10)

Travelling waves in an initial-boundary value problem. Proc. Rov. Soc. Edinburgh Sect. A 90 (1981), no. 1-2, 41-61. (P. C. Fife) 82k:35064 35K60 (92A09)

naerlović-Veljković, Natalija See Naerlović-Veljković, Natalija Velleman, Paul F. (with Ypelaar, M. Agelia) Constructing regressions with controlled features: a method of probing regression performance. J. Amer. Statist. Assoc. 75 (1980),

no. 372, 839-844. (A. I. Khuri) 82a:62097 62J05 (62F35)

Vel'misov, P. A. Asymptotic investigation of nonlinear effects in the problem of unsteady supersonic flow past a profile. Prikl. Mat. Meh. 43 (1979), no. 1, 30-37 (Russian); slated as J. Appl. Math. Mech. 43 (1979), no. 1, 31-38 (1980). (Author's sumi 761.05 (351.67, 76199)

Velo, Giorgio (with Ginibre, Jean) On a class of nonlinear Schrödinger equations. III. Special theories in dimensions 1, 2 and 3. Ann. Inst. H. Poincaré Sect. A (N.S.) 28 (1978), no. 3, 287-316. (Gustavo Perla Menzala) 82c:35059 35P25 (35B40, 35L65)

(with Ginibre, Jean) On a class of nonlinear Schrödinger equations. I. The Cauchy problem, general case. J. Funct. Anal. 32 (1979), no. 1, 1-32. (Gustavo Perla Menzala) 35P25 (35J10, 35L65)

(with Ginibre, Jean) On a class of nonlinear Schrödinger equations. II. Scattering theory, general case. J. Funct. Anal. 32 (1979), no. 1, 33-71. (Gustavo Perla Menzala) 35P25 (35B40)

(with Ginibre, Jean) Existence of solutions and scattering theory for the nonlinear Schrödinger equation. Nonlinear evolution equations and dynamical systems (Proc.

Meeting, Univ. Lecce, Lecce, 1979), pp. 218-232, Lecture Notes in Phys., 120, Springer, Berlin, 1980. (A. Devinatz) 82c:35017 din, 1980. (A. Devinatz) 82c:35017 35J10 (35P25, 81C05)

(with Ginibre, Jean) The classical field limit of nonrelativistic bosons. II. Asymptotic

expansions for general potentials. Ann. Inst. H. Poincaré Sect. A (N.S.) 33 (1980), no. 4, -394. (Jean-Claude Guillot) 82h:81157 81H99 (47D45) (with Ginibre, Jean) The classical field limit of nonrelativistic bosons. I. Borel 363-394. (Jean-Claude Guillot) 82h:81157

nability for bounded potentials. Ann. Physics 128 (1980), no. 2, 243-285.

(Jean-Pierre Eckmann) 82f:81038 81D99

(with Ginibre, Jean) On a class of nonlinear Schrödinger equations with nonlocal interaction. Math. Z. 170 (1980), no. 2, 109–136. (James S. Howland) 82c:35018

(with Ginibre, Jean) Global existence of coupled Yang-Mills and scalar fields in (2+1)-dimensional space-time. Phys. Lett. B 99 (1981), no. 5, 405-410. (Authors' summary) 82c:81080 81E10 (58E20)

Veloso, Paulo Augusto S. (with de Carvalho, Roberto Lins) Towards a logic of limited perception. Proceedings of the Third Brazilian Conference on Mathematical Logic (Inst. Math., Fed. Univ. Pernambuco, Recife, 1979), pp. 147-159, Soc. Brasil. Lógica, São Paulo, 1980. (G. E. Minc) 82e:68013 68B10 (03B99)

On additivity and linearity in general systems theory. Second Internation Conference on Information Sciences and Systems (Univ. Patras. Patras. 1979), Vol. 11. pp. 65-69, Reidel, Dordrecht, 1980. (See 82d:93002)

On the structure of multilinear systems. Second International Conferen Information Sciences and Systems (Univ. Patras, Patras, 1979), Vol. II, pp. 87-93, Reidel, Dordrecht, 1980. (Author's summary) 82e:93063 93C35

van Velsen, J. F. C. On the Rieman Velsen, J. F. C. On the Riemann curvature of conservative systems in classical mechanics. *Phys. Lett. A* 67 (1978), no. 5-6, 325-327. (Frans Cantrijn) 82g:58072

Isoenergetic families of quasiperiodic solutions near the equilateral solution of the

three-body problem. Celestial Mech. 23 (1981), no. 4, 383-395. (George Bozis) 70F07 (58F05)

The average Riemann curvature of conservative systems in classical mechanics. J. Phys. A 14 (1981), no. 7, 1621-1627. (Author's summary) 82g:70032 70G05 (58C27, 58G15, 70K50, 82A50)

The equations $z^2-3y^2=-2$ and $z^2-6x^2=-5$. A collection of manuscripts related to the Fibonacci sequence, pp. 71-75, Fibonacci Assoc., Santa Clara, Calif., 1980. (Takashi Agoh) 82h:10018 10B05

nganti, R. R. (with Houck, David J., Jr.; Picard, Jean-Claude; Queyranne, Maurice) The travelling salesman problem as a constrained shortest path problem: theory and computational experience. Opsearch 17 (1980), no. 2-3, 93-109. (Claude Benzaken) 82h:90076 90C10 (90C08)

A new algorithm suitable for PDE software. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 161–164, IMACS, New Brunswick, N.J., 1977. (See 82x68004)

ran de Ven, M. P. A. (with Kaashoek, M. A.) A linearization for operator polynomials with coefficients in certain operator ideals. Ann. Mat. Pura Appl. (4) 125 (1980), 329-336. (Harro Heuser) 82b:47020 47A70 (47D25)

a, Gerard A. Neighborhoods of compacta in Euclidean space. Fund. Math. 109

(1980), no. 1, 71-78. (T. B. Rushing) 82d:57006 57N15 (57N25) The Whitney method in dimension four. (Russian) International Topology

Conference (Moscow State Univ., Moscow, 1979). Translated from the English by M. A. Štan'ko. Uspehi Mat. Nauk 35 (1980), no. 3(213), 157-158. (Author's introduction)

57035 (with Ivanšić, I.; Sher, R. B.) Complement theorems beyond the trivial range. Illinois J. Math. 25 (1981), no. 2, 209-220. (T. B. Rushing) 82i:57017 57N25 (57N30)

Approximating topological surfaces in 4-manifolds. Trans. Amer. Math. Soc. 265 (1981), no. 1, 35-45. (R. J. Daverman) 82i:57022 57Q35 (57N45) anopoulos, Anastasios N. (with Mittal, Kumud K.) On the dynamic control of the

Urn scheme for multiple access broadcast communication systems. IEEE Trans. Comm. 29 (1981), no. 7, 962-970. (Authors' summary) 82f:94003 94A05

Venezia, Itzhak The effect of increased risk on the expected proceeds and sale strategy of a machine. J. Oper. Res. Soc. 31 (1980), no. 9, 839-844. (F. Beichelt) 82a:90065 90B25 The covariance structure of sequential forecasts obtained by regression analysis. J. Statist. Plann. Inference 5 (1981), no. 2, 121-132. (Author's summary) 82h:62168 62M20 (62J05)

Veneziano, G. U(1) without instantons. Nuclear Phys. B 159 (1979), no. 1-2, 213–224. (Author's summary) 82d:81151 81G05

Venkatesan, P. S. Orthodox semigroups. Semigroup Forum 20 (1980), no. 3, 227-231. (T. E. Hall) 82b:20092 20M10

Venkatramaiah, S. (with Sinha, T. N.) Correction: "The equation $x^2 - Py^2 = 2z^2$: P, a Mersenne prime" [Indian J. Mech. Math. 16 (1978), no. 2, 45-47; MR 81g:10030]. Indian J. Mech. Math. 17 (1979), no. 1, 84. (Editors) 82m:10028 10B05

Venkatraman, C. S. (with Saluja, K. K.) Transition count testing of sequential machines. FTCS-10 (Tenth Internat. Sympos. Fault-Tolerant Comput., Kyoto, 1980), pp. 167-172, IEEE, New York, 1980. (From the summary) 82a:68096 68D15

Venkov, A. B. (with Zograf, P. G.) Analogues of Artin factorization formulas in the spectral theory of automorphic functions associated with induced representations of Fuchsian groups. (Russian) Dokl. Akad. Nauk SSSR 259 (1981), no. 3, 523-526. (J. Tunnell) 10D40

Venkov, G. I. An algorithm for the reconstruction of the differential equations of a dynamical system. (Bulgarian. Russian and English summaries) Godišnik Visš. Učebn. Zaved. Priložna Mat. 13 (1977), no. 3, 127-132 (1978). (Author's summary) \$2c:65054

tojanova-Venkova, A. N. See Stojanova-Venkova, A. N. enneri, B. (with Coppo, M.; Dezani-Ciancaglini, M.) Principal type schemes and λ-calculus semantics. To H. B. Curry: essays on combinatory logic, lambda calculus and formalism, pp. 535-560, Academic Press, London, 1980. (John Staples) 824:03022

(with Coppo, M.; Dezani-Ciancaglini, M.) Functional characters of solvable terms Z. Math. Logik Grundlag. Math. 27 (1981), no. 1, 45-58. (J. P. Seldin) 82j:03011

Venni, Alberto (with Favini, Angelo) On a two-point problem for a system of abstract differential equations. Numer. Funct. Anal. Optim. 2 (1980), no. 4, 301–322. (S. Rolewicz) 82h:34080 34G10 (49A10)

(with Favini, Angelo) A boundary-value problem for a second-order abstract differential equation with variable operational coefficients. (Italian. English summary) Rend. Mat. (6) 13 (1980), no. 2, 283-298. (Eugenio Sinestrari) 82a:34070

nteel', A. D. *Wykłady z teorii procesów stochastycznych. (Polish) [A course in the theory of random processes] Translated from the Russian by Ryszard Zieliński. Państwowe Wydawnictwo Naukowe (PWN), Warsaw, 1980. 383 pp. (loose errata).

ISBN 83-01-00748-6 (Editors) 82c-60004 60-02

Large deviations for stochastic processes. (Russian) Proceedings of the International Congress of Mathematicians (Helsinki, 1978), pp. 763-766, Acad. Sci. Fennica, Helsinki, 1980. (S. A. Book) 82c:60052 60F10 (60G50)

*A course in the theory of stochastic processes. With a foreword by K. L. Chung. Translated from the Russian by S. Chomet. Advanced Book Program. McGraw-Hill International Book Co., New York, 1981. x + 304 pp. ISBN 0-07-069305-6 (Editors) 82f:60002 60-01

Ventcel, E. S. (with Ovčarov, L. A.) ★Problemas de cálculo de probabilidades. (Spanish) [Problems of the calculus of probabilities] Con soluciones. [With solutions]. Translated from the Russian by Carlos H. Bode. With a foreword by Peter Franker. Paraminfo, Madrid, 1978. 454 pp. ISBN 84-283-0934-5 (Editors) 82g:60002 60-01

*Исследование операциям (Russian) [Operations research] Задачи, принципы, методология. [Problems, principles, methodology] "Nauka", Moscow, 1980. 208 pp. (L. M. Abol'nikov) 82b:90001 90-01 (90Вхх)

Venter, A. (with Yavin, Yaakov) Computation of impulse control laws for a nonlinear stochastic oscillator. Comput. Methods Appl. Mech. Engrg. 28 (1981), no. 2, 129–143. (Authors' summary) 82m:70027 70L05 (70Q05, 93E20)

- hma, M. (with Poli, A.) Codes autoduaux principaux et groupe d'automorphismes de l'algèbre $A = F_{Z}(X_1, -, X_n)/(X_1^2 1, -, X_n^2 1)$. (English summary) European J. Combin. 2 (1981), no. 2, 179–183. (Authors' summary) 82i:94022 94B05 (13M99,
- e, Aldo G. S. (with Di Nola, Antonio) Synthesis and decision by defuzzification (French and Russian summaries) Econom. Comput. Econom. Cybernet. Stud. Res. 14 (1980), no. 4, 99–106 (1981). (Authors' summary) 822:90007 90A05 (90C99) (with Di Nola, Antonio) On some chains of fuzzy sets. Fuzzy Sets and Systems 4 (1980), no. 2, 185–191. (A. K. Vjatkin) 824:8088 03E72 (28D99, 94D05) strigila, F. Kinetic theory of neural systems: simulation of propagated waves. Second International Conference on Information Sciences and Systems (Univ. Patras, Patras,
- 1979), Vol. III, pp. 258-264, Reidel, Dordrecht, 1980. (See 824:93003) 92A09

Numerical investigation of kinetic neuronic equations for one-din system. Biol. Cybernet. 36 (1980), no. 3, 125-130. (Editors) 82f:92019

(with Aiello, A.; Burattini, E.; Massarotti, A.) "A posteriori" evaluation of bin packing approximation algorithms. Discrete Appl. Math. 2 (1980), no. 2, 159–161. (Barry E. Jacobs) 821c68061 68C25 (52–04, 90B05)

naturini, Marco G. B. (with Alesina, Alberto) Solid-state power conversion: a Fourier analysis approach to generalized transformer synthesis. IEEE Trans. Circuits and Systems 28 (1981), no. 4, 319-330. (Authors' summary) 82d:94065

nems 28 (1981), no. 4, 319-330. (Authors' summary) 82d:94065 94C10 spal Rao, V. Convergence criteria for Fourier series. Bull. Math. Soc. Sci. Math. R. ie (N.S.) 24(72) (1980), no. 4, 435-438. (B. L. Gupta) 82g:42002

a Boti, G. Finitely additive measures on topological spaces. (Spanish) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 73 (1979), no. 3, 427-435. (Pedro Jiménez Guerra) era Boti, G. Finitely additive me 82e:46062 46G12 (28C15)

sition of finitely additive measures in topological spaces. (Spanish. English summary) Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid 74 (1980), no. 2, 247-266. (Pedro Jiménez Guerra) 82j:28907 28C15 (54D35, 54H05) averbeke, Noël (with Callaert, Herman) The order of the normal approximation for a

studentized U-statistic. Ann. Statist. 9 (1981), no. 1, 194-200. (Gábor J. Székely) 82a:60033 60F05 (62E20)

Verha E. L. Nonho Nonholonomic three-webs. (Russian) Geometry of imbedded manifolds an), pp. 18-25, Moskov. Gos. Ped. Inst., Moscow, 1978. (M. A. Akivis) 82a:53018 53A60

Verbeek, Rutger On the naturalness of the Grzegorczyk hierarchy. Fundamentals of uputation theory (Proc. Conf. Algebraic, Arith. and Categorical Methods in Comput. Procy, Berlin/Wendisch-Rietz, 1979), pp. 483-490, Math. Research, 2, Akademic-Verlag, Berlin, 1979. (Giorgio Ausiello) 82e:03041 03D20

Verbeure, A. Thermodynamic stability and equilibrium. Mathematical problems in the theory of irreversible processes (Naples, 1978), pp. 179-194, Lab. Cibernet. CNR, Naples, 1978. (See 82j:82003) 82A15

Napies, 1976. (See agraemes)
(with Quagebeur, J. Stability for mean field models. Ann. Inst. H. Poincaré Sect. A
(N.S.) 32 (1980), no. 4, 343–349. (Authors' summary) 82a:82014
82A15 (46L60) (with Jedrzejewski, Janusz) On the spontaneous magnetic order in the Hubbard model. J. Math. Phys. 22 (1981), no. 4, 914-915. (Authors' summary) 821:82065

rbickaja, L. A. On a class of congruences of parabolas. (Russian) Kaliningrad. Gos. Univ. Differencial naja Geom. Mnogoobraz. Figur No. 11 (1980), 17-21, 125. (Vladislav Goldberg) 82k:53014 53A15

Verbickii, I. E. (with Krupnik, N. Ja.) Exact constants in theorems on the boundedness of singular operators in L_p spaces with a weight and their application. (Russian) Linear operators. *Mat. Issled. No.* 54 (1980), 21-35, 165. (V. S. Pilidi) 82b:45005 45E05 (47A30, 47G05)

Inner functions as multipliers of l_A^p spaces. (Russian) Linear operators and integral ations. *Mat. Issled. No.* 61 (1981), 3–7, 155. (D. Sarason) **82**j:30045 30D50

Verbickii, I. L. On one method of solving the Helmholtz equation. I. J. Math. Phys. 22 (1981), no. 1, 32-38. (Luciano Biasini) 82e:65124 65N99

in Finitely generated, projective extensions of an m-convex algebra. (Spanish) Collect. Math. 31 (1980), no. 1, 41-61. (Bruno Kramm) 82i:46073 46H05 (32B05. 58C27)

sella (with Cassa, Antonio) An inductive procedure to express every algebraic set in C" as the intersection of n hypersurfaces. (Italian. English su Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 3, 186-188. (Mirella Manaresi) 14M10

lin de Verdière, Yves See Colin de Verdière, Yves

coun de Veruere, 1 ves See Com de Veruere, 1 ves See Com de Veruere, 1 ves See Com de Veruere, 1 ves See Com de Veruere, 1 ves See Com de Veruere, 1 ves See Com de Verdiev, 1 ves See Com de Verdiev, 1 ves See Com de Verdiev, 1 ves See Com de Verdieve, 1 ves See

Verdinelli, I. (with Smith, A. F. M.) A note on Bayes designs for inference using a hierarchical linear model. Biometrika 67 (1980), no. 3, 613-619. (J. M. Bernardo) 62K05

Vere-Jones, D. (with Athreya, K. B.; Tweedie, R. L.) Asymptotic behaviour of point processes with Markov-dependent intervals. Math. Nachr. 99 (1980), 301-313. (Masao processes with Mar Mori) 82m:60057 60G55 (60J27, 60K05)

Veremei, E. M. (with Eremeev, V. V.) Synthesis of regulators supplying a minimum to the mean-square quality criterion taking account of requirements for the degree of stability of systems (Russian), pp. 91–98, 169, Kalinin. Gos. Univ., Kalinin, 1980. (Authors' summary) 82e-49006 49A10 a closed system. (Russian) Mathematical methods of optimization and structuring of

Verel, F. Analytical solution of the plane, averaged, restricted, three-body problem in the case of circulation of the pericenter of the orbit of the particle. Astronom. Z. 57 (1980), no. 4, 824-832 (Russian); translated as Soviet Astronom. 24 (1980), no. 4, 474-478 (1981). ary) 82d:70020 70F07

(Author's summary) 82d:70020 70F07

Two particular types of solution of the plane, averaged, restricted, three-body problem. Astronom. 2. 57 (1980), no. 5, 1070-1077 (Russian): translated as Soviet Astronom. 24 (1980), no. 5, 614-618 (1981). (Author's summary) 82d:70021 70F07

Verekčagin, A. F. (with Medvedev, V. S.; Puzanov, V. P.) Algorithms for optimizing the

trajectories of motion in the case of controllable search for objects. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 2, 146–153, 222 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 2, 115–122 (1981). (Authors' summary) 82d:93014 93B05 (90B40, 90D26)

Verescapin, V. P. (with Kaščenko, M. P.) Isolation of a Markov approximation in the nonequilibrium statistical operator method. (Russian) Physical methods for investigating the solid state, No. 3 (Russian), pp. 57-67, 139, Ural. Gos. Univ., Sverdlovsk, 1979. (Authors' summary) 82j:82038 82A35 (47A55) (Authors' summary) 82j:82038

Veresh, F. See Veres, F.

Vereshchagin, A. F. See Vereščagin, A. F. Vereškov, G. M. (with Poltavcev, A. N.) Quantum phenomena in strongly curved space-time and the structure of equations of a gravitational field. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk. 1980, no. 3, 40–48, 110. (S. G. Mamaev) 82c:83053 83C99 (81G25)

(with Beilin, V. A.; Griškan, Ju. S.; Ivanov, N. M.; Nesterenko, V. A.; Poltavcev, (with Bellin, V. A.; Griskan, Ju. S.; Ivanov, N. M.; Nesterenko, V. A.; Poltaveev, A. N.) Quantum gravitational effects in an isotropic universe. Z. Eksper. Teoret. Fiz. 78 (1980), no. 6, 2081–2098 (Russian); translated as Soviet Phys. JETP 51 (1980), no. 6, 1045–1052. (Authors' summary) 82bc33034 83C45 (83F05) etemnikov, A. Ju. On the existence of the optimal policy for a multidimensional quasidiffusion controlled process. Stochastic differential systems (Proc. JFIP-WG 7/1)

Working Conf., Vilnius, 1978), pp. 80-90, Lecture Notes in Control and Information Sci., 25, Springer, Berlin, 1980. (È. G. Al'breht) 82g-93056 93E20 (49A60)

Strong solutions and explicit formulas for solutions of stochastic integral equations.

(Russian) Mat. Sb. (N.S.) 111(153) (1980), no. 3, 434-452, 480. (A. B. Buche) 82f:60147 60H20 (60J65)

etennikov, B. M. On a conjecture of Alperin. (Russian) Sibirsk. Mat. Ž. 21 (1980), no. 1, 200-202, 239. (Ja. G. Berkovič) 82æ20032 20D10

Veretennikov, V. G. (with Seregin, V. N.) On the investigation of oscillations of quasilinear systems with almost-periodic coefficients. Prikl. Mat. Meh. 43 (1979), no. 6, 980-991 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 6, 1060-1072 (1981). (M. K.

Grammatikopoulos) 82g;34045 34C15
(with Erugin, N. P.; Šestakov, A. A.; Demin, V. G.; Muhametzjanov, I. A.;
Muharljamov, R. G.) Abdel'hak Safiullovič Galiullin (on the occasion of his sixtieth birthday). (Russian) Differencial'nye Uravnenija 16 (1980), no. 5, 950-954. (Editors) 82i:01049 01A70

Vergara Caffarelli, Giorgio (with Leaci, Antonio) Generalized variational solutions of the Cauchy problem for Hamilton-Jacobi equations. Comm. Partial Differential Equations 6 (1981), no. 3, 289–304. (Rolf Klötzler) 82d:49022 49C10 (35F25, 70H20)

Verger, Daniel (with Catinat, Michel) Estimation d'un modèle de demande de travail à court terme. (English and Spanish summaries) Production functions and factor demand

functions. Ann. I.N.S.É. È. No. 38-39 (1980), 153-175. (See 82e:90019) 62P20

Vergez, Pierre ★Automates et graphes cartésiens. (French) [Automata and Cartesian graphs] With a preface by M. Fouilliart. Pratique des Systèmes Logiques [Applications of Logical Systems], II. Technique et Documentation, Paris, 1979. xi+351 pp. ISBN 2-85206-055-8 (Jan Grabowski) 82h:94031 94C10 (68D15)
Verghese, George C. (with Kailath, Thomas) Rational matrix structure. IEEE Trans.

Automat. Control 26 (1981), no. 2, 434-439. (Authors' summary) 82d:93022

las Vergnas, Michel See Las Vergnas, Michel
Vergne, Michèle See Noncommutative harmonic analysis and Lie groups, 82m:22001
Verheest, Frank Third-harmonic and subharmonic generation in general media. Wave Motion 3 (1981), no. 3, 231-236. (Author's summary) 82h:76046 76X05

Verheiden, Eric Integral and rational completions of Hadamard matrices. J. Combin. Theory Ser. A 29 (1980), no. 3, 336-345. (V. A. Zinov'ev) 82g:05026 Verhelst, Paul *Some thoughts on a tuple oriented programming system. Afdeling

Informatica [Department of Computer Science], 174. Mathematisch Centrum, Amsterdam, 1981. i+14 pp. (Author's summary) 82m:68016 68B05 (68B20)

Verheyen, Paul Formules du type de Simons et applications. J. Korean Math. Soc. 17 (1980/81), no. 2, 197-209. (M. do Carmo) 82g:53066 53C42 (49F99) (with Verstraelen, Leopold) Conformally flat totally real submanifolds of complex projective spaces. Soochow J. Math. 6 (1980), 137-143. (Yoshio Matsuyama) 82j:53098

53C40 (53C55)

(with Gheysens, Luc; Verstraelen, Leopold) Sur les surfaces & ou les surfaces de Chen. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 19, 913-916. (Authors' summary) 82f:53064 53C40

Verhoff, Frank (with Peterson, William) Properties of an integral equation describing enzyme activity. Integral and functional differential equations (Proc. Conf., West Virginia niv., Morgantown, W. Va., 1979), pp. 233-240, Lecture Notes in Pure and Appl. Math., Dekker, New York, 1981. (J. P. Kernevez) 82j:92030 92A09 (45H05, 80A30)
 Verigin, N. N. A class of hydromechanics problems for domains with moving boundaries.

(Russian) Dinamika Sploin. Sred No. 46 Dinamika Židkosti so Svobod. Granicami (1980), 23–32, 172. (Author's summary) **82m:76062** 76805 (35R35) (with Vasil'ev, S. V.) Thermohydrodynamic state of underground steam generators.

(Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 6, 1356-1361. (I. R. Juhnovs'kii) 80A20 (86A99)

SZEZBOUND

SUPLAN (SOLVEY)

VErjaskin, A. V. (with Lapčinskii, V. G.; Rubakov, V. A.) The spontaneous breakdown of symmetry in the closed cosmological Friedman model. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 407-420. (S. G. Mamaev) 82c:83073 83F05 (81D20)

Verkerk, C. See Proceedings: CERN School of Computing, 82d:68003 Verlan', A. F. (with Abdusatarov, B. B.; Bilenko, V. I.) Application of splines for the numerical solution of an integral equation in the signal restoration problem. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 4, 72-75. (Authors'

summary) 82k:93068 93E11 (65R20)

Verma, Arun Certain transformations of products of basic hypergeometric series. Ganita 29 (1978), 69–83. (From the introduction) 82k:33007 33A30 (with Joshi, C. M.) Remarks on certain generalized expansions. Indian J. Pure Appl.

Verma, B. G. (with Srivastava, R. C.) On singular surfaces of order one in magnetogasdynamics. Proc. Indian Nat. Sci. Acad. Part A 43 (1977), no. 6, 452–460 (1978). (Authors' summary) 82e:76077 76W05 (76Q05)

(with Srivastava, R. C.) Behaviour of sonic waves in dissociating gases in the presence of a magnetic field. *Defence Sci. J.* 30 (1980), no. 3, 137-142. (Authors' summary) 82c:76113 76W05 (76K05)

Kumar, A.) On singular surfaces of order one in dissociating gases. Inc

- Pure Appl. Math. 11 (1980), no. 7, 935-941. (Tommaso Ruggeri) 82c-76086 76N99 ma, Manjula Auto-parallelism and union Gaussian curvature in Riemannian space. Indian J. Pure Appl. Math. 12 (1981), no. 4, 427-429. (P. M. Matzeu) 82k:53038 Verma, Man 53R20
- Laguerre function of a hypersurface in a Finsler space. Indian J. Pure Appl. Math. 12 (1981), no. 7, 807-813. (Yoshihiro Ichijyō) 82i:53023 53B40
- Verma, R. K. (with Agrawal, S. C.) p-variables replacement in linear fractional functional programming. Acta Cienc. Indica 6 (1980), no. 2, 95-103. (From the text) 82a:90164 90C32
- Verma, R. L. (with Singh, Punyatma; Srivastava, K. K.) Thermodynamic method to ional stagnation flow and heat transfer. Czechoslovak J. Phys. B 31 (1981), b. (B. Vujanović) 82e:76024 76D10 (80A20) no. 1, 32-40. (B. Vujanović) 82e:76024
- Generalized Reynolds and integrated energy equations for fluid-film lubrication. (French and German summaries) Internat. J. Non-Linear Mech. 16 (1981), no. 1, 71–78. (Author's summary) 82e:76028 76D99 (76S05)
- Verma, R. U. A note on self-reciprocal functions in generalised Hankel transform. J. Math. Sci. 9 (1974), 87-90 (1976). (J. L. Fields) 82j:44007 44A30
 - Algebraic Fredholm type solutions of integral equations $(I+\underline{U}H)x=x_0$ in Banach ces. Math. Notae 28 (1980/81), 53-58. (Eugenio Sinestrari) 82k:45015 45N05 (47A50, 47A53)
- a, T. N. (with Lall, A. B. B.) A convolution formula for the distributional generalized Laguerre transform. Ranchi Univ. Math. J. 9 (1978), 99-106. (B. R. Bhonsle) 82h:44006
- ani, L. R. A note on Yoneda product. J. Math. Soc. Japan 33 (1981), no. 4, 591-594.
- (From the introduction) 82i:18017 18G15
 Vermeer, J. (with Wattel, Evert) Remote points, far points and homogeneity of X*.
 Topological structures, II (Proc. Sympos. Topology and Geom., Amsterdam, 1978), Part 2, pp. 285-290, Math. Centre Tracts, 116, Math. Centrum, Amsterdam, 1979. (Donald Plank) 82a:54043 54D35 (54D40)
- Vermeir, Dirk (with Rozenberg, Grzegorz) On metalinear ETOL systems. Fund. Inform.
 - (4) 3 (1980), no. 1, 15-36. (Jürgen Dassow) 82b:68069 68F05 (with Rozenberg, Grzegorz) A note on M-growth functions of FTOL systems with rank. Fund. Inform. (4) 3 (1980), no. 3, 295-302. (Jürgen Dassow) 82e:68053 68D22
- es, D. Extremality properties of the optimal strategy in Markovian control problem Analysis and optimisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 35-47, Academic Press, London, 1980. (B. Marchal) 82b:93055 93E20 (49A60)
 - On the semigroup theory of stochastic control. Stochastic differential systems (Proc. IFIP-WG 7/1 Working Conf., Vilnius, 1978), pp. 91-102, Lecture Notes in Control and on Sci., 25, Springer, Berlin, 1980. (E. G. Al'breht) 82j:93061
- Verner, J. H. John Butcher's algebraic theory: motivation for selecting simplifying conditions. Proceedings of the Ninth Manitoba Conference on Numerical Mathematics and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 125-155, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (Kevin Burrage) 82a:65050
- Vernik, A. N. Integral representation of vector functions and scalar character of operators in a Banach space. (Russian) Functional analysis, No. 14 (Russian), pp. 56-64, Ul' janousk. Gos. Ped. Inst., Ul' yanovsk, 1980. (G. K. Kalisch) 82h:47034 47B40 (47A05)
- A spectral representation of operators acting in a Banach space. (Russian)
 Functional analysis, No. 15, pp. 61–71, Ul' janovsk. Gos. Ped. Inst., Ul' yanovsk, 1980. (M. Demuth) 82k:47009 47A10 (47B99)
- Vernikov, B. M. (with Volkov, M. V.) Almost chain varieties of alternative rings. (Russian) Ural. Gos. Univ. Mat. Zap. 11 (1979), vo. 3 Issled. po Sovremen. Algebre, 22-39, 209. (Harry F. Smith) 82a:17012 17D05
- ola (with Sinestrari, Eugenio) Retarded functional parabolic equations in interpolation spaces. Nonlinear Anal. 3 (1979), no. 5, 583-593. (Curtis C. Travis) 82a:35094 35R10 (47D05)
- Vernon, R. J. (with Huggins, B. D.) Extension of the Jones matrix formalism to reflection problems and magnetic materials. J. Opt. Soc. Amer. 70 (1980), no. 11, 1364–1370. (N.
 V. Mickevič) 82g:78004 78A10 (78A40)
- Véron, Laurent (with Vazquez, Juan Luis) Removable singularities of some strongly nonlinear elliptic equations. Manuscripta Math. 33 (1980/81), no. 2, 129-144. (Z. C. Motteler) 82b:35059 35J60 (31B15)
 - Singularités éliminables d'équations elliptiques non linéaires. J. Differentia
 - ons 41 (1981), no. 1, 87-95. (D. E. Edmunds) 82k:35042 35J60
 - Singular solutions of some nonlinear elliptic equations. Nonlinear Anal. 5 (1981), no. 3, 225-242. (Bernhard Kawohl) 82f:35076 35J60 (35A20)
- Veronis, George A note on the method of multiple scales. Quart. Appl. Math. 38 (1980/81), no. 3, 363-368. (John R. Graef) 824:34012 34A.25
 Verozub, L. V. Properties of space-time in noninertial reference frames. (Russian. English summary) Ukrain. Fiz. Ž. 26 (1981), no. 1, 131-136, 174. (Author's summary) 82b:83008 83B05
- Properties of certain phenomena in noninertial frames of reference. (Russian) Ukrain. Fiz. Ž. 26 (1981), no. 5, 778-783, 877. (Author's summary) 82j:83005
- raedt, R. (with Rozenberg, Grzegorz) Synchronized and desynchronized EOI. forms. Discrete Appl. Math. 2 (1980), no. 3, 233-247. (Jürgen Dassow) 82b:68068 68F05
- (with Rozenberg, Grzegorz) On fixed, terminal fixed and nonterminal fixed interpretations of EOL forms. Inform. and Control 48 (1981), no. 2, 119-146. (Authors'
- summary) 82j:68082 68F05
 (with Rozenberg, Grzegorz) EOL forms and finite substitutions of OL forms. Internat. J. Comput. Math. 10 (1981/82), no. 1, 17-33. (Authors' summary) 82m:68124 68F05
- (with Rozenberg, Grzegorz) On pure, terminal invariant and nonterminal invariant interpretations of EOL forms. Theoret. Comput. Sci. 14 (1981), no. 3, 267-288. (Authors'
- summary) 82g-68076 68F05

 Verschoren, A. Birationality of P.I. rings and noncommutative varieties. Ring theory,

- Antwerp 1980 (Proc. Conf., Univ. Antwerp, Antwerp, 1980), pp. 172-197, Lecture Notes in Math., 825, Springer, Berlin, 1980. (Jonathan Golan) 82b:16013 16A38 (14A20)
 Tertiary decomposition in Grothendieck categories. With a loose Russian summary.
- Czechoslovak Math. J. 30(105) (1980), no. 4, 661-672. (From the introduction) 82f:18013
- (with van Oystaeyen, F.) Graded P.I. rings and noncommutative projective scheme Comm. Algebra 9 (1981), no. 2, 149-177. (G. Krause) 82g:16003 16A03 (14A 16A03 (14A15, 16A33, 16A38)
- Fully bounded Grothendieck categories. I. Locally Noetherian categories. J. Pu Appl. Algebra 21 (1981), no. 1, 99-122. (Jonathan Golan) 82j:18017a 18E40 (18F9 18E40 (18F99)
- (with van Oystaeyen, F.) Fully bounded Grothendieck categories. II. Graded modules. J. Pure Appl. Algebra 21 (1981), no. 2, 189-203. (Jonathan Golan) 82j:16003 16A03 (18E40)
- Addendum: "Fully bounded Grothendieck categories. I. Locally Noetherian egories". J. Pure Appl. Algebra 22 (1981), no. 2, 213-214. (Jonathan Golan)
- 82j:18017b 18E40 (18F99) Finite-dimensional w-regular algebras. Rev. Roum ine Math. Pures Appl. 26 (1981).
- no. 5, 801-807. (R. A. Hirschfeld) 82k:46074 46H20 (16A80)

 Veršik, A. M. (with Gel'fand, I. M.; Graev, M. I.) Remarks on the representations of a group of functions with values in a compact Lie group. (Russian, English summary) ad. Nauk SSSR Inst. Prikl. Mat. Preprint No. 17 (1979), 35 pp. (Authors' summary) 82b-22011 22F65
- Versinin, S. V. Representation of the solution of equations of a symmetric triple wave in the neighborhood of a region of quiescence. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. ntr Akad. Nauk SSSR No. 33 Analitič Metody Meh. Splošn. Sredy (1979), 17-29, 74.
- (N. D. Kopačevskii) 82k:76068 76N15
 Verstraelen, Leopold (with Chen, Bang-yen) Hypersurfaces of symmetric spaces. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 2-3, part 1, 201-236. (Jean-Marie Morvan) 82b:53029 53B25 (53C35, 53C40)
 - (with Verheyen, Paul) Conformally flat totally real submanifolds of complex projective spaces. Soochow J. Math. 6 (1980), 137-143. (Yoshio Matsuyama) 82j:53098 53C40 (53C55)
 - (with Chen, Bang-yen) Characterizations of space forms by hypersurfaces. Global differential geometry and global analysis (Berlin, 1979), pp. 105–109, Lecture Notes in Math., 838, Springer, Berlin, 1981. (See 82i:53001) 53C40
 - (with Gheysens, Luc; Verheyen, Paul) Sur les surfaces & ou les surfaces de Chen. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 19, 913-916. (Authors' summary) 82f:53064 53C40
- (with Bouten, Franciska) Recurrent hypersurfaces of symmetric spaces.
- Math. Soc. 18 (1981), no. 1, 7-13. (Yoshio Matsuyama) 82k:53070 53C35 (53C40)
 Vértesi, P. Lagrange interpolation for continuous functions of bounded variation. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 1-2, 23-31. (D. L. Berman) 82a:41007 41A05
 - On the convergence of Fourier series. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 7-12. (Roger L. Jones) 82e:42005 42A20
 - (with Erdős, Paul) On the almost everywhere divergence of Lagrange interpolatory polynomials for arbitrary system of nodes. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 71-89. (N. Passell) 82e:41006a 41A05 (41A10)
 - (with Hermann, Thomas) On an interpolatory operator and its saturation. Acta Math. Acad. Sci. Hungar. 37 (1981), no. 1-3, 1-9. (Hans-Bernd Knoop) 82j:41003
 - (with Erdős, Paul) Correction of some misprints in our paper: "On almost everywhere divergence of Lagrange interpolatory polynomials for arbitrary system of nodes". Acta Math. Acad. Sci. Hungar. 38 (1981), no. 1-4, 263. (Editors) 82e41006b 41A05 (41A10)
 - On Lagrange interpolation. Period. Math. Hungar. 12 (1981), no. 2, 103-112. (A. Sharma) 82e:41011 41A05
- Vertgeim, B. A. Rate of convergence of some iteration processes. (Russian) Optimizacija No. 23(40) (1979), 41-50, 129. (V. Pták) 82a:26003 26A18

 Vervaat, Wim Une compactification des espaces fonctionnels C et D; une alternative pour la démonstration de théorèmes limites fonctionnels. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 8, 441-444. (Author's summary) 82c:60008 60B10 (46E05)
- Verwer, J. G. (with Sommeijer, B. P.) *A performance evaluation of a class of Runge-Kutta-Chebyshev methods for solving semidiscrete parabolic differential equations. Afdeling Numericke Wiskunde [Department of Numerical Mathematics], 91. Mathematisch Centrum, Amsterdam, 1980. i+16 pp. (Authors' summary) 82a:65074
- See also Colloquium: Numerical Solution of Partial Differential Equations, 82a:65006
 Veržbalovič, T. A. Associative multiplication of certain homogeneous generalized functions.
 (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 6, 3-7. (Bl. P. Damyanov)
- 46F10 (32A45) Vescan, Robert T. An existence theorem for quasivariational inequalities. Varia inequalities and optimization problems (Proc. Summer School, Constanţa, 1979), pp. 115-124, Minist. Ed. Învățămilntului, Constanța, 1979. (M. Biroli) 82b:49017
 - Existence of solutions for some quasivariational inequalities. Rend. Sem. Mat. Univ.
- Padova 63 (1980), 215-230. (Igor Bock) 82c:49006 49A29 (47H99)

 Veselinov, Vasil M. (with Kirkorov, Ivan) A general estimate for a class of linear operators.
 (Russian) Serdica 6 (1980), no. 3, 275-277. (J. Szabados) 82d:41029 41A36 Derivatives of functions by derivatives of linear positive operators. (Germanical Control of Contro
- summary) Computing 26 (1981), no. 1, 83-86. (A. Meir) 82b:41025 41A25 Veselov, A. I. (with Drohm, J. K.; Kok, L. P.; Simonov, Ju. A.; Tjon, J. A.) Collision and rotation of solitons in three space-time dimensions. Phys. Lett. B 101 (1981), no. 3, 204-208. (Authors' summary) 82d:81097 81E99
- Veselý, Jiří (with Netuka, Ivan) The Dirichlet problem and the Keldyš theorem. (Czech) Pokroky Mat. Fyz. Astronom. 24 (1979), no. 2, 77-88. (Editors) 82f:01126 01A70
- entini, Edoardo (with Franzoni, Tullio) * Holomorphic maps and invariant distances.

 North-Holland Mathematics Studies, 40. Notas de Matemática [Mathematical Notes], 69.

- North-Holland Publishing Co., Amsterdam-New York, 1980. viii + 226 pp.

 ISBN 0-444-85436-3 (J. Siciak) 82a:32032 32H15 (46G20)

 Vessereau, A. Méthodes bayésiennes et méthodes classiques en contrôle de réception. Rev.

 Statist. Appl. 28 (1980), no. 4, 5-35. (D. V. Lindley) 82h:62038 62F15

 Vestergaard, P. D. What is topology? An example. (Danish. English summary) Normat 29 (1981), no. 2, 67-71. (Author's summary) 82i:54002 54-01

 van der Vet, Robert Peter ** Flexible solutions to systems of linear equalities and inequalities. A study in linear programming. Dissertation, Technische Hogeschool Eindhoven, Eindhoven, 1980. iv+118 pp. (1 insert). (From the introduction) 82e:65038 65K05 (90C05)

 Vetchý, Vladimir (with Schthina, Milan) Regularization of the power of a graph. (Slovak and Russian summaries) Acta Math. Univ. Comenian. 39 (1980), 61-66. (R. C. Entringer) 82g:65079 05C99

 Vetčinkin, N. M. Uniqueness of classes of positive quadratic forms, on which values of
- Vetčinkin, N. M. Uniqueness of classes of positive quadratic forms, on which values of Hermite constants are reached for 6≤n≤8. (Russian) Geometry of positive qua forms. Trudy Mat. Inst. Steklov. 152 (1980), 34-86, 237. (S. A. Stepanov) 82f:10040 10220
- Vetluckii, V. N. (with Ganimedov, V. L.) Calculation of the laminar boundary layer on an acute elliptic cone. (Russian) Numerical analysis (Russian), pp. 24–36, 134, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Teoret. i Prikl. Meh., Novosibirsk, 1978. (Authors' summary) 65N05
- Vetrov, L. G. Linearization of stochastic differential equations of optimal nonlinear filtering. (Russian. English summary) Teor. Verojutnost. i Primenen. 25 (1980), no. 2, 399-407. (Eckhard Platen) 824:60079 60G35 (60H10, 93E11)

 Veysseyre, Renée (with Weigel, Dominique; Charon, Jean-Louis) Sur la détermination
- géométrique de l'ordre du groupe de symétrie d'un polytope de l'espace euclidien à n
- dimensions. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 12, B287–B290. (Authors' summary) 82c:S2014 52A25 (20H15, 82A60)

 Vezzosi, Georges (with Arquès, Pierre-Yves) Matrice de filtrage adapté éliminatrice de plusieurs brouilleurs. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981),
- no. 15, 739-742. (Authors' summary) 82e:94003b 94A05 (93E11)
 Vial, Jean-Philippe Strong convexity of sets and functions. J. Math. Econ. no. 1-2, 187-205. (K. Zimmermann) 82m:52004 52A20 (90C25)
- Vinllet, C.-M. (with Babelon, O.) The Riemannian geometry of the configuration space of gauge theories. Comm. Math. Phys. 81 (1981), no. 4, 515-525. (N. J. Hitchin) 82m:58013 58D17 (53C05, 81E10)
 - (with Babelon, O.; de Vega, H. J.) Solutions of the factorization equations from Toda field theory. Nuclear Phys. B 190 (1981), no. 3, FS 3, 542-552. (Authors' summary) 81E25 (58F07, 81F99, 82A68)
 - (with Babelon, O.) Conserved quantiles for the geodesic motion on the configuration space of nonabelian Yang-Mills theory. Phys. Lett. B 103 (1981), no. 1, 45-47. (From the 53C05 (58F07, 81E99) text) 82f:53045
- ello, Maurizio On the equilibrium of a non-simply connected membrane with constant curvature. (Italian. English summary) Istit. Lombardo Accad. Sci. Lett. Rend. A 113 (1979), 161-169 (1981). (Author's summary) 82h:73060 73K15 (53A05)
- no, G. A. (with Bertero, M.; de Mol, Ch.) The stability of inverse problems. Inverse ng problems in optics, pp. 161–214, Topics Current Phys., 20, Springer, Berlin, 1980.
 Millar) 82:65968 65M30 (35R30, 78A45, 94A05) (R. F. Millar) 82i:65068
- Nu, Victor Some topics in formal languages theory viewed from the standpoint of asure theory. Found. Control Engrg. 4 (1979), no. 3, 133-137. (D. Simovici) 82h:68076 68D05 (28C99, 68F10)
- hnevetsky, R. See Advance 82a:65004 and 82a:65005 ter methods for partial differential equa
- Vickers, J. A. G. (with Ludvigsen, Malcolm) The positivity of the Bondi mass. J. Phys. A 14 (1981), no. 10, L389–L391. (Authors' summary) 82i:83027 83C30

 Vicković, Ivan (with Giacovazzo, Carmelo) The theory of representations: its application to
- the estimation of the two-phase variants and semi-invariants. Acta Cryst. Sect. A 36
- (1980), no. 6, 1017–1025. (Werner Nowacki) 82:82053 82:A60 (20H15) kson, R. G. Two single-machine sequencing problems involving controllable job processing times. AIIE Trans. 12 (1980), no. 3, 258–262. (Author's summary) 82g:90064 Vickson, R. G. 90R35
 - (with Parlar, Mahmut) An optimal control problem with piecewise quadratic cost functional containing a "dead-zone". Optimal Control Appl. Methods 1 (1980), no. 4, 361–372. (Giovanni Resta) 82c-49025 49D37 (90C30)
- Victor, Stephen K. * Practical geometry in the High Middle Ages. Including texts of Artis cuiuslibet consummatio and the Praktike de géomètrie. Memoirs of the American Philosophical Society, 134. American Philosophical Society, Philadelphia, Pa., 1979. xii + 638 pp. ISBN 0-87169-134-5 (H. L. L. Busard) 82i:01014 01A35 (01A75)
- ueiras-Vidal, Anibal R. See Figueiras-Vidal, Anibal R. iė-Vidal, Annie See Astié-Vidal, Annie
- Vidal, Christian (with Roux, J.-C.; Rossi, A.; Bachelart, S.) Representation of a strange attractor from an experimental study of chemical turbulence. Phys. Lett. A 77 (1980), no. 6, 391-393. (O. E. Rössler) 82h:58028 58F13 (80A30, 92A40)
 - (with Roux, J.-C.; Rossi, A.; Bachelart, S.) Experimental observations of complex dynamical behavior during a chemical reaction. *Phys. D* 2 (1981), *no.* 2, 395-403. (Authors' summary) 82i:92010 92A09 (58F15, 80A30)
- Vidal, Claude Un théorème de fonction implicite avec perte de différentiabilité. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 7, A455-A457. (Author's summary) 82f:58015 58C15
- Vidal, Robert Anneaux de valuation discrète complets non commutatifs. Trans. Amer.
- Math. Soc. 267 (1981), no. 1, 65–81. (P. M. Cohn) 82;:16008 16A10

 Vidal-Naquet, Guy (with Valk, Rüdiger) Petri nets and regular languages. J. Comput.

 System Sci. 23 (1981), no. 3, 299–325. (Authors' summary) 82m:68109 68D90 (68F10)
- Videnskii, V. S. A negative reply to one of S. N. Bernštein's questions. (Russian. Armenian ry) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 3, 145-150. (A. Lupas) 82h:41031 41A35
 - Approximation by Bernštein type operators. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 16 (1981), no. 2, 103–110, 168. (D. D. Stancu) 82k:41015 41A36 (41A25)

- Vidibida, O. K. On a hierarchical chain of Bogoljubov equations for one-dimension systems of particles with a hard core. (Russian. English summary) Teoret. Mat. Fiz. 48 (1981), no. 2, 236-249. (Author's summary) 82i:82014 82A05 (82A67)
 Vidigal, L. M. (with Brayton, Robert King; Director, Stephen W.; Hachtel, G. D.) A new
- algorithm for statistical circuit design based on quasi-Newton methods and function splitting, 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 280–283, IEEE, New York, 1979. (See 82e:94002) 90C30
- iger, A. See Widiger, A. omenko, V. P. Structural interpretation of data-logic languages. Progre 1980, no. 5, 56-62, 96 (Russian); translated as Programming and Comput. Software 6 (1980), no. 5, 267-271 (1981). (H.-D. Ehrich) 82m:68049 68B15 ossich, Giovanni Two remarks on the stability of ordinary differential equations. Nonlinear Anal. 4 (1980), no. 5, 967-974. (S. Lecla) 82c:34064 34D20
- Vidyanidhi, V. (with Dhananjaya Rao, V.) Convective horizontal channel flow in a porous m. Acta Cienc. Indica 6 (1980), no. 1, 46-58. (David Zachmann) 82h:76058 76S05 (76R05, 76R10, 76U05)
- Vidyasagar, M. Input-output stability of large-scale interconnected systems. Handbook of
 - yasagar, M. Input-output stability of large-scale interconnected systems. Iranapook of large scale systems engineering applications, pp. 38–53, North-Holland, Amsterdam, 1979.
 (O. I. Nwokah) 82a:93051 93D25 (93A15)
 On the absolute instability of nonlinear feedback systems. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 415–419, IEEE, New York, 1979. 93D15
 - New L₂-instability criteria for large-scale interconnected systems. IEEE Trans. Circuits and Systems 27 (1980), no. 10, 970-973. (Author's summary) 82e:93093a
 - L_{∞} -instability of large-scale interconnected systems using orthogonal decomposition and exponential weighting. IEEE Trans. Circuits and Systems 27 (1980), no. 10, 973-976. (Author's summary) 82e:93093b 93D99
 - ★Input-output analysis of large-scale interconnected systems. Decomposition, well-posedness and stability. Lecture Notes in Control and Information Sciences, 29. Springer-Verlag, Berlin-New York, 1981. vi+221 pp. ISBN 3-540-10501-8 (N. Harris McClamroch) 82j:93027 93D05 (93A15, 93B15)
- Vidybida, A. K. See Vidibida, O. K.
- Viehweg, Eckart (with Kawamata, Yujiro) On a characterization of an abelian variety in the classification theory of algebraic varieties. Compositio Math. 41 (1980), no. 3, 355-359. (Takao Fujita) 82c:14028 14J15 (14E22, 32J25)
 - Klassifikationstheorie algebraischer Varietäten der Dimension drei. Composition Math. 41 (1980), no. 3, 361-400. (Takao Fujita) 82c:14027 14J10 (14D20)
- weger, Uwe (with Hippe, Lutz; Tessmann, Hans-Jürgen; Bittrich, Hans-Joachim) Zur Modellierung oszillierender Reaktionssysteme am Analogrechner. Wiss. Z. Tech. Hochsch. Leuna-Merseburg 22 (1980), no. 4, 503-510. (K. R. Schneider) 82h:68133 68J05 (34C05, 92A09)
- nnot, Gérard (with Dumont, Dominique) A combinatorial interpretation of the Seidel generation of Genocchi numbers. Combinatorial mathematics, optimal designs and their applications (Proc. Sympos. Combin. Math. and Optimal Design, Colorado State Univ., Fort Collins, Colo., 1978). Ann. Discrete Math. 6 (1980), 77-87. (J. M. Gandhi) 82j:10024 10A40 (05A05, 05A15)
- Viergever, M. A. (with Borsboom, M. J. A.; Kalker, J. J.) A geometrically nonlinear model of the cochlea. Delft Progr. Rep. 5 (1980), no. 4, 303-318. (Authors' summary) 82e:92010 92A09 (73P99, 76Z99)
- Operations Research (Oberwolfach, 1978), pp. 321–326, Operations Research Verfahren, 36, Athenäum/Hain/Scriptor/Hanstein, Königstein/Ts., 1980. (Masafumi Sasaki) 62N05 (90B25) 82g:62132
- Vieser, G. Perturbation theory at large order for the super-(\varphi^3)2-model. (Italian and Russian summaries) Nuovo Cimento A (11) 56 (1980), no. 4, 470-482. (Author's
 - summary) 82g:81111a 81G25 (81C12, 81E99) Asymptotic estimates for the massless Wess-Zumino model in four dimensions. (Italian and Russian summaries) Nuovo Cimento A (11) 56 (1980), no. 4, 483-491. (Author's summary) 82g:81111b 81G25 (81C12, 81E99)
- (Author's summary) 82g:81111b 81G25
 Viète, François See Gluškov, S. S., 82a:01010
 ngô Việt Trung See Ngô Việt Trung
- Viffjaneev, V. P. Local construction of a completely integrable differential system with singularities. (Russian) Mat. Zametki 29 (1981), no. 5, 685-690, 797. (Mark Levi) 35F20 (34C99, 93B05)
- Vigilante, M. (with Rosato, E.; De Cesare, N.; Perillo, E.; Spadaccini, G.) Weighted fit by orthonormal polynomials. Comput. Phys. Comm. 22 (1981), no. 2-3, 311-315. (Authors' 65F25 introduction) 82h:65031
- Viglin, E. S. Well-posedness classes of the Cauchy problem for equations with linearly transformed time. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1978, no. 8, 45-49. 35G05 (35R25) (O. Veivoda) 82f:35054
- Vigna Suria, Giuseppe (with Eastwood, Michael G.) Cohomologically complete and seudoconvex domains. Comment. Math. Helv. 55 (1980), no. 3, 413-426. (G. Berg) 82a:32020 32F10
- Vignéras, Marie-France ★Arithmétique des algèbres de quaternions. (French) [Arithmetic of quaternion algebras] Lecture Notes in Mathematics, 800. Springer-Verlag, Berlin-New York, 1980. vii+169 pp. ISBN 3-540-09983-2 (J. H. H. Chalk) 82i:12016
 - iennes isospectrales et non isométriques. (1980), no. 1, 21-32. (P. Wintgen) 82b:58102 58G25 (10J25, 12A70)

 Valeur au centre de symétrie des fonctions L associées aux formes modulaires. [The
 - value at the center of symmetry of the L functions associated to modular forms] Seminar on Number Theory, Paris 1979–80, pp. 331–356, Progress in Math., 12, Birkhäuser, Boston, Mass., 1981. (See **82j**:1**0004**) 10D12 (10D40, 12A67, 22E55) Boston, Mass., 1981. (See 82j:10004)
- Vigneron, J. P. (with Lambin, Ph.) Gaussian quadrature of integrands involving the error function. Math. Comp. 35 (1980), no. 152, 1299-1307. (M. M. Chawla) 82b:65002 65A05 (65D30)
 - (with Lambin, Ph.) Improved continued fraction treatment of the one-dimensional cattering problem. J. Phys. A 14 (1981), no. 7, 1815-1819. (Authors' summary) 82g:81093 81F05 (65D15)

1982

- neron, Léopold À propos de la conjecture de Tait. Définition de la c-parité d'un cycle bicolore d'arêtes; effets produits par l'échange des couleurs sur un cycle dans le cas où il est c-pair et dans le cas où il est c-impair. (English summary) Problèmes combinatoires et théorie des graphes (Colloq. Internat. CNRS, Univ. Orsay, Orsay, 1976), pp. 411-414, Colloques Internat. CNRS, 260, CNRS, Paris, 1978. (Author's summary) 82b:05064 05C15
- Vignes, Jean L'impact de l'informatique dans les sciences, les techniques, la vie sociale. Eleutheria 1979, no. 2, 310-326. (Philip L. Quinn) 82g:00015 00A69 (68K05, 92A07) ★Algorithmes numériques, analyse et mise en œuvre. 2. (French) [Numerical algorithms, analysis and application. 2] Équations et systèmes non linéaires. [Nonlinear

equations and systems]. With the collaboration of René Alt and Michèle Pichat. Collection Langages et Algorithmes de l'Informatique. Éditions Technip, Paris, 1980. xiii + 302 pp. ISBN 2-7108-0365-8 (R. P. Brent) 82g:65002 65-01 (65H05, 65H10)

(with Bois, Pierre) Évaluation de la précision dans le calcul de la convolution et de la corrélation. (English summary) C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci. Univers Sci. Terre 292 (1981), no. 10, 771-774. (Authors' summary) 82f:65046 (68C05)

Vigué, Jean-Pierre Sur la convexité des domaines bornés cerclés homogènes. Séminaire Pierre Lelong-Henri Skoda (Analyse). Années 1978/79 (French), pp. 317-331, Lectu Notes in Math., 822, Springer, Berlin, 1980. (Harald Upmeier) 82e:32044 32Mi

Vigué-Poirrier, Micheline Réalisation de morphismes donnés en cohomologie et suite spectrale d'Eilenberg-Moore. Trans. Amer. Math. Soc. 265 (1981), no. 2, 447-484. (J.

Stasheff 82:55021 55P62 (55R05)

Vijayakumar Cyclic numbers. Proceedings of the Conference on Number Theory (Mysore, 1979), pp. 218-237, Matscience Rep., 101, Inst. Math. Sci., Madras, 1980. (S. A. Stepanov) 82i:10012 10A30

i, B. (with Mathews, P. M.; Seetharaman, M.; Takahashi, Yasushi) On the admissibility of repeated irreducible representations in barnacle-free unique-spin unique-mass relativistic wave equations. J. Phys. A 14 (1981), no. 5, 1193-1204. (N. D. Sengupta) 82g:81038 81D25 (22E70)

ram, G. See Mercier, Bertrand, 82e:65112

Viktorov, B. V. On the decomposition of linear nonstationary automatic control systems. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 5, 1048-1052. (From the text) 93C05

Vila Miranda, M. A. Definition of an H-valued stochastic integral with respect to a Poisson random measure. (Spanish) Contributions in probability and mathematical statistics, teaching of mathematics and analysis (Spanish), pp. 116-128, Grindley, Granada, 1979. (Marta Sanz Solè) 82a:60079 60H05 (60H10)

carol Vilanova, Antonio See Carol Vilanova, Antonio
Vilares, Manuel José Fonctions de production à générations de capital: théorie et estimation. (English and Spanish summaries) Production functions and factor demand functions. Ann. I. N. S. É. É. No. 38-39 (1980), 17-41. (See 82e:90019) 90A11 (62P20)

Vil'činskii, V. T. On simultaneous approximations by irreducible fractions. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 2, 41-47, 140. (John H. Loxton) 82j:10058 10F10 (10K15)

Vilela Mendes, R. (with Taborda Duarte, J.) Decomposition of vector fields and mixed dynamics. J. Math. Phys. 22 (1981), no. 7, 1420-1422. (Manfred Andrié) 82h:58016 58F05 (70G35)

Critical-point dependence of universality in maps of the interval. Phys. Lett. A 84

(1981), no. 1, 1-3. (S. Ju. Piljugin) 82k:58083 58F20 (58F14)

Vilenc, I. L. On the connection between the uniqueness of the solution of a nonlocal boundary value problem in a layer for systems with variable coefficients and parametric systems. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 6, 69-70. (From the text) 82k:35057 35K22 (76B99)

Vilenkin, Alexander (with Ford, L. H.) A gravitational analogue of the Aharonov-Bohm effect. J. Phys. A 14 (1981), no. 9, 2353–2357. (Authors' summary) 82h:83010 83C10

enkin, N. Ja. (with Klesova, L. M.) The continuum parts of the bases on the hyperboloid [x,x]=-1. Jadernaja Fiz. 31 (1980), no. 1, 204–220 (Russian); translated as Soviet J. Nuclear Phys. 31 (1980), no. 1, 108-115 (1981). (Jacques Faraut) 82c:33008 (33A40, 33A45, 43A85, 81C40)

Calculation of an integral containing Bessel functions. (Russian) Mat. Zametki 30 (1981), no. 2, 185-186, 313. (Author's summary) 82k:33017 33A40

novský, Jiří Several extremal coreflective classes in uniform spaces. With a loose Russian summary. Czechoslovak Math. J. 30(105) (1980), no. 4, 569-578. (H. L. Bentley) 54E15 (54C99)

(with Mankiewicz, P.) A remark on uniform classification of boundedly compact linear topological spaces. Rocky Mountain J. Math. 10 (1980), no. 1, 59-64. (M. S. Ramanuian) 82g:46009 46A14 (57N17)

(with Preiss, D.) In-between theorems in uniform spaces. Trans. Amer. Math. Soc. 261 (1980), no. 2, 483–501. (M. Katětov) 82b:54022 54C30 (54E15) tunov, V. N. (with Baušev, V. S.; Timohin, A. M.) Stability of stationary solutions of the control o system of equations of the combustion theory. Pril. Mat. Med. 44 (1981), no. 1, 96–103 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 1, 65–69 (1981). (Richard J. Field) 82h:80004 80A25 (35P20)

Viljamaa, Matti On the structure of generalized Jacobian varieties. Ann. Acad. Sci. Fenn. Ser. A I Math. Dissertationes No. 33 (1980), 42 pp. (T. Oda) 82f:14026

(14K30)

Vilkas, Eduardas Axiomatic approach to optimality principles. (Russian) Current state of the theory of operations research (Russian), pp. 101-116, "Nauka", Moscow, 1979. (See 90-02

(with Maiminas, E. Z.) ★Решеняя: теорня, информация, моделирование.
(Russian) [Decisions: theory, information, modeling] "Radio i svjaz", Moscow, 1981. 328 pp. (M. Mañas) 82m:90188 90D35 (90A05)

Vil'ke, V. G On stability of nonlinear oscillations of a membrane. Prikl. Mat. Meh. 43 (1979), no. 2, 380-383 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 2, 412-415 (1980). (Author's summary) 82g:73034 73K15 (73C50)

Existence and uniqueness of solutions in the problem of the motion of a system

consisting of an elastic body and a solid. (Russian. French summary) Vestnik Moskov. Univ. Ser. I Mat. Meh. 1980, no. 2, 76-80, 104. (M. Mişicu) 82e:73041 (35O20, 70E99)

(1981), no. 1, 27-31. (From the summary and introduction) 82;81047

81E99 (58F06, 81G20)

(with Frolov, V. P.) Spherically symmetric collapse in quantum gravity. Phys. Lett. B 106 (1981), no. 4, 307-313. (Authors' summary) 82k:83023 83C45 (83C99)

Villa, A. (with Cumani, A.; Del Bello, R.) A multilevel approach to urban traffic modeling.

Proceedings of the First World Conference on Mathematics at the Service of Man (Barcelona, 1977), Vol. II, pp. 590-611, Univ. Politec., Barcelona, 1980. (Authors'

summary) 82a:90057 90B20

Villa, L. T. A note on behavior of solutions of consolidation equations in soil mechanics. J. Math. Anal. Appl. 72 (1979), no. 2, 788-790. (H. K. Verma) 82e:73682 (34A10)

Villa, Pierre (with Maurice, Joël) Fiscalité et choix de la technique de production vus à travers une réforme de l'assiette des charges sociales. (English and Spanish summaries) Production functions and factor demand functions. Ann. I.N.S.É. É. No. 38-39 (1980), 97-122. (See 82e:90019) 90A11

(with Muet, Pierre-Alain; Boutillier, Michel) Une estimation simultanée des mandes d'investissement et de travail. (English and Spanish summaries) Production functions and factor demand functions. Ann. I.N.S. É. É. No. 38-39 (1980), 237-258. (See 82e:90019)

82e:90019) 90A99 berto Martinez See Martinez-Villa, Roberto

Villadsen, John (with Baden, Niels) A family of collocation based methods for parameter estimation in differential equations. Chem. Engrg. J. 23 (1982), no. 1, 1-13. (Authors' summary) 82k:65074 65P05 (65C20)

Villamayor, Orlando E. (with Villamayor, Orlando, Jr.) A remark on terrible points. Rev. Un. Mat. Argentina 29 (1979/80), no. 1-2, 77-84. (R. F. Lax) 82c:14039

Villamayor, Orlando, Jr. (with Villamayor, Orlando E.) A remark on terrible points. Rev. Un. Mat. Argentina 29 (1979/80), no. 1-2, 77-84. (R. F. Lax) 82c:14039

Villani, A. (with di Vincenzo, R.) On a boundary value problem for a third-order linear equation of hyperbolic type. Existence, uniqueness and representation of the solution. (Italian. English summary) Matematiche (Catania) 32 (1977), no. 2, 211-238. (Maria Cinquini-Cibrario) 82i:35112 35L45 (46E35)

On an optimal control problem for a distributed parameter control process with

unbounded coefficients. J. Optim. Theory Appl. 34 (1981), no. 4, 561-577. (J. P. Babary) 82m:49008 49A22 (93C20)

Villani, M. Feynman path-integrals with unusual kinematics and mass fluctuations. L. Nuovo Cimento (2) 31 (1981), no. 10, 355-360. (Takashi Miura) 82i:81051 81C35

Villarreal, Bernardo (with Karwan, Mark H.) An interactive dynamic programming approach to multicriteria discrete programming. J. Math. Anal. Appl. 81 (1981), no. 2, 524-544. (Authors' summary) 82j:90071 90C31 (90C39)

Villarroel, D. (with Teitelboim, Claudio; van Weert, Ch. G.) Classical electrodynamics of retarded fields and point particles. Riv. Nuovo Cimento (3) 3 (1980), no. 9, 64 pp. (A. H. Taub) 82g:78010 78A35

Villaverde, Carlos (with de León, Manuel) Calcul différentiel sur les fibrés tangents d'ordre supérieur. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 18,

881-884. (Authors' summary) 821:58016 58C20 (49A51)
(with de León, Manuel) "Sprays" et connexions sur les fibrés tangents d'ordre supérieur. (English summary) ["Sprays" and connections on tangent bundles of higher order] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 1, 51-54. (Authors' sum 82i:53056 53C05

Villella Bressan, Rosanna Flow invariant sets for functional-differential equations. Abstract Cauchy problems and functional differential equations (Proc. Workshop, Leibnitz, 1979), pp. 213-229, Res. Notes in Math., 48, Pitman, Boston, Mass., 1981. (G. F. Webb) 34K15 (47H15) 82e:34105

On suitable spaces for studying functional equations using semigroup theory. Nonlinear differential equations (Proc. Internat. Conf., Trento, 1980), pp. 347-357, 47H20 (39B70. Academic Press, New York, 1981. (Gregory B. Passty) 82i:47100

Villiers, Noël (with Glasser, David) A continuation method for nonlinear regression SIAM J. Numer. Anal. 18 (1981), no. 6, 1139-1154. (Authors' summary) 82k:65036

endas, Maria Victoria A further note on a mechanical treatise contained in Codex Medicea Laurenziana Or. 152. J. Hist. Arabic Sci. 2 (1978), no. 2, 395-396. (Editors) 82f:01021 01A30

nte, Carlos D. Relation between empirical spectral analysis and linear regression. Inform. Sci. 24 (1981), no. 3, 187-193. (Raúl Pedro Mentz) 82k:62177 62M15

Vinberg, É. A. (with Kimel'fel'd, B. N.) Homogeneous domains on flag manifolds and spherical subsets of semisimple Lie groups. (Russian) Funkcional. Anal. i Priložen. 12 (1978), no. 3, 12-19, 96. (Alan T. Huckleberry) 82e:32042 32M10 (14F05, 14L30, 14M17, 20G05)

Vinberg, E. B. Invariant convex cones and orderings in Lie groups. (Russian) Funkcios Anal. i Priložen. 14 (1980), no. 1, 1-13, 96. (A. Morimoto) 82c:32034 32M10 (22E45, 52A20)

Vince, Andrew Locally homogeneous graphs from groups. J. Graph Theory 5 (1981), no. 4, 417–422. (Hugo S. Sun) 82k:05061 05C25 (20F32)

Vincent, Max (with Césari, Yves) Une caractérisation des mots périodiques. (English summary) C. R. Acad. Sci. Paris Sér. A-B 286 (1978), no. 24, A1175-A1177. (Authors' summary) 82a:20063 20M05

Differential methods. Electron sgnetic theory of gratings, pp. 101-121, Topics See 82s:78001) 78A45 Current Phys., 22, Springer, Berlin, 1980. (See 82a:78001) 78A45

droz-Vincent, Philippe See Droz-Vincent, Philippe

Vincent, Thomas L. Vulnerability of a prey-predator model under harvesting. Rewes

resource manangement (Proc. Workshop, Univ. Canterbury, Christchurch, 1980), pp. 112-132, Lecture Notes in Biomath., 40, Springer, Berlin, 1981. (See 82k:90001) 92A15

nent, 82k:90001 See also Renewable res vanni-Vincentelli, Alberto See Sangiovanni-Vincentelli, Alberto

opradskaja, A. V. (with Girko, V. L.) Control of the spectrum of certain unbounded differential operators. (Russian. English summary) Vyčisl. Prikl. Mat. (Kieo) No. 39 (1979), 123–129, 175. (Authors' summary) 82m:35112 35P05 (49A22) opradskaja, T. M. (with Rubčinskii, A. A.) Logical forms of choice functions. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1362–1366. (Stanislaw J. Surma) 82f:04005

okurov, V. A. (with Petunin, Ju. I.; Pličko, A. M.) Measurability and regularizability of mappings that are inverses of continuous linear operators. (Russian) Mat. Zametki 26 (1979), no. 4, 583-591, 654. (A. Alexiewicz) 82g:47002 47A05 (46A99, 65J10)

wov, V. G. von Neumann algebras generated by pairs of measurable partition (Russian) Limit theorems, random processes and their applications (Russian), pp. 64-70, 231, "Fan", Tashkent, 1979. (N. N. Ganihodžaev) 82c.46077 46L10

/ins, František A note on a one-dimensional measure in a two-dimensional space. (Slovak Russian and English summaries) Acta Fac. Rerum Natur. Univ. Comeni

(1979), 193-205. (V. Ficker) 82h:28006 28A12 (53C65)
sonhaler, C. Corrections to: "Torsion free abelian groups quasiprojective over their endomorphism rings. II" [Pacific J. Math. 74 (1978), no. 1, 261-265; MR 58 #927b].

Pacific J. Math. 79 (1978), no. 2, 564-565. (Editors) 82k:20090 20K15 (with Wickless, W.) A theorem on quasi-pure-projective torsion free abelian groups of finite rank. Pacific J. Math. 91 (1980), no. 1, 239-241. (Luigi Salce) 82e:20065 20K15

(with Wickless, W.) Quasiprojective and quasi-injective finite valuated groups.

Collog. Math. 44 (1981), no. 1, 35-40. (L. Fuchs) 82j:20104 20K40

(with Wickless, W.) The injective hull of a separable p-group as an E-module. J. Algebra 71 (1981), no. 1, 32-39. (P. L. Sperry) 82m:20058 20K10 (20K30)

Vinter, R. B. (with Lewis, R. M.) Relaxation of optimal control problems to equivalent convex programs. J. Math. Anal. Appl. 74 (1980), no. 2, 475-493. (V. F. Dem'janov) 49A10 (90C25)

(with Kwong, R. H.) The infinite time quadratic control problem for linear systems with state and control delays: an evolution equation approach. SIAM J. Control Optim. 19 (1981), no. 1, 139-153. (Authors' summary) 82e:93048 93C05

Viola, C. Diophantine approximation in short intervals. Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4) 6 (1979), no. 4, 703–717. (W. W. Adams) 82e:10058 10F05

Viola, Paolo On maximal systems of linear subvarieties of special complete intersections (Italian. English summary) Rend. Istit. Mat. Univ. Trieste 11 (1979), no. 1-2, 109-121 (1980). (Knud Lønsted) 82e:14017 14C99 (14M10)

Violini, G. See Proceedings: Einstein Centennial Symp 82h:81005

Viollaz, Aldo José Fictitious improvement of the goodness of fit due to the adjustment of a family of models. (Spanish) Rev. Un. Mat. Argentina 29 (1979/80), no. 1-2, 38-48. (Joaquin Diaz Saiz) 82f:62129 62J05

Virabjan, G. V. Spectral expansion of the holomorphic operator-function with continuous spectrum. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 226–230, 256, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (P. A. Mišnaevskii) 82g:47015 47A70 (47A10)

Spectral decomposition of a holomorphic operator-function with continuous spectrum. (Russian. Armenian and English summaries) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 15 (1980), no. 3, 176-190, 246. (Heinz Langer) 82f:47025

Virig, Tibor Modelling of operational units in chemical engineering with Hammerstein-type integral equations. Seminar on Numerical Methods for Solving Balance Equations (Berlin, 1980) (Russian), pp. 3–12, Rep. 1980, 5, Akad. Wiss. DDR, Berlin, 1980. (Author's summary) 82h:80025 80A30 (92A40, 93C45)

(with Halasz, G.) A numerical method for simulation of mass and heat transfer processes. (Russian) Seminar on Numerical Methods for Solving Balance Equations (Berlin, 1980) (Russian), pp. 127–138, Rep. 1980, 5, Akad. Wiss. DDR, Berlin, 1980. (Authors' summary) 82b:80006 80A20 (65R20)

Virasoro, M. A. Variational principle for two-dimensional incompressible hydrodynamics

and quasigeostrophic flows. Phys. Rev. Lett. 47 (1981), no. 17, 1181-1183. (Author's ary) 82j:86002 86A10 (76C99, 86A05)

Virčenko, Ju. P. (with Laskin, N. V.) Divergences in the construction of kinetic equations. (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 2, 238-250. (Nina B. Maslova) 82b:82056 82A42 (60K35)

Virgopia, N. (with Feraioli, F.) Axisymmetric gravitational collapse of rotating interstellar gas clouds. Astrophys. and Space Sci. 79 (1981), no. 1, 129–144. (Authors' summary) 82h:85002 85A05

Virlan, I. (with Boju, V.; Popescu, Mariana) Espaces Chern-Vrănceanu qui admettent deux feuilletages à courbure presque constante. An. Univ. Craiova Mat. Fiz.-Chim. 6 (1978), 89–96. (Toru Ishihara) 82e:53018 53B20

Viro, O. Ja. Curves of degree 7, curves of degree 8 and the Ragsdale conjecture. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1306-1310. (V. M. Harlamov) 82e:14067 14N99 (14G30, 14H99)

Virot, Bernard Extensions vectorielles d'opérateurs linéaires bornés sur L^p. (English summary) [Vector extensions of bounded linear operators on L^p] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 8, 413–415. (Author's summary) 82m:47025 47B38

Virtanen, Ilkka On the concepts and derivation of reliability in stochastic systems with states of reduced efficiency. Proceedings of the First World Conference on Mathematics at the Service of Man (Barcelona, 1977), Vol. II, pp. 128–153, Univ. Politec., Barcelona, 1980. (Author's summary) 82b:62133 62N05

Viry, Guy Factorisation des polynômes à plusieurs variables. (English summary) RAIRO Inform. Théor. 14 (1980), no. 2, 209-223. (R. P. Brent) 82c:12016 12D05 (12-04,

Visconti, A. (with Calmet, J.) Computing methods in quantum electrodynamics. Field theory, quantization and statistical physics, pp. 33-57, Math. Phys. Appl. Math., 6, Reidel, Dordrecht, 1981. (Authors' summary) 82d:81186 81L05 (68C20, 81-04)

Vishnevskii, V. M. See Višnevskii, V. M. Vishnevskiy, V. M. See Višnevskii, V. M.

Vishveshwara, C. V. See Gravitation, quanta and the universe, 82d:83005

centi, Rita The collineations group of a translation plane and the collineations group of an affine geometry. Atti Sem. Mat. Fis. Univ. Modena 28 (1979), no. 2, 342-351 (1980). (E. W. Ellers) 82g:51007 51A40 (20H15) Vincenzo, R. (with Villani, A.) On a boundary value problem for a third-order linear

equation of hyperbolic type. Existence, uniqueness and representation of the solution. (Italian. English summary) Matematiche (Catania) 32 (1977), no. 2, 211-238. (Maria -Cibrario) 82i:35112 35L45 (46E35)

On the complete controllability of material system governed by a third-order linear equation of hyperbolic type. (Italian. English summary) Matematiche (Catania) 33 (1978), no. 1, 67-82 (1980). (Michel Chipot) 32g-49008 49A22 (49B22) che. Philima Aggregation of preferences: a review. European J. Oper. Res. 9 (1982).

ceke, Philippe Aggregation of preferences: a review. European J. Oper. Res. 9 (1982), no. 1, 17-22. (From the summary) 22k:50014 90A06 cee, Istvin Remark to the derivation of the Cramér-Fréchet-Rao inequality in the regular case. The First Pannonian Symposium on Mathematical Statistics (Bad Tatzmannsslorf, 1979), pp. 284–289, Lecture Notes in Statist., 8, Springer, New York, 1981. (Bradford R. Crain) 82;62019 62F10

et, Luc Some invariant solutions to the Yang-Mills equa tions in the presence of scalar fields in Minkowski space. Geometrical and topological methods in gauge theories (Proc. Canad. Math. Soc. Summer Res. Inst., McGill Univ., Montreal, Que., 1979), pp. 137-147, Lecture Notes in Phys., 129, Springer, Berlin, 1980. (J. H. Rawnsley) 82a:81026 81E10

(with Harnad, John; Shnider, Steven) Invariance considerations and solutions of the SU(2) Yang-Mills equations in compactified Minkowski space. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 263–266, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82e.81004) 81E10 (53C05)

(with Harnad, John; Shnider, Steven) Invariance conditions for gauge fields.

Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 296–299, Lecture Notes in Phys., 116, Springer, Berlin, 1980. (N. J. Hitchin)

enko, A. A. (with Jakimov, N. D.) An analogue method for solution of a Hilbert boundary value problem. (Russian) Trudy Sem. Kraev. Zadačum No. 16 (1979), 44-51, 241. (P. Ju. Alekna) 82a:68182 68J05 (30E25, 65E05)

Val. (F. Ju. Aickna) 82xr08182 68005 (30E.25, 63205)

Valke, Ramon M. (with Giudici, Reinaldo E.) A table of chromatic polynomials. J. Combin. Inform. System Sci. 5 (1980), no. 4, 323–350. (Ruth Bari) 82xr0839 05C15

Vinnickii, B. V. Series in the system $\{f(\lambda_n z)\}$. (Russian) Mat. Zametki 29 (1981), no. 4, 503–516, 632. (C. Tanaka) 82g:30009 30B50

micheles, S. D. (with Berezov'kii, M. I.) Description of solutions of an operator equation in the space A(G). (Russian) Ukrain. Mat. Z. 32 (1980), no. 5, 645-649. (V. V. Peller)

82=47017 47A62 (47B38)

ar (with Misra, Prabdu ah Ram) A characterization of pseud Internat. J. Math. Math. Sci. 4 (1981), no. 2, 407-409. (C. E. Aull) 82f:54035 54D99

Vinogradov, A. I. (with Tahtadžjan, L. A.) Linnik-Skubenko asymptotics. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 4, 777-780. (H. Iwaniec) 82j:10083 10J25 (10E25,

(with Tahtadžjan, L. A.) On analogues of the Gauss-Vinogradov formula. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1298-1301. (S. A. Stepanov) 82b:10050 10H08 (10C15, 12A70)

(with Tahtadžjan, L. A.) On the Gauss-Hasse hypothesis for real quadratic fields. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 6, 1306-1309. (Paul Ponomarev) 12A50 (12A70)

See also Differential geo ry, Lie groups and mechanics, 82g:81002 and Linnik, Ju. V. 82j:01077b w, A. P. A theorem on the local rank of one-place predicates. (Russian) Z. Vyčisl.

Mat. i Mat. Fiz. 19 (1979), no. 3, 787-790, 800. (Editors) 82h:03008 03B10 (68C05) ogradov, I. M.

↑ Mercon триговометрических сумы в теории чиссл. (Russian) [The method of trigonometric sums in the theory of numbers] Second edition. "Nauka", Maccow, 1980. 144 pp. (Editors) 820:10047 10005 (10010) ogradov, M. M. Field extensions and extensions of linear differential operators.

(Russian) Mat. Zametki 30 (1981), no. 2, 237-248, 315. (Chr. U. Jensen) 82m:12017 12H05

lov, O. G. (with Malcolm, D. J.) A new algorithm for cable statics. Proceedings of the 16th Midwestern Mechanics Conference (Kansas State Univ., Manhattan, Kan., 1979), pp. 73-77, Develop. in Mech., 10, Kansas St. Univ., Manhattan, Kan., 1979. (Authors'

ogradov, S. A. Multiplicative properties of power series with a sequence of coefficients from I^p. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 6, 1301–1306. (C. Tanaka) 30B10 (30H05)

On free interpolation in Bergman spaces. (Russian. English summary) Investigations on linear operators and the theory of functions, XI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 113 (1981), 208-211, 268. (Author's summary) 82k:46038

(with Gorin, E. A.; Hruščev, S. V.) Free interpolation in H^{∞} in the sense of P. Jones. (Russian. English summary) Investigations on linear operators and the theory of nctions, XI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 113 (1981), 212-214, 268. (From the introduction) 82k:46039 46E15 (30E05, 46J15)

(with Kotočigov, A. M.) Some remarks on interpolation by analytic functions that belong to Besov spaces B₀⁰, (Russian English summary) Investigations on linear operators and the theory of functions, XI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Stekhov. (LOMT) 113 (1981), 215–217, 269. (Authors' summary) 82k:46040 46E15

radov, S. S. (with Tučkin, Ju. A.; Šestopalov, V. P.) On the theory of wave scattering on unclosed screens of spherical form. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 6, 1346-1350. (K. Wódkiewicz) 82h:78020 78A45

wa, G. Ju. Singular integral operators on the axis with fractionally linear shift in spaces with a weight (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1979, no. 3, 67-72. (T. G. Gegelia) 82æ45010 45E10 (47G05) Višik, M. I. (with Fursikov, A. V.) ★Математические задачи статистической гипромеханики. (Russian) [Mathematical problems of statistical hydromechani "Nauka", Moscow, 1980. 440 pp. (loose errata). (Dan Socolescu) 82g:35095 (58D25, 76Dxx)

(with Komeč, A. I.) Stationary solutions of the stochastic Navier-Stokes equations Stochastic differential systems (Proc. IFIP-WG 7/1 Working Conf., Vilnius, 1978),
pp. 103–113, Lecture Notes in Control and Information Sci., 25, Springer, Berlin, 1980. (B.
G. Pachpatte) 82k:35085 35Q10 (76D05)

(with Aleksandrov, P. S.; Ditkin, V. A.; Kolmogorov, A. N.; Lavrent'ev, M. A.; Oleĭnik, O. A.) Lazar' Aronovič Ljusternik (on the occasion of his 80th birthday). (Russian) Uspehi Mat. Nauk 35 (1980), no. 6(216), 3-10. (Editors) 82g:01036 01A70

Visinescu, M. (with Ghika, G.) Four-dimensional sigma-model coupled to the metric tensor field. (Italian and Russian summaries) Nuovo Cimento B (11) 59 (1980), no. 1, 59-74. (Authors' summary) 82c:81145 81G20 (83E99)

Višins'kii, V. A. (with Klin, M. H.; Čeredničenko, N. I.) Realization of an algorithm for construction of S-rings of cyclic groups of order p^m and its application for solution of the problem of cataloguing cyclic p^m -vertices of graphs. (Russian) Computations in algebra and combinatorial analysis (Russian), pp. 73-86, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1978. (B. Zelinka) 82f:20013 20B25 (05C25, 20-04, 68E10)

Visintin, Augusto Existence results for some free boundary filtration problems. (Italian summary) Ann. Mat. Pura Appl. (4) 124 (1980), 293–320. (Sadakazu Aizawa) 82d:35106

1982

(with Caffarelli, Luis A.; Friedman, Avner) A free boundary problem describing transition in a superconductor. SIAM J. Math. Anal. 12 (1981), no. 5, 679-690. (Nima Geffen) 82k:81100 81J05 (35R35)

Viskov, O. V. Power series inversion and the Lagrange formula. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 2, 269-271. (M. S. Rangachari) 82d:30002 30A10 (40A30)

evec'kii, O. L. Groups of class 2 and exponent p with commutant of order p^2 . (Russia English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 9, 9–11, 103. (I. D. Macdonald) 824:20026 20D15

Višnevskii, V. M. (with Žarkih, V. A.) A priority system with group servicing. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 2, 96-106, 221 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 2, 66-75 (1980). (E. A. Danieljan) 82j:60178a 60K25 (with Zarkih, V. A.) On a priority system with group servicing. II. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 6, 100-109, 221 (Russian); translated as Engrg.

Cybernetics 17 (1979), no. 6, 74-82 (1980). (E. A. Danieljan) 82j:60178b 60K25 (with Tverdohlebov, A. S.) Models of closed networks with lockout for analyzing multiprogramming computers. Automat. i Telemeh. 1980, no. 5, 172-179 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 5, part 2, 728-733. (Authors' summary) 82h:68058 68C15 (68B20, 90B22)

Višnevskii, V. V. (with Burdakov, V. M.) Structures in the ruled geometry of spaces with degenerate absolute. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 10 (1978), 37-45.

(Josef Vala) 82g:51010 51D20

(with Il'inskii, N. B.; Norden, A. P.; Šapukov, B. N.; Širokov, A. P.) Boris Lukič Laptev (on the occasion of his 75th birthday). (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 10, 3-5. (Editors) 82h:01067 01A70

(with Gazieva, F. A.) Antiquaternion structures and connections. (Russian) Trudy Geom. Sem. Kazan. Univ. No. 12 (1980), 19-26. (Hillel Gauchman) 82j:53072 Visscher, William M. Scattering of elastic waves from planar cracks in isotropic media. J. Acoust. Soc. Amer. 69 (1981), no. 1, 50-53. (Author's summary) 82a:73017 73D25

Wittgenstein Sympos., Kirchberg am Wechsel, 1979), pp. 339–345,

Hölder-Pichler-Tempsky, Vienna, 1980. (See 82e:03006) Visser, R. P. W. See Studies on Christiaan Huygens, 82m:01036

Visvanathan, V. (with Sangiovanni-Vincentelli, Alberto) Diagnosability of nonlinear circuits and systems. I. The dc case. IEEE Trans. Circuits and Systems 28 (1981), no. 11, 1093-1102. (Authors' summary) 82m:93054a 93C10 (93C25)

(with Saeks, Richard; Sangiovanni-Vincentelli, Alberto) Diagnosability of nonlinear circuits and systems. II. Dynamical systems. IEEE Trans. Circuits and Systems 28 (1981), no. 11, 1103–1108. (Authors' summary) 82m:93054b 93C10 (93C25)

wanadham, N. (with Warrior, J.) A new approach for fixed point smoothing in linear distributed parameter systems. Internat. J. Systems Sci. 12 (1981), no. 4, 511-517. (Authors' summary) 824:93070 93E14

(with Ramakrishna, A.) Decentralized regulation of large dyna engineering applications. Large Scale Systems 2 (1981), no. 3, 191–204. (Authors' summary) 82k:93009 93A15

Viswanath, K. (with Srinivasan, Sundarajan; Sastry, Sundaram M. A.) Orthogonality in Banach space and approximation theory. J. Madurai Kamaraj Univ. 8 (1979), no. 2, 93–97. (Geetha S. Rao) 82a:41035 41A65 (46B20)

m, K. (with Sharma, J. P.; Datta, S. K.) On the matched-asymptopic solution to the diffraction of a plane elastic wave by a semi-infinite stress-free boundary of finite width. Wave Motion 4 (1982), no. 1, 1-13. (Authors' summary) 82m:73023 athan, K. S. (with Chakrabarti, Amitabha; Comtet, A.) SU(n) meronlike

configurations and Gribov ambiguities. Ann. Inst. H. Poincaré Sect. A (N.S.) 33 (1980),

no. 4, 345-362. (A. M. Jaffe) 82f:81060 81E99 (53C05)

No. 4, 393-362. (A. M. Jaire) 82:81000 81E59 (33.U.5)
Viswanathan, T. M. *Thirtodução a algebra e arimética. (Portuguese) [Introduction to algebra and arithmetic] Monografias de Matemática [Mathematical Monographs], 33. Instituto de Matemática Pura e Aplicada, Rio de Janeiro, 1979. vii + 358 pp. (loose errata). (Contents) 82k:00002 00A05

de Vita, Joseph See De Vita, Joseph Vita, Vincenzo The theory of conics in Newton's *Principia*. (Italian) *Archimede* 30 (1978),

vita, vincenzo The theory of conics in Newton's Principal. (tanan) Archimeae 30 (1978), no. 3, 130-141. (J. Dicudonne) 28-201046 (D1A45 (70-03)
 Vitanor, Aleksand'r On the solution of a class of generalized hypergeometric differential equations. (Bulgarian) Godišnik Visš. Ped. Inst. Sumen Prirod.-Mat. Fak. 4 (1979), 27-40 (1980). (Vlajko Lj. Koció) 82g:35018 35C05 (33A30)
 A class of solutions of differential equations describing steady-state processes in a medium with variable parameters. (Russian. Bulgarian and English summaries) Teoret.

Prilož. Meh. 12 (1981), no. 1, 4, 8, 49-57. (E. Ungureanu-David) 82m:76063 (33A30, 35C99)

Vitányi, P. M. B. *Lindenmayer systems: structure, languages, and growth functions. Mathematical Centre Tracts, 96. Mathematisch Centrum, Amsterdam, 1980. vii.+209 pp.
ISBN 90-6196-164-5 (Jürgen Dassow) 82e:68054 68D22 (68-02, 68F05, 92A05)
A note on DPDA transductions of {0,1}* and inverse DPDA transductions of the

Dyck set. Internat. J. Comput. Math. 9 (1981), no. 2, 131-137. (Author's summary) 82c:68053 68F05

Vitek, Yehoshua (with Lewin, Mordechai) A system of gaps in the exponent set of primitive matrices. Illinois J. Math. 25 (1981), no. 1, 87-98. (Abraham Berman) 82h:15026 15A48 (05C50)

Viterbi, A. J. (with Omura, Jim K.) Error bounds for intersymbol interference channels. The information theory approach to communication, pp. 127–169, CISM Courses and Lectures, 229, Springer, Vienna, 1978. (See 824:94024) 94A40

Lectures, 229, springer, Vienna, 1978. (See 82a:94024) 94A.40
Vitiello, G. (with De Concini, Corrado) Group contractions in quantum field theory. Mathematical aspects of quantum field theory, Part II (Karpacz, 1978), pp. 199–239, ACTA Univ. Wratislav., 519, Wydawn. Uniw. Wrocław., Wrocław, 1979. (See

82i:81004b) 81:99 (22E70)
Vitjaev, E. E. Regularities in languages of empirical systems and the laws of classical physics. (Russian) Vyčisi. Sistemy No. 79 Émpir. Predskazanie i Raspoznavanie Obrazoo (1979), 45-56, 124. (V. Ja. Kreinovic) 82g:03013 03A05 (00A69, 03B48, 70A05) Detection of regularities expressed by universal formulas. (Russian) Vyčisl. Sistem No. 79 Émpir. Predskazanie i Raspoznavanie Obrazov (1979), 57-59, 124. (V. Ja. Kreinovič) 82g:03034 03B48 (00A69, 03A05, 62A99)

Vitjuk, A. N. Solvability and the difference method for solving a boundary value problem for a system of differential equations of hyperbolic type. (Russian) Ukrain. Mat. 2. 33

(1981), no. 1, 50-53. (T. Stys), 82c:65060 65N05 (35L50)

Vitória, José Generalization of inequalities by Carmichael and Mason and by Parodi. (German summary) Computing 22 (1979), no. 4, 363-365. (E. Deutsch) 82g:15013

Latent roots of lambda-matrices, Kronecker sums and matricial norms. (Czech summary) With a loose Russian summary. Apl. Mat. 25 (1980), no. 6, 395-399. (E. Deutsch) 82a:15019 15A42 (30C15)

Vitruvius See Sleeswyk, Andre W., 82b:01003

Vittenburg, I. See Wittenburg, Jens

Vitulli, Marie A. The obstruction of the formal moduli space in the negatively graded case. Pacific J. Math. 82 (1979), no. 1, 281-294. (Jonathan M. Wahl) 82c:14006

Vituskin, A. G. Approximation of entire functions and signal coding with finite spectrum. (Russian) The theory of the approximation of functions (Proc. Internat. Conf., Kaluga, 1975) (Russian), pp. 83-89, "Nauka", Moscow, 1977. (I. V. Ostrovskii) 82b:30024 30D15 (26C05, 30E10, 41A46, 94A24)

(with Arakeljan, N. U.; Vladimirov, V. S.; Gončar, A. A.) Mhitar Mkrtičevič Džrbašjan (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 34 01A70

(1979), no. 2(206), 235-240. (Editors) 82d:01025

Vivaldi, Franco (with Cirikov, B. V.; Ford, Joseph) Some numerical studies of Arnold diffusion in a simple model. Nonlinear dynamics and the beam-beam interaction (Sympos., Brookhaven Nat. Lab., New York, 1979), pp. 323-340, AIP Conf. Proc., 57, Amer. Inst. Physics, New York, 1980. (See 82g:78001) 78A55 (65P05)

(with Greene, John M.; MacKay, R. S.; Feigenbaum, Mitchell J.) Universal behaviour in families of area-preserving maps. Phys. D 3 (1981), no. 3, 468-486. [Frederick R. Marotto) 82m:58041 58F14 (76F99)

(Frederick R. Marotto) 82m:58041 58F14 (76F99)

Vivaldi, Maria Agostina (with Garroni, Maria Giovanna) Bilateral inequalities and implicit unilateral systems of the nonvariational type. Manuscripta Math. 33 (1980/81), no. 2, 177-215. (Alfonso Castro) 82i:49006 49A29 (35J85, 60H99)

Viviani, Alessandro On the possibility of reducing the distortion in estimation of the

parameters of an incorrectly specified relationship by using a priori information. (Italian. English and French summaries) Statistica (Bologna) 41 (1981), no. 1, 141-147. (Adolfo Gili) 82h:62111 62J05

Vivrot, T. M. (with Homenko, M. P.) Mutual interrelationship of the ideas of matrix theory and graph theory in their historical development. II. (Russian) Questions on the history of mathematical natural science, pp. 97-108, 141, Akad. Nauk Ukrain. SSR, Inst. Mat.,

Kiev, 1979. (Authors' summary) 82k:01025 01A55 (05-03, 15-03, 94-03) Vizgin, V. P. ★"Эрлангенская программа" в физика. (Russian) [The "Erlangen program" and physics] "Nauka", Moscow, 1975. 112 pp. (Editors) 82f:00022 (01A55, 01A60)

(with Polak, L. S.) Noether's theorem in the history of physics. (Russian. English summary) History and methodology of the natural sciences, No. XXII: Physics (Russian), pp. 99-110, Moskov. Gos. Univ., Moscow, 1979. (D. ter Haar) 82c:70001 70-03 (01A60, 49C99, 49H05, 70H99, 81C99)

(with Smorodinskii, Ja. A.) From the equivalence principle to the equations of gravitation. Uspehi Fiz. Nauk 128 (1979), no. 3, 393-434 (Russian); translated as Soviet Phys. Uspekhi 22 (1979), no. 7, 489-513 (1980). (H. Treder) 82g:01033

★Редятивистская теория тяготения. (Russian) [The relativistic theory of gravitation] Истоки в формирование, 1900–1915. [Sources and formation, 1900–1915] "Nauka", Moscow, 1981. 352 pp. (H. Treder) 82m:01051 01A60 (53-03, 83-03)

Vizitiu, V. N. Continuation of pseudonorms of fields. (Russian) Rings, algebras, modules. Mat. Issled. No. 62 (1981), 3-8, 148. (Witold Wieslaw) 82j:12034

Viznjuk, G. I. The alternate-triangular method for the solution of a system of two fourth-order differential equations. (Russian) Some numerical methods, pp. 11-16, 38-39, Preprint 80, 40, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (See 65N10

SZECSOUZ)

Vjazorik, A. P. The problem of synthesis of a system taking account of informational limitations of feedback channels. (Russian)

Mathematical methods of optimization and structuring of systems (Russian), pp. 36–42, 166–167, Kalinin, Gos. Univ., Kalinin, 1980. (Author's summary) 82e:93045

Synthesis of linear systems with constraints on the control. (Russian) Izv. Vysš.

Učebn. Zaved. Matematika 1980, no. 3, 8-11. (S. P. Bingulac) 82e:93049 93C05
V'Juga, A. A. Gradient of the field of directions along the normal to the trajectory and the third integral. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 4, 80-86, 118. (Author's summary) 82e:85001 85A05 (58F40,

870

Vlach, M. Approximation operators in optimization theory. (German sum mary) Z. Oper. Res. Ser. A-B 25 (1981), no. 1, A15-A23. (Author's sum nary) 82k:90104

Vlachos, K. (with Jannussis, A. D.; Papatheou, V.) Statistical mechanics and the quantum friction. Phys. Lett. A 77 (1980), no. 2-3, 112-114. (Authors' summary) 82h:82040 82A35 (35Q20)

(with Jannussis, A. D.; Filippakis, P.; Filippakis, Th.; Zisis, V.) Quantization of mass coordinate-dependent Hamiltonian. Lett. Nuovo Cimento (2) 31 (1981), no. 8, 298-302. (F. R. Halpern) 82h:81020 81C05

(with Jannussis, A. D.; Leodaris, A.; Papatheou, V.; Patargias, N.) Quantum friction in a periodic potential. *Phys. A* **106** (1981), *no.* 3, 611–621. (From the summary) 81C05 (82A60)

scu, Ion Formulas for the com utation of the moments of the number of occurrences of a transient state and of the absorption time in a homogeneou Markov chain. (Romanian. English summary) Stud. Cerc. Mat. 32 (1980), no. 6, 715–720. (Harry I. Cohn) 82h:60135 60J10

irov, A. A. (with Sirkov, D. V.) The renormalization group and ultraviolet asymptotics. Uspehi Fiz. Nauk 129 (1979), no. 3, 407-441 (Russian); transleted as Soviet Phys. Uspekhi 22 (1979), no. 11, 860-878 (1980). (Authors' summary) 82x81028

(with Klepcyn, A. F.; Koziakin, V. S.; Krasnosel'skii, M. A.; Lifsic, E. A.; Pokrovskii, A. V.) Vector hysteresis nor earities of the von Mises-Tresca type (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 3, 581-584. (Petr Procházka) 82h-73035 73E05 (34G20)

dimiror, S. A. Symmetry groups of Lagrangians of chiral fields taking values in S^2 . (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 3, 410-413. (B. Geyer) 82b:81100 81E99 (22E70, 58F07, 58F35)

tomorphic systems of scalar fields. (Ru n. English sur 46 (1981), no. 1, 44-49. (S. G. Mamaev) 82g/81065 81E10 (35L70, 58A15, 58F07)

rov, V. A. Stability of flows of an ideal incompressible fluid with circular flow lines. (Russian) Dinamika Splošn. Sredy No. 42 Dinamika Neodnorod. Židkosti (1979),

(Russian) Dinamika Spicosi. Sreal No. 42 Dinamika recomordi. Ziakosti (1979), 103–109, 130. (Author's summary) 82e:76061 76E99
dimirov, V. S. (with Erugin, N. P.; Mitropol'skii, Ju. A.; Parasjuk, O. S.) Nikolai
Nikolaevič Bogoljubov (on the occasion of his 70th birthday). (Russian) Differencial'nye
Uravnenija 15 (1979), no. 8, 1347–1359. (Editors) 82:01152 01A70 (34–03)

(with Mitropol'skii, Ju. 4.; Parasjuk, O. S.) A survey of the major papers of N. N. Roljubov in mathematics and theoretical physics. (Russian) *Ukrain. Mat. Ž.* 31 (1979), no. 4, 341-350, 476. (Editors) 82k:01036 01A70

(with Arakeljan, N. U.; Vituškin, A. G.; Gončar, A. A.) Mhitar Mkrtičevič Džrbašjan (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 34 (1979), no. 2(206), 235-240. (Editors) 824:01025 01A70

(with Zav'jalov, B. I.) Tauberian theorems in quantum field theory. (Russian) Current problems in mathematics, Vol. 15 (Russian), pp. 95-130, 228, Akad. Nauk SSSR Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (B. Geyer) 82e81072 81E03

(with Guščin, A. K.; Dezin, A. A.; Millionščikov, V. M.; Pontrjagin, L. S.) Valentin Petrovič Mihailov (on the occasion of his fiftieth birthday). (Russian) Differencial nye Uravnenija 17 (1981), no. 4, 757-762. (Editors) 82g:01077 01A70

dimirskii, Ju. N. Cylindrical measures and p-summing operators. (Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 1, 59-72. (Werner Linde) 82f:28018 28C20 (47B10)

sov, A. A. (with Denisov, V. I.; Logunov, A. A.; Mestvirišvili, M. A.) Gravitational effects in the field theory of gravitation. (Russian. English summary) Teoret. Mat. Fiz. 43 (1980), no. 2, 147–186. (Authors' summary) 82m:83019 83C25 (83B05)

w, A. D. Energy balance of a beam of charged particles and the kinetic power theorem. Radiotehn. i Elektron. 24 (1979), no. 10, 2156-2159 (Russian); translated as Radio Engrg. Electron. Phys. 24 (1979), no. 10, 134-136 (1980). (From the text) 82g:78011

sov, L. P. Properties of generalized elements of the best approximation. (Russian) Mat. Zametki 24 (1978), no. 4, 513-522, 590. (Author's summary) 82c:46022 46R20 (41A65)

Approximate properties of subspaces of finite codimension in C(Q). (Russian) Mat. Zametki 28 (1980), no. 2, 205–222, 318. (W. W. Breckner) 82b:41027 41A50 (41A65, 41A50 (41A65,

The character of generalized and classical elements of best approximation in relation to subspaces of finite codimension. (Russian) Mat. Zametki 28 (1980), no. 5, 707-716, 802. (J. Reif) 82i:41045 41A65 (46B99)

ov, V. F. (with Kolmogorov, A. N.; Ponomarenko, V. G.; Trofimov, V. M.; Judin, D. B.) Aleksandr Filippovič Timan (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 221-226. (Editors) 82f:01153 01A70

sov, V. V. Description of canonical coefficients of contraction of a quadratic form to a pace of finite codimension. (Russian) Mat. Zametki 28 (1980), no. 4, 589-598, 636. (L. Rodman) 82c:46029 46C99 (15A63)

noteman, accuses (with van Dooren, René) A new look at the brachistochrone robiem. (French summary) Z. Angew. Math. Phys. 31 (1980), no. 6, 785-790. (R. C. Varma) 82j:49031 49D99

ov, A. T. (with Neroslavskii, O. M.) Sur les déformations de l'algèbre des fonctions d'une variété symplectique. (English summary). C. R. Acad. Sci. Paris Sér. I Ma (1981), no. 1, 71–73. (Authors' summary). 82c:58026 58F06 (17B65, 70H99, 81 58F06 (17B65, 70H99, 81B99)

(1901), no. 1, (1-7). (Authors summary) **a.c.:3000**38406 (1/80-), (1/199), (1899)

484, **Vladimir** On functions describing a distribution of zeros of solutions of an iterated linear differential equation of the fourth order. (Czech and Russian summaries) Sb. Pract Přirodověd. Fak. Univ. Palackého v Olomouci Mat. 18 (1979), 103-116. (From the summary) 82e:34034 34C10

sformations of bundles of solutions of a fourth order iterated linear differential equation. (Czech and Russian summaries) Sb. Praci Přirodověd. Fak. Univ. Palackého v Olomouci Mat. 19 (1980), 23–38. (From the text) 82m:34043 34C20

- van Vleck, F. S. See Van Vleck, F. S.
 van Vleck, John Hasbrouck See Van Vleck, John Hasbrouck
 van Vliet, Dirck Selected node-pair analysis in Dial's assignment algorithm. Transporta
 Res. Part B 15 (1981), no. 1, 65-68. (Author's summary) 82e:90110 90C35
- van Vliet, J. C. (with Meertens, Lambert G. L. T.) *An operator-priority grammar for ALGOL 68+. Afdeling Informatica [Department of Computer Science], 173.

 Mathematisch Centrum, Amsterdam, 1981. i+24 pp. (Authors' summary) 82m:68122

h Meertens, Lambert G. L. T.) *An underlying context-free gram ALGOL 68+. Afdeling Informatica [Department of Computer Science], 171.

Mathematisch Centrum, Amsterdam, 1981. 19 pp. (Authors' summary) 82m:68127

V"lkov, L. G. Nonregularity of the classical solution of a quasilinear hyperbolic diagonal system. (Russian. Bulgarian and English summaries) Godišnik Visš. Učebn. Zaved. Priložna Mat. 14 (1978), no. 3, 129–136 (1979). (L. A. Ivanov) 82e:35059 35L60

Kiem Phong The Schensted correspondence and lexicographic matchings on multisubs lattices. SIAM J. Algebraic Discrete Methods 2 (1981), no. 3, 324-332. (Bruce Sagan) 05A17 (05A05, 06A10) 82i:05006

Vo An' Zung (with Muhin, A. B.; To An' Zung) Certain local limit theorems for independent integer-valued random variables. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 5, 9-15, 99. (S. A. Book) 824:60046 60F05

ing plans for power distribution. An. Univ. Craiova Mat. Fiz.-Chim. 6 (1978), 47-50. (Author's summary) 82a:62148 62N05

*Noi modele statistice în studiul durabilității produselor. (Romanian) [New statistical models in durability analysis] With a foreword by Alexandru C. Dorin. With English and Russian summaries. Editura Academiei Republicii Socialiste România, Bucharest, 1980. 156 pp. (I. Văduva) 82k:62191 62N05

(with Isaic-Maniu, Al.) Tolerance limits for the Weibull distribution using the maximum likelihood estimator for the scale parameter. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 24(72) (1980), no. 3, 273-276. (Authors' summary) 82d:62068

A solvable case of the equation of degree five. (Romanian) G (1980), no. 5, 199–200. (J. S. Joel) 82e:10030 10B15 (12F10) nian) Gaz. Mat. (Bucharest) 85

Some inferences on the generalized Gompertz distribution. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 8, 1267-1278. (Madanlal T. Wasan) 82e:62049 62F10

Vodak, F. (with Stastna, J.) Material constants of a mixture. Acta Tech. CSAV 25 (1980), no. 5, 561–574. (C.-C. Wang) 82e:73010 73B99
Vodegel, Ron (with van Rhijn, Johan G.) Being honest about one's intentions: an

egge, non (with van Knji), Johan G. J Beng Ionics about one's michious. an evolutionary stable strategy for animal conflicts. J. Theoret. Biol. 85 (1980), no. 4, 623–641. (J. J. Buckley) 82c:92026 92A15 (90D45)

Vodjanjuk, E. A. Co-atoms in lattices of radicals, torsions and special radicals of algebras of bounded dimension. (Russian) Rings, algebras, modules. Mat. Issled. No. 62 (1981),

Usunneeu amerisson. (Russian) Kings, aigebras, modules. Mat. Issled. No. 62 (1981), 18–37, 148–149. (J. Jirásko) 82g:16012 16A21
 Vodop'janov, S. K. (with Gol'dštein, V. M.; Kopylov, A. P.) On boundary values of quasiconformal mappings in space. Romanian-Finnish Seminar on Complex Analysis (Proc., Bucharest, 1976), pp. 238–261, Lecture Notes in Math., 743, Springer, Berlin, 1979. (Olli Martio) 82e:30025 30C60

Vodop'janov, V. V. Normal interpolation property of a family of Hölder spaces. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 4, 16-17. (From the text) 82e:46052 46E35 (46M35)

Interpolation of the property of complete continuity of operators in the interpolation constructions of A. Calderón. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 2, 14-16. (H. Triebel) 82i:46105 46M35

Voelcker, H. B. (with Requicha, A. A. G.) An introduction to geometric modeling and its applications in mechanical design and production. Advances in information systems science, Vol. 8, pp. 293–328, Plenum, New York, 1981. (See 82k:68001) 00A69

Voelkel, Lutz (with Förster, Michael; Pirling, Christian) Zweiregister-Akzeptoren mit unterschiedlichen Druckbefehlen. Elektron. Informationsverarb. Kybernet. 16 (1980), no. 7, 325-334. (Authors' summary) 824:68050 68F10

oevodin, V. V. (with Svešnikov, A. G.; Tyrtyšnikov, E. E.) An effective numerical method for solving an integral equation of the second kind in problems of electrodynamics. (Russian) Vestnik Moskov, Univ. Ser. XV Vyčisl. Mat. Kibernet. 1980, no. 1, 14-26, 72. (R. Smarzewski) 82e:65136 65R20 (78A45)

odina, L. P. Motion of a rotating cylinder of variable mass when the reactive force changes only the angular velocity of rotation. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 3, 54-58, 92. (Author's summary) 82i:70034 70P05

Vogan, David A., Jr. The size of infinite dimensional representations. Séminaire d'Algèbre Paul Dubreil et Marie-Paule Malliavin, 32ème année (Paris, 1979), pp. 172-178, Lecture Notes in Math., 795, Springer, Berlin, 1980. (Yasuhiro Asoo) 82d:22014 22E47 (with Speh, Birgit) Reducibility of generalized principal series representations. Acta

Math. 145 (1980), no. 3-4, 227-299. (A. U. Klimyk) 82c:22018 22E46 (with Barbasch, Dan) The local structure of characters. J. Funct. Anal. 37 (1980), no. 1, 27-55. (Kenneth Johnson) 82e:22024 22E30 (22E46)

Vogel, Curtis R. Proof that the area of a Pythagorean triangle is never a square. A collection of manuscripts related to the Fibonacci sequence, pp. 43–44, Fibonacci Assoc., Santa Clara, Calif., 1980. (Editors) 82h:51032 51M25 (10A40)

Vogel, Helmut Der finite Standpunkt in Hilberts Programm. On the philosophy of mathematical knowledge (Colloq., Univ. Münster, Münster, 1978/79) (German) pp. 11-25, Königshausen + Neumann, Würzburg, 1981. (B. van Rootselaar) 82h:03064

03Fxx (00A25, 03A05) Vogel, J. (with Marx, B.) Analytizitätseigenschaften der Lösungen nichtlinearer Operatorgleichungen vom Hammerstein-Typ und rekursive Bestimmung ihrer Lösung.

(English and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 9, 371-382. (Jürgen Scheurle) 82f:58033 58E07 (45N05, 47H15, 65J15) Vogel, Kurt ★Beiträge zur Geschichte der Arithmetik. (German) [Contributions to the history of arithmetic] Edited by Ernst H. Berninger. With an introduction by Ivo

Schneider. Wissenschaftsgeschichte. [History of Science] Minerva Publikation, Munich, 1978. 96 pp. (5 plates). ISBN 3-597-10036-8 (Editors) 82i:01080 01A75 Vogel, Robert H. (with Provencher, Stephen W.) Information loss with transform methods in system identification: a new set of transforms with high information content. Math. 1982

Biosci. S0 (1980), no. 3-4, 251-262. (Authors' summary) 82m:92010 92A05 (93E12)
 Vogel, W. O. Eine Klasse von Ellipsenflächen. Abh. Braunschweig. Wiss. Ges. 31 (1980), 73-81. (P. Drägilä) 82e:53010 53A05

Vogel, Wolfgang (with Achilles, Rüdiger) Über vollständige Durchschnitte in lokalen Ringen. Math. Nachr. 89 (1979), 285–298. (J. Ohm) 82e:14060 14M10 (13H10) On Bezout's theorem. Seminar D. Eisenbud/B. Singh/W. Vogel, Vol. 1,

pp. 113-144, Teubner-Texte zur Math., 29, Teubner, Leipzig, 1980. (Allen B. Altman) 82k:14001 14-01 (01A45, 01A55, 01A60, 14-03)

A non-zero-divisor characterization of Buchsbaum modules. Michigan Math. J. 28 (1981), no. 2, 147-152. (Manfred Herrmann) 82j:13027 13H10

(with Achilles, Rüdiger; Schenzel, Peter) Bemerkungen über normale Flachheit und normale Torsionsfreiheit und Anwendungen. Period. Math. Hungar. 12 (1981), no. 1, 49-75. (Manfred Herrmann) 82i:13018 13C99 (14E15)
See also Seminar: Eisenbud, D.-Singh, B.-Vogel, W., 82b:14001

Vogl, Fritz Über eine Integraldarstellung der ganzen Lösungen der Funktional-Differentialgleichungen $\Sigma_{k=0}^{m} a_k D^k y (\lambda^{m-k} z) = f(z)$. Demonstratio Math. 12 (1979), no. 3, 645–655. (T. Kato) 82h:34088 34K05 (30D05, 34A20)

Das Wachstum spezieller analytischer Lösungen der

Funktional-Differentialgleichung $y'(x) = ay(\lambda x) + iby(x)$. (English and Serbo-Croatian summaries) Glas. Mat. Ser. III 15(35) (1980), no. 1, 61–70. (K. Smitalová) 82e:34089 34K25

Über ein System linearer Funktional-Differentialgleichungen. (English and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 1, 7-17. (Author's summary) 82i:34080 34K05 (34K25)

Vogler, Hans Regelflächen mit besonderen ebenen Kurven. I. Regelflächen mit durchweg isotropen Erzeugenden und ebenen Fallinien. Resultate Math. 3 (1980), no. 2, 249-258. (C. Thas) 82b:53009 53A05

Räumliche Zwangläufe mit ebenen Bahnkurven. Second Zagreb-Graz Meeting of Mathematicians (Plitvice, 1980) (German), Ber. No. 162, 17 pp., Bericht, 154-162, Forschungszentrum Graz, Graz, 1981. (H. Brauner) 82j:53008 53A05

Vogt, Andrew (with Carter, David S.) Collinearity-preserving functions between Desarguesian planes. Mem. Amer. Math. Soc. 27 (1980), no. 235, v+98 pp. (T. G. Ostrom) 82b:51009 51A30 (14A99)

(with Carter, David S.) Collinearity-preserving functions between Desarguesian Proc. Nat. Acad. Sci. U.S.A. 77 (1980), no. 7, part 1, 3756-3757. (R. Artzy) 82c:51006 51A30 (12J10)

The isoperimetric inequality for curves with self-intersections. Canad. Math. Bull. 24 (S1), no. 2, 161–167. (H. W. Guggenheimer) 82g:53005 53A04 (52A40, 53C65, (1981), no. 2, 161-167. (H. W. Guggenheimer) 82g:53005

Vogt, Elmar (with Zieschang, H.; Coldewey, Hans-Dieter) ★Surfaces and planar discontinuous groups. Translated from the German by John Stillwell. Lecture Notes in Mathematics, 835. Springer-Verlag, Berlin-New York, 1980. x + 334 pp.

ISBN 3-540-10024-5 (David Singerman) 82h:57002 57Mxx (20Fxx, 30F35) Vogt, Renate ★Cobordismus von hochzusammenhängenden Knoten. (German) [Cobordism of highly connected knots] Dissertation, Rheinische Friedrich-Wilhelms-Universität, Bonn, 1978. Bonner Mathematische Schriften [Bonn Mathematical Publications], 116. Universität Bonn, Mathematisches Institut, Bonn, 1980. ii + 107 pp. (J. P. Levine) 82c:57016 57R40 (57Q45)

Vogtmann, Karen Spherical posets and homology stability for O_{n.n}. Topology 20 (1981), no. 2, 119-132. (A. A. Ranicki) 82d:18016 18F25

ovskaja, K. F. (with Kas'janov, V. A.; Udarcev, E. P.) Identification algorithms with nonlinear tunable models. (Russian) Kibernet. i Vyčisl. Tehn. No. 50 (1980), 95–101, 108. (Authors' summary) 82e:93085 93D15 (93B30)

icehovskii, S. A. (with Makarov, V. L.) Estimation of the rate of convergence of difference schemes in eigenvalue problems for convex domains. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1035-1038. (From the introduction) 821:65107 65N25

Voiculescu, Dan (with Pimsner, M.; Popa, Sorin) Homogeneous C*-extensions of C(X) & K(H). I. J. Operator Theory 1 (1979), no. 1, 55-108. (Maurice J. Dupré) 82e:46093a 46M20 (47D25, 58G12)

(with Pimsner, M.) Exact sequences for K-groups and Ext-groups of certain cross-product C*-algebras. J. Operator Theory 4 (1980), no. 1, 93-118. (Vern Paulsen) 82c:46074 46L05 (46M20, 58G12)

(with Pimsner, M.) Imbedding the irrational rotation C*-algebra into an AF-algebra. J. Operator Theory 4 (1980), no. 2, 201-210. (David Handelman) 82d:46086 (16A54)

(with Pimsner, M.; Popa, Sorin) Homogeneous C^* -extensions of $C(X) \otimes K(H)$. II. J. Operator Theory 4 (1980), no. 2, 211-249. (Maurice J. Dupré) 82e:46093b (47D25, 58G12)

Remarks on the singular extension in the C*-algebra of the Heisenberg group. J. rator Theory 5 (1981), no. 2, 147-170. (Claude Schochet) 82m:46075 (22D25, 46L05, 81D05)

Voigt, Detlef Groupes algébriques infinitésimaux résolubles et leurs représentations linéaires irréductibles. Séminaire d'Algèbre Paul Dubreil 31ème année (Paris, 1977-1978), pp. 48-68, Lecture Notes in Math., 740, Springer, Berlin, 1979. (S. Donkin) 82b:20063 20G15 (17B50)

Voigt, H. (with Bandilla, A.) The density matrix for single-mode light after k-photon absorption. (German sum mary) Ann. Physik (7) 38 (1981), no. 2, 137-142. (Authors' 81K05 summary) 82i:81178

Voigt, Jürgen (with Dierolf, Peter) Calculation of the bidual for some functions spaces. ible distributions. Math. Ann. 253 (1980), no. 1, 63-87. (Olaf von Grudzinski) 824:46060 46F05 (46A20)

A perturbation theorem for the essential spectral radius of strongly continuous nigroups. Monatsh. Math. 90 (1980), no. 2, 153-161. (L. J. Wallen) 82b:47053 47D05 (47A10)

(with Greiner, Günther; Wolff, Manfred) On the spectral bound of the generator of igroups of positive operators. J. Operator Theory 5 (1981), no. 2, 245-256. (J. A. Goldstein) 82h:47039 47D05

Stein) 648-768-7

The H-theorem for Boltzmann type equations. J. Reine Angew. Math. 326 (1981),

–213. (Carlo Cercignani) 82;82045

82A40 (76P05) 198-213. (Carlo Cercignani) 82j:82045

Volkov, G. K. Element indexes and subdirect indecomposability of nilpotent semigroups. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 11, 1437-1438. (From the text) 20M10

Volna, O. A. (with Anisimov, V. V.; Sereda, V. I.) Choice of optimal checking times for a semi-Markov system with failures. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 6, 79-82. (From the summary) 82:62135 62N05

lovič, V. M. Questions of decision-making in two-level hierarchical systems. (Russian) Complex control systems (Russian), pp. 42-54, 95, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. (Author's summary) 824:90116 90C30
Voinovič, P. A. (with Zmakin, A. I.; Popov, F. D.; Fursenko, A. A.) Numerical study of

uities of complex configurations. (Russian) Ž. Vyčisl. Mat. i flows of a gas with discontin Mat. Fiz. 19 (1979), no. 6, 1608-1614, 1632. (Authors' summary) 82h:76033 76N99 (65R99, 76L05)

(1981), no. 2, 191–207. (Roy Dyckhoff) 82h:57013 57N05 (18F20, 54C10)

Voitišek, L. V. See Vojtišek, L. V.

Voitišin, Ju. V. Algorithms for solving for the minimal flow in a network. Kibernetika (Kiev) 1980, no. 1, iv, 116-118, 152 (Russian); translated as Cybernetics 16 (1980), no. 1, -134. (From the text) 824:90057 90B10 ler, J. (with Brüggemann, R.) Eine Beschreibung von Hückel-Parametern mit Hilfe 131-134. (From the text) 82d:90057

von Kennzahlen. (English summary) Z. Naturforsch. A 34 (1979), no. 12, 1463-1466. (Authors' summary) 82he81150 81G55 (58C28)
Voitovič, N. N. (with Savenko, P. A.) Synthesis of antennas from a specified amplitude

pattern and related problems in quasioptics (review). Radiotehn. i Elektron. 24 (1979), no. 8, 1485-1500 (Russian); translated as Radio Engrg. Electron. Phys. 24 (1979), no. 8, 1-13 (1980). (Authors' summary) 820:78027 78A50
Vojtńś, Peter (with Balcar, Bohuslav; Simon, Petr) Refinement and properties and

extending of filters. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 11-12, 535-540 (1981). (Authors' summary) 82h:06019 06E05 (03G05, 04A20,

54A20, 54D40, 54H10) (with Gavalec, Martin) Remarks to a modification of Ramsey-type theorem

nent. Math. Univ. Carolin. 21 (1980), no. 4, 727-738. (Walter A. Deuber) 82i:05053 05C55 (04A20, 06A10)

(with Balcar, Bohuslav; Simon, Petr) Refinement properties and extensions of filters in Boolean algebras. Trans. Amer. Math. Soc. 267 (1981), no. 1, 265-283. (Sabine Koppelberg) 82k:06014 06E05 (03E05, 03E35) Koppelberg) 82k:06014

Vojtišek, L. V. (with Blinov, N. I.) Construction of cubature formulas with regular boundary layer for rational polyhedra. (Russian) Theory of cubature formulas and the application of functional analysis to problems of mathematical physics (Proc. Sem. S. L. Sobolev, No. 1, 1979) (Russian), pp. 5–15, 154, Trudy Sem. S. L. Soboleva, No. 1, 1979, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1979. (James D. Fabrey) 82e:65026 65D32 (41A55)

Vojvodić, Gradimir D. (with Ušan, Janez; Šelelja, B.) Generalized ordering and partitions Mat. Vesnik 3(16)(31) (1979), no. 2, 241-247. (Derek C. J. Burgess) 82j:06010 06A1

On the II e-theorem for a many-valued predicate calculus. (Serbo-Croatian. English summary) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 127-131 (1980). (G. E. Minc) 82d:03036 03B50 (03B10)

Vokurka, Karel Power spectrum of the periodic group pulse process. Kybernetika (Prague) 16 (1980), no. 5, 462-471. (Author's summary) 82a:94027 94A14

Volauf, Peter The measure extension problem on ortholattices. (Slovak and Russia summaries) Acta Fac. Rerum Natur. Univ. Comenian. Math. 36 (1980), 171-177. (Przemysław Kranz) 82g:28012 28A60 On extension of maps with values in ordered spaces. (Russian su

Slovaca 30 (1980), no. 4, 351-361. (Przemysław Kranz) 82c:28016 28B15

Vol'berg, A. L. The completeness of the rational fractions in weighted L^p-spaces on the circle. (Russian) Funkcional. Anal. i Priložen. 15 (1981), no. 2, 69-70. (A. Olevskii)

82i:30005
 30B60 (42/C30, 46/E30)
 Volkenko, M. V. (with Starčenko, A. A.) Semantics of questions in natural language.
 (Russian) Studies in logical methodology (Russian), pp. 265–284, Moskov. Gos. Univ., Moscow, 1980. (Roman Murawski) 82d:03044
 03B65

Volčenkov, S. G. (with Buličev, S. F.) Optimal plane packings of trees. (Russian) Heuristic algorithms of optimization (Russian), pp. 36-68, Jaroslav. Ges. Univ., Yaroslavl', 1978. (K. Zimmermann) 82g:65032 65K05 (05C70, 52A45, 90C99)

Volevič, L. R. (with Gindikin, S. G.) Sur le problème mixte pour des opérateurs différentiels à partie quasi-homogène. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980). no. 2, A107-A110. (Authors' summary) 82a:35063 35L35

(with Voskresenskii, G. P.; Zabrodin, A. V.; Kolmogorov, A. N.; Oleinik, O. A.; Tihomirov, V. M.) Konstantin Ivanovič Babenko (on the occasion of his 60th birthday). (Russian) Uspehi Mat. Nauk 35 (1980), no. 2(212), 231-239. (Editors) 82g:01078

(with Gindikin, S. G.) The method of energy estimates in the mixed problem. (Russian) Uspehi Mat. Nauk 35 (1980), no. 5(215), 53-120, 271. (Alexander Doktor) 35L35 (35S15) 82c:35042

Voličenko, I. B. A variety of Lie algebras connected with standard identities. I. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 1, 23-30, 140. (V. A. Artamonov) 82e:17011a 17B05 (08B99)

A variety of Lie algebras connected with standard identities. II. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 2, 22-27, 139-140. (V. A. Artamonov) 82e:17011b 17B05 (08B99)

Volintiru, Constantin On the Radon-Nikodým property in Banach spaces. Rev. Ro Math. Pures Appl. 26 (1981), no. 6, 905-919. (Z. Lipecki) 82k:46031 46B22 46B22 (28B05,

Völk, H. J. (with Jones, F. C.; Morfill, G. E.; Röser, S.) Collisions between grains in a turbulent gas. Astronom. and Astrophys. 85 (1980), no. 3, 316-325. (F. C. Auluck) 82b:85009 85A30 (76F05)

Volk, Wolfgang (with Töpfer, Hans-Joachim) Die numerische Behandlung von Integralgleichungen zweiter Art mittels Splinefunktionen. (English summary) Numerical treatment of integral equations (Workshop, Math. Res. Inst., Oberwolfach, 1979), pp. 228-243, Internat. Ser. Numer. Math., 53, Birkhäuser, Basel, 1980. (Rolf Leis) 65R20 82f:65141

- Remistein, M. V. Information theory and biological membranes. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 1, 237-240. (Editors) 82ac9202 92A05 (80A15) (with Livlic, M. A.; Gurija, G. T.; Belincev, B. N.) Positional differentiation as pattern formation in reaction-diffusion systems with permeable boundaries. Bifurcation sion system is. J. Math. Biol. 11 (1981), no. 3, 295-310. (J. Smoller) 82i:92009 (35B32, 35K55, 58F14)
 - (with Belincev, B. N.; Livšic, M. A.) Self-organisation as a result of effective alocality. Phys. Lett. A 82 (1981), no. 8, 375-377. (Authors' summary) 82b:92009 92A09 (35K55, 80A20)
 - (with Belincev, B. N.; Livšic, M. A.) Pattern formation in systems with nonlocal interactions. Z. Phys. B 44 (1981), no. 4, 345-351. (Authors' summary) 82m:92020
- klein, Helmut Transitivitätsfragen bei linearen Liegruppen. Arch. Ma (1981), no. 1, 23-34. (H. Salzmann) 82i:57032 57S25 (22E15, 51H99)
- lo On modifying constructed normal numbers. (French summary) Ann. Fac. Sci. Toulouse Math. (5) 1 (1979), no. 3, 269-285. (M. Mendès France) 82a:10062 10K25
- Volkmann, Lutz (with Doppel, Karl) Koeffizientenabschätzungen für Funktionen, deren erste Ableitung beschränktes Argument hat. Ann. Acad. Sci. Fenn. Ser. A 1 Math. 4 (1979), no. 2, 259–265. (Ch. Pommerenke) 82g:30031 30C50
 Volkmer, Hans Integralrelationen mit variablen Grenzen für spezielle Funktionen der
- chen Physik. J. Reine Angew. Math. 319 (1980), 118-132. (J. Meixner) 824:33017 33A55 (33A45, 35C99, 45B05)
- Volkmer, Reinhard (with Barthel, Woldemar; Haubitz, Imme) Thomsensche Minimalflächen—analytisch und anschaulich. Resultate Math. 3 (1980), no. 2, 129–154. (K. Strubecker) 82f:53010 53A15
- Volkodavov, V. F. (with Lomonosova, T. B.) A class of generalized solutions for the Euler-Darboux equation with parameters of various signs. (Russian) Kuibyšev. Gos. Ped. dy 232 (1979), Differencial. Uravnenija i Mat. Fiz. No. 1, 8-12. (V. Ďurikovič) 82b:35096
 - Ped. Inst. Naučn. Trudy 232 (1979), Differencial. Uravnenija i Mat. Fiz. No. 1, 113-119.
- (D. K. Givazava) 82:35133 35M05

 Volkov, A. A. (with Minaev, Ju. N.) Use of the heuristic self-organization principle in synthesizing solution algorithms for optimization problems in computer systems. at. i Vyčisl. Tehn. (Riga) 1981, no. 1, 52-58, 99 (Russian); translated as Auton Control Comput. (65K05, 68C25) ut. Sci. 15 (1981), no. 1, 42-47. (Authors' summary) 82m:90123
- kov, E. A. An exponentially converging method of solving the Laplace equation on polygons. (Russian) Mat. Sb. (N.S.) 109(151) (1979), no. 3, 323-354, 478. (N. N. Volkov, E. A. An expo Janenko) 82b:65142 65N30
- Volkov, E. F. (with Eršov, N. N.) Canonical forms of multidimensional systems that are autonomous with respect to groups of state variables. (Russian) Voprosy Teor. Sister Automat. Upraclenija No. 5 (1980), 3-9, 153. (Authors' summary) 82i:93024 93B20 Volkov, E. I. (with Poležaev, A. A.) On the possible mechanism of cell cycle
- synchronization. Biol. Cybernet. 41 (1981), no. 2, 81-89. (From the introdu 92A09 (58F14)
- Volkov, Ju. I. Distributions of type B and their applications. (Russian. English summar Teor. Verojatnost. i Mat. Statist. 22 (1980), 15-24, 162. (M. Skalsky) 82a:60018 60F05 (41A35)
- Volkov, M. V. (with Vernikov, B. M.) Almost chain varieties of alternative rings (Russian) Ural. Gos. Univ. Mat. Zap. 11 (1979), no. 3 Issled. po Sovremen. Algebre, 22-39, 209. (Harry F. Smith) 82≈17012 17D05

 Finiteness of the basis of identities of certain associative rings. (Russian) Sibirsk.
- Mat. Ž. 22 (1981), no. 4, 79-87, 229. (V. N. Latyšev) 82k:16023
- Vol'kovič, V. E. Normed rings generated by generalized convolutions. (Russian) Problems pp. 12–18, 123, "Vsesojat. Nauč.-Issled. Inst. Sistem. Issled.", Moscow, 1980. (W. A. Woyczyński) 82e:60025 60E05 (43A05, 46199, 60B15) of stability of stochastic models (Proc. Fourth All-Union Sem., Palanga, 1979) (Russian), 60E05 (43A05, 46J99, 60B15)
- skii, M. I. (with Kabalevskii, A. N.) Conditions for the existence of a stationary mode in priority queues with switching losses. Avtomat. i Telemeh. 1980, no. 4, 35-40 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 4, part 465-470. (G. C. Jain) 82j:60179 60K25
- Volle, Michel ★Analyse des données. (French) [Data analysis] Collection "Économie et Statistiques Avancées". Série: École Nationale de la Statistique et de l'Administration que et du Centre d'Études des Programmes Économique Paris, 1978. 266 pp. ISBN 2-7178-0158-8 (Alain Pousse) 82m:62131 62H25
- Voller, V. R. (with Cross, Mark; Walton, P. G.) Assessment of weak solution numerical iques for solving Stefan problems. Numerical methods in thermal problems (Proc. First Internat. Conf., Univ. College, Swansea, 1979), pp. 172–181, Pineridge, Swansea, 1979. (See 82g:80001) 80A20 (35K05, 35R30)
- ar, R. Cellular spaces and parallel algorithms—an introductory survey. Parallel -parallel mathematics (Munich, 1977), pp. 49-58, North-Holland, Amsterdam, 1977. (See 82k:68003) 68C05
- buev, I. P. Plane waves on the sphere and some of their applications. (Russian. English summary) Teoret. Mat. Fiz. 45 (1980), no. 3, 421-426. (S. Ju. Priščepionok) 82c:43012 43A85 (33A45, 81E99)
- skii, A. I. Mathematical achievements of Aryabhata. Proceedings of the Sympo on the 1500th Birth Anniversary of Aryabhata I (New Delhi, 1976). Indian J. Hist. Sci. 12 (1977), no. 2, 167–172. (Editors) 82j:01023 01A32
 - Indian mathematics and al-Birūni. (Russian, English summary) History and ethodology of the natural sciences, No. XX (Russian), pp. 49-57, Moskov. Gos. Univ., Moscow, 1978. (E. S. Kennedy) 82g:01012 01A30
- Volodin, I. N. Lower bounds for average sample size in the tests of goodness-of-fit and homogeneity. (Russian. English summary) Teor. Verojatnost. i Primenen. 24 (1979), no. 3, 637-645. (Jana Jurečková) 82e:62125 62L10
- Volodin, N. A. (with Azlarov, T. A.) Laws of large numbers for identically distributed Banach space valued random variables. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 3, 3-4. (Z. G. Gorgadze) 82e:60008 60B12
 - On certain moment characteristics that are used in estimating probabilities of large

- deviations in the strong law of large numbers. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 5, 16-22, 99. (S. A. Book) 824:60057 60F15 (60F10)
- FIE.-Mai. Nain. 1390, no. 3, 10-22, 59. (S. A. Book) \$24:60057 60F15 (60F10) (with Azlarov, T. A.) The laws of large numbers for identically distributed Banach space-valued random variables. (Russian. English summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 3, 584-590. (M. M. Leonenko) \$24:60014 60B12
 Volodina, L. N. (with Malevič, T. L.) Upper and lower bounds for factorial moments of the number of retros of records. er of zeros of a Gaussian process. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 4, 26-33, 104. (Hiroshi Sato) 82a:60052 60G15
 - Inequalities of double exponential type for distribution of the maximum of a Gaussian process on the left semiaxis. (Russian) Dokl. Akad. Nauk UzSSR 1981, no. 5,
- Caussian process on the lext semants (cussian) Dokt. Andu. Value 02358 6–7. (From the text) 824:50088 60G15 logodskii, A. V. (with Anšelevič, V. V.) Laplace operator and random walk on
 - one-dimensional nonhomogeneous lattice. J. Statist. Phys. 25 (1981), no. 3, 419-430. (Authors' summary) 82k:82002 82A05 (60J15, 60K35)
 - (with Anselevič, V. V.) Random walk on a one-dimensional inhomogeneous lattic J. Phys. A 15 (1982), no. 1, 185-197. (Authors' summary) 82k:82057 82A70 (60K: ohin, V. A. Approximate solution of multidimensional weakly singular and singu 82A70 (60K35)
- integral equations. (Russian) Izv. Vysš. Učebn. Zaved. Matema ntika 1981. no. 3, 21-27. (L. B. Rall) 82g:45019 45L10 (45G05, 47G05)
- okitin, E. P. Representation of continuous piecewise-affine functions. (Russian) Upravljaemye Sistemy No. 19 (1979), 14-21, 78. (Hans G. Bothe) 82h:26020
- (with Gil'derman, Ju. I.) Realization of flows by continuous piecewise-affine
- systems. (Russian) Sibirsk. Mat. Z. 22 (1981), no. 2, 225-229, 239. (Ju. E. Gliklih) 58F09 (34C20)
- ovskaja, S. N. (with Karčevskii, M. M.; Ljaško, A. D.) Difference schemes for some problems of physically and geometrically nonlinear bending of plates. (Russian) Programming and numerical methods (Russian), pp. 6–18, Kazan. Gos. Univ., Kazan, 1978. (R. Kodnár) 82c:73049 73K10 (65N10)
- Difference scheme for a problem of strong bending of circular thin plates. (Russian) Programming and numerical methods (Russian), pp. 19–37, Kazan. Gos. Univ., Kazan, 1978. (D. P. Rašković) 82;73045 73K10 (65M10)
- (with Karčevskii, M. M.) An iteration method of solution of systems of strong bending of thin plates. (Russian) Computational methods and computer software (Russian), pp. 46-53, Kazan. Univ., Kazan, 1979. (L. P. Lebedev) 82a:73031
- (with Dar'in, N. A.; Levanov, E. I.; Lacabidze, G. S.) Self-similar
- problems of two-temperature magnetohydrodynamics. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 131, 32 pp. (Authors' summary) 82j:76097 76W05 (with Levanov, E. I.) Some self-similar problems of gas dynamics with account taken of complementary nonlinear effects. (Russian) Differencial'nye Uravnenija 17 (1981), no. 7, 1200-1213, 1341-1342. (Authors' summary) 82i:76069
- Vološin, S. A. Convergence and accuracy of monotone finite-difference approximation of the convergence and accuracy of monotone finite-difference approximation of the convergence and accuracy of monotone finite-difference approximation of the convergence and accuracy of monotone finite-difference approximation of the convergence and accuracy of monotone finite-difference approximation of the convergence and accuracy of monotone finite-difference approximation of the convergence and accuracy of monotone finite-difference approximation of the convergence and accuracy of monotone finite-difference approximation of the convergence and accuracy of monotone finite-difference approximation of the convergence and accuracy of monotone finite-difference approximation of the convergence and accuracy of the convergence and accurac first-order inhomogeneous quasilinear equation. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1979, no. 3, 11-19, 72. (J. Mikliček) 82a:65068 65M10
- na, A. A. Numerical sequences realized by a tree. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 5, 43-47, 140. (Ioan Tomescu) 82c:05043 05C05
- osov, V. I. (with Pekker, M. S.) On numerical methods for solving the two-dimen problem for Fokker-Planck equations. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 5, 1341–1346, 1360. (V. P. Kalašnikov) 82d:82064 82A45 (65P05) Volosov, V. M. See Bicadze, A. V., 82a:35001
- ova, I. G. See Bicadze, A. V., 82a:35001
- Volovikov, A. Ju. The Bourgin-Yang theorem. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Uspehi Mat. Nauk 35 (1980), no. 3(213), 159–162. (Gencho Skordev) 82a:55006 55M20 (55M35)
- no. 3(213), 159–162. (Gencho Skordev) 82a:55006 55M20 (55M3)

 Volper, Dennis J. (with Fredman, Michael L.) Query time versus redundancy trade-offs for range queries. J. Comput. System Sci. 23 (1981), no. 3, 355-365. (From the introduction) 68B15
- oltaire, François Marie See von Borzeszkowski, Horst-Heino; et al., 82i:01021
- Volterra, Vito See Correspondence: Baire, René, 82i:01041 and Symposium: Vito Volterra, Mathematical Models in Biology, 82j:92003
- Volynec, I. A. Comparison of metrics in a space of analytic functions. (Russian) Metric questions of the theory of functions (Russian), pp. 12–15, 157, "Naukova Dumka", Kiev. 1980. (N. I. Skiba) **82e-30074** 30H05 (30C45)
- Volzone, Gaetano (with de Paris, Gennaro) Generators of the group of automorphisms of a class of finite incidence structures. (Italian. English summary) Rend. Mat. (6) 12 (1979), no. 3-4, 477-491 (1980). (From the introduction) 82a:20007 20B25
- Vom Scheidt, Jürgen See vom Scheidt, Jürgen
- n See von Baravalle, Hern
- Von Borries, Dietrich F. W. See von Borries, Dietrich F. W.
- Von Borzeszkowski, Horst-Heino See von Borzeszkowski, Horst-Heino
- Von Chossy, R. See von Chossy, R.
- Von Collani, E. See von Collani, E.
- Von der Heyde, Paul See von der Heyde, Paul Von Eve. A. See von Eve. A.
- Von Golitschek, Manfred See von Golitschek, Manfred Von Grudzinski, Olaf See von Grudzinski, Olaf Von Hohenbalken, B. See von Hohenbalken, B.
- Von Humboldt, Alexander See von Humboldt, Alexander Von Kaenel, Pierre A. Generators of principal left ideals in a noncommutative algebra. Rocky Mountain J. Math. 11 (1981), no. 1, 27-30. (Philippe Piret) 82g:94019
- Some constructions for convolutional and block codes. SIAM J. Algebraic Discrete Methods 2 (1981), no. 2, 121-126. (Author's summary) 82k:94018
- Von Karman, Theodore See von Karman, Theodore
- Von Keviczky, Attila Bela See von Keviczky, Attila Bela
- Vonkomerova, Marta On the extension of positive operators. (Russian summary) Math. Slovaca 31 (1981), no. 3, 251-262. (S. J. Bernau) 82h:06028 06F20 (28B15)
- Von Plato, Jan See von Plato, Jan

Von Renteln, Michael See von Renteln, Michael

Von Rimscha, Michael See von Rimscha, Michael

Von Wahl, Wolf See von Wahl, Wolf

Von Weizsäcker, C. F. See von Weizsäcker, C. F.

Von Westenholz, C. See von Westenholz, C.

Von Wolfersdorf, Lothar See von Wolfersdorf, Loth

Von Wright, Georg Henrik See von Wright, Georg Henrik

Von zur Muehlen, Peter See von zur Muehlen, Peter Voogd, Henk See Nijkamp, Peter, 82c:90090

van de Vooren, A. I. A numerical investigation of the rolling-up of vortex sheets. Proc. Roy. Soc. London Ser. A 373 (1980), no. 1752, 67-91. (H. E. Fettis) 82a:76021 (65P05, 65R20)

(03F0.7), 03F0.9) Therefore, M. (with Győry, Kálmán; Tijdeman, R.) On the equation $1^k+2^k+\cdots+x^k=y^e$. Acta Arith. 37 (1980), 233–240. (C. L. Stewart) 82h:19021 10B15 (10B25)

(with Tijdeman, R.) Bounded discrepancy sets. Compositio Math. 42 (1980/81), no. 3, 375-389. (Robert F. Tichy) 82:10071 10K05

Voorn, Wim J. A class of variate transformations causing unbounded likelihood. J. Amer. Statist. Assoc. 76 (1981), no. 375, 709–712. (Author's summary) 82k:62040 62E10

Vorač, František Subgroups and normal subgroups as systems of ideals. Arch. Math. (Brno) 16 (1980), no. 4, 239-244. (Pl. Kannappan) 82c:20060 20E34

Voraček, Pavel The Friedmann universe and the world potential. Astrophys. and Space Sci. 74 (1981), no. 2, 463-474. (Author's summary) 82f:83100 83F05

ou, Rodiani A coherence theorem for biclosed categories. Eleutheria 1978, 103-150. om the introduction) 82j:18015a 18D15
Coherence in biclosed categories. Eleutheria 1978. 156-181. (Author's summary) (From the introduction) 82j:18015a

82j:18015b

Vorel, Zdenek Continuous dependence on parameters. Nonlinear Anal. 5 (1981), no. 4,

373-380. (Zvi Artstein) 82h:34005 34A10 (45D05)
Vornberger, O. (with Monien, Burkhard; Urmetzer, N.) A consideration of the

travelling-salesman problem using the assignment problem. (German summary) Discrete structures and algorithms (Proc. Conf., Berlin, 1979), pp. 167–179, Hanser, Munich, 1980. (Authors' summary) 82e:90065 90C10 (05C38, 68C25)

Vorob'ev, E. M. Reduction of differential equations with symmetries. (Russian) Izo. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 4, 805-820, 973. (A. Morimoto) 824:58066

58G35 (58F05, 70H20)

Vorob'ev, Ju. L. Hydrodynamic problem of the pitching of a catamaran on shallow water. Izv. Akad. Nauk SSSR Meh. Židk. Gaza 1980, no. 2, 147-151 (Russian); translated as Fluid Dynamics 15 (1980), no. 2, 296-299. (Author's summary) 82b:76012 76B10

Vorob'ev, L. S. (with Zurbenko, I. G.) Bounds for the power of $C(\alpha)$ -tests and their applications. (Russian. English summary) Teor. Verojatnost. i Primenen. 24 (1979), no. 2, 252-266. (Authors' summary) 82h:62040 62F05

Vorob'ev, N. F. On the solution of the problem of the flow around a wing of finite span in

the linear formulation. (Russian) Izv. Akad. Nauk SSSR Meh. Židk. Gaza 1979, no. 5, 114-125. (Author's summary) 82a:76049 76G99 (76J99) Vorob'ev, N. N. See Vorob'ev, Nikolai Nikolaevič

Vorob'ev, N. N., Jr. Antagonistic games with a convex payoff function. (Russian) Mathematical methods of optimization and structuring of systems (Russian), pp. 60-65, 168, Kalinin. Gas. Univ., Kalinin, 1980. (Author's summary) 82m:90166 90D05 Vorob'ev, N. T. Imbedding of local screens. (Russian) Mat. Zametki 30 (1981), no. 2,

305-311, 316. (Gerhard Pazderski) 82m:20023 20D10

Vorob'ev, Nikolai Nikolaevič A theorem of Bohnenblust, Karlin and Shapley. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 3, 122–124, See also Game theory, 82m:90161 v, Yu. L. See Mary 132. (Author's summary) 82e:90119

Vorob'ev, Yu. L. See Vorob'ev, Ju. L.

Voroncov, E. G. (with Jahno, O. M.) Analytic calculation of the mean thickness of films on rough surfaces. A translation of Gidromeh. (Kiev) 39 (1979), 61-67. Fluid Mech. - Soviet Res. 9 (1980), no. 5, 33-41 (1981). (Authors' summary) 82d:76085 76R99

Voronin, A. N. On the raising of effectiveness of statistical estimates of parameters of ergatic systems. (Russian) Kibernet. i Vyčisl. Tehn. No. 50 (1980), 22-31, 106. (Author's mary) 82e:93106 93E10 (92A09)

Voronin, S. M. Analytic classification of germs of conformal mappings $(C,0) \rightarrow (C,0)$. (Russian) Funkcional. Anal. i Priložen. 15 (1981), no. 1, 1-17, 96. (G. N. Himšiašvili) 82h:58008 58C27 (30C35)

Voronjec, Konstantin P. See Andelić, Tatomir P.; et al., 82b:01033

Voronkov, E. O. (with Rossihin, V. V.) On the solution of a nonhomogeneous Schrödinger equation with a model pseudopotential. (Russian. English summary) Teoret. Mat. Fiz. 48 81C05 (81H99) (1981), no. 1, 121-128. (Authors' summary) 82i:81029

Vorontsov, Ye. G. See Voroncov, E. G. Voropanov, S. A. (with Ioščihes, A. P.) A method for accelerating the convergence of monotone iteration processes. (Russian. Tajiki summary) Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk 1980, no. 2(76), 82-85. (Authors' introduction) 65J10 (47B55, 65B99, 65H10)

Vörös, József Multistage production planning with concave and linear cost functions. (Hungarian. English and Russian summaries) Szigma—Mat.-Közgazdasági Folyóirat 13 (1980), no. 4, 261–275. (Author's summary) 82i:90055 90B30

Vorus, T. (with Gyurkovics, Eva) On a computational method of the time-optimal control problem. Numerical methods (Third Collog., Keszthely, 1977), pp. 297–314, Collog. Math. Soc. János Bolyai, 22, North-Holland, Amsterdam, 1980. (T. Giec) 82f:49033 (65K10, 93C15)

Vorotnikov, V. I. (with Prokop'ev, V. P.) On stability of motion of linear systems with respect to some of the variables. Prikl. Mat. Meh. 42 (1978), no. 2, 268-271 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 2, 280-283 (1979). (M. Rama Mohana 34D20

On the stability of motion relative to part of the variables for certain nonlinear systems. Prikl. Mat. Meh. 43 (1979), no. 3, 441-450 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 3, 476-485 (1980). (Wolfgang Hahn) 82h:34070

Vorovič, I. I. (with Efimov, N. V.: Korobeinik, Ju. F.: Levin, B. Ja.: Mokriščev, K. K.)

Mihail Grigor'evič Haplanov. (Russian) Uspehi Mat. Nauk 33 (1978), no. 4(202),

203-204. (Editors) 824-01032 01A70
(with Safronenko, V. G.) Use of variational principles in coupled problems of thermoviscoelastic shells. Izv. Akad. Nauk SSSR Meh. Tverd. Tela 15 (1980), no. 4, 166-173 (Russian); translated as Mech. Solids 15 (1980), no. 4, 132-138. (Authors' summary) 82c:73088 73U05 (49H05, 73L99)
Vorožeov, E. V. (with Janenko, N. N.) On the theory of differential analysers of contact

discontinuities in one-dimensional flows. I, II. Comput. & Fluids 9 (1981), no. 1, 1–32. (Authors' summary) 824:76069 76N99 (65P05, 76L05)

Vorozhtsov, Ye. V. See Vovožcov, E. V.

Vorst, Ton Polynomial extensions and excision for K., Math. Ann. 244 (1979), no. 3. 193-204. (Manuel Ojanguren) 82a:13002 13D15 (18G99)

The general linear group of polynomial rings over regular rings (1981), no. 5, 499-509. (Andy R. Magid) 82c:13008 13B10 (13D 13B10 (13D15, 13E99, 20G35) (with Hazewinkel, Michiel) On the Snapper/Liebler-Vitale/Lam theorem on

permutation representations of the symmetric group. J. Pure Appl. Algebra 23 (1982), no. 1, 29-32. (Hiroaki Terao) 82k:20019 20C30 (14M17, 14N10)

Vos, J. W. E. Mixing of direct, ratio, and product method estimators. Statist. Neerlandica

34 (1980), no. 4, 209-218. (Padam Singh) 82;62020 62F11
Voskresenskii, E. V. Asymptotic stability of the equilibrium state of quasilinear systems of differential equations. (Russian. Kazakh summary) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 1, 12-17, 85. (A. Pelczar) 82j:34048 34D05

See also Some questions of the qualitative theory of differential equations and the theory of the control of motion, 82m:34004

Voskresenskii, G. P. (with Čuškin, P. I.) Numerical methods for computation of superso flow around bodies at an angle of attack. (Russian. English summary) Adv. in Mech. 3 (1980), no. 2, 47-95. (Authors' summary) 82k:76043 76J99 (76-02)

(with Volevič, L. R.; Zabrodin, A. V.; Kolmogorov, A. N.; Oleĭnik, O. A.;

Tihomirov, V. M.) Konstantin Ivanovič Babenko (on the occasion of his 60th birthday). (Russian) Uspehi Mat. Nauk 35 (1980), no. 2(212), 231-239. (Editors) 82g:01078

Voss, Clifford I. (with Pinder, George F.) A block iterative-preprocessed technique for efficient finite element simulation of large nonlinear problems. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos... Advances in computer Lehigh Univ., Bethlehem, Pa., 1977), pp. 170-177, IMACS, New Brunswick, N.J., 1977. (See 82a:65004) 65N30

Voss, David A. (with Gorla, Rama Subba Reddy) Higher order numerical solutions for unsteady heat transfer in a two-dimensional wall jet. Numerical methods in thermal problems (Proc. First Internat. Conf., Univ. College, Swansea, 1979), pp. 922-930,

Pineridge, Swansea, 1979. (See 82g:80001) 76D25 (with Oprian, C. A.; Aroian, Leo A.) Moving average models—time series in m-dimensions. Special issue on time series in M dimensions. Comm. Statist

B—Simulation Comput. 9 (1980), no. 5, 467-489. (See 82e:62150) 62M10 (with Oprian, C. A.; Taneia, Vidya S.; Aroian, Leo A.) General considerations and interrelationships between MA and AR models, time series in m dimensions, the ARMA model. Special issue on time series in M dimensions. Comm. Statist. B—Sin Comput. 9 (1980), no. 5, 515-532. (See 82e:62150) 62M10

(with Mastro, R. A.) A quintic spline collocation procedure for solving the Falkner-Skan boundary-layer equation. Comput. Methods Appl. Mech. Engrg. 25 (1981),

no. 2, 129-148. (Authors' summary) 82c:76039 76D10 (65D07) Voss, Edward R. On the isomorphism problem for incidence rings. Illinois J. Math. 24 (1980), no. 4, 624–638. (Uno Kaljulaid) 82f:16020 16A45 (06A10)

ss, Heinrich Positive solutions of superlinear boundary value problems. Proc. Roy. Soc. Edinburgh Sect. A 88 (1981), no. 1-2, 17-24. (Kenneth J. Brown) 824:34025 34B1:

Voß, Klaus Exakte stereologische Formeln und Näherungslösungen für konvexe Körper. (English and Russian summaries) Elektron. Informationsverarb. Kybernet. 16 (1980), no. 8-9, 485-491. (Shigeru Mase) 82;52013 52A22 (60D05, 62M09)

ov, S. V. (with Lecko, V. A.) Canonical decomposition in the group of points of a Lubin-Tate formal group. (Russian) Modules and linear groups. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 103 (1980), 52-57, 156. (Ernst-Wilhelm Zink) 82i:12020 12B25 (14L05)

(with Lecko, V. A.) The Hilbert symbol in an extension of the field of 2-adic numbers. (Russian) Modules and linear groups. Zap. Naučn. Sem. Leningrad. Oidel. Mat. Inst. Steklov. (LOMI) 103 (1980), 58-61, 156. (Helmut Koch) 82m:12012

trikova, L. Ju. Discovery of "discord" in multidimensional random processes. (Russian) Dokl. Akad. Nauk SSSR 259 (1981), no. 2, 270-274. (L. A. Shepp) 82i:60056 60G07 strov, V. K. (with Leonov, M. Ja.) On the theory of shear-crack formation. (Russian)

Dokl. Akad. Nauk SSSR 253 (1980), no. 4, 832-836. (J. L. Nowinski) 824:73074 73M05

Vošvrda, Miloslav (with Pelikán, Emil) On covariance coefficients estimates of finite order moving average processes. Kybernetika (Prague) 17 (1981), no. 2, 169-174. (Authors' summary) 82h:62160 62M10

Vo Thanh Liem An unknotting theorem in Q∞-manifolds. Proc. Amer. Math. Soc. 82

Voukalis, Demetre C. A good solution of the encryption problem using matrix code, distance factor and PN sequences. Internat. J. Electron. 48 (1980), no. 3, 271–274. (Author's summary) 82b:94020 94A99

The distance factor in cryptosystems. Internat. J. Electron. 49 (1980), no. 1, 73-75.

om the introduction) 822:34021 94B99
A new concatenated matrix code with cluster, burst and random error correcting (From the introduction) 82k:94021 abilities. Internat. J. Electron. 49 (1980), no. 5, 345-357. (Author's summary) 82h:94022

94B05 (94B35) Vo Van Tan On the compactification of strongly pseudoconvex surfaces. Proc. Amer. Math. Soc. 82 (1981), no. 3, 407-410. (G. M. Henkin) 82i:32054 32J05 (32F30)

Vork, S. P. Some questions of spectral theory of generalized random fields. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 9, 5-8, 94. (Author's mary) 82k:60119 60G60

Vovalcov, E. V. (with Fedorov, A. V.; Fomin, V. M.) The flow of a gas-coal particle mixture in coal mines with the desorption phenomenon taken into account. A translation of Aeromechanics (Russian), pp. 316-327, "Nauka", Moscow, 1976. Fluid Mech.—Soviet Res. 9 (1980), no. 3, 117-127. (Authors' summary) 82c:80017 80A25
 Vovsi, S. M. Two actions of a subgroup of varieties of groups. (Russian) Lato. Mat. Eżegodnik No. 24 (1980), 192-197, 261. (A. A. Iskander) 82g:20052 20E10 (20E22)

Varieties and triangular products of projective representations of groups. (Russian Sibirak. Mat. Z. 21 (1980), no. 3, 56-62, 236. (A. H. Kuškulei) 82f:20022 2000

(08399)

Lattices of invariant subspaces of group representations. Algebra Universalis 12 (1981), no. 2, 221–223. (From the introduction) 82c:06014 06B15 (20C99)

Two notes on local properties of groups. Simon Stevin 55 (1981), no. 1-2, 27-35. (Delmar L. Boyer) 82j:20062 20E25 (mann, William L. (with Bobisud, L. E.) Predator response to variation of prey density in a patchy environment: a model. Amer. Natur. 114 (1979), no. 1, 63-75. (Authors' summary) 82d:92017 92A15

(with Goetschel, Roy H., Jr.) *Advanced calculus. An introduction to modern analysis. Monographs and Textbooks in Pure and Applied Math., 63. Marcel Dekker, Inc., New York, 1981. xii+678 pp. ISBN 0-8247-6949-X (William Eames) 821:00003 00A06 (00A05, 26-01)

(with Goetschel, Roy H., Jr.) A pseudometric for fuzzy sets and certain related lits. J. Math. Anal. Appl. 81 (1981), no. 2, 507-523. (A. I. Krivoručko) 82g:54025 54C35 (03E72, 54A40)

Vovtovich, N. N. See Voitovič, N. N.

Vozjakov, V. I. (with Bogoljubov, N. N., Jr.; Plečko, V. N.) Many-boson averages for Dicke-type model systems. (Russian. English summary) Temo. 3, 363-372. (D. Ja. Petrina) 82j:82021 82A15 (81K05) nary) Teoret. Mat. Fiz. 44 (1980),

Vozlinskii, V. I. On the stability of points of equilibrium branching. Prikl. Mat. Meh. 42 (1978), no. 2, 259-267 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 2, 270-279 (1979). (Charles C. Conley) 82j:58092

On numerical estimation of the region of asymptotic stability. Questions of the stability of equilibrium branching points. (Russian) Theory of stability and its applications (Russian), pp. 94-100, 299, "Nauka" Sibirsk. Otdel., Novosibirsk, 1979. (Author's

 Summary) 82:93064 93D20 (58F10, 58F14, 65L07)
 Voznjak, L. S. Application of a projection-iteration analogue of the Newton-Kantorovič method to a nonlinear singular integral equation with a Cauchy kernel. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 11, 18-25. (M. Z. Berkolaiko) 82h:45007 45G05 (65R20)

Vrabel, Peter The measure extension theorem for subadditive measures in o-continuous ogics. (Russian summary) Math. Slovaca 31 (1981), no. 2, 141-147. (Beloslav Riečan) 82i:28011 28A60 (03G12, 06D99, 81B10)

Vrable, Joan I. (with Pavel, Nicolae H.) Flow-invariance for differential equations associated to nonlinear operators. An. Stilint, Univ. "Al. I. Cuza" Iaşi Secţ. I a Mat. (N.S.) 25 (1979), suppl., 125-132. (G. S. Ladde) 82e-34067 34G20

The nonlinear version of Pazy's local existence theorem. Israel J. Math. 32 (1979), no. 2-3, 221-235. (Jürgen Weyer) 82a-47064 47H20 (45K05)

Compactness methods and flow-invariance for perturbed nonlinear semigroups. An. Stiint, Univ. "Al. I. Cuca" Iaşi Sect. I a Mat. (N.S.) 27 (1981), no. 1, 117–125. (Ioana Ciorânescu) 82i:47101 47H20 (34G20)

Une méthode de compacité pour une classe d'équations d'évolution non linéaires. (English summary) [A compactness method for a class of nonlinear evolution equations] C. R. Acad. Sci. Paris Sér. I Math. 293 (1981), no. 2, 151-153. (Author's summary) 34G20 (47H15)

Compactness methods for an abstract nonlinear Volterra integro-differential Nonlinear Anal. 5 (1981), no. 4, 355-371. (J. S. W. Wong) 82d:45020 45N05 (45J05, 47H20)

ciu, George Gh. (with Niculescu, Constantin P.) On the integral representation of linear operators on C(S). The significance of Baire space. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 9, 1407-1410. (From the text) 82f:47042 47B38

Vragov, V. N. Formulation and solvability of boundary value problems for higher-order equations of mixed-composite type. (Russian) Mathematical analysis and related mathematical questions (Russian), pp. 5–13, 351, "Nauka" Sibirsk. Otdel., Novosibirsk, 1978. (Author's summary) 82a:35078 35M05 aream, G. G. Equations de Laplace et matrices de Dirac. (English summary) Atti

Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur. 55 (1980), 5-9. (Author's summary) 35J99 (58G05, 81C05)

nceanu, Gheorghe Quelques considérations quasi historiques sur les espaces non holonomes. Proceedings of the National Conference on Nonholono pp. 26–38, Ed. Acad. R.S. România, Bucharest, 1979. (Bernard Rouxel) 82i:01067b 01A72 (53A40)

See also Obituary: Vrănceanu, Gheorghe, 82f:01174

Vrbová, P. A remark concerning commutativity modulo radical in Banach algebras. Comment. Math. Univ. Carolin. 22 (1981), no. 1, 145–148. (Jaroslav Zemánek) 82g:46088 46H15

Vrdoliak. Božo Curvilinear "tubes" in the retraction method and the behaviour of solutions for the system of differential equations. Mat. Vesnik 4(17)(32) (1980), no. 3, 381-392. (V.

Staikos) 82j:34049 34D05 (34C99)

Vrem, Richard C. Continuous measures and lacunarity on hypergroups. Trans. Ann. Math. Soc. 269 (1982), no. 2, 549–556. (K. A. Ross) 82m:43013 43A46 (22Al 43A46 (22A10.

de Vries, J. (with Ludescher, H.) A sufficient condition for the existence of a G-compactification. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 3, 263-268. (Bernard L. Madison) 82b:54055 54H15 (54D35)

(Bernard L. Madison) 82b:54055 54H15 (54D35)

Eze, O. J. (with Wanrooy, G. L.) *Colloquium stochastische spelen. (Dutch)

[Colloquium on stochastic games] MC Syllabus, 39. Mathematisch Centrum, Amsterdam, 1978. v+118 pp. ISBN 90-6196-167-X (Jaap Wessels) 82b:90134 90D15 (90-01, 93E05)

Vrkoč, Ivo (with Chaichian, M.; Fischer, Jan; Molodenskii, S. M.; Nelipa, N. F.) A new expression for the high-energy upper bound on the scattering amplitude. J. Math. Phys. 22 (1981), no. 2, 380-384. (N. D. Sengupta) 82f:81070 81F20 Vrublevskaja, I. N. See Ore, Oystein, 82c:05002

Vrublerskaja, I. N. See Ost, учина V. Seeliger, Hugo
V. Seeliger, Hugo See v. Seeliger, Hugo
Všivkov, V. A. (with Berezin, Ju. A.) ** Метод частиц в динамике разреженной плазмы.

Všivkov, V. A. (with Berezin, Ju. A.) ** Метод частиц в динамике разреженной плазмы. (Russian) [The particle method in the dynamics of a rarified plasma]

Otdel., Novosibirsk, 1980. 96 pp. (M. Drăganu) 82i:82048 82A45 (82A45 (76X05, 82-03) (with Berezin, Ju. A.; Krygin, V. D.) Two-dimensional wave processes in a dispersive medium. (Russian) Ž. Prikl. Meh. i Tehn. Fiz. 1980, no. 6, 50-53, 138. (A.

Radu) 82f:76020 76L05 (35Q20, 76X05)

fam loi Vu See Fam Loi Vu

Vu, D. T. Les grandes inégalités et les termes de libration des satellites I, II et III de Jupiter. (English summary) Astronom. and Astrophys. 94 (1981), no. 1, 140-150. (Author's summary) 82a:70011 70F15

Vu Anh Phuong Behavior of the permanent of a special class of doubly stochastic matrices. Linear and Multilinear Algebra 9 (1980), no. 3, 227-229. (W. Ledermann) 82a:15006 15A15 (15A51)

Vučkov, I. N. (with Damgaliev, D. L.; Ĭončev, Ch. A.) Sequentially generated seco quasi-D-optimal designs for experiments with mixture and process variables.

Technometrics 23 (1981), no. 3, 233-238. (Authors' summary) 82i:62112 62K05

Vugal'ter, S. A. (with Zislin, G. M.) The discrete spectrum of many-particle quantum systems which have no stable subsystems. II. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 3, 69-70. (A. V. Buhvalov) 82d-81027 81C10 (35P05)

hà huy Vui See Hà Huy Vui

in, Jean E. A representation of linear lists with good average time performance 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 266-270, IEEE, New York, 1979. (See **82e:94002**) 68E05 (68C25, 90B10)

(with Flajolet, Philippe; Françon, J.) Sequence of operations analysis for dynamic data structures. J. Algorithms 1 (1980), no. 2, 111-141. (Authors' summary) 82m:68039

(with Raoult, Jean-Claude) Operational and semantic equivalence between recursive programs. J. Assoc. Comput. Mach. 27 (1980), no. 4, 772-796. (Klaus Indermark) 68B10

(with Preparata, Franco P.) The cube-connected cycles: a versatile network for parallel computation. Comm. ACM 24 (1981), no. 5, 300-309. (Authors' summary) 824-69018 68B20

Vuillermot, Pierre-A. Nonlinear dynamics of the infinite classical Heisenberg model: existence proof and classical limit of the corresponding quantum time evolution. Comm. Math. Phys. 76 (1980), no. 1, 1-26. (Author's summary) 82a:82016 82A15

Vuilleumier, M. (with Bojanic, R.) On the rate of convergence of Fourier-Legendre series of functions of bounded variation. J. Approx. Theory 31 (1981), no. 1, 67-79. (Daniel P.

Maki) 82j:42018 42C10

Vujaković, Dušan Ruled surfaces whose generators are rays of a congruence of third order and first class, and whose directrix is a conic section. (Russian. Serbo-Croatian summary) Akad. Nauka Umjet. Bosne Hercegov. Rad. Odjelj. Prirod. Mat. Nauka No. 19 (1980), 25-41. (W. Burau) 82e:14046 14J25 (14N05, 51N35)

Vujčić, V. V. Some properties of feasible directions methods. Numerical optimisation of dynamic systems, pp. 277-287, North-Holland, Amsterdam, 1980. (Author's summary) 90C30 (65K05)

Vujičić, Milan (with Božović, Ivan B.) Irreducible representations of the symmetry groups of polymer molecules. II. J. Phys. A 14 (1981), no. 4, 777-795. (T. Janssen) 82g:20030 20C35 (20H15, 81C40)

(with Damnjanović, Milan) Subgroups of weak-direct products and magnetic axial point groups. J. Phys. A 14 (1981), no. 5, 1055-1063. (T. Janssen) 82f:20078 20H15

Vujičić, V. Covariant differentiation of a scalar over a vector. (Serbo-Croatian) Mat. Vesnik 3(16)(31) (1979), no. 3, 357-360. (Author's introduction) 82e:53031 53A55 (26B12)

Vukajlović, F. R. (with Truskova, N. F.) Algebra of the incomplete integrals of the quantum-mechanical two-center problem. Jadernaja Fiz. 32 (1980), no. 1, 118-127 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 1, 62-66 (1981). (Authors'

(Australia & Solvet J. Nuclear rays. 32 (1900), no. 1, 02-00 (1901). (Auditors summary) 82k-81026 s 81C05 (81D05, 81G55) unan, J. Characterization of Hilbert space. (Serbo-Croatian summary) Glas. Mat. Ser. III 15(35) (1980), no. 2, 301-303. (M. M. Day) 82k:46035 46C10 (46L05)

Vukobrat, M. (with Plavšić, M.) Thermodiffusion in micropolar elastic plates. (Serbo-Croatian. English summary) Acad. Serbe Sci. Arts Glas 311 (1979), no. 44, 53-63. (I. Aganović) 82e:73007 73B05 (73U05)

Vukoslavčević, Petar (with Ašković, Radomir) Méthode de calcul de la couche limite tridimensionnelle. (English and Serbo-Croatian summaries) Teor. Primen. Meh. No. 5 (1979), 163–173. (Claude Demuth) 82e:76042 76D10 (76D15)

Vu Kuok Fong On the spectral theory of scalar operators in Banach spaces. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 5, 1038–1042. (B. Nagy) 82c:47039 47B40 (47A60, 47C05)

Theorems of von Neumann type for some classes of operators. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 8, 8-11, 86. (R. M. Džabar-Zade) 82i:47046 47B38 (47A15, 47B37, 47C15) 47B38 (47A15, 47B37, 47C15)

Vu Kuok Han' (with Zabello, L. E.) On the controllability of time-dependent systems with aftereffect. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 2, 47-53, 140. (A. Halanay) 82f:93013 93B05 (34K05)

Vul, E. B. (with Sinaĭ, Ja. G.) A structurally stable mechanis sm of appearance of invariant hyperbolic sets. Multicomponent random systems, pp. 595-606, Advances in Probability and Related Topics, 6, Dekker, New York, 1980. (Radu Nicolae Gologan) 82f:58064 58F13 (65L07, 86A10)

(with Sinai, Ja. G.) Discovery of closed orbits of dynamical systems with the use of computers. J. Statist. Phys. 23 (1980), no. 1, 27-47. (Radu Nicolae Gologan) 821:58062 58F13 (34C35, 65L07, 76F99, 86A10)

Vulih, B. Z. See Obituary: Vulih, B. Z., 82g:01086

Vulpe, N. I. A polynomial basis of center-affine comitants of a differential system. (Russian) Dokl. Akad. Nauk SSSR 250 (1980), no. 5, 1033-1037. (C. S. Coleman) 82e:34039 34C20 (34A25, 53A55)

Complete algebraic basis for centroaffine invariants of a homogeneous cubic differential system. (Russian) Algebraic invariants of dynamic systems. Mat. Issled. No. 55 (1980), 37-45, 149. (H. Kil'p) 82e:53032 53A55 (34A25, 34C20) (with Kirnickaja, E. F.) Centroaffine invariants of a differential system with cubic

nonlinearities. (Russian) Algebraic invariants of dynamic systems. Mat. Issled. No. 55 (1980), 46-57, 149. (H. Kil'p) 82e:53033 53A55 (34A25, 34C20) piani, Angelo (with Pierini, Stefano) Nonlinear stability analysis in multilayer quasigeostrophic systems. J. Phys. A 14 (1981), no. 5, L203-L207. (J. C. J. Nihoul) 82d:86012 86A35 (35Q20, 76V05)

(with Benzi, Roberto; Sutera, Alfonso) The mechanism of stochastic resonance. J

Phys. A 14 (1981), no. 11, L453-L457. (From the text) 82k:70027 70L05 (58F14)
Vu'o'ng Manh So'n (with Nguyễn Hữ'u Anh) On square integrable factor representations of locally compact groups. Acta Math. Vietnam. 4 (1979), no. 1, 63-70 (1980). (Jonathan erg) 82i:22008 22D10 (22D25)

Vuorinen, Matti Cluster sets and boundary behavior of quasiregular mappings. Math. Scand. 45 (1979), no. 2, 267–281. (Uri Srebro) 82a:30030 30C60 (30D40)

On the boundary behavior of locally K-quasiconformal mappings in space. Ann. Acad. Sci. Fenn. Ser. A I Math. 5 (1980), no. 1, 79-95. (Uri Srebro) 82c:30032

On the existence of angular limits of n-dimensional quasiconformal mappings. Ark. Mat. 18 (1980), no. 2, 157-180. (S. B. Agard) 82h:30016 30C60

Vust, Thierry Foncteurs polynomiaux et théorie des invariants. Séminaire d'Algèbre Paul Dubreil et Marie-Paule Malliavin, 32 ème année (Paris, 1979), pp. 330-340, Lecture Notes in Math., 795, Springer, Berlin, 1980. (H. H. Andersen) 82b:15020

Vũ Trong Tuần On first approximation stability relative to a part of variables. Prikl. Mat. Meh. 44 (1980), no. 2, 211–220 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 2, 151–157 (1981). (A. Somolinos) 82g:34073 34D20

Vuza, Dan An abstract theory of measurability in the sense of Jordan. (Romanian. French summary) Stud. Cerc. Mat. 30 (1978), no. 2, 237-248. (O. Costinescu) 82b:28018

Sur les espaces vectoriels réticulés complexes. Rev. Roumaine Math. Pures Appl. 25 (1980), no. 4, 663-674. (Peter Dodds) 82i:46011 46A40 (47B55)

aja, N. D. (with Javorskaja, I. M.; Beljaev, Ju. N.; Monahov, A. A.; Astaf'eva, N. M.; Ščerbakov, S. A.) Stability, nonuniqueness and transition to turbulence in the flow between two rotating spheres. *Theoretical and applied mechanics (Proc.* 15th Internat. Congr., Univ. Toronto, Toronto, Ont., 1980), pp. 431-443, North-Holland, Amsterdam, 1980. (See 824:00008) 76F99

Vvedens'kli, O. M. The Artin effect in abelian varieties. II. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 45 (1981), no. 1, 23-46, 239. (Reinhard Bölling) 82g:14042 14K15

Vyas, U. D. (with Akolia, G. M.; Joshi, P. S.) On almost causality. J. Math. Phys. 22 (1981), no. 6, 1243-1247. (Nicholas M. J. Woodhouse) 82j:83037 83C99

Vylder, Fl. See De Vylder, Fl.

Vyšenskii, V. A. See Višins'kii, V. A. Vysočanskii, D. F. Unimodality of the symmetrization of the convolution of unimodal distributions. (Russian. English summary) Teor. Verojatnost. i Mat. Statist. 23 (1980), 10-13, 146. (Author's summary) 82f:60044 60E05

Vyvrot, T. M. See Vivrot, T. M.

Vzovs'kııı, D. O. Application of functional-differential inequalities to the study of asymptotic properties of solutions of differential systems of neutral type. (Russian) Qualitative investigations of functional differential equations (Russian), pp. 16-23, 181, "Naukova Dumka", Kiev, 1980. (D. Baïnov) 821:34095 34K15

- W -

Waack, Stephan ★Tape complexity of word problems. With German and Russian summaries. Report MATH 1981, 4. Akademie der Wissenschaften der DDR, Institut für Mathematik, Berlin, 1981. 99 pp. (Author's summary) 82m:20040 03D40_68C25)

Waadeland, Haakon Some univalent compositions of polynomials with univalent functions. Ann. Polon. Math. 38 (1980), no. 1, 65-73. (D. R. Wilken) 82e:30021 30C45 (30C10) n. Polon. Math. 38 (1980), no. 1, 65-73. (D. R. Wilken) 82e:30021 30C45 (30C10) (with Thron, Wolfgang J.) Analytic continuation of functions defined by means of continued fractions. Math. Scand. 47 (1980), no. 1, 72-90. (L. J. Lange) 82e:30004

nn der Waals, J. D. See Rowlinson, J. S., 82e:01128

Waberski, A. Application of theory of optimal filtering to boundary problems of dynamics of plates. (Polish and Russian summaries) J. Tech. Phys. 21 (1980), no. 1, 111-124. (J. D. Atkinson) 82i:73039 73K35 (73K10, 93E11)

Wachnicka, Krystyna On the Green function for a certain three-harmonic problem. Fasc. Math. No. 11 (1979), 193-196. (Author's summary) 82e:35034 35J40 (31B30)

Wachnicki, Eugeniusz (with Milewski, Jan) Solution d'un problème aux limites po l'équation biharmonique. Demonstratio Math. 13 (1980), no. 1, 77-102. (G. Wildenhain) 82a-31003 31A30 (35J40)

The Green function for p-harmonic Dirichlet problem in half space. Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) 25(73) (1981), no. 2, 207-212. (David R. Adams)

82m:31011 31B30
Wachspress, E. L. A numerically expedient rational finite element. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 897-904, Academic Press, New

York, 1980. (Todd Dupont) 82:e55080 65N30 (41A20)
Wachter, Rupert The number of repeats expected in random nucleic acid sequences and found in genes. J. Theoret. Biol. 91 (1981), no. 1, 71-98. (Author's summary) 82j:92048 92A10 (05A15, 92A09)

Wacker, H.; (with Hackl, J.; Zulehner, W.) An efficient step size control for continuation methods. BIT 20 (1980), no. 4, 475–485. (Authors' summary) 82bc59037 65H05
 Wada, Junzo (with Ohno, Shûichi) Compact homomorphisms on function algebras. Tokyo J. Math. 4 (1981), no. 1, 105–112. (P. J. de Paepe) 82bc46079 46J10

Wada, Koh (with Mackawa, Makoto) On the relation of two approaches to Rubin's model of Brownian particles. Phys. Lett. A 80 (1980), no. 4, 293-295. (Authors' summary) 82b:82042 82A35 (82A40)

Wadati, Miki Generalized matrix form of the inverse scattering method. Solitons,

pp. 287-299, Topics Current Phys., 17, Springer, Berlin, 1980. (See 82m:35001) 35Q20 (47A40, 47H99, 58F07)

(with Sawada, Katuro) New representations of the soliton solution for the

rteweg-de Vries equation. J. Phys. Soc. Japan 48 (1980), no. 1, 312-318. (G. L. Lamb, Jr.) 82d:35100 35O20 (76B25, 81E99)

(with Sawada, Katuro) Application of the trace method to the modified

Korteweg-de Vries equation. J. Phys. Soc. Japan 48 (1980), no. 1, 319-325. (G. L. Lamb, Jr.) 824:35101 35Q20 (76B25, 81E99)

(with Shimizu, Toru) A new integrable nonlinear evolution equation. Progr. Theoret. Phys. 63 (1980), no. 3, 808–820. (Authors' summary) 82g:35112 35Q20 (81C05) (with Ichikawa, Yoshi H.; Shimizu, Toru) Cusp soliton of a new integrable nonlinear evolution equation. Progr. Theoret. Phys. 64 (1980), no. 6, 1959–1967. (Authors' summary) 82e:35077 35Q20 (81C05)

(with Omote, Minoru) Bäcklund transformations for the Ernst equation. J. Math. Phys. 22 (1981), no. 5, 961-964. (G. L. Lamb, Jr.) 82f:35004

(with Omote, Minoru) Bäcklund transformations of the axially symmetric stationary Einstein-Maxwell equations. II. Phys. Lett. A 83 (1981), no. 9, 411-413. (Authors' summary) 82h:83039 83C50 (35Q20, 58A15)

(with Omote, Minoru) The Bäcklund transformations and the inverse scattering method of the Ernst equation. Progr. Theoret. Phys. 65 (1981), no. 5, 1621-1631. (F. A. E. Pirani) 82i:35157 35Q20 (58A15, 58F07, 83C99)

Wade, William R. (with Lippman, G. E.) Pseudofunctions and uniqueness on the group of integers of a p-series field. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 1-2, 1-12. (V. F. Osipov) 82b:43011 43A46 (12B40)

(with Powell, Charles H.) Term by term dyadic differentiation. Canad. J. Math. 33 (1981), no. 1, 247–256. (W. Splettstösser and P. L. Butzer) 82d:42025 42C10 dhwa, Bhushan L. (with Buoni, John J.; Dash, A. T.) Joint Browder spectrum. Pacific J.

Math. 94 (1981), no. 2, 259-263. (Robin Harte) 82i:47005 47A10

Wadia, A. B. (with Carter, W. C.) Design and analysis of codes and their self-checking circuit implementations for correction and detection of multiple b-adjacent errors. FTCS-10 (Tenth Internat. Sympos. Fault-Tolerant Comput., Kyoto, 1980), pp. 35–40, IEEE, New York, 1980. (Authors' summary) 82a:54076 94B35 (94C99)

Wadia, Aspi Rustom (with Payne, Fred R.) Application of the method of integral relations to unsteady fluid flow problems with shocks. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ. aljerenia equations, 11 (va. 1979), pp. 205-213, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82c:76076 76L05 (65N30)

(with Payne, Fred R.) A boundary value technique for the analysis of laminar boundary layer flows. Internat. J. Comput. Math. 9 (1981), no. 2, 163-172. (Authors' summary) 82b:65073 65L10

Wadsworth, Adrian R. (with Small, Lance W.) An example in affine Pl-rings. Israel J. Math. 36 (1980), no. 3-4, 285–286. (A. Verschoren) 82a:16022 16A38 (with Small, Lance W.) Some examples of rings. Comm. Algebra 9 (1981), no. 10, 1105–1118. (J. C. Robson) 82h:16012 16A38 (16A33, 16A39)

Wadsworth, Christopher P. Some unusual λ-calculus numeral systems. To H. B. Curry:

essays on combinatory logic, lambda calculus and formalism, pp. 215–230, Academic Press, London, 1980. (Henk Barendregt) 82b:03043 03B40 van der Waerden, B. L. The connectedness theorem and the concept of multiplicity. Studies

in algebraic geometry, pp. 19-45, MAA Stud. Math., 20, Math. Assoc. America, Washington, D.C., 1980. (W. Vogel) 82e:14013 14C17 (13H10, 14N10) On pre-Babylonian mathematics. I. Arch. Hist. Exact Sci. 23 (1980/81), no. 1, 1-25.

(Bruno Poizat) 82a:01002a 01A10 On pre-Babylonian mathematics. II. Arch. Hist. Exact Sci. 23 (1980/81), no. 1,

27-46. (Bruno Poizat) 82a:01002b 01A10

The conjunction of 3102 B.C. Special issue dedicated to Olaf Pedersen on his sixtieth birthday. Centaurus 24 (1980), 117-131. (Kristian Peder Moesgaard) 82c:01010 01A20 (01A32, 85-03)

Two treatises on Indian astronomy. With a reply by David Pingree. J. Hist. Astronom. 11 (1980), no. 1, 50-62. (A. K. Bag) 82j:01024 01A32 See also Dick, Auguste, 82c:01047

bū al-Wafā' al-Buzjāni See Abū al-Wafā' al-Buzjāni

Wafi, Abdul A note on generalized Bernštein-type polynomial on an unbounded interval. Ranchi Univ. Math. J. 9 (1978), 18-24. (J. P. Singhal) 82a:41009 41A10

Wage, Michael L. (with Przymusiński, Teodor C.) Collectionwise normality and extensions of locally finite coverings. Fund. Math. 109 (1980), no. 3, 175-187. (Anne K. Steiner) 82a:54030 54D15 (54D18)

Wagenführer, E. Die Determinantenmethode zur Berechnung des charakteristischen Exponenten der endlichen Hillschen Differentialgleichung (English summary) Numer.

Math. 35 (1980), no. 4, 405-420. (Hans J. Stetter) 82e:34048 34D05 (65B99, 65F40)

Wagner, Ascher Invariants of groups generated by reflections or transvections. Arch. Math.

(Basel) 36 (1981), no. 1, 10–12. (Kwangil Koh) 82j:20087 20G15 (13B20, 20G05)

Determination of the finite primitive reflection groups over an arbitrary field of characteristic not two. II, III. Geom. Dedicata 10 (1981), no. 1-4, 191-203, 475-523. (E. W. Ellers) 82g:20076 20H15 (51F15)

Wagner, Bernd A permutation representation theoretical version of a theorem of Frobenius. Bayreuth. Math. Schr. No. 6 (1980), 23–32. (A. O. Morris) 82a:20025 20C30 (with Kerber, Adalbert; Sänger, Fritz) Quotienten und Kerne von

Young-Diagrammen, Brettspiele und Plethysmen gewöhnlicher irreduzibler Darstellungen symmetrischer Gruppen. Mitt. Math. Sem. Giessen No. 149 (1981), 131–175. (A. O. Morris) 82k:20020 20C30

Wagner, Clifford H. Symmetric, cyclic, and permutation products of manifolds. es Math. (Rozprawy Mat.) 182 (1980), 52 pp. (R. J. Daverman) 82h:55021

Wagner, Elżbieta (with Wilczyński, W.) Convergence of sequences of measurable functions Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 125-128. (B. Rodriguez-Salinas) 82c:28014 28A20

Sequences of measurable functions. Fund. Math. 112 (1981), no. 2, 89-102. (B. K. Lahiri) 82m:28010 28A20 (54A20)

Wagner, Franz (with Lippe, Wolfram-Manfred) Ein Entwurf zur maschinellen

- ng von Korrektheitsbeweisen bei Simulationen. GI-10. Jahrestagung rbrücken, 1980) (German), pp. 413–427, Informatik-Fachber., 33, Springer, Berlin, (See 82h:68003) 68G15
- model with a free surface. Z. Phys. B 42 (1981), no. 4, 355-365. (Authors') 82:82026 82:A25 (81E15, 82A68)
- Wagner, H.-J. The minin ber of mutations in an evolutionary network. J. Theoret. (Author's summary) 82h:92028 92A10 (05C05) ol. 91 (1981), no. 4, 621-636. (Author's summary) 82h:92028
- Biol. 91 (1981), no. 4, 621-636. (Author's summary) 82h:29028 92A10 (05CUS)
 guer, K. (with Bodendiek, R.) Zur Abschätzung der Anzahl von Kreuzhauben. Abh.
 Maih. Sem. Unio. Hamburg 50 (1980), 57-69. (J. Sedläck) 82g:05043 05C10 (05C75)
 guer, R. S. (with Swayne, D. A.) Some experimental results concerning generalized
 splitting of ADI type. Proceedings of the Ninth Manitoba Conference on Numerical
 Mathematics and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 399-409,
 Congress. Numer., XXVII, Utilius Math., Winnipeg, Man., 1980. (F. M. Pascal)
 82x:65085 65N20 (65F10)
- ner, Wolfgs guer, Wolfgang A fuzzy model of concept representation in memory. Fuzzy Sets and Systems 6 (1981), no. 1, 11-26. (Author's summary) 82f:92051 92A25 (03E72)
- Stanley A bound on the chromatic number of graphs without certain induced ographs. J. Combin. Theory Ser. B 29 (1980), no. 3, 345-346. (Author's summary) 82405062 05C15 (05C35)
 - Invariance properties of finitely additive measures in R*. Illinois J. Math. 25 (1981), no. 1, 74-86. (R. B. Burckel) 82c:28026 28C10 (28A99) greich, Philip Algebras of automorphic forms with few generators. Trans. Amer. Math.
- Soc. 262 (1980), no. 2, 367-389. (Mark E. Sheingorn) 82e:10044 10D15 (14J17,
 - Automorphic forms and singularities with C*-action. Illinois J. Math. 25 (1981), no. 3, 359–382. (I. Dolgachev) 82m:10045 10D15 (14H30, 14J17, 30F35)
- See also Algebraic geometry, 82m:14001

 Wagschal, Claude Le problème de Goursat non linéaire. J. Math. Pures Appl. (9) 58 (1979), no. 3, 309-337. (S. Cinquini) 82m:35024

 35G30 (35L30)
 - (with Schiltz, Dominique; Vaillant, Jean) Problème de Cauchy ramifié à
 - aractéristiques multiples en involution. Seminar on Hyperbolic and Holomorphic Partial Differential Equations, 1979-1980 (French), Exp. No. 10, 5 pp., Univ. Paris VI, Paris, 1980. (From the text) 82j:35004 35A20 (with Schiltz, Dominique; Vaillant, Jean) Problème de Cauchy ramifié à
- caractéristiques multiples en involution. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 13, A659-A662. (Authors' summary) 82a:35062 35L30
 Wagstaff, K. (with Paul, R.) Application of Padé approximants to the
- velocity-autocorrelation fun ction. Phys. Rev. A (3) 24 (1981), no. 1, 476-487. (Authors'
- summary) 82h:82053 82A70 (82A50)
 Wagstaff, Peter The stability of two decentralized adjustment schemes. J. Econ. nics Control 3 (1981), no. 2, 183-190. (From the introduction) 82m:90044 90A 14
- Wagstaff, Samuel S., Jr. (with Pomerance, Carl; Selfridge, J. L.) The pseudoprimes to 25·109. Math. Comp. 35 (1980), no. 151, 1003-1026. (Authors' summary) 82g:10030 10A40 (10-04, 10A25)
 - Large Carmichael numbers. Math. J. Okayama Univ. 22 (1980), no. 1, 33-41.
 - (Masao Kishore) 82:10007 10A20

 The computational complexity of solving exponential congruences. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. II (Winnipeg, Man., 1980). Congr. Numer. 31 (1981), 275–286. (Maurice Mignotte) 10A10 (10F37, 68C25)
- el-Wahab, H. M. See Abdel-Wahab, H. M.
- Wahha, Grace Spline bases, regularization, and generalized cross validation for solving approximation problems with large quantities of noisy data. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 905-912, Academic Press, New York, 1980. (Dietrich Braess) 82b:65009 65D15 (41A15, 41A63)
 - Data-based optimal smoothing of orthogonal series density estimates. Ann. Statist. 9 (1981), no. 1, 146–156. (Bradford R. Crain) 82c62059 62G05 Numerical experiments with the thin plate histospline. Comm. Statist. A—Theory
- Methods 10 (1981), no. 24, 2475-2514. (Author's summary) 82m:62252 62P99 (92A15)
- See also Tobler, Waldo R., 82b:62147
- Wahl, Jonathan M. Elliptic deformations of minimally elliptic singularities. Math. Ann. 253 (1980), no. 3, 241–262. (H. B. Laufer) 824:14004 14B07 (32G11)

 Wahl, Wolf On nonlinear evolution equations in a Banach space and on nonlinear (1980), no. 3, 241-262. (H. B. Laufer) 824:14004
- vibrations of the clamped plate. Bayreuth. Math. Schr. No. 7 (1981), 93 pp. (Yoshio Yamada) 82i:35086 35K22 (34G20, 47H15, 73K12) 35K22 (34G20, 47H15, 73K12)
- Yamada) 82c;39086 35K22 (34G20, 47H15, 73K12) (with Brenner, Philip) Global classical solutions of nonlinear wave equations. Math. 2. 176 (1981), no. 1, 87-121. (R. Glassey) 82m;35103 35L75 Wahlbin, L. B. (with Schatz, A. H.) On the quasi-optimality in L_{∞} of the \dot{H}^1 -projection into finite element spaces. Math. Comp. 38 (1982), no. 157, 1-22. (Authors' summary) 82m:65106 65N30
- Wahrendorf, J. Robuste Statistik: eine einführende Übersicht. Robust methods (25th Biometric Colloq., Bad Nauheim, 1979) (German), pp.1-13, Med. Inform. Statist., 20, Springer, Berlin, 1980. (See 82i:62003) 62F35
- hsner, Renate (with von Borzeszkowski, Horst-Heino) Newton und Voltaire.
 (German) [Newton and Voltaire] Zur Begründung und Interpretation der klassischen Mechanik. [On the founding and interpretation of classical mechanics] Excerpts
- translated from the English and French by the authors and Christa Poser.
 Wissenschaftliche Taschenbücher, Reihe Texte und Studien [Scientific Paperbacks, Texts and Studies Series], 123. Akademie-Verlag, Berlin, 1980. 291 pp. (Peeter Müürsepp) 01A50 (70-03)
- 82:01021 01A50 (70-03)

 Waikar, V. B. On the noncentral distribution of the ratio of the extreme roots of the Wishart matrix. Internat. J. Math. Math. Sci. 4 (1981), no. 1, 147-154. (S. Talwalker) 82i:62081 62H10 (62E15)
 ainer, Stan S. (with Normann, Dag) The 1-section of a countable functional. J. Symbolic
- Logic 45 (1980), no. 3, 549-562. (Viggo Stoltenberg-Hansen) 82f:03040 03D65
- nger, Stephen Applications of Fourier transforms to averages over lower-dimensional sets. Harmonic analysis in Euclidean spaces (Proc. Sympos. Pure Math., Williams Coll.,

- Williamstown, Mass., 1978), Part 1, pp. 85-94, Proc. Sympos. Pure Math., XXXV, Part 1, Amer. Math. Soc., Providence, R. I., 1979. (Eugene B. Fabes) 82g-42018 42B25 (with Marshall, Bernard; Strauss, Walter A.) L^p L^q estimates for the Klein-Gordon equation. J. Math. Pures Appl. (9) 59 (1980), no. 4, 417-440. (M. H. Pettal) 823-823-838.
- Protter) 82j:35133 35Q20 (35L15, 81C05)
- (with Nagel, Alexander) Limits of bounded holomorphic functions along curves. ents in several complex variables (Proc. Conf., Princeton Univ., Princeton,
- N. J., 1979, pp. 327-344, Ann. of Math. Studies, 100, Princeton Univ. Press, Princeton, N. J., 1981. (Guy Laville) 82j:32018 32A40 (with Shea, Daniel F.) Growth problems for a class of entire functions via singular integral estimates. Illinois J. Math. 25 (1981), no. 1, 41-50. (W. H. J. Fuchs) 82c:30043 30D15 (30D35)
- (with Nagel, Alexander: Stein, Elias M.) Boundary behavior of functions
- holomorphic in domains of finite type. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 11, part 1, 6596-6599. (From the text) 82k:32027 32A40 (31B20, 32E35, 42B25) inwright, J. (with Goode, S. W.) Some exact inhomogeneous cosmologies with equation
- of state p=γμ. Phys. Rev. D (3) 22 (1980), no. 8, 1906-1909. (Authors' summary) 83C20 (83C55, 83F05)
 - Exact spatially inhomogeneous cosmologies. J. Phys. A 14 (1981), no. 5, 1131–1147. (Peter Szekeres) 82f:83058 83C55 (83C40, 83F05)
- nwright, Roger L. Three-dimensional x-projection method (with acceleration techniques) for solving systems of linear equations. Comput. Math. Appl. 7 (1981), no. 3, 211-223.
- (Author's summary) 82e:65034 65F10 ismann, Friedrich See Schlick, Moritz, 82b:03021b
- Wait, J. R. Electromagnetic scattering from an isolated irregularity in a tropospheric duct. Acta Phys. Austriaca 52 (1980), no. 3-4, 193-202. (Author's summary) 82h:78021 78A45 (86A35)
- Wait, R. (with Mitchell, Andrew Ronald) *Метод конечных элементов для ур. частимом производимом. (Russian) [The finite element method in partial differential equations] Translated from the English by V. E. Kondrašov and V. F. Kurjakin. "Mir", Moscow, 1981. 216 pp. (Editors) 821:65117 65N30 uncu. (Russian) [The finite element method in partial differential
- Waiveris, C. F. (with Comfort, W. W.) Intersection of countably compact subspaces of Stone-Čech bicompactifications. (Russian) International Topology Conference (Moscow State Univ., Moscow, 1979). Translated from the English by A. Č. Čigogidze. Uspehi Mat. k 35 (1980), no. 3(213), 67-77. (A. I. Baškirov) 82f:54033
- Wajc, S. J. (with Tolley, M. D.) Approximate solution methods of Laplace's equation for a square domain. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 26-33,
- Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 26–33, IMACS, New Brunswick, N.J., 1977. (See 82a:65004) 65N30 (with Baron, Gino Victor) Convergence acceleration of nonscalar sequences with nonlinear transformations. Math. Comput. Simulation 23 (1981), no. 2, 133–141. (Authors' summary) 82i:65004 65B05 Wajima, Masayuki (with Okuyama, Tetsuro) Character correspondence and p-blocks of p-solvable groups. Osaka J. Math. 17 (1980), no. 3, 801–806. (W. Ledermann) 82a:20013 20015
- Wajler, Stanisław (with Szynal, Anna; Szynal, Jan) On the Gronwall's problem for some pier, Stamssaw (vin Szynai, Amna, Szynai, Jan) On the Ortonwan problem for some classes of univalent functions. Analytic functions, Kozubnik 1979 (Proc. Seventh Conf., Kozubnik, 1979), pp. 429–434, Lecture Notes in Math., 798, Springer, Berlin, 1980. (K. S. Padmanabhan) 82a:30020 30C45
- Wakabayashi, Seiichiro A necessary condition for the mixed problem to be C^{∞} well-posed. Comm. Partial Differential Equations 5 (1980), no. 10, 1031-1064. (E. C. Young)
- Wakakuwa, Hidekiyo Nonexistence of irreducible birecurrent Riemannian manifold of dimension >3. J. Math. Soc. Japan 33 (1981), no. 1, 23–29. (V. C. Gupta) 82e:53069
- Wakamatsu, Takayoshi (with Iwanaga, Yasuo) Trivial extension of Artin algebras. Representation theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 295-301, Lecture Notes in Math., 832, Springer, Berlin, 1980. (From the text) 16A56 (16A35)
- Waki, Hideyo The high frequency diffraction of plane electromagnetic waves by a perfectly conducting circular cylinder with a narrow slit. II. (Japanese. English summary) Res. Rep. Fac. Engrg. Tokyo Denki Univ. No. 28 (1980), 87-102. (Author's summary) 78A45
- Wakimoto, Kazumasa k-multiple chart and its application to the test for homogeneity against ordered alternatives. J. Japan Statist. Soc. 11 (1981), no. 1, 1–7. (Author's nary) 82g:62071 62G10
- Wakker, Peter Agreeing probability measures for comparative probability structures. Ann. Statist. 9 (1981), no. 3, 658-662. (Giulianella Coletti) 82i:60006 60A05
- Wakolbinger, Anton (with Kerstan, Johannes) Opérateurs markoviens et l'ensemble de leurs lois de probabilité invariantes. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A163-A166. (Authors' summary) 82b:60098 60345
- (with Rauchenschwandtner, Berthold) Some aspects of the Papangelou kernel. Point processes and queuing problems (Collog., Keszthely, 1978), pp. 325-336, Colloq. Math. Sci. János Bolyai, 24, North-Holland, Amsterdam, 1981. (Walter Warmuth) 82k:60213 60K35 (60G55)
- Waksman, Zeev (with Galperin, A. M.) An elementary approach to Jordan theory. Amer. Math. Monthly 87 (1880), no. 9, 728-732. (W. Ledermann) 82h:15013 15A21 (with Galperin, A. M.) On pseudo-inverses of operator products. Linear Algebra
 - Appl. 33 (1980), 123-131. (James R. Wall) 82f:15003
- (with Milman, David) On topological properties of the central set of a bounded domain in R^m. J. Geom. 15, no. 1, 1-7 (1981). (H. W. Guggenheimer) 82g:53008 53A07 (90C31)
- Walach, Eugene (with Zeheb, Ezra) On multivariable half-plane analyticity and positive IEEE Trans. Circuits and Systems 28 (1981), no. 9, 927-930. (W. H. J. Fuchs) 30C15 (94C05)
- basek, K. (with Lukierska-Walasek, K.) Quantum effects in the critical properties of the transverse Ising model for 2<d<3. Phys. Lett. A 81 (1981), no. 9, 527-529. (Authors' summary) 82c:82030 82A25 (82A67)
- ierska-Walasek, K. See Lukierska-Walasek, K.
- erer, Rainhard (with Behringer, Fred Alois) On continuous quasiconvex functions.

1982

(German and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 12 (1981), no. 3, 347-359. (Jean-Pierre Crouzeix) 82i:26006 26B25

Walczak, Paweł Grzegorz On totally geodesic submanifolds of tangent bundles with Sasaki metric. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 3-4, 161-165 (1981). (Lieven Vanhecke) 82f:53066 53C40

(with Waliszewski, Włodzimierz) *Geometria różniczkowa w zadaniach. (Polish) [Differential geometry in problems] Państwowe Wydawnictwo Naukowe (PWN), Warsaw, 1981. 229 pp. ISBN 83-01-00746-X (Józef Dodziuk) 82e:53001 53-01 (00A07)

Walczak, S. (with Mikolajczyk, L.) Application of the extremum principle to investigating certain extremal problems. Trans. Amer. Math. Soc. 259 (1980), no. 1, 147-155. (Editors) 49B21

Wald, Burkhard (with Göbel, Rüdiger) Wachstumstypen und schlanke Gruppen. Symposia Mathematica, Vol. XXIII (Conf. Abelian Groups and their Relationship to the Theory of Modules, INDAM, Rome, 1977), pp. 201–239, Academic Press, London, 1979. (E. A. Walker) 82b:20073 20K20 (20K45)

(with Göbel, Rūdiger) Martin's axiom implies the existence of certain slender groups. Math. Z. 172 (1980), no. 2, 107–121. (U. Felgner) 82c:20096 20K20 (03E50) (with Göbel, Rüdiger) Lösung eines Problems von L. Fuchs. J. Algebra 71 (1981),

with Cooler, Number) Lossing emiss Problems von E. Puchs. J. Argeora 1 (1981), no. 1, 219–231. (Khalid Benabdallah) 82j:20098 20K25

Wald, Robert M. Dynamics in nonglobally hyperbolic, static space-times. J. Math. Phys. 21 (1980), no. 12, 2802–2805. (Charles A. Nelson) 82f:83015 83C10 (58D25, 83C30)

Waldenstrøm, S. (with Razi Naqvi, K.; Mork, K. J.) Unification of the methods of Onsager

and Monchick for calculating the probabilities of various fates in diffusion-controlled reactions, with applications to diffusion in space and in a plane. J. Chem. Phys. 71 (1979), no. 1, 73-80. (Authors' summary) 82c:82117 82A99 (80A30)

Waldinger, Hermann V. (with Gaglione, Anthony M.) A generalization of the bracketing process applied in the commutator calculus. Comm. Algebra 8 (1980), no. 10, 961–981. (Carol Tretkoff) 82b:20052 20F12 (14G20)

nger, Richard (with Manna, Zohar) A deductive approach to program synthesis. Proceedings from 5th Scandinavian Logic Symposium (Aalborg, 1979), pp. 97–141, Aalborg Univ. Press, Aalborg, 1979. (Authors' summary) 82j:68094 68G15 (03B35, 68B10)

m, K.-H. Approximations of inventory models. (German summary) Z. Oper. Res. Ser. A-B 25 (1981), no. 5, 143-157. (Author's summary) 82m:90067 ison-Waldner, Robert E. See Jamison-Waldner, Robert E.

Waldo, R. A. (with Burchard, H. G.) Some mathematical properties of empirical Gibbs functions. Quantitative approximation (Proc. Internat. Sympos., Bonn, 1979), pp. 31-47, Academic Press, New York, 1980. (K. K. Sen) 82c:80001 80A10 (49D99, 90C99)

Waldschmidt, H. Zur Verbesserung der Lokalität im Zugriff auf Felder. (English summary) Computing 22 (1979), no. 3, 211–224. (Author's summary) 82g:68028 68B Idschmidt, Michel *Nombres transcendants et groupes algébriques. (French)

[Transcendental numbers and algebraic groups] With appendices by Daniel Bertrand and Jean-Pierre Serre. With an English summary. Astérisque, 69-70. Société Mathématique de France, Paris, 1979. 218 pp. (Pierre Lelong) 82k:10041 (14G25, 14L15)

Propriétés arithmétiques de fonctions de plusieurs variables. III. Séminaire Pierre Lelong-Henri Skoda (Analyse). Années 1978/79 (French), pp. 332-356, Lecture Notes in Math., 822, Springer, Berlin, 1980. (P. Bundschuh) 82h:10048 10F35

A lower bound for linear forms in logarithms. Acta Arith. 37 (1980), 257-283. (A. J. van der Poorten) 82h:10049 10F35

(with Bertrand, Daniel) Quelques travaux récents en théorie des nombres

transcendants. Abelian functions and transcendental numbers (Colloq., École Polytech., Palaiseau, 1979) (French). Mém. Soc. Math. France (N.S.) 1980/81, no. 2, 107-119. (A.

J. van der Poorten) 82g:10050 10F35 (14K10) Transcendance et exponentielles en plusieurs variables. *Invent. Math.* 63 (1981), no. 1, 97-127. (D. W. Masser) 82k:10042 10F35 (12A55, 12B15) See also Abelian functions and transcen ental numbers, 82c:10047

Waldspurger, J. L. Formes quadratiques à 4 variables et relèvement. Acta Arith. 36 (1980), no. 4, 377-405. (Kenneth A. Ribet) 82a:10027 10C15 (10D21)

Correspondance de Shimura. [Shimura correspondence] Seminar on Number Theory. Paris 1979-80, pp. 357-369, Progress in Math., 12, Birkhäuser, Boston, Mass., 1981. (See 82i:10004) 10D15 (10D40, 12A67, 22E55)

Waldvogel, J. (with Kirchgraber, U.; Schwarz, H. R.; Henrici, Peter) Eduard Stiefel (1909-1978). With a bibliography and comments on the bibliography by Stiefel. Z.

Angew. Math. Phys. 30 (1979), no. 2, 133–142 (1 plate). (Editors) 82:61063 01A70
Walecka, John Dirk (with Fetter, Alexander L.) ★Theoretical mechanics of particles and continua. International Series in Pure and Applied Physics. McGraw-Hill Book Co., New York, 1980. xvii+570 pp. ISBN 0-07-020658-9 (Ll. G. Chambers) 82d:70001 (73-01, 76-01)

Walendziak, Andrzej Direct decompositions in completely modular lattices. (Russian) Demonstratio Math. 13 (1980), no. 4, 861-876. (Jaroslav Libicher) 82e:06005

guin-Waléry, Dominique See Guin-Waléry, Dominique Wali, K. C. (with O'Raifeartaigh, L.; Park, S. Y.) On the long-range interaction of

topologically charged monopoles. Geometrical and topological methods in gauge theories (Proc. Canad. Math. Soc. Summer Res. Inst., McGill Univ., Montreal, Que., 1979), pp. 89-95, Lecture Notes in Phys., 129, Springer, Berlin, 1980. (D. I. Olive) 82f:81083 81G10 (81E99)

Walias Cuadrado, Mag dalena Note on the Marcinkiewicz integral. (Spanish) Proceedings of the First Spanish-Portuguese Mathematical Conference (Madrid, 1973) (Spanish), pp. 245–248, Consejo Sup. Inv. Cient., Madrid, 1977. (J. Horváth) 82a:42016

Waliszewski, Włodzimierz (with Matuszczykowa, Hanna) An immersion of a differential space in a Cartesian space. Ann. Polon. Math. 37 (1980), no. 2, 131–134. (Charles D. Marshall) 82b:58012 58A40

(with Walczak, Pawel Grzegorz) *Geometria różniczkowa w zadaniach. (Polish) [Differential geometry in problems] Państwowe Wydawnictwo Naukowe (PWN), Warsaw, 1981. 229 pp. ISBN 83-01-00746-X (Iózef Dodziuk) 82e:53001 53-01 (00A07)

lk, Harro Probabilistic methods in the approximation by linear positive operators.

Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 4, 445-455. (D. D. Stancu) 41A36 (60F05)

Walk, Manfred Optimale Programme für Multiströme auf endlichen gerichteten Graphen.

(Russian and English summaries) Wiss. Z. Friedrich-Schiller-Unio. Jena Math.-Natur. Reihe 29 (1980), no. 2, 319-325. (Uwe Zimmermann) 82e:90044 90B10

Walker, A. M. On the classical Bonferroni inequalities and the corresponding Gala inequalities. J. Appl. Probab. 18 (1981), no. 3, 757-763. (J. Galambos) 82h:60035 60E15 (60C05, 60E05)

Walker, Dennis (with Bajpai, Avinash Chandra; Mustoe, Leslie R.) *Specialist technic in engineering mathematics. John Wiley & Sons, Ltd., Chichester, 1980. ix+401 pp. ISBN 0-471-27907-2 (G. V. Hmelevskaja-Plotnikova) 82j:00020 00A69 (65N30,

ert (with Hunter, Roger) S-groups revisited. Proc. Amer. Math. Soc. 82 (1981), no. 1, 13-18. (Dovle O. Cutler) 82c:20093 20K10

Walker, Ian W. (with Emslie, A. Gordon; Roy, Archie E.) Stability criteria in many-body systems. I. An empirical stability criterion for corotational three-body systems. Celestial Mech. 22 (1980), no. 4, 371-402. (Authors' summary) 82a:70006 (with Roy, Archie E.) Stability criteria in many-body systems. II. On a sufficient

dition for the stability of coplanar hierarchical three-body systems. Celestial Mech. 24 (1981), no. 2, 195-225. (Authors' summary) 82h:70015 70F15 (58F05)
Walker, James W. (with Wenner, Bruce R.) Characterizations of certain classes of

infinite-dimensional metric spaces. Topology Appl. 12 (1981), no. 1, 101–104. (Shinpei Oka) 82b:54047 54F45

Walker, Mark A simple incentive compatible scheme for attaining Lindahl allocations. Econometrica 49 (1981), no. 1, 65–71. (Author's summary) 82b:90032 90A14

Walker, Marshall (with Mather, Michael) Commuting homotopy limits and colimits. Math. Z. 175 (1980), no. 1, 77-80. (R. M. Vogt) 32a:55008 55P10 Walker, Martin The asymptotic structure of space-time and the relativistic Kepler problem. Gravitation, quanta and the universe (Proc. Einstein Centenary Sympos., Ahmedabad, 1979), pp. 41-54, Wiley, New York, 1980. (Hans Stephani) 82g:83008 83C30

(with Will, Clifford M.) Gravitational radiation quadrupole formula is valid for gravitationally interacting systems. Phys. Rev. Lett. 45 (1980), no. 22, 1741-1744. (J. D. Finley, III) 82f:83038 83C35 (83C30)

Walker, P. L. The Mellin transform of the partial fraction expansion for θ(x). Math. Ann. 253 (1980), no. 2, 103–110. (W. H. Simons) 82i:10028 10D12 (10J05)

Walker, Russell B. Morse and generic contact between foliations. Trans. Amer. Math. Soc. 254 (1979), 265-281. (Robert Roussarie) 82i:58053 58F15 (57R30, 58F18)
Conjugacies of topologically hyperbolic fixed points: a necessary condition on foliations. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ.,

Evanston, III., 1979), pp. 446-457, Lecture Notes in Math., 819, Springer, Berlin, 1980. (C. 58F15 (34C30, 58F25) S. Coleman) 82e:58080

Walker, W. J. Rankings and ranking functions. Canad. J. Math. 33 (1981), no. 2, 395-399. (F. T. Howard) 82g:05011 05A15

Walkup, David W. (with Mani, Peter) A 3-sphere counterexample to the W_c-path conjecture. Math. Oper. Res. 5 (1980), no. 4, 595-598. (P. McMullen) 82a:52004

Wall, C. T. C. Stability, pencils and polytopes. Bull. London Math. Soc. 12 (1980), no. 6, 401-421. (G. N. Himšiašvili) 82h:58009 58C27 (14B05) Singularities of nets of quadrics. Compositio Math. 42 (1980/81), no. 2, 187-212. (I.

Dolgachev) 82e:14016 14C21 (14B05) Wall, Curtiss E. (with Chartrand, Gary; Lesniak-Foster, Linda) Balanced Ramsey mbers. Proceedings of the Eleventh Southeastern Conference on Combi Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. I.

Congr. Numer. 28 (1980), 271-279. (Ralph Faudree) 82g:05064 05C55 Wall, David W. Conditions for $\varphi(N)$ to properly divide N-1. A collection of ma related to the Fibonacci sequence, pp. 205-208, Fibonacci Assoc., Santa Clara, Calif., 1980. (C. Small) 82h:10009 10A20

Wall, G. F. Conjugacy classes in projective and special linear groups. Bull. Austral. Math. Soc. 22 (1980), no. 3, 339–364. (R. H. Dye) 82d:20041 20G15 (20G40)

Wall, J. R. (with Haynsworth, Emilie) Group inverses of certain positive operators. Linear

Algebra Appl. 40 (1981), 143-159. (J. J. Buoni) 82;:15004 15A09 (15A48)
Wall, Joseph E., Jr. (with Willsky, Alan S.; Sandell, Nils R., Jr.) On the fixed-interval smoothing problem. Stochastics 5 (1981), no. 1-2, 1-41. (Authors' summary) 82m:93092 93F11

Wall, Kent D. Specification and estimation of econometric models with generalized expectations. International Symposium on Systems Optimization and Analysis (Recquencourt, 1978), pp. 34-48, Lecture Notes in Control and Information Sci., 14, Springer, Berlin, 1979. (Yoshio Kimura) 82e:62173 62P20

Blace, Duane C. Irreversible thermodynamics of flow in solids. Phys. Rev. B (3) 22

Wallace, Duane C. (1980), no. 4, 1477–1486. (K. S. Harinath) 82;73066a 73B30 (35L67, 82A35)
Flow process of weak shocks in solids. Phys. Rev. B (3) 22 (1980), no. 4, 1487–1494.

(K. S. Harinath) 82j;73006b 73B30 (35L67, 82A35)

(Bace, Mark S. (with Davisson, Lee D.; McEliece, Robert J.; Pursley, Michael B.) Efficient universal noiseless source codes. IEEE Trans. Inform. Theory 27 (1981), no. 3, 269-279. (Authors' summary) 82e:94038 94A24 (94A05)

Wallach, Nolan R. (with Knapp, A. W.) Correction and addition: "Szegő kernels associated with discrete series" [Invent. Math. 34 (1976), no. 3, 163-200; MR 54 #7704]. Invent. Math. 62 (1980/81), no. 2, 341-346. (E. A. Thieleker) 82i:22016 22E45 (32H10) (with Goodman, Roe) Whittaker vectors and conical vectors. J. Funct. Anal. 39 (1980), no. 2, 199-279. (P. C. Trombi) 82i:22018 22E46 (43A80)

The restriction of Whittaker modules to certain parabolic subalgebras. Proc. Amer. Math. Soc. 81 (1981), no. 2, 181-188. (Mogens Flensted-Jensen) 82h:17014

Wallenstein, Sylvan (with Berger, Agnes) On the asymptotic power of tests for comparing k correlated proportions. J. Amer. Statist. Assoc. 76 (1981), no. 373, 114–118. (Authors' summary) 82d:62060 62F12

Waller, Derek Arthur See Biggs, Norman, 82m:01054
Wallerath, P. (with Görlich, E.) The fundamental theorem of best approximation for logarithmic and exponential orders. J. Approx. Theory 31 (1981), no. 1, 33-58. (Pier Luigi Papini) 82h:41023 41A25

Wallin, Hans (with Jonsson, Alf) The trace to subsets of R" of Besov spaces in the general case. (Russian summary) Anal. Math. 6 (1980), no. 3, 223-254. (J. Horváth) 82g-46069

John See Murata, Tamotsu, 82e:01043 and Golovinskii, I. A., 82k:01018 Mis, Kenneth F. See Granger, C. W. J., 82:62153

Mis, Peter John *An index of British mathematicians. Part 2. 1701–1760. A check-list.

Project for Historical Biobibliography, 105. University of Newcastle upon Tyne, Newcastle, 1976. xxvii + 136 pp. ISBN 0-7017-0000-9 (Jeremy Gray) 82k-91020 01AS0

Trends in history—the social index. Bull. Inst. Math. Appl. 16 (1980), no. 4, 98–103. (Jeremy Gray) 82e-91129 01A80

(with Wallis, Ruth) Female philomaths. (German and French summaries) Historia Math. 7 (1980), no. 1, 57-64. (Louis Charbonneau) 82e:01058 01A50
Wallis, Ruth (with Wallis, Peter John) Female philomaths. (German and French

maries) Historia Math. 7 (1980), no. 1, 57-64. (Louis Charbonneau) 82e:01058 01A30

is, W. Allen See Grubbs, Fra nk E., 82i:01052

Wallis, Walter D. (with Harary, Frank; Heinrich, Katherine) Decompositions of complete symmetric digraphs into the four oriented quadrilaterals. Combinatorial mathe (Proc. Internat. Conf. Combinatorial Theory, Australian Nat. Univ., Camberra, 1977), pp. 165-173, Lecture Notes in Math., 686, Springer, Berlin, 1978. (Nicholas Wormald) 82:e05068 05C20

(with Mullin, R. C.; Stinson, D. R.) Concerning the spectrum of skew Room Ars Combin. 6 (1978), 277-291. (G. H. J. Van Rees) 82a:05023

(with Mullin, R. C.) An exceptional case in the classification of finite linear spaces. Proceedings of the West Coast Conference on Combinatorics, Graph Theory and Com sholdt State Univ., Arcata, Calif., 1979), pp. 229-279, Congress. Nun Utilitas Math., Winnipeg, Man., 1980. (Jim Totten) 82f-95020 05B25 (05B30)
(with Heinrich, Katherine) Almost Graeco-Latin squares. Ars Combin. 10 (1980),

-63. (E. G. Straus) 82:05015 05B15

Hadamard equivalence. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. I. Congr. Numer. 28 (1980), 15-25. (From the text) 82i:05019 05B20 See also Combinatorial mathematics, 82e:05004

iner, Herbert ★Riemann-Funktionen als Lösungen partieller
Differentialgleichungssysteme. (German) [Riemann functions as solutions for systems of partial differential equations] With an English summary. Bericht [Report], 136. Forschungszentrum Graz, Mathematisch-Statistische Sektion, Graz, 1980. 28 pp. (W. Watzlawek) 82i:35036 35C99 (35L10)

*Bergman-Operatoren und Riemann-Funktion bei einer Klasse formalhyperbolischer Differentialgleichungen. (German) [Bergman operators and Riemann function in a class of formal hyperbolic differential equations] With an English summary. Bericht [Report], 139. Forschungszentrum Graz, Mathematisch-Statistische Sektion, Graz, 1980. 25 pp. (W. Watzlawek) 82i:35037 35C99 (35L10)
Wallner, R. P. Notes on recent U₄ theories of gravitation. Gen. Relativity Gravitation 12 (1980), no. 9, 719–732. (Larry L. Smalley) 82i:83074 83D05 (83E10)

Walls, Gary (with Oxford, Ed) Endocyclic groups. Arch. Math. (Basel) 32 (1979), no. 2, 109-113 (Authors' introduction) 221-20044 20K 20 109-113. (Authors' introduction) 82k:20094 20K30

sley, J. C. (with Berry, M. V.; Chambers, R. G.; Large, M. D.; Upstill, C.) Wavefront dislocations in the Aharonov-Bohm effect and its water wave analogue. (French summary) European J. Phys. 1 (1980), no. 3, 154-162. (Authors' summary) 82k:81007 81B05 (58C28, 58G15, 76B15)

rand, Jean (with Varaiya, Pravin) Interconnections of Markov chains and reversible queuing networks. Stochastic Process. Appl. 10 (1980), no. 2, 209-219. (Robert D. Foley) 824:60188 60K25 (60J10)

Walsh, Cecilia A. (with Kozak, John J.) Exact algorithm for d-dimensional walks on finite and infinite lattices with traps. Phys. Rev. Lett. 47 (1981), no. 21, 1500-1502. (Authors' summary) 82k:82048 82A67 (60J15, 60K35, 82A70)

Walsh, John B. (with Chacon, R. V.; Le Jan, Yves) Spatial trajectories. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 290-306, Lecture Notes in Math., 850, Springer, Berlin, 1981. (H.-J. Engelbert) 82k:60146

Optional increasing paths. Two-index random processes (Paris, 1980), pp. 172-201, Lecture Notes in Math., 863, Springer, Berlin, 1981. (Annie Millet) 82k:60101 (60G44, 60J45, 60J65)

A stochastic model of neural response. Adv. in Appl. Probab. 13 (1981), no. 2, 231-281. (M. Iosifescu) 82f:92020 92A09 (60H15)

Well-timed diffusion approximations. Adv. in Appl. Probab. 13 (1981), no. 2, 352–368. (Martin Jacobsen) 82f-60174 60J60 (60J10, 60J25) lsh, John J. A class of spaces with infinite cohomological dimension. Michigan Math. J. 27 (1980), no. 2, 215-222. (From the introduction) 82j:55001 55M10 (54F45)

Mappings with dense deficiency set. Michigan Math. J. 28 (1981), no. 1, 117-127. (David C. Wilson) 82e:54014 54C10

(with Mason, Alice; Wilson, David C.) Inverse limits which are not hereditarily indecomposable. Proc. Amer. Math. Soc. 83 (1981), no. 2, 403-407. (Józef Krasinkiewicz) 82k:54054 54F15 (57Q99)

Walsh, T. R. S. (with Wright, E. M.) The k-connectedness of unlabelled graphs. J. London Math. Soc. (2) 18 (1978), no. 3, 397-402. (Nicholas Wormald) 82b:05077

Generation of nonisomorphic maps on a computer. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 2, 301-304. (Narsingh Deo) 82j:05070 05C30 (05-04) Walshi. Thomas M. Prediction of velocity profile in fluid in which yield stress varies with depth. J. Rheal 24 (1980) no. 5 (21, 75) (4. Proj.) 80-75000 (2000)

depth. J. Rheol. 24 (1980), no. 6, 741-753. (A. Pozzi) 82c:76009

van der Walt, Andries P. J. Difficult words. Algebra Symposium (Potchefstroon Potchefstroom, 1979), pp. 105-111, Potchefstroom Univ. for Christian Higher Ed., Potchefstroom, 1980. (See 82:16002) 65F30 ium (Potchefstroom Univ.,

entz-Walter, Beate

commentz-Walter, Beate See Commentz-Walter, Beate
Walter, Colin D. Brauer's class number relation. Acta Arith. 35 (1979), no. 1, 33-40. (T.

Kuroda's class number relation. Acta Arith. 35 (1979), no. 1, 41-51. (T. Lepisto) 12A50

Pure fields of degree 9 with class number prime to 3. Ann. Inst. Fourier (Grenoble) 30 (1980), no. 2, v. 1-15. (J. C. Lagarias) 82b:12006 12A50

Walter, G. G. Stability and structure of compartmental models of ecosystems. Math. Biosci.

Walter, H. K.-G. Die Verwandtschaft kontextfreier Grammatiken. (English summary)

Computing 22 (1979), no. 1, 31-58. (Author's summary) 82i:68051 68F05

Walter, John H. The B-conjecture: 2-components in finite simple groups. The Santa Cruz
Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 57-66, Proc.
Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (From the text) 201005

Walter, Marion Exploring a rectangle problem. Math. Mag. 54 (1981), no. 3, 131–134. (J. Hoschek) 82i:51031 51M20

Walter, R. Konvexität in riemannschen Mannigfaltigkeiten. Jahresber. Deutsch Math.-Verein. 83 (1981), no. 1, 1-31. (Victor Bangert) 82c:53021 53B20 (5 Walter, Wolfgang (with Redheffer, Raymond M.) Uniqueness, stability and error 53B20 (53C20)

estimation for parabolic functional-differential equations. (Russian summary) Complex analysis and its applications (Russian), pp. 494-513, 670, "Nauka", Moscow, 1978. (J. Kalinowski (Zbl 425:35053)) 826:35104 35R10

(with Redheffer, Raymond M.) Invariant sets for systems of partial differential actions. I. Parabolic equations. Arch. Rational Mech. Anal. 67 (1978), no. 1, 41-52. (I. 35K55 (35B99) Lojczyk-Królikiewicz) 82h:35050

(with Redheffer, Raymond M.) Invariant sets for systems of partial differential equations. II. First-order and elliptic equations. Arch. Rational Mech. Anal. 73 (1980), no. 1, 19-29. (I. Lojczyk-Królikiewicz) 82h:35051 35K55 (35B99, 35J60)

Entire solutions of the differential equation $\Delta u = f(u)$. J. Austral. Math. Soc. Ser. A 35J60 30 (1980/81), no. 3, 366-368. (C. Bardos) 82f:35077

Walters, Stephen M. (with Gray, F. Gail; Thompson, Richard A.) Self-diagnosing cellular implementations of finite-state machines. IEEE Trans. Comput. 30 (1981), no. 12, 953-959. (Authors' summary) 82m:68107 68D35 (68D20)

Watther, G. Free group and Fibonacci sequence. Fibonacci Quart. 18 (1980), no. 3, 268–272. (Hugo S. Sun) 82h:20040 20E05 (05A15)

Walther, Hans-Otto Delay equations: instability and the trivial fixed point's index. Abstract Cauchy problems and functional differential equations (Proc. Workshop, Leibnitz, 1979), pp. 231-238, Res. Notes in Math., 48, Pitman, Boston, Mass., 1981. (Andrzej W. Olbrot) 34K20

(with an der Heiden, U.; Mackey, Michael C.) Complex oscillations in a simple deterministic neuronal network. Mathematical aspects of physiology (Proc. Summer Sem., Univ. Utah, Salt Lake City, Utah, 1980), pp. 355–360, Lectures in Appl. Math., 19, Amer. Math. Soc., Providence, R.I., 1981. (Authors' summary) 82j:92023 92A09 (34K15)

Density of slowly oscillating solutions of $\dot{x}(t) = -f(x(t-1))$. J. Math. Anal. Appl. 79

(1981), no. 1, 127-140. (I. P. Stavroulakis) 82c:34088 34K15
Walther, Hansjoachim (with Schäuble, Manfred) Über den Shortness Exponenten normaler Landkarten. Contributions to graph theory and its applications (Internat. Colloq., Oberhof, 1977) (German), pp. 287-299, Tech. Hochschule Ilmenau, Ilmenau, 1977. (E. Olaru) 05C38 (05C35, 05C99)

Note on two problems of J. Zaks concerning Hamiltonian 3-polytopes. Discrete Math. 33 (1981), no. 1, 107-109. (Joseph Zaks) 82k:52015 52A25 (05C45)

(with Harant, Jochen) On the radius of graphs. J. Combin. Theory Ser. B 30 (1981), 05C35 (05C38) no. 1, 113-117. (David E. Daykin) 82e:05081

Waltman, Paul (with Hoppensteadt, Frank C.) A flow mediated control model of respiration. Some Mathematical Questions in Biology (Proc. 13th Sympos. Math. Biol., Houston, Tex., 1979), pp. 211–218, Lectures Math. Life Sci., 12, Amer. Math. Soc., Providence, R.I., 1979. (Authors' summary) 82k:92026 92A09 (58F13) Providence, R.I., 1979. (Authors' summary) 82k:92026

(with Hubbell, Stephen P.; Hsu, Sze Bi) Theoretical and experimental investigations of microbial competition in continuous culture. Modeling and differential equations in biology (Conf., Southern Illinois Univ., Carbondale, Ill., 1978), pp. 107-152, Lecture Notes in Pure and Appl. Math., 58, Dekker, New York, 1980. (Hansgeorg Jeggle) 82m:92079 92A17 (34C11)

Walton, D. J. (with Hoskins, W. D.; Stanton, R. G.) An improved fourth order method for the solution of the Lyapunov matrix equation. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. II (Winnipeg, Man., 1980). Congr. Numer. 31 (1981), 63–76. (Authors' summary) 82m:65029 65F10

Walton, I. C. (with Shearer, Michael) On bifurcation and symmetry in Benard convection and Taylor vortices. Stud. Appl. Math. 65 (1981), no. 1, 85-93. (Authors' summary) 76E15 (58E07, 76R99) 82m:76029

Walton, P. G. (with Voller, V. R.; Cross, Mark) Assessment of weak solution numerical techniques for solving Stefan problems. Numerical methods in thermal problems (Proc. First Internat. Conf., Univ. College, Swansea, 1979), pp. 172–181, Pineridge, Swansea, 1979. (See 82g:80001) 80A20 (35K05, 35R30)

akiewicz, Stanisław (with Krarup, Jakob) Relations among integer programs Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 2, pp. 199-210, Lecture Notes in Control and Information Sci., 23, Springer, Berlin, 1980. (Uwe Zimmermann) 82e:90064

Some aspects of integer programming duality. European J. Oper. Res. 7 (1981), no. 2, 196–202. (Author's summary) 82f:90067 90C10

Walum, Herbert An exact formula for an average of L-series. Illinois J. Math. 26 (1982), no. 1, 1-3. (D. R. Heath-Brown) 22m:10066 10H08

Wambeeq, A. Solution of the equations associated with rational Runge-Kutta methods of

orders up to four. J. Comput. Appl. Math. 6 (1980), no. 4, 275-281. (Author's summary) 65L05

Wan, Bai Wu (with Wang, Huan Chen) Two transformed forms of population models. (Chinese. English summary) Acta Automat. Sinica 6 (1980), no. 4, 250-256. (Authors' mary) 82k:92057 92A15 (49B10)

Linear model reduction using Mihailov criterion and Padé approximation technique. Internat. J. Control 33 (1981), no. 6, 1073-1089. (Author's summary) 82h:93059

Wan, C. B. (with Davis, M. H. A.) The principle of optimality for Markov jump processes. Analysis and optimisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 21-33, Academic Press, London, 1980. (W. Greblicki) 82a:93073 93F20 (49A60)

- Wan, Frederick Y. M. (with Tuckwell, Henry C.) The response of a nerve cylinder to spatially distributed white noise inputs. J. Theoret. Biol. 87 (1980), no. 2, 275–295. (Authors' summary) 82h-92023 92A09
- Wan, Henry Y., Jr. Causally indeterminate models via multivalued differential equations Bifurcation theory and applications in scientific disciplines (Papers, Conf., New York, 1977), pp. 530-544, Ann. New York Acad. Sci., 316, New York Acad. Sci., New York, 1979.
- (From the introduction) 82g:90027 90A16

 Wan, Kay Kong (with McFarlane, Keith) On certain local observables generated by the momenta. J. Phys. A 14 (1981), no. 1, L1-L3. (Authors' summary) 82a:81019 81D99 (58F06, 81B05)
 - (with McFarlane, Keith) On the quantization of multilinear momentum observables. (Italian and Russian summaries) Nuovo Cimento B (11) 63 (1981), no. 2, 627-641. (Manfred Andrié) 82j:58057 58F06 (81D05)
- Wan, Yieh Hei On disequilibrium adjustment processes. J. Math. Econom. 7 (1980), no. 2, 151-163. (Georg Bol) 82d:90033 90A14
- (with Hassard, Brian D.; Kazarinoff, Nicholas D.) ★Theory and applications of Hopf bifurcation. London Mathematical Society Lecture Note Series, 41. Cambridge University Press, Cambridge-New York, 1981. v+311 pp. (microfiche insert).

 ISBN 0-521-23158-2 (Ralph Abraham) 82;:58089 58F14 (34C25, 58–04, 73J10,
- Wanderley, Marcus Théorie axiomatique de l'orientation des variétés topologiques à bord. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 3, 213–215. (Author's summary) 82b:57011 57N65
- Wandl, Hannelore *On kernel estimation of regression functions. With German and Russian summaries. Wissenschaftliche Sitzungen zur Stochastik 80 [Scientific Meetings on Stochastics 80], 3. Akademie der Wissenschaften der DDR, Institut für Mathematik, Berlin, 1980. 25 pp. (Gilbert Walter) 82g:62064 62G05
- Berlin, 1980. 25 pp. (Gilbert Walter) 82ge52064
 62G05
 Waner, Stefan Equivariant homotopy theory and Milnor's theorem. Trans. Amer. Math. Soc. 258 (1980), no. 2, 351–368. (A. Dold) 82m:55016a 55P99 (55R05, 57S15)
 Equivariant fibrations and transfer. Trans. Amer. Math. Soc. 258 (1980), no. 2, 369–384. (A. Dold) 82m:55016b 55P99 (55R05, 57S15)

 - Equivariant classifying spaces and fibrations. Trans. Amer. Math. Soc. 258 (1980). no. 2, 385-405. (A. Dold) 82m:55016c 55P99 (55R05, 57S15)
 - (with Caruso, Jeffrey L.) An approximation to $\Omega^n \Sigma^n X$. Trans. Amer. Math. Soc. 265 (1981), no. 1, 147–162. (J. P. May) 82i:55006 55P35 (55P40)
- Wang, Alan P. Dissipative properties of a nonlinear differential operators equation. J. Math. Anal. Appl. 72 (1979), no. 1, 75-88. (J. Weidmann) 82b:35147 35Q99 (47A62) Quasilinearization of a general selfadjoint Riccati equation. J. Math. Anal. Appl. 78 (1980), no. 2, 648-658. (Robert H. Martin, Jr.) 824:34095 34G20
- Wang, Bo Ying (with Marcus, Marvin) Some variations on the numerical range. Line Multilinear Algebra 9 (1980), no. 2, 111-120. (L. Berg) 82d:47007 47A12 (15A18)
- Wang, Cecilia (with Chung, Lung Ock; Sario, Leo) Harmonic L^p functions on the Poincaré N-ball. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 4, 499-512. (M. Nakai) 82k:31010 31C12 (31B05)
 - (with Chung, Lung Ock; Sario, Leo) Quasiharmonic L^p functions and biharmonic degeneracy. Tohoku Math. J. (2) 32 (1980), no. 3, 439-445. (M. Nakai) 82c:31006
- Wang, Chang Yi The helical coordinate system and the temperature distribution inside a helical coil. Trans. ASME Ser. E J. Appl. Mech. 47 (1980), no. 4, 951-953. (From the text) 82h:80003 80A20
 - Arbitrary squeezing of fluid from a tube at low squeeze numbers. (German summary) Z. Angew. Math. Phys. 31 (1980), no. 5, 620-627. (Giovanni P. Galdi) 82c:76050 76D99 (76Z05)
 - Large deformations of a heavy cantilever. Quart. Appl. Math. 39 (1981/82), no. 2, 261-273. (Author's summary) 82h:73049 73H99
- Wang, Chao Chen (with Liu, I Shih) A note on material symmetry. Arch. Rational Mech. Anal. 74 (1980), no. 3, 277–296. (A. J. M. Spencer) 82d:73003 73B20 (73B05)
- Wang, Chih Ming (with Graybill, Franklin A.) Confidence intervals of nonnegative linear combinations of variances. J. Amer. Statist. Assoc. 75 (1980), no. 372, 869-873. (B. C. Gupta) 82i:62056 62F25
 - (with Graybill, Franklin A.) Confidence intervals on a ratio of variances in the two-factor nested components of variance model. Comm. Statist. A-Theory Methods 10
- (1981), no. 14, 1357-1368. (Authors' summary) 82:62106 62110

 Wang, Ching Hua (with Ying, Long An) The discontinuous initial value problem of a Trans. Amer. Math. Soc. 266 (1981), no. 2, 361-387. (R. G.
- Mang, Chong Hu (with Yin, Hong Sheng; Zhao, Jun Feng) On λ-separated subsets of unit spheres of normed linear spaces. (Chinese. English summary) Nanjing Daxue Xuebao 1980, Special Issue on Mathematics, 123-129. (Bor-Luh Lin) 82g:46042
- Wang, Chung Lie Functional equation approach to inequalities. II. J. Math. Anal. Appl. 78 (1980), no. 2, 522-530. (E. F. Beckenbach) 82;26021a 26D15 (39C05, 90C39)
 - A generalization of the HGA inequalities. Soochow J. Math. 6 (1980), 149-152. (E. F. Beckenbach) 82i:26013 26D15 (65K05, 90C39)
 - (with Patuwo, B. E.; Thomas, R. S. D.) The triangle inequality of Lessells and Pelling. (Serbo-Croatian summary) Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 678-715 (1980), 45-47 (1981). (S. R. Mandan). 82i:51034 51N20
 - Functional equation approach to inequalities. III. J. Math. Anal. Appl. 80 (1981), no. 1, 31–35. (E. F. Beckenbach) 82j:26021b 26D15 (39C05, 90C39)
- Wang, De Lin (with Xu, Yi Chao) On the classification of bounded semicircular domains in C². (Chinese) Acta Math. Sinica 23 (1980), no. 3, 372-384. (H. Wu) 82a:32005
- Wang, Edward Tzü Hsia (with Celmins, Uldis A.) Transitive sets of permutations. Ars Combin. 10 (1980), 83–89. (Giuseppe Pellegrino) 82h:05005 05A05 (20B99) (with Li, Kuo Wei) Permanental affine subspaces of generalized doubly stochastic
 - matrices. Bull. Inst. Math. Acad. Sinica 9 (1981), no. 1, 69-73. (H. Minc) 82g:15002 15A15 (15A51)
 - (with Li, Kuo Wei) Monotonicity conjecture on permanents of doubly stochastic matrices. Proc. Amer. Math. Soc. 82 (1981), no. 2, 173-178. (George P. Barker) 824-15003 15A15 (15A51)
- Wang, Fan (with Chen, Jin Quan; Gao, Mei Juan) A new approach to the representation

- theory of finite groups. I. The eigenfunction method for finding characters and irreducible bases. (Chinese) Nanjing Daxue Xuebao 1977, no. 2, 148-149. (Editors) 82m:20010a 20C35 (81G50)
- (with Chen, Jin Quan; Gao, Mei Juan) A new approach to the representation theory of finite groups. II. Intrinsic group and resolution of regular representation. (Chines English summary) Nanjing Daxue Xuebao 1978, no. 2, 110-128. (Editors) 82m:20010b
- (with Chen, Jin Quan; Gao, Mei Juan; Yu, Zu Rong) A new approach to the representation theory of finite groups. III. Application of the eigenfunction method to point groups. (Chinese. English summary) Nanjing Daxue Xuebao 1979, no. 4, 37-48. (Editors) 82m:20010e 20C35 (81G50)
- (with Chen, Jin Quan; Gao, Mei Juan; Yu, Zu Rong) A new method of calculation for molecular shell model. Sci. Sinica 23 (1980), no. 9, 1116-1127. (R. Mirman) 82b:81140 81G50 (20C35, 22E70)
- Wang, Frank J. S. Stability of an age-dependent population. SIAM J. Math. Anal. 11 (1980), no. 4, 683–689. (J. M. Cushing) 82d:92028 92A15 (45G10)
- The convergence of a spatial contact epiJemic model with incubation period. Bull. Inst. Math. Acad. Sinica 9 (1981), no. 2, 293-302. (D. R. Grey) 82k:60168 (60J60, 92A15)
- Wang, H. H. See Wang, Hsuan Heng
- Wang, Hai Li (with Hinkley, David V.) A trimmed jackknife. J. Roy. Statist. Soc. Ser. B 42
- (1980), no. 3, 347–356. (W. J. R. Eplett) 82c:62041 62F10

 Wang, Hao ★Popular lectures on mathematical logic. Van Nostrand Reinhold Co., New York-London; Kexue Chubanshe (Science Press), Peking, 1981. ix + 273 pp. ISBN 0-442-23109-1 (John Cherniavsky) 82e:03001 03-01 (68-01)
- Wang, Hong Gang The fundamental equations in the solution of a plane thermoelasticity problem by the finite element method. (Chinese. English summary) Appl. Math. Mech. 1
- (1980), no. 2, 247-259. (Author's summary) 82e:73088 73U05 (65N30, 73B30) Wang, Hsien Chung See Hu, S. T., 82b:01048 and Boothby, William M.; et al., 82f:01081 Wang, Hsuan Heng On vectorizing the fast Fourier transform. BIT 20 (1980), no. 2,
- 233-243. (A. D. Booth) 82d:65091 65T05 Wang, Huan Chen (with Wan, Bai Wu) Two transformed forms of population models. (Chinese. English summary) Acta Automat. Sinica 6 (1980), no. 4, 250-256. (Authors'
- summary) 82k:92057 92A15 (49B10) Wang, James Li Ming Approximation by rational modules on boundary sets. Pacific J. Math. 92 (1981), no. 1, 237-239. (Anthony G. O'Farrell) 82h:30042 30E10
- Wang, Jia Gang Some remarks on processes with independent increments. Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 627-631, Lecture Notes in Math., 850, Springer, Berlin, 1981. (Isaac Meilijson) 82h:60142 60130 (60G17)
 - The uniform integrability of a class of exponential martingales. (Chinese summary) Chinese Ann. Math. 2 (1981), no. 1, 13-20. (I. Cuculescu) 82k:60124 60H05 (60G15 60H05 (60G15.
- Wang, Jia Ye A kind of difference method for solving nonlinear parabolic partial differential equations. (Chinese) Numer. Math. J. Chinese Univ. 1 (1979), no. 2, 218-222. (Author's summary) 82g:65052 65N05
- Wang, Jian Fang (with Zhu, Yong Jin) Generating k-ary trees in lexicographic order. Sci.
- Sinica 23 (1980), no. 10, 1219-1225. (Authors' summary) 82a:68134 68E10 (05C05)
 Wang, Jing Hua (with Ying, Long An) Global solutions of the Cauchy problem for a nonhomogeneous quasilinear hyperbolic system. Comm. Pure Appl. Math. 33 (1980), no. 5, 579-597. (C. Bardos) 82a:35067 35L60
- Wang, Ju Kwei (with Hu, M. C.; Hwang, F. K.) A boundary problem for group testing.

 SIAM J. Algebraic Discrete Methods 2 (1981), no. 2, 81–87. (Authors' summary)

 871-99060 00725 90B25
- Wang, Kai Torus actions on cohomology complex projective spaces. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 2-3, part 2, 439–445. (H.-T. Ku) 82b:57032 57S25
 - Resultants and group matrices. Linear Algebra Appl. 33 (1980), 111-122. (Carl 15A15 Riehm) 82d:15004
 - Kronecker products of permutations and its applications to group matrices. Linear and Multilinear Algebra 9 (1980), no. 1, 69-76. (D. B. Hunter) 82f:15019 15A69
 - Locally smooth torus group actions on integral cohomology complex projective spaces. Pacific J. Math. 94 (1981), no. 1, 243-250. (M.-C. Ku) 82m:57028 57S25
 - Wang, Lian (with Wang, Mu Qiu) On a group of differential equations on the cylinder. II. (Chinese) Acta Math. Sinica 23 (1980), no. 4, 506-521. (J. S. W. Wong) 82j:34050 34D05 (58F10)
 - (with Wang, Mu Qiu) Qualitative analysis of a type of nonlinear differential equation of second order with forcing terms on the cylinder. (Chinese) Acta Math. Sinica 23 (1980), no. 5, 763-772. (J. S. W. Wong) 82j:34042 34C25
 - (with Wang, Mu Qiu) Qualitative method in analysis of a phase-locked loop with
 - tangent characteristic and frequency modulation input. (Chinese. English summary)

 Chinese Ann. Math. 1 (1980), no. 3-4, 411-419. (Authors' summary) 82h:34056 34C25 (93D05)
 - (with Wang, Mu Qiu; Zhang, Jin Yan) Equation of a phase locked loop with tangent discriminator and frequency modulation input and its generalization. Sci. Sinica 23 (1980), no. 5, 554-565. (V. M. Popov) 82a:93043 93D05 (34C25)
 - On the construction of generalized Lyapunov's function. Sci. Sinica 24 (1981), no. 4, -454. (Carmen Chicone) 82k:34058 34D20 (58F10, 93D20) 445-454. (Carmen Chicone) 82i:34058
- Wang, Lian Xiang (with Xu, Guang Shan) On a Diophantine inequality involving a class of G-functions in p-adic form. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 9, 389-392. Kexue Tongbao (English) 25 (1980), no. 10, 801-806. (F. Beukers) 82j:10066 10F35 (10F37)
 - (with Wang, Yuan; Ren, Jian Hua) A note on a transference theorem of the system of linear congruences. Acta Math. Sinica 24 (1981), no. 2, 303-307. (J. H. H. Chalk) 82:10043 10F35 (10B05, 10F40)
- Wang, Lie Heng Relation between eigenvalues and eigenvectors of the SOR matrix £, and the Jacobi matrix B. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 1, 35-40. (Author's summary) 82a:15012 15A18 (65F10)
- Wang, Ling Lie Chau (with Ogielski, A. T.; Prasad, M. K.; Sinha, A.) Bäcklund transformations and local conservation laws for principal chiral fields. Phys. Lett. B 91

81E10 (14F05, 35C05)
 Wang, Min Zhong On the solutions for several boundary value problems in half space elasticity. (Chinese, English summary) Beijing Daxue Xuebao No. 4 (1980), 36–42.
 (Author's summary) 82k:73013 73C35 (35Q20)
 Wang, Ming Shu (with Wang, Xian) Qualitative analysis of a toral differential equation having critical points. (Chinese, English summary) Nanjing Daxue Xuebao 1980, Special Issue on Mathematics, 39–58. (J. S. W. Wong) 82c:34035 34C05 (58F21)
 Wang, Mu Qiu (with Wang, Lian) On a group of differential equations on the cylinder. II.
 (Chinese) Actor Math. Spring 27 (1980) and 506. 531 (L. S. W. Wong) 821:4050

e) Acta Math. Sinica 23 (1980), no. 4, 506-521. (J. S. W. Wong) 82j:34050

34D05 (58F10)

(with Wang, Lian) Qualitative analysis of a type of nonlinear differential equation of second order with forcing terms on the cylinder. (Chinese) Acta Math. Sinica 23 (1980),

no. 5, 763-772. (J. S. W. Wong) 82j:34042 34C25
(with Wang, Lian) Qualitative method in analysis of a phase-locked loop with tangent characteristic and frequency modulation input. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 3-4, 411-419. (Authors' summary) 82h:34056 34C25 (93D05)

(with Wang, Lian; Zhang, Jin Yan) Equation of a phase locked loop with tangent discriminator and frequency modulation input and its generalization. Sci. Sinica 23 (1980), no. 5, 554-565. (V. M. Popov) 82a:93043 93D05 (34C25)

Wang, Patrick Shen Pei Finite-turn repetitive checking automata and sequential/parallel trix languages. IEEE Trans. Comput. 30 (1981), no. 5, 366-370. (Author's sum 68D35 82468039

Wang, Pei (with Hou, Bo Yu; Hou, Bo Yuan) Equations, eigenfunctions and Green function in field of O(5) instanton expressed by moving frames. Sci. Sinica 24 (1981), no. 3, 342–355. (Authors' summary) 82i:81146 81G20

ng, Pei Zhuang Introduction to fuzzy mathematics. II. (Chinese) Knowledge Practice Math. No. 3 (1980), 52-63. (Editors) 82g:03092 03E72 (68F99, 90Cxx, 90Dxx)

Dissipative structure theory and Markov chains. (Chinese. English summary) Sci. Exploration 1981, no. 1, 43-50. (Author's summary) 82m:82024 82A35 (60J10)
Wang, Qiao Ling (with Song, Guo Zhu) A property of (M_k) and its associated function.
(Chinese. English summary) Nanjing Daxue Xuebao 1980, Special Issue on Mathematics, 1-6. (Authors' summary) 82f:46047 46F05

Wang, Ren Hong (with Wu, Shun Tang) On a problem of rational spline interpolation. (Chinese. English summary) Numer. Math. J. Chinese Univ. 3 (1981), no. 2, 165–175. (Authors' summary) 82m:65010 65D07 (41A15)

ng, Rong A comment on the composite quantized field theory and bound states. (Chinese. English summary) Acta Phys. Sinica 29 (1980), no. 3, 365-373. (Tuan W. Wang, Rong A comm Chen) 82c:81063 81D10 (81E99)

On the isomorphism between gauge groups before and after renormalization in the presence of abelian subgroups and Higgs fields. (Chinese. English summary) Acta Phys. Sinica 30 (1981), no. 6, 731–746. (Author's summary) 82m:81067 81E99 (22E70)

Wang, S. P. (with Boothby, William M.; Chern, Shiing Shen) The mathematical work of H. C. Wang. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 2-3, part 1, xiii–xxiv. (Editors) 82f-01081 01A70 (53–03)

A note on free subgroups in linear groups. J. Algebra 71 (1981), no. 1, 232-234. (From the text) 82i:20051 20G15

Wang, Sheng Wang Ann. Math. 1 (1980), no. 3-4, 325-334. (Robert Carlson) 82j:47055 47B40 (46F10)

g, Shu Jing The "equivalent" stiffness matrix in the neighborhood of a singularity. (Chinese) Acta Math. Appl. Sinica 2 (1979), no. 4, 302-307. (Author's summary) 65N30

ang, Shu Tang The rational line partitions every self-dense metrisable space. Topology Appl. 12 (1981), no. 3, 331-332. (Paul Bankston) 82g:54013 54B15 (54E35)

Wang, Si Jing (with Fan, Yuan Xun) On the application of an interpolation matrix for computation of stresses in finite elements. Numerical methods in geomechanics, Aachen 1979 (Proc. Third Internat. Conf., Aachen, 1979), Vol. IV, pp. 1273-1280, Balkema, Rotterdam, 1980. (Rolf Rannacher) 82e:73064 73K25 (65N30)

(with Liu, Jun) A finite element simulation on the failure of brittle rocks. Numerical methods in geomechanics, Aachen 1979 (Proc. Third Internat. Conf., Aachen, 1979), Vo IV, pp. 1357-1362, Balkema, Rotterdam, 1980. (From the introduction) 82b:65143 mechanics, Aachen 1979 (Proc. Third Internat. Conf., Aachen, 1979), Vol. 65N30 (73M05)

Wang, Si Lei Fourier series for the class of BMO functions. (Chinese. English summary) J. Math. Res. Exposition 1981, no. 1, First Issue, 57-59. (Yung-Ming Chen) 82h:42010

Wang, Stuart Sui Sheng Extension of derivations. J. Algebra 69 (1981), no. 1, 240-246. (David E. Dobbs) 82e:13005 13B10

(with Morris, Robert A.) A Jacobian criterion for smoothness. J. Algebra 69 (1981), no. 2, 483-486. (S. Greco) 82j:14004 14B25 (14E40)

Wang, Szu Ching See Wang, Si Jing
Wang, T. G. (with Busse, F. H.) Torque generated by orthogonal acoustic waves—theory. J. Acoust. Soc. Amer. 69 (1981), no. 6, 1634-1638. (Authors' summary) 82f:76028 76005

Wang, Ti Xiang On perturbation problems for unbounded linear operators with discrete spectrum and their applications. (Chinese. English summary) Nanjing Daxue Xuebao

1981, no. 1, 1-12. (Author's summary) 82h:47016 47A70 (47A55)
Wang, Tseng Chan (with Salathé, Eric P.; Gross, Joseph F.) Mathematical analysis of oxygen transport to tissue. Math. Biosci. 51 (1980), no. 1-2, 89-115. (Authors' summary) 82b:92021 92A09 (92A07)

Wang, Tzu Chiang See Wang, Zi Qiang
 Wang, Tzu Chiang See Wang, Zi Qiang
 Wang, Xian (with Wang, Ming Shu) Qualitative analysis of a toral differential equation having critical points. (Chinese. English summary). Nanjing Daxue Nuebao 1980, Special Issue on Mathematics, 39-58. (J. S. W. Wong) 82c:34035 34C05 (58F21)
 Wang, Xin Min On some theorems for the convergence of the matrices \$\mathbb{C}_{\overline{\text{L}}}\$ (Chinese. English summary). Math. Numer. Sinica 2 (1980), no. 1, 63-68. (Author's summary) 82i:65024

Wang, Xin Yi (with Lin, Lei) Landau-de Gennes model of first-order phase

transitions—Gaussian approximation. (Chinese. English summary) Acta Phys. Sinica 29 (1980), no. 11, 1427-1436. (Authors' summary) 82g:82021 82A25 (82A57)

ng, Xing Hua Accurate estimates of remainders of quadrature formulas. (Chinese. English summary) Numer. Math. J. Chinese Univ. 1 (1979), no. 1, 102-111. (Author's summary) 82h:65022 65D32

Local convergence of the Xu-Ostrowski iteration method for differentiable functions (Chinese. English summary) Numer. Math. J. Chinese Unio. 1 (1979), no. 2, 173–178. (Cheng-Ming Lee) 82g:65027 65H05

Wang, Y. H. Sequential estimation of the mean of a multinormal population Statist, Assoc. 75 (1980), no. 372, 977-983, (Rasul A. Khan) 82b:62103 62L12 (with Gutierrez, A. P.) An assessment of the use of stability analyses in population J. Animal Ecology 49 (1980), no. 2, 435-452. (T. G. Hallam) 82g:92057 92A17 (34K20)

Wang, Yang Xian See Zhang, Hai Quan, 82h:10036

Wang, Yuan (with Zhang, Yong Xiao; Xu, Guang Shan) A number-theoretic method for numerical integration in high dimensions. (Chinese) Acta Math. Appl. Sinica 1 (1978), no. 2, 106-114. (Editors) 82i:65018 65D32 (10K05)

(with Wang, Lian Xiang; Ren, Jian Hua) A note on a transference theorem of the systems of linear congruences. Acta Math. Sinica 24 (1981), no. 2, 303-307. (J. H. H. Chalk) 82i:10043 10F35 (10B05, 10F40)

Wang, Yuan Da On some properties of Riemannian spaces of quasiconstant curvature. Tensor (N.S.) 35 (1981), no. 2, 173-176. (P. Drăgilă) 82j:53036

Wang, Yun Jiu The role of mathematical modeling in biological research. (Chinese) Kexue Tonghao 23 (1978), no. 8, 459-464.
 Wang, Yung Terng (with Desoer, Charles A.) Clarification of a footnote of: "On the

generalized Nyquist stability criterion" [IEEE Trans. Automat. Control 25 (1980), no. 2, 187-196; MR 81e:93065]. IEEE Trans. Automat. Control 26 (1981), no. 3, 804. (Editors) 93D15

See also Harris, C. J., 82k:93052

Wang, Zhong An investigation of mathematical methods in inhomogeneous phase chemical engineering. (Chinese) Knowledge Practice Math. 1981, no. 2, 11–22. (Editors) 82m:80008

Wang, Zi Kun (with Yang, Xiang Qun) Construction of terminating birth and death processes. (Chinese) Acta Math. Sinica 21 (1978), no. 1, 66–71. 82;60161 60180

Last exit distributions and maximum excursion for Brownian motion. Sci. Sinica 24 60J65 (60J45) (1981), no. 3, 324-331. (Mou-Hsiung Chang) 82j:60157

Wang, Zi Qiang Uniqueness, stability and variational principle for a large plastic deformation problem. (Chinese. English summary) Acta Mech. Sinica (Beijing) 1981, no. 3, 226-235. (Author's summary) 82m:73033 73E99 (49H05)

no. 3, 226-235. (Author's summary) 82m:73033 Wani, Jagannath K. (with Lo, Hing Po) Characterizing constants for biological populations

following certain power series abundance distributions. Professor Huzurbazar felicitation volume. J. Indian Statist. Assoc. 17 (1979), 189-195. (Authors' summary) 82h:62184

niewski, Jacek Theorem about completeness of quantum mechanical motion group. Rep. Math. Phys. 11 (1977), no. 3, 331-337. (Håkan Snellman) 82b:81024 81C10 "Time inversion" and mobility of many-particle systems. (1980), no. 1, 27-37. (A. V. Buhvalov) 82e:81023 81C99 (47D05)
Wanke-Jakubowska, M. B. (with Wanke-Jerie, M. E.) Erratum to the paper: "On orders of

skew elements in finite n-groups" [Demonstratio Math. 12 (1979), no. 1, 247-253; MR 80h:20111]. Demonstratio Math. 14 (1981), no. 2, 527-528. (Editors) 82i:20087

Wanke-Jerie, M. E. (with Wanke-Jakubowska, M. B.) Erratum to the paper: "On orders of skew elements in finite n-groups" [Demonstratio Math. 12 (1979), no. 1, 247-253; MR 80h:20111]. Demonstratio Math. 14 (1981), no. 2, 527-528. (Editors) 82i:20087 20N15

ess, P. (with Caldwell, James) A Fourier series approach to Burgers' equation. J. Phys. A 14 (1981), no. 5, 1029-1037. (Authors' summary) 82d:35085

Wanner, G. Characterization of all A-stable methods of order 2 m-4. BIT 20 (1980), no. 3, 367-374. (E. H. Twizell) 82g:65037 65L05 (with Nørsett, S. P.) Perturbed collocation and Runge-Kutta methods.

Math. 38 (1981/82), no. 2, 193-208. (Authors' summary) 82m:65065 (with Kaps, P.) A study of Rosenbrock-type methods of high order. Numer. Math.

38 (1981/82), no. 2, 279–298. (Authors' summary) 82m:65064 65L05 (with Hairer, E.) Algebraically stable and implementable Runge-Kutta methods of

higher order. SIAM J. Numer. Anal. 18 (1981), no. 6, 1098-1108. (Authors' summary) 65L05

rrooy, G. L. (with Vrieze, O. J.) ★Colloquium stochastische spelen. (Dutch)
[Colloquium on stochastic games] MC Syllabus, 39. Mathematisch Centrum, Amsterdam, 1978. v+118 pp. ISBN 90-6196-167-X (Jaap Wessels) 82b:90134 90D15 (90-01,

nsbeek, Tom A regression interpretation of the computation of MINQUE variance component estimates. J. Amer. Statist. Assoc. 75 (1980), no. 370, 375-376. (R. Kala) 62J10 (62F10)

nsink, Joh. H. Strabbe. (Dutch) Euclides (Groningen) 55 (1979/80), no. 8, 341-348. (Editors) 82f:01154 01A70 (01A50)

Waragai, Toshiharu The ontological law of contradiction and its logical structure. Japan Assoc. Philos. Sci. 6 (1981), no. 1, 43-58 (loose errata). (Stephen Read) 82m:03043

Jaski, Kazimierz On the Fourier problem for the poliparabolic equation. Fasc. Math. 11 (1979), 197–205. (William Rundell) 82g:35023 35C15 (35K35)

No. 11 (1979), 197-205. (William Rundell) 82g:35023 35C15 (35K35)
On the Cauchy-Dirichlet problem for the polyparabolic equation. Demonstr
Math. 14 (1981), no. 1, 183-199. (Antonino Maugeri) 82j:35081 35K35 (35K70)

Ward, J. W. (with Poreda, S. J.; Kably, A. K.) Multipliers of Hankel matrices. Sci. Fenn. Ser. A I Math. 5 (1980), no. 2, 347-354. (Nicholas P. Jewell) 82j:47047

Ward, James R., Jr. Periodic solutions for systems of second order differential equations. J. Math. Anal. Appl. 81 (1981), no. 1, 92-98. (K. Schmitt) 82j:34043 34C25 (with Mawhin, Jean) Nonresonance and existence for nonlinear elliptic boundary value problems. Nonlinear Anal. 5 (1981), no. 6, 677-684. (P. W. Bates) 82j:35063

1982

Asymptotic conditions for periodic solutions of ordinary differential equations. Proc. Amer. Math. Soc. 81 (1981), no. 3, 415-420. (Yiannis Sficas) 82a:34057

Ward, Joseph D. (with Chui, Charles K.; Smith, Philip W.) Approximation by M-ideals in the disc algebra. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 305-309, Academic Press, New York, 1980. (D. N. Zarnadze) 82f:30032 30E05 (41A65, 46J15)

(with Smith, R. R.) Matrix ranges for Hilbert space operators. Amer. J. Math. 102 80), no. 6, 1031–1081. (Man-Duen Choi) 82a:46067 46L05 (47A12) (1980), no. 6, 1031-1081. (Man-Duen Choi) 82a:46067

(with Smith, R. R.) Locally isometric liftings from quotient C*-algebra:

 Math. J. 47 (1980), no. 3, 621–631. (Man-Duen Choi)
 82a:46068
 46L05 (47A12)

 (with Allen, G. D.; Legg, D. A.)
 Hermitian liftings in Orlicz sequence spaces

 Pacific J. Math. 86 (1980), no. 2, 379–387. (T. A. Gillespie)
 82a:47031
 47B37 (46A4)

 46E30, 47B15)

(with Rogers, Donald D.) C_p-minimal positive approximants. Acta Sci. Math. (Szeged) 43 (1981), no. 1-2, 109-115. (D. A. Herrero) 82i:47032 47B10 (47B10 (47A30. 47A55, 47B15)

(with Smith, R. R.) The geometric structure of generalized state spaces. J. Funct. Anal. 40 (1981), no. 2, 170-184. (Man-Duen Choi) 82i:46094 46L30 (47A12)

(with Narcowich, Francis J.) A Toeplitz-Hausdorff theorem for matrix ranges. J. erator Theory 6 (1981), no. 1, 87-101. (J. W. Bunce) 82m:47004 47A12 (46L05)

Ward, L. E., Jr. Axioms for cutpoints. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 327-336, Academic Press, New York, 1981. (B. J. Pearson) 82g:54053 54F30 (54F05)

Extending Whitney maps. Pacific J. Math. 93 (1981), no. 2, 465–469. (R. N. mocadze) 82m:54003 54B20 (54C20) Ormocadze) 82m:54003

Ward, Richard Samuel Introduction: Massless fields and sheaf cohomology. Advances in

twistor theory, pp. 19-24, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81D25 (81E99, 83A05)

Massless fields from twistor functions. Advances in twistor theory, pp. 46-48, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81D25 (83A05)

Sheaf cohomology and an inverse twistor function. Advances in twistor theory, 68-71, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 81D25 (83A05)

Introduction: curved twistor spaces. Advances in twistor theory, pp. 121–131, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 83C45

The twisted photon: massless fields as bundles. Advances in twistor theory, pp. 132-135, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See

81D25 (83A05)

Twistor construction for left-handed gauge fields. Advances in twistor theory, p. 147-149, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 81E10

(with Penrose, Roger) Twistors for flat and curved space-time. General relativity and ravitation, Vol. 2, pp. 283-328, Plenum, New York, 1980. (Arthur Greenspoon)

83-02 (32L99, 53C55, 81E20) Self-dual space-times with cosmological constant. Comm. Math. Phys. 78 (1980/81), no. 1, 1-17. (Richard Sigal) 82g:83004 83C20 (32C10, 53C15, 53C55, 83C45)

no. 1, 1-17. (Richard Sign) 8228-3004

Ansätze for self-dual Yang-Mills fields. Comm. Math. Phys. 80 (1981), no. 4, 563-574. (Nicholas M. J. Woodhouse) 82m:81059

81E10 (14F05, 58A99)

Two Yang-Mills-Higgs monopoles close together. Phys. Lett. B 102 (1981), no. 2-3, 136-138. (Author's summary) 82i:81098 81E10 (53C05)

See also Advances in twistor theory, 82e:83002

Wardle, Leigh J. The direct boundary integral method for potential theory and elasticity. Application and numerical solution of integral equations (Proc. Sem., Australian Nat. Univ., Canberra, 1978), pp. 135-149, Monographs Textbooks Mech. Solids Fluids: Mech. Anal., 6, Sijthoff & Noordhoff, Alphen aan den Rijn, 1980. (Christopher T. H. Baker) 82&35016 35A25 (45L10, 65R20)

Wardrop, M. J. Coupled Langmuir and ion-acoustic solitary waves. Phys. Lett. A 69 (1978/79), no. 2, 109-112. (From the summary and introduction) 824:82065

bry-Wardrop, Mary See Embry-Wardrop, Mary

Ware, James H. (with Demets, David L.) Group sequential methods for clinical trials with a one-sided hypothesis. Biometrika 67 (1980), no. 3, 651-660. (Rasul A. Khan) 82e:62122 62L10

Waren, Allan D. (with Lasdon, Leon S.) Survey of nonlinear programming applications. Oper. Res. 28 (1980), no. 5, 1029–1073. (Csaba Fabian) 82a:90181 90C50 (90C30)

Warfield, John N. Learning through model building. Computer-assisted analysis and model simplification (Proc. First Sympos., Univ. Colorado, Boulder, Colo., 1980), pp. 69-78, Academic Press, New York, 1981. (See 82g:00016) 00A69 (92A20) Warfield, R. B., Jr. (with Huber, Martin) On the values of the functor lim . Arch. Math

(Basel) 33 (1979/80), no. 5, 430-436. (Donald Cook) 82b:20077 20K40 (18G15) The number of generators of a module over a fully bounded ring. J. Algebra 66

(1980), no. 2, 425–447. (J. C. Robson) 82h:16021 16A54 (16A55)

Cancellation of modules and groups and stable range of endomorphism rings.

Pacific J. Math. 91 (1980), no. 2, 457–485. (K. R. Goodearl) 82m:16022 16A5-

Warga, J. On bounding, interior and covering functions. J. Math. Anal. Appl. 82 (1981), no. 1, 255-267. (V. F. Dem'janov) 82k:49039 49B99 (54C99)

nt, Richard Squarefree numbers in arithmetic progressi (2) 22 (1980), no. 1, 21-24. (R. A. Rankin) 82b:10055 10H20

rod, Ken Counterfactuals and substitution of equivalent antecedents. Special issue on conditionals. J. Philo: Logic 10 (1981), no. 2, 267-289. (Charles F. Kielkopf) 82k:03023 03B45 (03 .05)

Warming, R. F. (with Beam, Richard M.) Recent advances in the development of implicit schemes for the equations of fluid dynamics. Seventh International Conference on Numerical Methods in Fluid Dynamics (Stanford Univ., Stanford, Calif.; NASA/Ames Res. Center, Moffett Field, Calif., 1980), pp. 429-433, Lecture Notes in Phys., 141, Springer, Berlin, 1981. (J. Mikliček) 82m:65083 65M05 (76A60)

(with Steger, Joseph L.) Flux vector splitting of the inviscid gasdynamic equations with application to finite-difference methods. J. Comput. Phys. 40 (1981), no. 2, 263-293. (N. N. Janenko) 82k:76053 76N15 (65P05)

Warner, Garth (with Gangolli, Ramesh) Zeta functions of Selberg's type for sor noncompact quotients of symmetric spaces of rank one. Nagoya Math. J. 78 (1980), 1-44. (P. C. Trombi) 82m:58049 58G10 (10D24, 10D40)

Warner, Ken (with Turner, Barbara) The structure and geometry of 4×4 pandiagonal matrices. Discrete Math. 34 (1981), no. 3, 301-310. (C. A. Rowley) 82f:20012 20B25

Warner, M. W. The tolerability of subspaces of the real line. Bull. Malaysian Math. Soc. (2) 3 (1980), no. 1, 45-50. (Stephen B. Seidman) 82a:54068 54F65 (92A27) (with Muir, A.) The decomposition of tolerance automata. Kybernetes 9 (1980),

no. 4, 265-273. (P. Dömösi) 82a:68105 68D30 (68D37)

Stability of orbits in automata and control theories. Kybernetes 10 (1981), no. 2, 99-103. (C. Marchal) 82e:58057 58F10 (68D05, 93D99)

On tolerating automata. Kybernetes 10 (1981), no. 3, 173-178. (Author's summary) 82f:68059 68D30

Warnock, Robert Lee (with Johnson, Porter W.; Kackebeke, M.) Dynamical equations for a Regge theory with crossing symmetry and unitarity. III. Crossing-symmetry representation with explicit Regge-pole terms. Phys. Rev. D (3) 16 (1977), no. 2, 482-493. (G. R. Allcock) 82h:81125a 81F30 (32D99, 81F20)

(with Johnson, Porter W.) Solution of the unitarity equation with overlapping left and right cuts: a tool for study of the S* and similar systems. J. Math. Phys. 22 (1981), no. 2, 385-399. (N. D. Sengupta) 82f:81072 81F30 (81F20)

Dynamical equations for a Regge theory with crossing symmetry and unitarity. IV. Coupled channels. Phys. Rev. D (3) 23 (1981), no. 8, 1832-1844. (G. R. Allcock) 82h:81125b 81F30 (32D99, 81F20)

Warren, David H. D. (with Pereira, Fernando C. N.) Definite clause grammars for language analysis-a survey of the formalism and a comparison with augmented transition networks. Artificial Intelligence 13 (1980), no. 3, 231-278. (Authors' summary) 82g:68073

Warren, David S. (with Friedman, Joyce) \(\lambda \)-normal forms in an intensional logic for English. Studia Logica 39 (1980), no. 2-3, 311-324. (Garrel Pottinger) 82k:03030 03B65 (03B15, 03B40, 03B45)

Warren, M. E. See Chen, Chi Tsong, 82d:93023

Warren, Richard H. Identification spaces and unique uniformity. Pacific J. Math. 95 (1981), no. 2, 483-492. (W. F. Newns) 82j:54050 54E15

Warrington, R. O. (with Blackketter, D. O.; Henry, Myron S.; Garner, E. R.) A new iterative method for solving simultaneous linear equations. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 70-72, IMACS, New Brunswick, N.J., 1979. (See 82a:65005)

Warrior, J. (with Viswanadham, N.) A new approach for fixed point smoothing in linear distributed parameter systems. Internat. J. Systems Sci. 12 (1981), no. 4, 511-517. (Authors' summary) 82d:93070 93E14

Warsi, S. A. (with Usmani, Riaz A.) Quintic spline solutions of boundary value problems. Comput. Math. Appl. 6 (1980), no. 2, 197-203. (H. Werner) 82c:65052 65L10 (with Usmani, Riaz A.) Smooth spline solutions for boundary value problems in plate deflection theory. Comput. Math. Appl. 6 (1980), no. 2, 205-211. (Authors' summary) 82b:73041 73K30 (65L10)

Warusfel, A. (with Malliavin-Brameret, Marie-Paule) ★Algèbre linéaire et géométrie classique. (French) [Linear algebra and classical geometry] Exercises. [Exercises] Maîtrise de Mathématiques Pures. [Mastery of Pure Mathematics] Masson, Paris, 1981. 128 pp. ISBN 2-225-68640-8 (R. J. Bumcrot) 82j:15001b 15-01 (00A07)

Warwick, K. Self-tuning regulators—a state space approach. Internat. J. Control 33 (1981), no. 5, 839-858. (Author's summary) 82e:93107 93E10 (93B55)

Warzecha-Sawon, Aleksandra (with Sawon, Zbigniew) Maximal subalgebras of algebra C(X). (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 5-6, 257-260 (1981). (T. W. Gamelin) 82g:46090 46J10 (46J30)

san, M. T. (with Buckholtz, P. G.) First passage probabilities of a two-dimensional Brownian motion in an anisotropic medium. Sankhyā Ser. A 41 (1979), no. 3-4, 198-206. 60J65 (P. Laurie Davies) 82g:60106

(with Burnett, R. T.) The negative binomial point process and its inference Multivariate statistical analysis (Proc. Conf., Dalhousie Univ., Halifax, N.S., 1979), pp. 31-45, North-Holland, Amsterdam, 1980. (See 81m:62005) 60G55 (62M07,

Waschbüsch, Josef (with Scherzler, Eberhard) A class of self-injective algebras of finite representation type. Representation theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 545–572, Lecture Notes in Math., 832, Springer, Berlin, 1980. (From the text) 82i:16034 16A64

A class of self-injective algebras and their indecomposable modules. Represent theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 632-647, Lecture Notes in Math., 832, Springer, Berlin, 1980. (From the text) 82c:16023 Eine Klasse von Quasi-Frobenius-Algebren und ihre unzerlegbaren Moduln. J.

Algebra 69 (1981), no. 2, 372-401. (P. Donovan) 82i:16018 16A36 Symmetrische Algebren vom endlichen Modultyp. J. Reine Angew. Math. 321 (1981), 78-98. (Idun Reiten) 82f:16021 16A46 (16A64)

Wasen, R. (with Rotkiewicz, A.) Lehmer's numbers. Acta Arith. 36 (1980), no. 3, 203-217. (D. H. Lehmer) 82a:10009 10A25

(D. H. Lettiner) deal today (D

Washburn, Robert B. (with Baillieul, John; Brockett, Roger W.) Chaotic motion in near feedback systems. IEEE Trans. Circuits and Systems 27 (1980), no. 11, 990-997 (Mark Levi) 824-58039 58F13 (93D15)

urn, Sherwood On the moduli of plane curve singularities. II. The versal E-deformation in the case of a single characteristic pair. J. Algebra 66 (1980), no. 2, 354-385. (Vasile Brinzānescu) 82à:14026 14H20 (14H15)

Washihara, Masako Convergence and compactness in ranked spaces. (Japanese summary) Acta Human. Sci. Univ. Sangio Kyotien. Natur. Sci. Ser. No. 8 (1978), 22-31. (Gary

Gruenhage) 82a:54006 54A20 (54E99)
Washington, Lawrence C. Zeros of p-adic L-functions. Seminar on Number Theory. 1980-1981 (Talence, 1980-1981), Exp. No. 25, 4 pp., Univ. Bordeaux I, Talence, 1981. (See 82m:10006) 12B30 (12A70, 12A95)

Benford's law for Fibonacci and Lucas numbers. Fibonacci Quart. 19 (1981), no. 2, 175-177. (S. P. Mohanty) 82f:1009 10A30 (10A35)

u, Shin (with Orikasa, Teruaki; Fukai, Ichiro) Analysis of two-dimensional H-plane orns by the finite element method extended to unbour nded fields. (Japanese. English ary) J. Asahikawa Tech. College No. 18 (1981), 133-141. (From the sum 78A50

izu, Kyuichiro A note on the principle of stationary comp near elasticity. Mechanics today, Vol. 5, pp. 509-522, Pergamon, Oxford, 1980. (R. illgol) 82a:73012 73C50 (49H05) R. Huilgol) 82a:73012

slaw (with Dobija, Mieczysław; Zając, Kazimierz) Construction and ation of one-dimen sional empirical distribution functions of continuous random variables. (Polish. English and Russian summaries) Przegląd Statyst. 25 (1978), no. 4, 565-576 (1979). (M. Hušková) 82d:62087 62G30

ska, Anita On the Gentzen-type formalizations. Z. Math. Logik Grundlag. Math. 26

(1980), no. 5, 439–444. (Henry Africk) **82g-03102** 03F50 (03B25, 03D05, 68F05) silkowski, G. W. Can any stationary iteration using linear information be globally convergent? J. Assoc. Comput. Mach. 27 (1980), no. 2, 263-269. (J. G. Herriot) 65H05 (65J15)

ecture for mi ltipoint iterations for the solution of scalar poplinear n-evaluation con equations. J. Assoc. Comput. Mach. 28 (1981), no. 1, 71-80. (M. Z. Nashed) 82c:65030 65H05 (41A25, 90C30)

on, Judith C. On infinite Nielsen kernels. Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference (State Univ. New York, Stony Brook, N.Y., 1978), pp. 497–503, Ann. of Math. Studies, 97, Princeton Univ. Press, Princeton, N.J., 1981. (L. Keen) 82i:39063 30F10 (10D07, 20H10, 30F35, 32G15, 57N05) sserman, Arthur G. (with Brown, Morton) Arithmetic invariants of simplicial complexes.

Canad. J. Math. 32 (1980), no. 6, 1306-1310. (Jože Vrabec) 82e:57011 (with Smoller, Joel) Global bifurcation of steady-state solutions. tions 39 (1981), no. 2, 269-290. (A. Vanderbauwhede) 82d:58056 58F14 (34B15.

Type II representations of inseparable C*-algebras. Bull. Lo.

Math. Soc. 13 (1981), no. 3, 231-234. (J. W. Bunce) 82:46091 46L05
Wasynczuk, O. (with DeCarlo, R. A.) The component connection model and structure preserving model order reduction. Automatica—J. IFAC 17 (1981), no. 4, 619-626. (Authors' summary) 82h:93003 93A15 (93C05)

Watabe, Mutsuo Correction to the paper: "On class numbers of some cyclotomic fields" [J. Reine Angew. Math. 301 (1978), 212–215; MR 80h:12005]. J. Reine Angew. Math. 329 (1981), 176. (Editors) 82m:12005 12A50 (12A35)

tanabe, Atumi On the degrees of irreducible representations of finite groups. Osaka J. Math. 18 (1981), no. 2, 403-406. (Robert B. Howlett) 82i:20015 20C15

e, Chikara A note on an algebraic divisor in C". Sci. Rep. Kanazawa Univ. 23 (1978), no. 1, 17-29. (Author's summary) 82i:32013 32A15 (32A22) A remark on the constant Jacobian problem. Ann. Sci. Kanazawa Univ. 17 (1980), 13-16 (1981). (Vazgain Avanissian) 82i:32064 32H99

13-16 (1961). (Vargalin (Valussian) Islami, Hidenori) Catastrophe analysis of structures by discretization and modal transforms. Mem. Fac. Engrg. Kyoto Univ. 43 (1981), no. 1, 67-87. (D. R. J. Chillingworth) 82k:58024 58C28 (73H05)

tanabe, Hiroshi (with Morita, Akio) Use of continued fractions for the calculation of

higher-order terms in a perturbation system. Chem. Phys. Lett. 77 (1981), no. 1, 158–162. (Authors' summary) 82b:81026 81C12 tanabe, Hisako The Choquet boundary and the integral representation. Natur. Sci. Rep. nizu Univ. 31 (1980), no. 1, 23-33. (Thomas E. Armstrong) 82f:46013

The balayage onto closed sets with respect to continuous function-kernels. Natur.

Sci. Rep. Ochanomizu Univ. 32 (1981), no. 1, 13-21. (N. Boboc) 82k:31011 Watanabe, Hisao (with Hitsuda, Masuyuki) On stochastic integrals with respect to an infinite number of Brownian motions and its applications. Proceedings of the tional Symposium on Stochastic Differential Equations (Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1976), pp. 57-74, Wiley, New York, 1978. (Authors' introduction) 60H05

(with Ichibara, Kanji) Double points for diffusion processes. Japan. J. Math. (N.S.) 6 (1980), no. 2, 267–281. (Jean-Michel Bismut) 82g:60102 60J60 (58G32, 60G17)
Watanabe, Keigo Optimal filtering and smoothing algorithms for linear

distributed-parameter systems with pointwise observation. Internat. J. Systems Sci. 12

81), no. 3, 325-349. (Author's summary) 82c60072 60035 (93E11, 93E14)
An alternative approach to the derivation of distributed-type partitioned filters. (1981), no. 3, 325-349. (Author's sum

Internat. J. Systems Sci. 12 (1981), no. 3, 351-356. (Author's summary) 82e:93113 93E11 (94A14)

(with Yoshimura, Toshio; Soeda, Takashi) A diagnosis method for linear stochastic systems with parametric failures. Trans. ASME Ser. G.J. Dynamic Systems Measurement Control 103 (1981), no. 1, 28-35. (Authors' summary) 82e:93112

(with Yoshimura, Toshio; Soeda, Takashi) A discrete-time adaptive filter for stochastic distributed parameter systems. Trans. ASME Ser. G. J. Dynamic Systems Measurement Control 103 (1981), no. 3, 266-278. (From the summary) 82h:93077

Watanabe, Keiichi Invariant subrings which are complete intersections. I. Invariant subrings of finite abelian groups. Nagoya Math. J. 77 (1980), 89–98. (J. C. Fogarty) 82d:13020 13H10 (14M10)

Watanabe, Kimio On plurigenera of normal isolated singularities. I. Math. Ann. 250 (1980), no. 1, 65–94. (E. Brieskorn) 82i:32025 32C40 (14B05)

e, Masanobu (with Miyahara, H.; Hasegawa, Toshiharu) Queueing analysis of integrated switched networks. Evolutions in computer commun pp. 481-486, North-Holland, Amsterdam, 1978. (See 82m:94001) nications (Kyoto, 68C15 (68A05)

abe, Osamu Reproducing differentials and certain theta functions on open Riema surfaces. J. Math. Kyoto Univ. 21 (1981), no. 1, 189-202. (H. H. Martens) 82f:30051 30F35 (30F30)

anabe, Satosi Pattern recognition as a quest for minimum entropy. Pattern Recogni 13 (1981), no. 5, 381-387. (Author's introduction) 82h:68122 68G10 (92A90)

Watanabe, Seiji The boundedness of closed linear maps in C*-algebras. Acta Sci. Math. (Szeged) 43 (1981), no. 1-2, 37-39. (B. E. Johnson) 82i:46085 46K05 (46L05)

Watanabe, Shinzo Excursion point process of diffusion and stochastic integral. Proceedings of the International Symposium on Stochastic Differential Equations (Res. Inst. Math. Sci., Kyoto Univ., Kyoto, 1976), pp. 437-461, Wiley, New York, 1978. (Nicole El Karoui) 60J60 (60G55, 60H05, 60J55)

Construction of diffusion processes with Wentzell's boundary conditions by means of Poisson point processes of Brownian excursions. Probability theory (Papers, VIIth Semester, Stefan Banach Internat. Math. Center, Warsaw, 1976), pp. 255-271, Banach

Center Publ., 5, PWN, Warsaw, 1979. (Kiyosi Itô) 82a:60119 60360 (60H10) (with Takahashi, Yöichirö) The probability functionals (Onsager-Machlup functions) sion processes. Stochastic integrals (Proc. Sympos., Univ. Durha 1980), pp. 433-463, Lecture Notes in Math., 851, Springer, Berlin, 1981. (M. Fukushima) 58G32 (60J60, 82A35)

tanabe, Shôji (with Ikeda, Fumio) On some properties of Finsler spaces based on the indicatrices. Publ. Math. Debrecen 28 (1981), no. 1-2, 129-136. (H. Rund) 82i:53024 53B40

Watanabe, Tadashi (with Otsu, Tôzaburô) Generating functions of two-time Green nctions for simple systems. II. Phys. Rep. Kumamoto Univ. 4 (1979), no. 1, 37-44. (Martin Costabel) 82c.81056 81C99 (81N05)
(with Otsu, Hideharu) Vortices in two-dimensional anisotropic σ-models. Progr.

oret. Phys. 65 (1981), no. 1, 164-171. (Authors' summary) 82f:81055

(58E30, 82A15)

Watanabe, Takahiro (with Asano, Takao; Saito, Nobuji) Upper bounds on lengths of Watanabe, Takanio (with Asano, Takao, Saito, Rootuji) Opper tourius on reignis or Chinese postman walks in undirected graphs. Systems-Comput-Controls 10 (1979), no. 2, 66–75 (1981). (Carsten Thomassen) 821:05071 05C45 (90C08)
Watanabe, Tetsuro On a characterization of the solvable groups of Galois type. Mem. Nat. Defense Acad. 20 (1980), no. 1, 7–12. (M. E. Harris) 82a:20045 20F16 (12F10)
Watanabe, Toshihiro On a difference system of the integrals of Pochhammer. Proc. Japan

Acad. Ser. A Math. Sci. 56 (1980), no. 9, 433-437. (G. Marinescu) 82e:41050 (32C40, 33A70, 39A10, 58C27)

be, Toshimasa (with Ae, Tadashi; Nakamura, Akira) On the removal of forbidden graphs by edge-deletion or by edge-contraction. Discrete Appl. Math. 3 (1981), no. 2, 151-153. (D. R. Lick) 82k:05097 05C99 (68C25)

de (with Fujimoto, Atsuo) Symmetries of certain nonlinear evolution be, Yoshihi equations. Mem. Fac. Engrg. Hiroshima Univ. 7 (1979/80), no. 3, 7-15 (1981).

(Yoshihito Tomita) 82g:58040 SRF07 (13NOS, 35A30, 35K55)
(with Fujimoto, Atsuo) Conserved densities of the fifth-order Korteweg-de Vries equation. Lett. Math. Phys. 4 (1980), no. 3, 185-193. (Authors' introduction) 82g:35104 35Q20 (58F07)

(with Fujimoto, Atsuo) Conserved densities of certain nonlinear evolution equations. Math. Japon. 26 (1981), no. 2, 203-221. (Francesco Calogero) 82i:35085

Watatani, Vasuo Haagerup's multiplications on group C*-algebras. Math. Japon. 24 (1979/80), no. 2, 223-224. (Jonathan M. Rosenberg) 82b:22008 22D25 (46L05) (with Enomoto, Masatoshi; Takehana, Hiroaki) C*-algebras on free semigroups as

extensions of Cuntz algebras. Math. Japon. 24 (1979/80), no. 5, 527-531. (William 46L05 Paschke) 82b:46070 Clifford C*-algebras. Math. Japon. 24 (1979/80), no. 5, 533-536. (William Paschke)

82b:46071 46L05

Potential operators for irreducible dynamical semigroups on operator algebras.

Math. Japon. 25 (1980), no. 1, 135–142. (László Zsidó) 82d:46095 46L55 (with Enomoto, Masatoshi) Young diagrams and C*-algebras. Math. Japon. 25

(1980), no. 4, 395-404. (A. R. Camina) 82f:46064 46L05 (20C32, 22D35)
(with Enomoto, Masatoshi; Fujii, Masatoshi) Tensor algebra on the sub-Fock space associated with 04. Math. Japon. 26 (1981), no. 2, 171-177. (E. Størmer) 82g:46098

(with Choda, Hisashi) Subfreely acting automorphisms of operator algebras. Math. Japon. 26 (1981), no. 2, 223-232. (Takateru Okayasu) 82j:46081

Toral automorphisms on irrational rotation algebras. Math. Japon. 26 (1981), no. 4, 479–484. (Jonathan M. Rosenberg) 82m:46073 46L55 (28D20, 46L40)

van de Water, Henk (with Willems, Jan C.) The certainty equivalence property in stochastic control theory. IEEE Trans. Automat. Control 26 (1981), no. 5, 1080–1087. (Authors' summary) 82k:93081 93E20

Waterhouse, William C. ★Introduction to affine group schemes. Graduate Texts in Mathematics, 66. Springer-Verlag, New York-Heidelberg, 1979. xi+164 pp. ISBN 0-387-90421-2 (M. H. Gizatullin) 82e:14003 14-01 (14Lxx, 20G99)

The early proofs of Sylow's theorem. Arch. Hist. Exact Sci. 21 (1979/80), no. 3, 279–290. (Manfred Stern) 82i:01034 01A55 (20–03)

(with Weisfeiler, Boris) One-dimensional affine group schemes. J. Algebra 66 (1980), no. 2, 550-568. (M. H. Gizatullin) 82e:14057 14L15 (with McDonald, B. R.) Projective modules over rings with many units. Proc. Amer.

h. Soc. 83 (1981), no. 3, 455-458. (Daniel D. Anderson) 82j:13010 (13B25)

Waterman, Daniel (with Goffman, Casper) The localization principle for double Fourier series. Studia Math. 69 (1980/81), no. 1, 41-57. (Hans P. Heinig) 82d:42010 42B05

(with Golfman, Casper; Liu, Fêng Chê) A remark on the spaces V_{1,a}. Proc. Amer. Math. Soc. 82 (1981), no. 3, 366-368. (Wo-Sang Young) 82i:26004 26A45 (28A20,

(with Sahney, B. N.) On the summability of Fourier series. Rev. Roumaine Math Pures Appl. 26 (1981), no. 2, 327-330. (V. Totik) 82f:42004 42A24

Waterman, M. S. (with Howell, J. A.; Smith, Temple F.) Computation of generating functions for biological molecules. SIAM J. Appl. Math. 39 (1980), no. 1, 119–133. (From the introduction) 82a:92018 92A10 (92A40)

Waterman, P. C. Survey of T-matrix methods and surface field representations. Acoustic, electromagnetic and elastic wave scattering-focus on the T-matrix approach (Proc Internat. Sympos., Ohio State Univ., Columbus, Ohio, 1979), pp. 61-78, Pergamon, Oxford, 1980. (See 82h:78002) 78A25 78A25

Waterman, P. L. (with Beardon, A. F.) Strongly discrete subgroups of SL(2, C). J. London Math. Soc. (2) 24 (1981), no. 2, 325-328. (A. M. Macbeath) 82i:30065 22E40, 30F40)

- Waters, H. R. (with Andreadakis, M.) The effect of reinsurance on the degree of risk sociated with an insurer's portfolio. Astin Bull. 11 (1980/81), no. 2, 119-135. (Authors' introduction) 82k62147 62P05
- Waters, William E. See Environmental I
- management, 82j-92001

 Waters, William M., Jr. An alternate formula for the jth coefficient of $(a+b)^{-n}$ and a surprising relationship to the triangle of Pascal. MATYC J. 15 (1981), no. 2, 122-125. (Heiko Harborth) 82j:05011
- Determining initial values for stiff systems of ordinary differential equations. SIAM J. Numer. Anal. 18 (1981), no. 1, 13-20. (J. R. Cash) 82c:65049
- Watkins, Mark E. (with Holton, D. A.) On infinite tournaments with regular automorphism groups. Aequationes Math. 22 (1981), no. 1, 46-53. (J. W. Moon) 82k:05060 (05C20, 20B27)
- Watnick, Richard Constructive and recursive scattered order types. Logic Year 1979-80 (Proc. Seminars and Conf. Math. Logic, Univ. Connecticut, Storrs, Conn., 1979/80), pp. 312-326, Lecture Notes in Math., 859, Springer, Berlin, 1981. (Charles Applebaum) 03D50
- son, Bruce B. (with Borwein, David) On the relation between the logarithmic and Borel-type summability methods. Canad. Math. Bull. 24 (1981), no. 2, 153-159. (B. E. Rhoades) 82g:40010 40G10 (40E05)
- m, D. F. Computing the n-dimensional Delaunay tessellation with application to Voronoĭ polytopes. Comput. J. 24 (1981), no. 2, 167-172. (Author's summary) 82f:52002 52-04 (52A25)
- Watson, Dan A. (with Blumenthal, Saul) A two-stage procedure for estimating the size of a truncated exponential sample. Austral. J. Statist. 22 (1980), no. 3, 317-327. (S. N. Alam) 82i:62053 62F12
- Watson, Eric John ★Laplace transforms and applications. VNR New Mathematics Son, 2rt Sum

 1. Lapracy (10. Van Nostrand Reinhold Co., New York-London, 1981. viii + 205 pp.

 1. SBN 0-442-30176-6 (R. G. Buschman) 82m:44001 44-01 (33-01)
- Watson, G. Alistair * Approximation theory and numerical methods. A Wiley-Interscience Publication. John Wiley & Sons, Ltd., Chichester, 1980. x+229 pp. ISBN 0-471-27706-1 (M. Lachance) 82e:41001 41-01 (65-01)
 - (with Baboolal, S.) Computational experience with an algorithm for discrete L_1 approximation. (German summary) Computing 27 (1981), no. 3, 245-252. (Authors' 65D10
- Watson, G. L. Acknowledgement: "Determination of a binary quadratic form by its values at integer points" [Mathematika 26 (1979), no. 1, 72-75; MR 81e:10019]. Mathematika 27 (1980), no. 2, 188 (1981). (Editors) 82d:10037 10C05
- tson, G. N. See Stuart, S. N., 82h:33001 Watson, Layne T. (with Yang, Wei H.) Optimal design by a homotopy method. Applicable Anal. 10 (1980), no. 4, 275–284. (Hj. Wacker) 82b:58021 58C30 (65H10, 73K40,
- (with Kamat, M. P.; Vanden Brink, D. J.) An assessment of quasi-Newton sparse
- update techniques for nonlinear structural analysis. Comput. Methods Appl. Mech. Engrg. 26 (1981), no. 3, 363–375. (Authors' summary) 821:65061 65H10 (73K25) (with Yang, Wei H.) Methods for optimal engineering design problems based on
- globally convergent methods. Comput. & Structures 13 (1981), no. 1-3, 115-119. (Authors' summary) 82j:73060 73K40 (49D37, 65H10, 90C30) Numerical study of porous channel flow in a rotating system by a homotopy method.
- J. Comput. Appl. Math. 7 (1981), no. 1, 21-26. (Author's summary) 82d:65084 (76S05)
- ison, N. A. Initial singularities of Gauss-Weierstrass integrals and their relations to Laplace transforms and Hausdorff measures. J. London Math. Soc. (2) 21 (1980), no. 2, 336–350. (D. T. Haimo) 82b:28029 28C20 (44A10)
- The asymptotic behaviour of temperatures and subtemperatures. Math. Soc. (3) 42 (1981), no. 3, 501-532. (Cornelius O. Horgan) 82f:31004 (31B05, 35B40)
- Watson, Ray On the size distribution for some epidemic models. J. Appl. Probab. 17 (1980), no. 4, 912-921. (A. C. Trajstman) 82j:92058 92A15 (60J70)
 - An application of a martingale central limit theorem to the standard epidemic model. Stochastic Process. Appl. 11 (1981), no. 1, 79-89. (H. A. Guess) 82e:60044 (60J70, 92A15)
- son, Saleem (with Husain, Taqdir) Topological algebras with orthogonal Schauder bases. Pacific J. Math. 91 (1980), no. 2, 339-347. (V. K. Srinivasan) 82h:46064 46H05 (46A35)
- Watson-Gandy, C. D. T. (with Foulds, L. R.) The vehicle scheduling problem: a survey. New Zealand Oper. Res. 9 (1981), no. 2, 73-92. (Authors' summary) 82m:90094
- Watt, A. (with Whitehead, R. R.) On the avoidance of cancellations in the matrix moment problem. J. Phys. A 14 (1981), no. 8, 1887-1892. (K. V. Bhagwat) 82i:15031 (65F30)
 - (with Flessas, George P.) An exact solution of the Schrödinger equation for a multiterm potential. J. Phys. A 14 (1981), no. 9, L315-L318. (Authors' summary) 82i:81019 81C05 (34B25)
- van der Watt, P. A note on estimation of bounds of random variables. Biometrika 67 (1980), no. 3, 712-714. (J. V. Deshpande) 82f:62077 62G05
- Wattel, Evert (with Mills, Charles F.) Nowhere densely generated topological properties. Topological structures, II (Proc. Sympos. Topology and Geom., Amsterdam, 1978), Part 2, pp. 191-198, Math. Centre Tracts, 116, Math. Centrum, Amsterdam, 1979. (Eric K. van Douwen) 82a:54045 54D20 (54B05)
 - (with Vermeer, J.) Remote points, far points and homogeneity of X*. Topological structures, II (Proc. Sympos. Topology and Geom., Amsterdam, 1978, Part 2, pp. 285–290, Math. Centre Tracts, 116, Math. Centrum, Amsterdam, 1979. (Donald Plank) 82a:54043 54D35 (54D40)
 - (with Purisch, Steve) Nonorderability of suborderable spaces with many pseudogaps. Topology and order structures, Part 1 (Lubbock, Tex., 1980), pp. 17-25, Math. Cen Tracts, 142, Math. Centrum, Amsterdam, 1981. (Marcel Erné) 82;54067 54F05
 - (with van Mill, Jan) Dendrons. Topology and order structures, Part 1 (Lubbock, Tex.,

- 1980), pp. 59-81, Math. Centre Tracts, 142, Math. Centrum, Amsterdam, 1981. (L. E. Ward, Jr.) 82m:54037 54F50 (54F05)
- (with van Mill, Jan) Selections and orderability. Proc. Amer. Math. Soc. 83 (1981), no. 3, 601-605. (E. Michael) 82i:54038 54C65 (54B20)
- Watters, J. F. (with Nicholson, W. K.) Normal classes of rings and tensor products. m. Algebra 9 (1981), no. 3, 299-311. (Stuart A. Steinberg) 82h:16002 (16A20)
 - (with Nicholson, W. K.) Normal classes of prime rings determined by modules. Proc. Amer. Math. Soc. 83 (1981), no. 1, 27-30. (Louis Rowen) 82;16033 16A48
 - (with Pearson, K. R.; Stephenson, W.) Skew polynomials and Jacobson rings. Proc. ndon Math. Soc. (3) 42 (1981), no. 3, 559-576. (G. Michler) 82j:16058 16A66 (16A05, 16A21)
- Watts, A. M. (with Frederiksen, C. S.) Finite-element method for time-dependent incompressible free surface flow. J. Comput. Phys. 39 (1981), no. 2, 282-304. (Authors' ary) 82e:65108 65N30 (76D05)
- Watts, Donald G. (with Bates, Douglas M.) Parameter transformations for improved approximate confidence regions in nonlinear least squares. Ann. Statist. 9 (1981), no. 6, 1152-1167. (Authors' summary) 82j:62049 62J02 (62F25)
- Watts, H. A. Initial value integrators in BVP codes. Codes for boundary-value problem ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 19-39, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 82h:65074)
 - (with Scott, Melvin R.) Superposition, orthonormalization, quasilinearization and two-point boundary-value problems. Codes for boundary-value problems in ordin differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 109-121, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 82b:65074)
 - Survey of numerical methods for ordinary differential equations. Electric power problems: the mathematical challenge (Proc. Conf., Seattle, Wash., 1980), pp. 127–158, SIAM, Philadelphia, Pa., 1980. (Author's summary) 82b:65063 65L05
- Watts, Vernon The almost sure representation of intermediate order statistics. Z. Wahrsch. Verw. Gebiete 54 (1980), no. 3, 281–285. (R. M. Dudley) 82g:62075 62G30 (60F15) Wavrik, John Computers and the multiplicity of polynomial roots. Amer. Math. Monthly 89 (1982), no. 1, 34-36, 45-56. (Maurice Mignotte) 82m:12002 12-04 (12D05, 65-04)
- Wawrzynek, Andrzej Variational formulation of a nonlinear problem of plate bending taking into account the effect of temperature. (Polish. Russian and English summaries) Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 31 (1980), 89-94. (Author's summary) 73C25
- Generalization of Reissner's rule on geometrically nonlinear thermal elasticity. (Polish. Russian and English summaries) Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 31 (1980), 95-100. (Author's summary) 82f:73013 73025
- Wawrzyniak, W. A characterization of minimum variance unbiased estimators in the general linear model with restrictions on parameter space. Math. Operationsforsch. Statist. Ser. Statist. 12 (1981), no. 4, 465-477. (I. S. Alalouf) 82m:62158 62J05
- Wax, Nelson (with Albrecht, Felix; Grasse, Kevin A.) Reproducibility of linear and nonlinear input-output systems. J. Math. Anal. Appl. 79 (1981), no. 1, 178-202. (From the introduction) 82i:93016 93B15
- Wax, Yohanan (with Haitovsky, Yoel) Generalized ridge regression, least squares with stochastic prior information, and Bayesian estimators. Appl. Math. Comput. 7 (1980),
- no. 2, 125-154. (D. V. Lindley) 822-62085 62J07

 Wayment, S. G. (with Andalafte, E. Z.; Valentine, J. E.) Triangle median properties which characterize Banach spaces. Houston J. Math. 5 (1979), no. 3, 307-312. (V. Zizler) 46B20
- Wayne, C. Eugene (with Shraiman, Boris; Martin, Paul C.) Scaling theory for noisy period-doubling transitions to chaos. Phys. Rev. Lett. 46 (1981), no. 14, 935-939. 70L05 (58F13, 70K05, 82A05) (Authors' summary) 82g:70051
- Weatherby, Ginner (with Montgomery, Douglas C.) Modeling and forecasting time series using transfer function and intervention methods. AIIE Trans. 12 (1980), no. 4, 289-307. (Authors' summary) 82g:90030 90A20
- Weathersby, Paul K. (with Homer, Louis D.) The variance of the distribution of traversal times in a capillary bed. J. Theoret. Biol. 87 (1980), no. 2, 349-377. (Authors' summary) 92A09 (76Z99)
- Weaver, George A correction to: "Uniform compactness and interpolation theorems in sentential logic" [Rep. Math. Logic No. 5 (1975), 93-95; MR 57 #9471]. Rep. Math. Logic No. 12 (1981), 67. (Editors) 82e:03018 03B05

 Weba, Michael Interpolation schwach stationärer Zeitreihen. (English and Russian
- summaries) Math. Operationsforsch. Statist. Ser. Statist. 10 (1979), no. 3, 415-425. (M. I. Jadrenko) 824:60067 60G10
- Webb, G. F. A representation formula for strongly continuous cosine families. Aequationes Math. 21 (1980), no. 2-3, 251-256. (B. Nagy) 82i:47078 47D99 (34G10)
 - A genetics model with age dependence and spatial diffusion. Differential equa and applications in ecology, epidemics, and population problems (Claremont, Calif., 1981), pp. 29-40, Academic Press, New York, 1981. (See 82m:92003) 92A10 (45D05)
 - A deterministic diffusive epidemic model with an incubation period. Integral and functional differential equations (Proc. Conf., West Virginia Unic., Morgantown, W. Va., 1979), pp. 119-135, Lecture Notes in Pure and Appl. Math., 67, Dekker, New York, 1981. (H. W. Hethcote) 82k:92058 92A15 (34K05)
- Webh, Heywood E., Jr. (with Stark, Henry; Cahana, D.) Restoration of arbitrary finite-energy optical objects from limited spatial and spectral information. J. Opt. Soc.
- Amer. 71 (1981), no. 6, 635-642 (Authors' summary) 82:e94012 94:A05 (78A10)
 Webb, I. R. (with Murthy, D. N. P.; Day, J. D.) A note on the stability of CSDT methods for solving parabolic equations. Math. Comput. Simulation 23 (1981), no. 2, 107-110. (From the introduction) 82m:65093 65M99
 - (with Murthy, D. N. P.) Higher order Runge-Kutta type CSDT methods for solving parabolic equations. Math. Comput. Simulation 23 (1981), no. 3, 235-244. (From the introduction) 82m:65094 65M99
- Webb, J. R. L. On the homotopy property of degree for multivalued noncomputational of the computation of
 - ndary value problems for strongly nonlinear elliptic equations. J. London Math.

- Soc. (2) 21 (1980), no. 1, 123-132. (Christian G. Simader) 82e:35039 35J65 On a property of duality mappings and the A-properness of accretive of Bull. Landon Math. Soc. 13 (1981), no. 3, 235-238. (Dan Tiba) 825:47065
- Minimal relation modules of free nilpotent groups. Arch. Math. (Basel) 37 (1981), no. 3, 193–197. (F. Pickel) 82m:20054 20105 (20F18)
 The projective extensions of a finite group. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 2, 251–257. (J. A. Schafer) 82m:20006 20C05 (18G05, 20J05)

- bb, U. H. M. An independence theorem for automorphisms of torsion-free groups.

 Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 3, 403-409. (G. A. Noskov) 82h:20057 20E36 (20F28)
- William A. Expressing rationals as a sum of a small number of unit fractions opis Pēst. Mat. 105 (1980), no. 4, 345–349. (Thomas W. Cusick) 82a:10016 10A9 (10B99)

- Webber, D. M. (with Robson, D.) The gauge boson sector of U(1) lattice theories. Z. Phys. C 10 (1981), no. 2, 159-168. (Authors' summary) 824:81067 81E25
 Weber, Albin Über das wesentliche Spektrum des gestörten polyharmonischen Operators.
 II. Math. Nachr. 95 (1980), 195-208. (H. Baumgärtel) 824:35075 35P05 (31B30,
- Weber, H. (with Ameling, W.; Hoener, S.) Parallel processor solutions for a certain class of optimization strategies. Parallel computers—parallel mathematics (Munich, 1977), pp. 243–246, North-Holland, Amsterdam, 1977. (See 82i:68003) 90B35
- r, Hans Zu einem Problem von H. J. Kowalsky. Abh. Braunschweig. Wiss. Ges. 29 (1978), 127-134. (Author's introduction) 82m:12019 12J20 (13J20)
 - Ein Fortsetzungssatz für gruppenwertige Maße. Arch. Math. (Basel) 34 (1980), no. 2, 157–159. (Z. Lipecki) 82f:28013 28B10
- Weber, Helmut (with Mittelmann, Hans-Detlef) Numerical methods for bifurcation problems—a survey and classification. Bifurcation problems and their numerical solution (Proc. Workshop, Univ. Dortmund, Dortmund, 1980), pp. 1–45, Internat. Ser. Numer. Math., 54, Birkhäuser, Basel, 1980. (B. V. Loginov) 82d:58021 58E07 (47H15, 65J15)

Shooting methods for bifurcation problems in ordinary differential equations.

Bifurcation problems and their numerical solution (Proc. Workshop, Univ. Dortmund, Dortmund, 1980), pp. 185-210, Internat. Ser. Numer. Math., 54, Birkhäuser, Basel, 1980. (F. Odeh) 82d:650 65L10

Zur numerischen Behandlung gestörter Verzweigungsprobleme bei gewöhnlichen Differentialgleichungen. (English summary) Computing 25 (1980), no. 4, 337–349. (Jürgen Scheurle) 82i:58050 58F14 (65L10, 73H05)

Numerical computation of the Fourier transform using Laguerre functions and the fast Fourier transform. *Numer. Math.* **36** (1980/81), *no.* 2, 197–209. (Author's summary) 65T05 (65R10)

(with Werner, W.) On the accurate determination of nonisolated solutions of nonlinear equations. (German summary) Computing 26 (1981), no. 4, 315-326. (Authors' summary) 82e:65062 65H10 (58C15)

(with Werner, W.) On the numerical solution of some finite-dimensional bifurcation problems. Numer. Funct. Anal. Optim. 3 (1981), no. 3, 341-366. (Authors' summary) 65J15 (58E07)

Weber, Herbert (with Ehrig, Hartmut; Kreowski, Hans-Jörg) Neue Aspekte algebraischer Spezifikationsschemata für Datenbanksysteme. Formal model for information systems (GI Conf., Tutzing, 1979) (German), pp. 181–198, Informatik-Fachber., 21, Springer, Berlin, 1979, (Authors' summary) 82b:68013 68B15

Weber, Joseph The search for gravitational radiation. General relativity and gravita. Vol. 2, pp. 435-467, Plenum, New York, 1980. (Editors) 82h:83006 83B05 (83C) 83B05 (83C35)

Domination number for almost every graph. Rostock. Math. Kolloq. No. 16 (1981), 31-43. (Renu Laskar) 82j:05094 05C99

Weber, Martin On the realization of vector lattices on locally compact topological spaces. Proceedings of the Conference on Topology and Measure, I (Zinnowitz, 1974), Part 2, pp. 393-402, Ernst-Moritz-Arndt Univ., Greifswald, 1978. (B. M. Makarov) 82a:46008 46A40

(with Makarov, B. M.) Über die Realisierung von Vektorverbänden. III. Realisierungen mit Hilfe von Basen finiter Elemente. Math. Nachr. 86 (1978), 7-14.

(Editors) 821:46007 46A40 (46E05)
Weber, Michel Sur un théorème de Maruyama. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 475-488, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Simeon M. Berman) 82f:60082 60G15 (60G10)

Analyse asymptotique des processus gaussiens stationnaires. Ann. Inst. H. Poincaré 7. B (N.S.) 16 (1980), no. 2, 117–176. (Simeon M. Berman) 82b:60040 60G15 (60G17)

Sur les instants de grande amplitude des trajectoires de processus gaussiens stationnaires. Z. Wahrsch. Verw. Gebiete 53 (1980), no. 2, 221–229. (J. Hüsler) 82a:60053 60G15 (60G17)

Sur les D-modules asymptotiques des processus strictement stationnaires ergodiques Z. Wahrsch. Verw. Gebiete 53 (1980), no. 2, 231–240. (J. Hüsler) 82a:60051 60G1 (60G17)

Une méthode élémentaire pour l'étude de la régularité d'une large classe de fonctions aléatoires. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 12, 599-602. (Author's summary) 82f:60084 60G17 (60G15)

Weber, N. C. Rates of convergence for U-statistics with varying kernels. Bull. Austral. Math. Soc. 21 (1980), no. 1, 1-5. (Gutti J. Babu) 82c:60046 60F05 (60F99)
 Weber, René Willi Eine alternative Herleitung der Euler-Hamiltonschen Gleichungen der

Mechanik. (English summary) Z. Angew. Math. Phys. 31 (1980), no. 6, 780-784. (D. Schmidt) 82f:58043 58F05 (49H05, 70H30)

Weber, Richard R. On the marginal benefit of adding servers to G/GI/m que Management Sci. 26 (1980), no. 9, 946-951. (Author's summary) 82f:60229 60K25 (90B22)

Weber, Robert E. (with Mullen, Gary L.) Latin cubes of order <5. Discrete Math. 32 (1980), no. 3, 291-297. (Jean M. Turgeon) 82b:05034 05B15

On weak* continuous operators on $\mathfrak{B}(\mathfrak{R})$. Proc. Amer. Math. Soc. 83 (1981), no. 4, 735–742. (Sheldon Axler) 82j:47003 47A05 (47A10, 47D25)

Weber, Robert James (with Dubey, Pradeep; Neyman, Abraham) Value theory without efficiency. Math. Oper. Res. 6 (1981), no. 1, 122–128. (J. Moulen) 82k:90139 90D12

- (with Shubik, Martin) Systems defense games: Colonel Biotto, command and control. Naval Res. Logist. Quart. 28 (1981), no. 2, 281-287. (Authors' summary)
- Weber, T. A. (with Hamr ner, C. L.) A note on con
- no. 1, 24-27. (P. A. Mišnaevskii) 82a:34025 34825 (30E20, 81F05)

 Weber, Tullio (with Fonda, L.; Ghirardi, G. C.; Omero, C.; Rimini, A.) Quantum dynamical semigroup description of sequential decays. Mathematical problems in the quantum theory of irreversible processes (Naples, 1978), pp. 99-114, Lab. Cibernet. CNR, Naples, 1978. (See 82j:82003) 82A15 (82A35)

(with Ghirardi, G. C.; Omero, C.; Rimini, A.) The stochastic interpretation of tum mechanics: a critical review. Riv. Nuovo Cimento (3) 1 (1978), no. 3, 1-34. (P. D. F. Ion) 82i:81039

F. Ion) 82:81039 81C20 (81B99) (with Ghirardi, G. C.; Omero, C.; Rimini, A.) Quantum dynamical semigroups description of decay processes and Zeno's paradox in quantum mechanics. Group theoretical methods in physics (Proc. Eighth Internat. Colloq., Kiryat Anavim, 1979), pp. 330–332, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See 82h:81004) 81B99

(with Ghirardi, G. C.; Miglietta, F.; Rimini, A.) Limitations on quantum surements. I. Determination of the minimal amount of nonideality and identification of the optimal measuring apparatuses. Phys. Rev. D (3) 24 (1981), no. 2, 347-352. (Authors' summary) 82m:81005a 81B05

(with Ghirardi, G. C.; Miglietta, F.; Rimini, A.) Limitations on quantum rements. II. Analysis of a model example. Phys. Rev. D (3) 24 (1981), no. 2, 353-358. (Authors' summary) 82m:81005b 81B05 Webster, R. J. A problem of Fourier. Math. Gaz. 64 (1980), no. 430, 270-271. (Louis

neau) 82i:01025b 01A50 (05B30, 51E30)

Webster, S. M. (with Diederich, Klas) A reflection principle for degenerate real hypersurfaces. Duke Math. J. 47 (1980), no. 4, 835–843. (Ingo Lieb) 82j:32046

Wechler, Wolfgang On algebraic power series. Begriffsschrift—Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 495-504, Friedrich-Schiller-Univ., Jena, 1979. (A. H. Kuškulei) 821:68085 68F05 (16A78, 68F10)

Über eine Teilklasse kontextabhängiger Sprachen. Wiss. Z. Tech. Univ. Dresden 29

(1980), no. 2, 389-391. (W. Vollmerhaus) 82a:68160 68F10
Wedde, Horst (with Maggiolo-Schettini, Andrea; Winkowski, Józef) Modeling a solution for a control problem in distributed systems by restrictions. Theoret. Comput. Sci. 13 (1981), no. 1, 61-83. (N. N. Mirenkov) 82e:68028 68B20 (68A05, 93A10)
Weddepohl, H. N. (with Ruys, P. H. M.) Economic theory and duality. Convex analysis and

mathematical economics (Proc. Sympos., Univ. Tilburg, Tilburg, 1978), pp. 1-72, Lecture Notes in Econom. and Math. Systems, 168, Springer, Berlin, 1979. (Mohamed El-Hodiri) 82b:90030 90A14 (90C30)

Weder, Ricardo Rigorous results on the Yang-Mills-Higgs equations. Proceedings of the UNAM Workshop on Gauge Theories (Univ. Nac. Autónoma México, Mexico City, 1979). Hadronic J. 4 (1980/81), no. 1, 164-181. (Author's summary) 82g:81066 81E10 (58E20)

(with Combes, J. M.) Spectral theory and unbounded obstacle scattering. Spectral theory of differential operators (Birmingham, Ala., 1981), pp. 93–98, North-Holland Math. Studies, 55, North-Holland, Amsterdam, 1981. (See 82k:34002) 35P25 (47A40)

(with Schechter, Martin) A theorem on the existence of dyon solutions. Ann. Physics 132 (1981), no. 2, 292-327. (José M. Cerveró) 82h:81095 81E10 (58E30)

(with Castagnino, Mario) The quantum equivalence principle and finite particle creation in expanding universes. J. Math. Phys. 22 (1981), no. 1, 142–151. (Derek Raine) 83C99 (81E99)

Wedig, W. Modale und integrale Kovarianzanalyse hybrider Systeme. (English and Russian mmaries) Z. Angew. Math. Mech. 60 (1980), no. 8, 277-291. (Author's summary) 73K05 (70L05)

The integration of nonlinear stochastic systems with applications to the damage and ambiguity identification. (German and Russian summaries) Z. Angew. Math. Mech. 61 (1981), no. 1, 7-20. (Author's summary) 82f:70015 70L05 (58F13)

Wedin, Per Åke (with Ruhe, Axel) Algorithms for separable nonlinear least squares problems. SIAM Rev. 22 (1980), no. 3, 318-337. (Nobuo Sannomiya) 82a:90148 90C30

Wedrychowicz, Stanisław (with Banaś, Józef; Hajnosz, Andrzej) Relations among various criteria of uniqueness for ordinary differential equations. Comment. Math. Univ Carolin. 22 (1981), no. 1, 59-70. (B. L. Schter) 82e:34005 34A10

Weeda, P. J. ★Finite generalized Markov programming. Mathematical Centre Tracts, 92. Mathematisch Centrum, Amsterdam, 1979. vii + 127 pp. ISBN 90-6196-158-0 (A. A. Juškevič) 82f:90099 90C40

Weerahandi, S. (with Zidek, James V.) Multi-Bayesian statistical decision theory. J. Roy. Statist. Soc. Ser. A 144 (1981), no. 1, 85-93. (D. V. Lindley) 82f:62017 (90A07)

van Weert, Ch. G. (with Teitelboim, Claudio; Villarroel, D.) Classical electrodynamics of retarded fields and point particles. Riv. Nuovo Cimento (3) 3 (1980), no. 9, 64 pp. (A. H. Taub) 82g:78010 78A35

Weese, Martin (with Baudisch, Andreas; Seese, Detlef G.; Tuschik, Hans-Peter) ★Decidability and generalized quantifiers. Mathematical Research, 3. Akademie-Verlag, Berlin, 1980. xii+235 pp. (A. B. Slomson) 82i:03048 03C80 (03B25, 03C60, 05C05, 06A05, 20K99)

Generalized Ehrenfeucht games. Fund. Math. 109 (1980), no. 2, 103-112. (John Cowles) 82a:03033 03C80 (03C95, 68F05, 90D45)

A new product for Boolean algebras and a conjecture of Feiner. (Russian, German and French summaries) Wiss. Z. Humboldt-Univ. Berlin Math.-Natur. Reihe 29 (1980), no. 4, 441-443. (Author's summary) 82g:06024 06E05

Wefelscheid, Heinrich Verallgemeinerte Minkowski-Geometrie. Contributions to geo-(Proc. Geom. Sympos., Siegen, 1978), pp. 397-406, Birkhäuser, Basel, 1979. (W. R. Heise) 82b:51014 51B20 (20B25)

Zur Planarität von KT-Fastkörpern. Arch. Math. (Basel) 36 (1981), no. 4, 302-304. (W. R. Heise) 82h:12026 12K05 (51B20)

Wegener, Ingo The discrete sequential search problem with nonrandom cost and overlook probabilities. Math. Oper. Res. 5 (1980), no. 3, 373–380. (Ulla Pursiheimo) 82k:90068

Some results on a discrete search problem. Proceedings of the Sixth Conference on Probability Theory (Braşov, 1979), pp. 473–487, Ed. Acad. R.S. România, Bucharest, 1981. (Author's summary) 823-390699 90840

An improved complexity hierarchy on the depth of Boolean functions. Acta Inform. 15 (1981), no. 2, 147–152. (Jean-Marie Laborde) 82i:94036 94C10

Optimal sequential search with discounted income. J. Inform. Optim. Sci. 2 (1981), no. 1, 1-18. (Lawrence D. Stone) 82k:90069

gener, Ursula Sind Ludwigs Chancengewichtungen propensities im Sinne Poppers? Z. Allgemeine Wissenschaftstheorie 11 (1980), no. 1, 80-85. (Author's summary) 82b:03022

Ein Vergleich der von Ludwig bzw. Popper vorgeschlagenen Interpretationen der Quantenmechanik. Z. Allgemeine Wissenschaftstheorie 11 (1980), no. 2, 357-366. (Author's summary) 82c:81004 81B05

Weglein, Arthur B. (with Silvia, Manuel T.) Method for obtaining a nearfield inverse scattering solution to the acoustic wave equation. J. Acoust. Soc. Amer. 69 (1981), no. 2, 478-482. (Authors' summary) 824:76081 76Q05 478-482. (Authors' summary) 82d:76081

Weglorz, Bogdan (with Brzuchowski, Jan; Cichoń, Jacek) Some applications of strong . Compositio Math. 43 (1981), no. 2, 217-224. (H. Sarbadhikari) 82k:04003 04A15 (28A05)

Wegman, Edward J. Two approaches to nonparametric regression: splines & isotonic inference. Recent developments in statistical inference and data analysis (Proc. Internat. Conf., Inst. Statist. Math., Tokyo, 1979), pp. 323–334, North-Holland, Amsterdam, 1980. (Vladimir Katkovnik) 82c:62060 62G05

(with Nour, El-Sayed E; Kukuk, Cris) A time series approach to life table construction. Comm. Statist. A—Theory Methods 9 (1980), no. 15, 1587–1607. (Theo Gasser) 82i:62145 62N05 (62M10)

(with Gould, Jerren) On probabilistic automata in deterministic environment. Fund.

Inform. (4) 3 (1980), no. 1, 1-13. (R. G. Buharaev) 82a:68100 68D25 Optimal estimation of time series functions. IEEE Trans. Acoust. Speech Signal Process. 28 (1980), no. 6, 763-767. (Melvin Hinich) 82f:62173 62M10

Vector splines and the estimation of filter functions. Techn netrics 23 (1981), no. 1. 83-89. (Robert Fernholz) 82m:62215 62M15 (41A15)

Wegman, Mark N. (with Blum, Manuel; Chandra, Ashok K.) Equivalence of free Boolean graphs can be decided probabilistically in polynomial time. Inform. Process. Lett. 10 (1980), no. 2, 80-82. (Kabekode V. S. Bhat) 82d:68022 68C05 (68C25)

(with Carter, J. Lawrence) New hash functions and their use in authentication and set equality. Special issue dedicated to Michael Machtey. J. Comput. System Sci. 22

(1981), no. 3, 265-279. (From the summary) 82:68017 68B15

Wegner, Bernd Einige Bemerkungen zur Geometrie transnormaler Mannigfaltigkeiten. [Some remarks on the geometry of transnormal manifolds] J. Differential Geom. 16 (1981), no. 1, 93-100. (P. Scherk) 82k:53007 53A07

(1961), no. 1, 93-100. (F. Scherk) Schemberg and global analysis, 82i:53001

Wegner, Franz J. Relations between nonlinear o-models of various symmetries. Nuclear Phys. B 180 (1981), no. 1, FS 2, 77-88. (Author's summary) 82a:81038

Wegner, Lutz Bracketed two-level grammars-a decidable and practical approach to language definitions. Automata, languages and programming (Sixth Colloq., Graz, 1979), pp. 668-682, Lecture Notes in Comput. Sci., 71, Springer, Berlin, 1979. (P. Deussen) 68F05 (03D05)

(with Albert, Jürgen) Languages with homomorphic replacements. Automata, languages and programming (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 19-29, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (S. A. Greibach) 68F05

(with Albert, Jürgen) Languages with homomorphic replacements. Theoret. Comput.

Sci. 16 (1981), no. 3, 291–305. (Authors' summary) 82m:68115 68F05
Wehausen, J. V. See Annual review of fluid mechanics, 82i:76001 and Annual review of fluid mechanics, 82m:76001

Wehking, Annette (with Henze, Ernst; Theodorescu, Radu) On multiple Markov dependence. Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 2, 101-105 (1981). (A. Fuchs) 82m:60084 60125

Wehmer, F. Ein Verfahren zur Untersuchung der Isomorphie von Hecken. Wiss. Z. Tech. Hochsch. Ilmenau 27 (1981), no. 2, 65-74. (A. Adam) 82m:05085 05C99 Wehrfritz, B. A. F. Wielandt's subnormality criterion and linear groups. J. Algebra 67

(1980), no. 2, 491-503. (John S. Wilson) 82g:20055 20E15

The residual finiteness of some generalised free products. J. London Math. Soc. (2) 24 (1981), no. 1, 123-126. (S. Andreadakis) 82j:20063 20E26 (20E06)

hn, Christian (with Bard, Jonathan L. B.; Ghozlan, Aline; Goldbeter, Albert; Hardt, Shoshana; Levitzki, Alexander; Liron, Nadav; Odell, Garrett M.; Parnas, Hanna; Perelson, Alan S.; Rapp, P. E.; Rubinow, Sol I.; Segel, Lee A.; Tolkovsky, Aviva M.; Yagil, Gad; Zeigler, Bernard P.) ★Mathematical models in molecular and cellular biology. Cambridge University Press, Cambridge-New York, 1980. x+757 pp. ISBN 0-521-22925-1 (John J. Tyson) 82c:92001 92-01 (92A09)

Wehrl, A. Three theorems about entropy and convergence of density matrices. Rep. Math Phys. 10 (1976), no. 2, 159–163. (A. V. Buhvalov) 82e:82006 82A15 (47B99)

Wehrly, Thomas E. (with Shine, Eugene P.) Influence curves of estimators for directional data. Biometrika 68 (1981), no. 1, 334-335. (Authors' summary) 82f:62068 62F35

Wei, C. Z. (with Chow, Y. S.; Teicher, H.," Yu, Kai Fun) Iterated logarithm laws with random subsequences. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 2, 235-251. (Endre Csáki) 82k:60062 60F15

Wei, L. J. Estimation of location difference for fragmentary samples. Biometrika 68 (1981), 62G05 no. 2, 471-476. (Pi-Erh Lin) 82k:62082

(with Padgett, W. J.) A Bayesian nonparametric estimator of survival probability assuming increasing failure rate. Comm. Statist. A—Theory Methods 10 (1981), no. 1, 49–63. (Authors' summary) 82d:62155 62N05 (62C10, 62G05)

Wei, Quan Ling (with Ying, Mei Qian) The properties of solutions and computational methods for single variable multiobjective mathematical programming. (Chinese) Acta Math. Appl. Sinica 3 (1980), no. 4, 382-388. (Su-shing Chen) 82i:90110 90C31 (with Gu, Ji Fa) Multi-objective decision problems. (Chinese) Yingyong Shuxue Yu Jisuan Shuxue 1980, no. 1, 28-47. (From the text) 82i:90106 90C31

Wei, Victor K. (with Bertram, Edward A.) Decomposing a permutation into two large cycles: an enumeration. SIAM J. Algebraic Discrete Methods 1 (1980), no. 4, 450-461. (Hugo S. Sun) 82c:05009 05A15 (20B05)

(Hugo S. Sun) 82cus007 USA15 (20005)
Wei, Wan Di Generalized principle of inclusion and exclusion and its applications.
Combinatorics 79 (Proc. Colloq., Univ. Montréal, Montreal, Que., 1979), Part II. Ann. Discrete Math. 9 (1980), 137-139. (Rodney T. Hansen) 82c:05012

Wei, William W. S. (with Abraham, Bovas) Forecasting contemporal time series aggregates. Comm. Statist. A—Theory Methods 10 (1981), no. 13, 1335–1344. (Naohiro Ishii) 62M10

Effect of systematic sampling on ARIMA models. Comm. Statist. A—Theory Methods 10 (1981), no. 23, 2389–2398. (Robert Fernholz) 82m:62207 62M10

Wei, Ying Ji (with Shieh, Leang San) Synthesis of optimal block controllers for multivariate control systems and its inverse optimal control problem. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 68-71, IEEE, New York, 1979. (See 49D29 82e:94002)

Wei, Ze Guang Element analysis of isoparametric hexahedron in three-dimensional finite

element methods. (Chinese. English summary) Numer. Math. J. Chinese Univ. 1 (1979), no. 1, 50-61. (Author's summary) 82g:65055 65N30

Weibel, Charles A. K₂, K₃ and nilpotent ideals. J. Pure Appl. Algebra 18 (1980), no. 3, 333-345. (Daniel R. Grayson) 82i:18016 18F25 (13D15, 14B20)

(with Geller, Susan C.) K2 measures excision for K1. Proc. Amer. Math. Soc. 80 (1980), no. 1, 1-9. (Barry H. Dayton) 82c:13018 13D15 (18F25)

Mayer-Victoris sequences and module structures on NK_a. Algebraic K-theory, Evanston 1980 (Proc. Conf., Northwestern Univ., Evanston, Ill., 1980), pp. 466–493, Lecture Notes in Math., 854, Springer, Berlin, 1981. (From the text) 82k:18010

(13D15, 13K05) A survey of products in algebraic K-theory. Algebraic K-theory, Evanston 1980 (Proc. Conf., Northwestern Univ., Evanston, Ill., 1980), pp. 494–517, Lecture Notes in Math., 854, Springer, Berlin, 1981. (From the text) 82k:18011 18F25 (13D15)

K-theory of Azumaya algebras. Proc. Amer. Math. Soc. 81 (1981), no. 1, 1-7. (Daniel R. Grayson) 824:18017 18F25

Weibel, E. S. (with Vaclavik, J.) Quasilinear theory without the random phase approximation. Phys. Fluids 24 (1981), no. 3, 413-417. (Authors' summary) \$2a:76096

Weichsel, Paul M. A commutator identity for basic p-groups. J. Austral. Math. Soc. Ser. A 26 (1978), no. 1, 70–75. (Author's summary) 82g:28047 20D15
 Weide, Bruce W. (with Bentley, Jon Louis; Yao, Andrew Chi Chih) Optimal expected-time

algorithms for closest point problems. ACM Trans. Math. Software 6 (1980), no. 4, 563-580. (Wolfgang Boehm) 82g:68084 68G10 (52-04, 52A45, 68E10, 90C10)

van der Weide, Th. P. (with Bergstra, J. A.; Goeman, H. J. M.; Ollongren, A.; Terpstra, G. A.) Axioms for multilevel objects. Fund. Inform. (4) 3 (1980), no. 2, 171-180. (From the 68B15 summary) 82i:68014

van der Weiden, A. J. J. (with Bosgra, O. H.) Realizations in generalized state-space form for polynomial system matrices and the definitions of poles, zeros and decoupling zeros at infinity. Internat. J. Control 33 (1981), no. 3, 393-411. (Authors' summary) 82e:93037 93B55 (94C05)

Weidenfeld, G. Changements de temps de processus de Markov. Z. Wahrsch. Verw. Gebiete 53 (1980), no. 2, 123-146. (Yves Le Jan) 82c:60133 60J25 (60J55)

Weidlich, W. (with Haag, G.) Migration behaviour of mixed population in a town. Collect. Phenom. 3 (1980), no. 2, 89-101. (Authors' summary) 82m:92083 92A20 (90A30)

Weidner, Richard J. See Barnett, Stephen, 82:15011
Weidner, Richard J. See Barnett, Stephen, 82:15011
Weier, D. R. (with Basu, Asit P.) Testing for independence in multivariate exponential distributions. Austral. J. Statist. 22 (1980), no. 3, 276-288. (I. Olkin) 82g:62040 62F03 (62N05)

(with Basu, Asit P.) An investigation of Kendall's 7 modified for censored data with applications. J. Statist. Plann. Inference 4 (1980), no. 4, 381-390. (Jana Zvárová) 82j:62029 62G30

Bayes estimation for a bivariate survival model based on exponential distributions. Comm. Statist. A-Theory Methods 10 (1981), no. 14, 1415-1427. (Author's summary) 62N05 (62F15)

Weierstrass, Karl Theodor Wilhelm See Neuenschwander, E., 82j:01050
Weigandt, R. (with van Leeuwen, L. C. A.) Radicals, semisimple classes and torsion

theories. Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 37-47. (B. J. Gardner) 17A65 (08B99, 16A21)

Weigel, Dominique (with Veysseyre, Renée; Charon, Jean-Louis) Sur la détermination géométrique de l'ordre du groupe de symétrie d'un polytope de l'espace euclidien à dimensions. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 12, B287-B290. (Authors' summary) 82c:52014 52A25 (20H15, 82A60)

Weiguny, A. On the relation between the interacting boson model of Arima and Iachello and the collective model of Bohr and Mottelson. Z. Phys. A 301 (1981), no. 4, 335–338. (Author's summary) 82i:81167 81H10

Weihrauch, Klaus (with Reiser, Angelika) Natural numberings and generalized computability. (German and Russian summaries) Elektron. Informati ernet. 16 (1980), no. 1-3, 11-20. (Horst Reichel) 82b:03083 03D45 (68C30)

Weik, Martin H. See Dictionary: Computer, 82a:68001 Weil, André See Chern, Shiing Shen, 82h:01074

rnard-Weil, E. See Bernard-Weil, E.

Weiland, J. (with Fernandez, Jean-Claude; Reinisch, Gilbert; Bondeson, A.) Collapse of a Korteweg-de Vries soliton into a weak noise shelf. Phys. Lett. A 66 (1978), no. 3, 175-178. (From the text) 82c:76020 76B25 (35Q20) 175-178. (From the text) 82c:76020

Hand, R. H. (with Do, Duong Dang) Poisoning-induced exchange of steady states in a catalytic chemical reactor. J. Austral. Math. Soc. Ser. B 22 (1980/81), no. 2, 237–253. (S. L. Kalla) 82d:80028 80A30 (34E05)

Weimer, Richard C. Primeness for the Gaussian integers. A collection of manuscripts related to the Fibonacci sequence, pp. 19-20, Fibonacci Assoc., Santa Clara, Calif., 1980. (From the text) 82e:10013 10A25

A note on ordering the complex numbers. A collection of manuscripts related to the nacci sequence, pp. 20-21, Fibonacci Assoc., Santa Clara, Calif., 1980. (Editors)

Fat bundles and symplectic manifolds. Adv. in Math. 37 (1980), no. 3, 239–250. (H. Gluck) 82a:53038 53C10 (55R99, 58F05) R. Gluck) 82a:53038

Neighborhood classification of isotropic embeddings. J. Differential Geom (1981), no. 1, 125–128. (N. J. Hitchin) 82m:53060 53C42 (53C15, 81E10) eddings. J. Differential Geom. 16

101, no. 1, 125–126. (N. J. Filletting 8211:35000) 3262 (32C.3, 32E.0) (with Stanton, Robert J.) On the L⁴ norm of spherical harmonics. Math. Proc. nbridge Philos. Soc. 89 (1981), no. 2, 343–358. (J. Weidmann) 824:58015 58C40 (33A45, 43A85, 58G25)

netry, 82c:58002

See also Symposium: Chern, Differential Geometry, 82c:58002 stein, Alexander ★Selecta. Edited by J. B. Diaz. Pitman Publishing, Ltd., oston, Mass., 1978. xxi+629 pp. (1 plate). ISBN 0-273-08411-9 (Robert D. Brown) 82::01073 01A75 (35-03, 49-03)

Weinstein, Lenard The zeroes of functions related to Dirichlet L-functions, Canad, Math.

- Weinstein, Lemand The zeroes of functions related to Dirichlet 2-functions. Canda. Math. Bull. 24 (1981), no. 1, 53-57. (K. Thanigasalam) 82d:10056
 Weinstein, M. Nonlinear instability in plane Poiseuille flow: a quantitative comparison between the methods of amplitude expansions and the method of multiple scales. Proc. Roy. Soc. London Ser. A 375 (1981), no. 1761, 155-167. (Author's summary) 82m:76031
- Weinstein, Stanley E. (with Henry, Myron S.; Swetits, John J.) Lebesgue and strong unicity constants. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 507-512, Academic Press, New York, 1980. (Martin Bartelt) 82g:41007 41A10 (41A50)

ASO) (with Henry, Myron S.; Swetits, John J.) Orders of strong unicity constants. J. Thorn: 71 (1981), no. 2, 175–187. (Martin Bartelt) 82ks41016 41A50 (41A44) Approx. Theory 31 (1981), no. 2, 175-187. (Martin Bartelt) 82k:41016 nstock, Barnet M. Uniform approximation on smooth polynomially convex sets

Complex approximation (Proc. Conf., Quebec, 1978), pp. 83-89, Progress in Math., 4, Birkhäuser, Boston, Mass., 1980. (Thomas Bloom) 824:32009 32E20 (32E25) Uniform approximation on the graph of a smooth map in C". Canad. J. Math. 32 (1980), no. 6, 1390-1396. (Eric Amar) 82e:32027 32E30 (41A10)

Weintraub, Andres (with Ingram, William) An efficient approach to some cases of coefficient variations in linear programs. Oper. Res. 29 (1981), no. 3, 609-611. (Authors' summary) 82i:90072 90C05 (90C31)

Weintraub, Steven H. A note on doubles of 4-manifolds. Canad. Math. Bull. 23 (1980), no. 3, 367-369. (R. C. Kirby) 82e:57004 57N15 PSL₂(Z_p) and the Atiyah-Bott fixed-point theorem. Houston J. Math. 6 (1980),

no. 3, 427-430. (H. D. Fegan) 82c:10029 10D12 (12A50) Weir, B. S. (with Hill, William G.) Effect of mating structure on variation in linkage disequilibrium. Genetics 95 (1980), no. 2, 477-488. (Authors' summary) 82a:92024

(with Avery, P. J.; Hill, William G.) Effect of mating structure on variation in inbreeding. Theoret. Population Biol. 18 (1980), no. 3, 396–429. (Authors' summary) 821-92028 92A10 (62P10)

92A10 (62P10) 821:92028 Weir, G. J. Analysis of Munch theory. Math. Biosci. 56 (1981), no. 1-2, 141–152. (Author's summary) 82h:92020 92A09 (76Z05)

Weis, Lutz (with Schachermayer, Walter) Almost compactness and decomposability of integral operators. Proc. Amer. Math. Soc. 81 (1981), no. 4, 595-599. (V. S. Pilidi) 821:47062 47G05 (45P05, 47B05, 47B38)

berg, Sanford (with Cook, R. Dennis) Characterizations of an empirical influence function for detecting influential cases in regression. Technometrics 22 (1980), no. 4, 495-508. (V. J. Yohai) 82h:62079 62J05

A statistic for allocating C, to individual cases. Technometrics 23 (1981), no. 1, 27-31. (Robert L. Mason) 82k:62140 62307
Weisbuch, G. (with Atlan, H.; Fogelman-Soulie, F.; Salomon, J.) Random Boolean

networks. Cybernet. Systems 12 (1981), no. 1-2, 103-121. (Authors' summary) 82m:94053 94C10 (68J05)

Weisel, Jutta Approximation quasikonformer Abbildungen mehrfach zusammenhängender Gebiete durch finite Elemente. (English summary) Z. Angew. Math. Phys. 32 (1981), no. 1, 34-44. (R. Kühnau) 82g:30016 30C30 (30C60, 65E05, 73K25)

Weiserbs, Daniel (with Thisse, Jacques) Existence and uniqueness of an optimal control with an infinite horizon. Cahiers Centre Études Rech. Opér. 21 (1979), no. 1, 17-22. (Authors' introduction) 82h:49002 49A10 (90A16)

Weisfeiler, Boris (with James, D. G.) On the geometry of unitary groups. J. Algebra 63 (1980), no. 2, 514-540. (Ernst-Wilhelm Zink) 82e:10039 10C30 (15A57, 20G15) (with Waterhouse, William C.) One-dimensional affine group schemes. J. Algebra 66

(1980), no. 2, 550-568. (M. H. Gizatullin) 82e:14057 14L15 Monomorphisms between subgroups of groups of type G_2 . J. Algebra **68** (1981), no. 2, 306–334. (E. A. Connors) **82j:20088** 20G15 (20F28)

Abstract isomorphisms of simple algebraic groups split by quadratic extensions. J.

Algebra 68 (1981), no. 2, 335-368. (E. A. Connors) 82j:20089 20G15 (20F28) Weispfenning, Volker Elimination of quantifiers for certain ordered and lattice-ordered abelian groups. Proceedings of the Model Theory Meeting (Univ. Brussels,

Brussels/Univ. Mons, Mons, 1980). Bull. Soc. Math. Belg. Sér. B 33 (1981), no. 1, 131–155. (A. M. W. Glass) 82h:03022 03C10 (03C60, 06F20)

Weiss, Benjamin (with Glasner, S.) On the construction of minimal skew products. Israel J. Math. 34 (1979), no. 4, 321-336 (1980). (Krishna M. Das) 82f:54068 (with Connes, Alain) Property T and asymptotically invariant sequences. Israel J. Math. 37 (1980), no. 3, 209-210. (V. Losert) 82e:28023b 28D15 (22D40)

Orbit equivalence of nonsingular actions. Ergodic theory (Sem., Les Plans-sur-Bex, 1980) (French), pp. 77-107, Monograph. Enseign. Math., 29, Univ. Genève, Geneva, 1981. (R. L. Adler) 82i:28011 28D05

Weiss, Elliott N. (with Hershey, John C.; Cohen, Morris A.) A stochastic service network model with application to hospital facilities. Oper. Res. 29 (1981), no. 1, 1–22. (Authors' summary) 82b:99056 90B22 (60K25)

Weiss, Gary The Fuglede commutativity theorem modulo operator ideals. Proc. Amer. Math. Soc. 83 (1981), no. 1, 113-118. (Bernd Rosenberger) 82k:47037 47B15 (47D25)

Weiss, George H. (with Kiefer, Jamer E.) A comparison of two methods for accelerating the convergence of Fourier series. Comput. Math. Appl. 7 (1981), no. 6, 527-535. (Authors' summary) 82m:65004 65B10

nacht, Richard J. (with Hsiao, George C.) A singularly perturbed Cauchy problem. J. Math. Anal. Appl. 71 (1979), no. 1, 242-250. (Jean Genet) 82g:35011 35B25 (35C20)

nberg, Charles B. (with Freeland, James R.) S-shaped response functions: implications for decision models. J. Oper. Res. Soc. 31 (1980), no. 11, 1001–1007. (Csaba Fabian) 90C25 (90B05)

Boise State Univ., Boise, Idaho, 1978), pp. 71–79, Lecture Notes in Pure and Appl. Math.,
 62, Dekker, New York, 1980. (A. M. W. Glass) 82c:06032 06F15 (03C60, 04A20)

inherg, F. A necessary and sufficient condition for the aggregation of linear Diophantine equations. Survey of mathematical programming (Proc. Ninth Internat. Math. Programming Sympox., Budapest, 1976), Vol. 2, pp. 559–565, North-Holland, Amsterdam, 1979, (Author's introduction) 82‡90054 90C10 (10805) inherg, Louis (with Lawrence, Jim) Unions of oriented matroids. Combinatorics 79 (Proc. Colloq., Univ. Montreal, Montreal, Que., 1979), Part I. Ann. Discrete Math. 8

(1980), 29-34 (R. P. Dilworth) 82a-9500 05B35

(with Riederer, Alois J.) Synthesis of lossy lumped-distributed cascade networks.

IEEE Trans. Circuits and Systems 28 (1981), no. 12, 1137-1152. (Authors' summary)

(with Inukai, Thomas) Whitney co ectivity of matroids. SIAM J. Algebraic Discrete Methods 2 (1981), no. 2, 108-120 (J. M. S. Simões-Pereira) 82e:05037 (05C40)

(with Bethe, Hans; Goldberger, Marvin L.; Adler, Stephen L.; Dyson, berg, Steven Freeman J.; Yang, Chen Ning) Einstein and the physics of the future. Some strangeness in the proportion (Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 493–506, Addison-Wesley, Reading, Mass., 1980. (See 824:83002) 01A65

Conceptual foundations of the unified theory of weak and electromagnetic interactions. Rev. Modern Phys. 52 (1980), no. 3, 515-523. (Editors) 82d:81001a 81-03 (01A65, 81G20)

Conceptual foundations of the unified theory of weak and electromagnetic interactions. Science 210 (1980), no. 4475, 1212-1218. (From the introduction) 81G15

sinberger, Hans F. Asymptotic behavior of a class of discrete-time models in population genetics. Applied nonlinear analysis (Proc. Third Internat. Conf., Univ. Texas, Arlington, Tex., 1978), pp. 407-422, Academic Press, New York, 1979. (J. Milota) 82m:92055

Some deterministic models for the spread of genetic and other alterations. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 320-349, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (Andris Abakuks) 82h:92040 92A15 (3

Weinelt, W. Net approximation of variational inequalities. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 5, 1033-1035, (Gerhard Telschow) 82b:65056 65K10 (49A29. 49D25)

onald D. (with Sarkar, Tapan K.; Jain, Vijay K.) Some mathematical considerations in dealing with the inverse problem. *IEEE Trans. Antennas and Propagation* 29 (1981), no. 2, part 1, 373-379. (Authors' summary) 82e:65071

Weiner, Howard J. Central limit theorem for parking models on the line and plane. Sankhyā Ser. A 41 (1979), no. 3-4, 170-183. (Lars Holst) 82g:60026 60D05 (with Pickard, David K.; Tory, E. M.; Tanemura, Masaharu; Hori, Motoo) Further ents on: "Sequential random packing in the plane" [J. Appl. Probab. 15 (1978), no. 4, 803-814; MR 80a:60015] by Weiner. J. Appl. Probab. 17 (1980), no. 3, 878-892. (Adrian Baddeley) 82m:60021 60D05

On asymmetric stochastic bang-bang control. Internat. J. Control 34 (1981), no. 6, 1215-1219. (Author's summary) 82m:93104 93E20

iner, Joel L. A uniqueness theorem for submanifolds of Euclidean space. Illinois J. Math. 25 (1981), no. 1, 16-26. (Sheila Carter) 82e:53011 53A07 (53C42)

nert, Friedel Kontingente versus notwendige Wahrheiten und mögliche Welten bei Leibniz. (English summary) Studia Leibnitiana 12 (1980), no. 1, 125-139. (F. C. Kreiling) 01A45 (03-03)

Weinert, Hanns Joachim On special right quotient filters of semigroups. Semigroups (Proc. Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 211–221, Lecture Notes in Math., 855, Springer, Berlin, 1981. (William R. Nico) 82i:20083 20M20 (20M12)

See also Semigroups, 821:20009

Weinert, Horst On the solution of certain multiparametric linear programming problems. Studies on mathematical programming (Papers, Third Conf. Math. Programming, Matrafüred, 1975), pp. 147-160, Math. Methods Oper. Res., 1, Akad. Kiadó, Budapest, 1980. (K. Swarup) 82a:90162 90C31

Weinert, M. Solution of Poisson's equation: beyond Ewald-type methods. J. Math. Phys. 22 (1981), no. 11, 2433-2439. (Author's summary) 82m:31008 31B20 (78A25, 82A60) Weinert, Ulrich Spherical tensor representation. Arch. Rational Mech. Anal. 74 (1980), no. 2, 165-196. (Wayne J. Holman, III) 82f:22019 22E70 (33A75, 53A45, 81C40)

Weinfeld, Roman (with Staniewski, Piotr) Optimization of denumerable semi-Markov decision processes. (Russian summary) Systems Sci. 6 (1980), no. 2, 129–141. (Eduardo J. Subelman) 82c:90095 90C40 (90B05)

Weingarten, D. H. (with Petcher, D. N.) Monte Carlo integration for lattice gauge theories with fermions. Phys. Lett. B 99 (1981), no. 4, 333-338. (Authors' summary) 82c:81045 81C35 (81-04, 81E99)

Weingartner, Paul Nachruf auf Paul Bernays. Ontologie und Logik/Ontology and logic (Proc. Internat. Colloq., Salzburg, 1976), pp. 281-283, Duncker & Humblot, Berlin, 1979. (Editors) 82f:01155 01A70 (03-03)

initschke, H. J. On axisymmetric deformations of nonlinear elastic membranes. Mechanics today, Vol. 5, pp. 523-542, Pergamon, Oxford, 1980. (R. R. Huilgol) 73C50 (45G10)

inmüller, E. (with Stetter, H. J.) On the error control in ODE solvers with local extrapolation. (German summary) Computing 27 (1981), no. 2, 169-177. (Authors' summary) 82m:65066 65L05

Weinrichter, Hans (with Pangratz, Heinrich) Pseudorandom number generator based on binary and quinary maximal-length sequences. IEEE Trans. Comput. 28 (1979), no. 9, 637-642. (Authors' summary) 82;:65002 65C10 (10K10)

Weinstein, Alan D. *Lectures on symplectic manifolds. Corrected reprint. CBMS Regional Conference Series in Mathematics, 29. American Mathematical Society, ence, R.I., 1979. ii+48 pp. ISBN 0-8218-1679-9 (Editors) 82b:58039 (47G05, 53C15, 70Hxx)

A note on lattice random walks with an excluded point. J. Math. Phys. 22 (1981),

no. 3, 562-563. (Author's summary) 821:60161 60J15
First passage time problems for one-dimensional random walks. J. Statist. Phys. 24 (1981), no. 4, 587-594. (N. H. Bingham) 82e:60110 60J15

Weiss, Gibon (with Ross, Sheldon M.; Shahshahani, Mehrdad) On the duration of the problem of the points. J. Amer. Statist. Assoc. 75 (1980), no. 371, 663-666. (Z. W. 62N05

Weiss, Guido (with Coifman, R. R.; Rochberg, R. H.; Taibleson, Mitchell H.) Introduction. Representation theorems for Hardy spaces, pp. 1-9, Astérisque, 77, Soc. Math. France, Paris, 1980. (Sun Yung A. Chang) 82g:32010 32A35 (42B30, 43A85,

Weiß, Gunter Zur euklidischen Liniengeometrie. II. Österreich. Akad. Wiss. Math.-Natur. Kl. Sitzungsber. II 188 (1979), no. 8-10, 343-359. (J. Hoschek) 82d:51011

Weiss, Haim (with Moore, John B.) Recursive prediction error algorithms without a stability test. Automatica—J. IFAC 16 (1980), no. 6, 683-688. (Authors' summary) 82x:93677 93E25

Weiss, Howard J. Waiting time distribution in a queue with a bulk service rule. Opsearch 18 (1981), no. 1, 15-24. (Author's summary) 82h:99053 90B22

Weiss, Lionel A simple sequential test for Hotelling's T² problem. Sankhyā Ser. B 40 (1978), no. 1-2, 38-42. (James Berger) 82a:62129 62L10

Asymptotic sufficiency in a class of nonregular cases. Mathematical statistics,

pp. 141-150, Selecta Statist. Canadiana, V, Univ. Press of Canada, Toronto, Ont., 1979. (Christian Hipp) 82h:62011 62B05 (62F12)

(with Bialas, Wayne F.) Bounds for the error in an approximation to the distribution of continuous random vectors with bounded supports. Comm. Statist. B-Simulation Comput. 10 (1981), no. 1, 67-76. (Authors' summary) 82c:62031 62E20

Weiss, Max L. (with Satyanarayana, Upadhyayula V.) Restricted principal values of ounded analytic and harmonic functions. J. Math. Soc. Japan 33 (1981), no. 1, 05-123, (V. I. Gavrilov) 82g:30057 30D40 105-123. (V. I. Gavrilov) 82g:30057 30D40 (with Gerber, Eric Alan) Parts in H[∞] with homeomorphic analytic maps.

Math. Soc. 83 (1981), no. 2, 315-318. (Arne Stray) 82k:46081 46J15 (30H05) Weiss, N. A. (with McDonald, John N.) A system of Markov processes with random lifetimes. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 3, 287-315. (Hermann Rost)

60J25 (60K35) Weiss, N. O. (with Da Costa, L. N.; Knobloch, Edgar) Oscillations in double-diffusive

convection. J. Fluid Mech. 109 (1981), 25-43. (Authors' summary) 82i:76041

Weiss, R. (with de Hoog, F. R.) An approximation theory for boundary value problems on infinite intervals. (German summary) Computing 24 (1980), no. 2-3, 227-239. (Authors' summary) 82f:65087 65L10 (34B15)

Weiss, Richard M. The nonexistence of certain Moufang polygons. Invent. Math. 51 (1979), no. 3, 261-266. (Bruce Cooperstein) 82k:05062 05C25

(with Semmler, Ulrike) On Fischer's characterization of Σ_4 and Σ_5 . Arch. Math. (Basel) 36 (1981), no. 2, 120-124. (Gareth A. Jones) 82k:20010 20D99)

radil-Weiss, T. See Radil-Weiss, T.

Weiss, U. (with Häffner, W.) The uses of instantons for diffusion in bistable potentials. Functional integration theory and applications (Proc. Colloq., Louvain-la-Neuve, 1979), pp. 311–331, Plenum, New York, 1980. (See 82b:81005) 81C35

Weiss, William A. R. (with Juhasz, Istvan) On thin-tall scattered spaces. Colloq. Math. 40 (1978/79), no. 1, 63-68. (From the text) 82k:54005 54A25

(with Juhász, István) The determination of π-weight by subspaces of singular cardinality. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 5, 257-260. (Andrzej Szymański) 82m:54002 54A25 (54B05)

(with Broverman, S.) Spaces co-absolute with \$N-N. Topology Appl. 12 (1981), no 2 127-133 (W. W. Comfort) 82e:54039 54D40 (54F65)

Weisser, D. P. (with Lagarias, J. C.) Fibonacci and Lucas cubes. Fibonacci Quart. 19

(1981), no. 1, 39-43. (A. Eswarathasan) 82d:10023 10A40
Weissler, Fred B. Existence and nonexistence of global solutions for a semilinear heat equation. Israel J. Math. 38 (1981), no. 1-2, 29-40. (J. A. Goldstein) 82g:35059

Weissman, Ishay Confidence intervals for the threshold parameter. Comm. Statist. A-Theory Methods 10 (1981), no. 6, 549-557. (Author's summary) 82f:62183 (62F25)

Weissman, Yitzhak (with Jortner, Joshua) What are the quantum manifestations of classical stochasticity in a discrete level structure? Chem. Phys. Lett. 78 (1981), no. 2, 224-229. (Authors' summary) 82b:81147 81G55 (58F13)

(with Jortner, Joshua) Dephasing maps for quantum stochastic systems. Phys. Lett. A 83 (1981), no. 2, 55-58. (Authors' summary) 824:82026 82A15 (58F13)
Weisstein, Larry S. (with Noor, Ahmed K.) Stability of beamlike lattice trusses. Comput.

Methods Appl. Mech. Engrg. 25 (1981), no. 2, 179-193. (Authors' summary) 82c:73038 73H05

Weisz, Peter (with Lüscher, M.; Symanzik, K.) Anomalies of the free loop wave equation in the WKB approximation. Nuclear Phys. B 173 (1980), no. 3, 365-396. (B. Geyer) 82a:81035 81E99 (81G05)

(with Lüscher, M.; Münster, Gernot) How thick are chromo-electric flux tubes? Nuclear Phys. B 180 (1981), no. 1, FS 2, 1-12. (Authors' summary) 82a:81047 (with Münster, Gernot) On the roughening transition in abelian lattice gauge

theories. Nuclear Phys. B 180 (1981), no. 1, FS 2, 13-22. (Authors' summary) 82a:81048 81G05 (82A67)

(with Münster, Gernot) On the roughening transition in nonabelian lattice gauge theories. Nuclear Phys. B 180 (1981), no. 2, FS 2, 330-340. (Authors' summary) 82e:81043 81E99

Weit, Yitzhak On spectral analysis in locally compact groups. Harmonic analysis, Iraklion 1978 (Proc. Conf., Univ. Crete, Iraklion, 1978), pp. 204-213, Lecture Notes in Math., 781, Springer, Berlin, 1980. (P. R. Mueller-Roemer) 82h:43009 43A22
On the one-sided Wiener's theorem for the motion group. Ann. of Math. (2) 111

(1980), no. 3, 415-422. (H. Leptin) 82g:43007a 43A20 (22D15)

On closed ideals in the motion group algebra. Math. Ann. 248 (1980), no. 3,

279-283. (H. Leptin) 82g:43007b 43A20 (22D15, 43A45)

Spectral analysis in spaces of vector valued functions. Pacific J. Math. 91 (1980), no. 1, 243-248. (Ernst Albrecht) 82m:43007 43A20 (46E40)

On spectral analysis in locally compact motion groups. *J. Funct. Anal.* 40 (1981), 1, 45-53. (A. H. Dooley) 82e:43005 43A45 no. 1, 45-53. (A. H. Dooley) 82e:43005

A characterization of polynomials by convolution equations. J. London Math. Sec. (2) 23 (1981), no. 3, 455-459. (C. Tanaka) 82m:30010 30C10

(with Strelitz, Shlomo) Asymptotic behavior of Dirichlet series. J. Math. Anal. Appl. 80 (1981), no. 1, 150-155. (R. S. L. Srivastava) 82g:30008 30B50

Weitsman, Allen (with Jerison, David) On the means of quasiregular and quasiconformal mappings. Proc. Amer. Math. Soc. 83 (1981), no. 2, 304–306. (Brad G. Oagood) 30C60 (30C75)

Math. Gaz. 64 (1980), no. 430, 255–262. (Paul Hartung) *826:10017*** 10A25

Weitzman, Martin L. (with Roberts, Kevin) Funding criteria for research, development, and exploration projects. Econometrica 49 (1981), no. 5, 1261-1288. (Authors' summary) 90A30

von Weizsäcker, C. F. Binary alternatives and space-time structure. Quantum theory and the structures of time and space, Vol. 2 (Second Conf., Tutzing, 1976), pp. 86-112, Hanser,

Munich, 1977. (Philip L. Quinn) 82a:83060 83F05 (81B10)
Welch, Lloyd R. (with Leung, Kon S.) Erasure decoding in burst-error channels. IEEE Trans. Inform. Theory 27 (1981), no. 2, 160-167. (Authors' summary) 82i:94028

94B20 (94B35) Welch, Peter D. (with Heidelberger, Philip) A spectral method for confidence interval generation and run length control in simulations. Comm. ACM 24 (1981), no. 4, 233-245. (Authors' summary) 824:68059 68305

233-245. (Authors' summary) 824:68059 68305

Welch, W. J. (with White, L. V.) A method for constructing valid restricted randomization schemes using the theory of D-optimal design of experiments. J. Roy. Statist. Soc. Ser. B

43 (1981), no. 2, 167-172. (Ch'ing Shui Chêng) 82m:62171 62K05 Welcher, Peter J. Symmetric fibre spectra and K(n)-homology acyclicity. Indiana Univ. Math. J. 30 (1981), no. 6, 801–812. (Harvey Margolis) 82m:55012 55P42 (55S10)

Welham, Bob (with Bundy, Alan) Using meta-level inference for selective application of multiple rewrite rule sets in algebraic manipulation. Artificial Intelligence 16 (1981), no. 2, 189-211. (Authors' summary) 82hc68059 68C20 (03B35)

Welk, R. (with Tomber, Marvin L.; Smith, C. L.; Norris, Diane M.) Addenda to: nonassociative algebra bibliography" [Hadronic J. 3 (1979/80), no. 1, 507-725; MR 82i:17001]. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part C. Hadronic J. 4 (1980/81), no. 4, 1318-1443. (J. Dieudonné) 82i:17002 17-02 (00A15)

Welkowitz, W. (with Min, B. G.; Fich, S.) Frequency analysis of time-varying elastance model of the left ventricle. Bull. Math. Biol. 42 (1980), no. 2, 173-180. (Authors' summary) 82k:92013 92A07 (73P10)

Welland, Robert Grassmann spaces in Hilbert space. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 2-3, part 1, 195-200. (Richard C. Swanson) 82d:58008 58B12 (46C99,

Wellford, L. Carter, Jr. (with Fernandez, R.) A finite element-singular perturbation technique for convection-diffusion problems. Finite element methods for convection dominated flows (Papers, Winter Ann. Meeting Amer. Soc. Mech. Engrs., New York, 1979), pp. 167-193, AMD, 34, Amer. Soc. Mech. Engrs. (ASME), New York, 1979. (T. A. Porsching) 82h:65144 65N30

(with Diaz-Munio, Rafael F.) A finite-element singular-perturbation technique for convection-diffusion problems. I. The one-dimensional case. Trans. ASME Ser. E. J. Appl. Mech. 48 (1981), no. 2, 265–271. (Authors' summary) 82j:76075a 76R99

(with Diaz-Munio, Rafael F.) A finite-element singular-perturbation technique for convection-diffusion problems. II. Two-dimensional problems. Trans. ASME Ser. E.J. Appl. Mech. 48 (1981), no. 2, 272-275. (Authors' summary) 82;76075b 76R99

Wellner, Jon A. A Glivenko-Cantelli theorem for empirical measures of independent but nonidentically distributed random variables. Stochastic Process. Appl. 11 (1981), no. 3, 309-312. (George L. O'Brien) 82k:60054 60F05 (60B10)

Wellner, Marcel Manifest gauge and Poincaré covariance. Ann. Physics 135 (1981), no. 2, 78A25 (53C80, 81E05, 81G10) 211-221. (R. Delbourgo) 82m:78009

Wells, David L. (with Davida, George I.; Kam, John B.) A database encryption system with subkeys. ACM Trans. Database Systems 6 (1981), no. 2, 312-328. (Authors' summary) 82f:68020 68B15

Wells, R. See Wells, Robert

Wells, R. O., Jr. Cohomology and the Penrose transform. Complex manifold techniques in theoretical physics (Proc. Workshop, Lawrence, Kan., 1978), pp. 92–114, Res. Notes in Math., 32, Pitman, San Francisco, Calif., 1979. (S. G. Gindikin) 82b:81048 81D25 (32F99, 81E10)

Wells, Robert (with Gorman, Arthur) A sharpening of Maslov's method for finding asymptotic solutions. Quart. Appl. Math. 38 (1980/81), no. 4, 509-510. (A. Voros) 82h:81036 81C15 (35J05, 58G15)

(with Gorman, Arthur; Fleming, G. N.) Wave propagation and Thom's theorem. J. Phys. A 14 (1981), no. 7, 1519–1531. (I. Stewart) 82i:58018 58C28 (35B32, 58G15, 78A10)

Wellstead, P. E. (with Robins, A. J.) Recursive system identification using fast algorith Internat. J. Control 33 (1981), no. 3, 455-480. (Authors' summary) 82c:93010 (with Prager, D. L.) Multivariable pole-assignment self-tuning regulators. Proc. IEE-D 128 (1981), no. 1, 9-18. (Authors' summary) 82e:93139

Welsh, A. P. G. (with Mitra, G.) A computer based crew scheduling system using a mathematical programming approach. Computer scheduling of public transport (Internat. Workshop, Univ. Leeds, Leeds, 1980), pp. 281-296, North-Holland, Amsterdam, 1981. (See 82f:90053) 90C35

Welsh, D. J. A. Colourings, flows and projective geometry. Nieww Arch. Wisk. (3) 28 (1980), no. 2, 159-176. (R. Balakrishnan) 82h:05002 05-02 (05B25, 05B35, 05C15,

(with Rands, B. M. I.) Animals, trees and renewal sequences. IMA J. Appl. Math. 27 (1981), no. 1, 1-17. (R. M. Cormack) 82j:05049 05B50 (82A67)

- Webh, Wayne (with Ojika, Takeo) A numerical method for multipoint boundary value problems with application to a restricted three-body problem. Internat. J. Comput. Math. 8 (1980), no. 4, 329–344. (Authors' summary) 82hc6963 65L10 (70F07) (with Ojika, Takeo) Modeling problems in ordinary differential equations using the initial value adjusting method. J. Math. Anal. Appl. 75 (1980), no. 2, 359–372. (Seihaku Higuch) 82hc69077 65L99 (93B30)

 - (with Ojika, Takeo) The scaling method for free interface problems in ordinary differential equations. J. Math. Anal. Appl. 79 (1981), no. 2, 428-435. (H. C. Howard) 34B10 (65L10)
- Websher, Terry L. (with Klein, Douglas J.) Cluster expansion and generalized transfer matrices for the statistical mechanics of linear chains. J. Statist. Phys. 24 (1981), no. 4, 555-586. (Authors' summary) 82482085 82A67
- tters, Gerard E. (with Collino, Alberto; Murre, Jacob P.) On the family of conics lying on a quartic threefold. Rend. Sem. Mat. Univ. Politec. Torino 38 (1980), no. 1, 151-181. 14J25 (14M07, 14N10) (Werner Kleinert) 82h:14022
- elzel, Helmut Eine arithmetische Eigenschaft der Koeffizienten hypergeometris aktionen mit algebraischen Para netern. J. Reine Angew. Math. 322 (1981), 190-195. 10F35 (33A30) (R. G. Buschman) 82st:10051
- th, E. On the density of color-families. Automata, languages and programming (Akko, 1981), pp. 68–72, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (From the Welzl, E. On the density of color-families. Automo
- introduction) 82m:68128 68F05 (05C15, 05C99)
 Wen, Guo Chen (with Fang, Ai Nong) The complex form and some boundary value ear elliptic systems of second order. (Chinese. English su
- Chinese Ann. Math. 2 (1981), no. 2, 201-216. (Long-Yi Tsai) 82k:35047 35365

 Wen, Tao A keep-convex interpolation for monotonic smooth functions. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 4, 299-306. (Author's summary) 82f:41020
- Wend, H. D. On hierarchical control of complex technological systems. Large Scale Systems 1 (1980), no. 1, 63–75. (From the summary) 821:93005 93A13

 Wendell, R. E. (with McKelvey, Richard D.) New perspectives in competitive location theory. European J. Oper. Res. 6 (1981), no. 2, 174–182. (Authors' summary) 82g:90042 90B05
- nd, Horst Pseudoeuklidische Räume endlicher Dimension im Aufbau der Geometrie aus dem Spiegelungsbegriff. (Russian and English summaries) Wiss. Z. Pādagog. Hochsch. "Karl Liebknecht" Potsdam 24 (1980), no. 1, 115-127. (H. Lenz) 82k:51010
- nd, Wolfgang L. (with Stephan, E.; Hsiao, George C.) On the integral equation method for the plane mixed boundary value problem of the Laplacian. Math. Methods Appl. Sci. 1 (1979), no. 3, 265-321. (Authors' summary) 82e:31003 31A25 (35J05) On Galerkin collocation methods for integral equations of elliptic boundary value problems. Numerical treatment of integral equations (Workshop, Math. Res. Inst., Oberwolfach, 1979), pp. 244–275, Internat. Ser. Numer. Math., 53, Birkhäuser, Basel, 1980. (Rolf Leis) 82f:65142 65R20 (65N35)
- ndroff, Burton (with Efroymson, Gustave A.; Swartz, Blair) A new inequality for symmetric functions. Adv. in Math. 38 (1980), no. 2, 109-127. (J. Bochnak) 82e:58018 58C25 (26D05, 90C30)
- Wendt, Dirk Optimales und reales Verhalten in Messick's Union-Dilemma-Game. Decision in small groups (Workshop, Jungholz, 1977) (German), pp. 193-205, Math. Systems in Econom., 45, Hain, Königstein/Ts., 1979. (See 82e:90130) 90D99
- Wendt, W. D. (with Frank, L. S.) Coercive singular perturbations: asymptotics and reduction to regularly perturbed boundary value problems. Analytical and numerical approaches to asymptotic problems in analysis (Proc. Conf., Univ. Nijmegen, Nijmegen, 1980), pp. 305–318, North-Holland Math. Studies, 47, North-Holland, Amsterdam, 1981. (Jack Carr) 82j:35012 35B25 (73K10)
- ne, G. P. Towards a structure theory for Lie-admissible algebras. Proceedings of the Third Workshop on Lie-Admissible Formulations (Univ. Massachusetts, Boston, Mass., 1980), Part A. Hadronic J. 4 (1980/81), no. 2, 580-607. (Aleksei Gainov) 82k:17001
- Alternative rings whose symmetric elements are nilpotent or a right multiple is a symmetric idempotent. Pacific J. Math. 90 (1980), no. 2, 483-492. (I. P. Šestakov)
- Weng, Zu Yin Optimal error bounds for derivatives of cubic interpolating splines with equidistant nodes. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 1, 24-34. (Author's summary) 82a:41014 41A15 (65D07)
- nger, John (with Deliyannis, Platon) Representing Baire and Borel measures by functionals. Measure theory and its applications (Proc. Conf., Northern Illinois Univ., De Kalb, Ill., 1980), pp. 201-206, Northern Illinois Univ., DeKalb, Ill., 1981. (See 82g:28002)
- Wenner, Bruce R. (with Walker, James W.) Characterizations of certain classes of infinite-dimensional metric spaces. Topology Appl. 12 (1981), no. 1, 101-104. (Shinpei Oka) 82b:54047
- nocur, Roberta S. (with Salant, Stephen W.) Recurrence of a modified random walk and its application to an economic model. SIAM J. Appl. Math. 40 (1981), no. 1, 163-166. (B. W. Stuck) 82f:60162 60J15 (90A12)
- n, Paul R. (with Roberts, Gary B.) Uniqueness in the Cauchy problem for weakly hyperbolic operators not satisfying Levi conditions. J. Differential Equations 40 (1981), no. 1, 7-36. (D. Gourdin) 82k:35071 35L30
- Large solutions to the volume constrained Plateau problem. Arch Rational Mech. Anal. 75 (1980/81), no. 1, 59-77. (R. Osserman) 82a:49049 49F99
- Wentzell, A. D. See Ventcel', A. D.
- Wentzell, R. A. (with Lastman, G. J.) Comparison of five models of spherical bubble response in an inviscid compressible liquid. J. Acoust. Soc. Amer. 69 (1981), no. 3, 638-642. (Authors' summary) 82b:76044 76N99 (76T05)
- (with Lastman, G. J.) Perturbation corrections to the equation of radial motion of a cavitating spherical bubble in an inviscid compressible liquid. J. Acoust. Soc. Amer. 70 (1981), no. 2, 596-602. (Authors' summary) 82j:76066 76N99 (35Q20)
 Werbiński, Tadeusz Uniform distribution of some sets of integers. Funct. Approx. Comment. Math. 8 (1980), 9-11. (L. C. Eggan) 82e:10090 10K05

wski, Jarosław (with Bobrowski, Dobiesław) On oscillation behaviour of functionally bounded solutions of nonlinear differential equations with deviating argument. Fasc. Math. No. 11 (1979), 115-123. (B. S. Lalli) 82h:34091 34K15

1982

- (with Popenda, Jerzy) On the discrete analogy of Gronwall lemma. Fasc. Math. No. 11 (1979), 143-154. (Miomir S. Stanković) 82g:39011 39C05 (26D20, 39A05) (with Popenda, Jerzy) On the asymptotic behaviour of the solutions of difference equations of second order. Comment. Math. Prace Mat. 22 (1980), no. 1, 135-142. (T. J.
- Mahar) 82i:39001 39A10 (39A12)
- On some asymptotic behaviour of solution of a Volterra integral equation with delay. stratio Math. 13 (1980), no. 3, 579-584. (C. Corduneanu) 82c:45019
- Asymptotic behavior of solutions of differential equations with lag. (Russian) Differencial'nye Uravnenija 17 (1981), no. 5, 917-920, 958. (V. Rosa) 82i:3409
- v. d. Werff, J. (with Akkerboom, J. C.; Schepers, P.) Thin layer chromatography, a case dy. Statist. Neerlandica 34 (1980), no. 4, 173-187. (S. Talwalker) 82b:62146 (92A07, 92A40)
- van der Werff, Terry J. (with Collins, Richard) *Mathematical models of the dynamics of the human eye. Lecture Notes in Biomathematics, 34. Springer-Verlag, Berlin-New York, 1980. vii + 99 pp. ISBN 0-387-09751-1 (Editors) 82d:92004 92A07 (35K55, 76Z05)
- Wergeland, Harald (with Pihl, Mogens) Christian Møller. (Norwegian) Norske Vid. Selsk. Forh. (Trondheim) 1980, 69-72 (1981). (S. D. Chatterji) 82m:01065
- mer, John Maximum modulus algebras and singularity sets. Proc. Roy. Soc. Edit Sect. A 86 (1980), no. 3-4, 327-331. (Eric Amar) 82e:46071 46J10 (32E25) ★Potential theory. Second edition. Lecture Notes in Mathematics, 408.
 - nger-Verlag, Berlin-New York, 1981. viii + 166 pp. ISBN 3-540-10276-0 (Editors) 31-02
 - (with Lee, Hsuan Pei) Orthogonal measures for subsets of the boundary of the ball in Recent developments in several complex variables (Proc. Conf., Princeton Univ., Princeton, N. J., 1979), pp. 277-289, Ann. of Math. Studies, 100, Princeton Univ. Press,
- Princeton, N.J., 1981. (Aline Bonami) 82k:32024 32A35 (46J15)
 Wermuth, Nanny Linear recursive equations, covariance selection, and path analysis. J.
 Amer. Statist. Assoc. 75 (1980), no. 372, 963-972. (Maxwell W. Layard) 82j:62055 62J05 (62H99)
- Werner, Bernhard Zur Lösung einiger Ausgleichsprobleme im dreidimensionalen projektiv abgeschlossenen euklidischen Raum mit Hilfe benachbarter elliptischer bzw. hyperbolischer Geometrien. [On the solution of some curve-fitting problems in a three-dimensional projectively closed Euclidean space, using adjacent elliptic or hyperbolic geometries] Wiss. Z. Pädagog. Hochsch. "Karl Friedrich Wilhelm Wander Dresden 15 (1981), no. 3, 71-77. (K. Strubecker) 82m:51023 51M10
- Werner, Bodo Turning points of branches of positive solutions. Bifurcation problems and their numerical solution (Proc. Workshop, Univ. Dortmund, Dortmund, 1980), pp. 211-226, Internat. Ser. Numer. Math., 54, Birkhäuser, Basel, 1980. (B. V. Loginov) 82i:58022 58E07 (47H15, 65H10, 82A25)
- Werner, Günter (with Heineken, H.) Nilpotente Gruppen T mit vorgeschriebener Faktorgruppe T/T₃. Arch. Math. (Basel) 35 (1980), no. 3, 239–251. (Norman Blackburn) 82b:20031 20D15
- Blackburn) 82b:20031 20D15 See also Gluškov, V. M.; et al., 82b:68001 Werner, Hans-Joachim On the matrix monotonicity of generalized inversion. Linear Algebra Appl. 27 (1979), 141-145. (Author's summary) 82k:15006
 - (with Hartung, Joachim) Zur Verwendung der restringierten Moore-Penrose-Inversen beim Testen von linearen Hypothesen. Z. Angew. Math. Mech. 60 (1980), no. 7, T344-T346. (Hilmar Drygas) 82;:62052 62J05
- Werner, Heinrich (with Burris, Stanley) Sheaf constructions and their elementary properties. Trans. Amer. Math. Soc. 248 (1979), no. 2, 269-309. (S. Comer) 82d:03049 03C30 (03C90)
- Werner, Helmut Neuere Entwicklungen auf dem Gebiete der nichtlinearen Splinefunktionen. Z. Angew. Math. Mech. 58 (1978), no. 6, 86-95. (Author's summary)
 - 41A15 (65D07)
 - The development of nonlinear splines and their applications. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 125-150, Academic Press, New York, 1980, (H. P. Dikshit) 82e-41019 41A15 (65D07) Numerical algorithms for interpolation and smoothing. Map data processing (Maratea, 1979), pp. 331-353, Academic Press, New York, 1980. (Author's summary)
 - 65D05 (86A30)
 - Spline functions and the numerical solution of differential equations. Special topics of applied mathematics (Proc. Sem., Ges. Math. Datenverarb., Bonn, 1979), pp. 173-192, North-Holland, Amsterdam, 1980. (Steven M. Serbin) 82b:65064 65L05 (65D07,
 - Remarks on Newton type multivariate interpolation for subsets of grids. (German ummary) Computing 25 (1980), no. 2, 181-191. (Author's summary) 82e:65010
 - (with Barrar, R. B.; Loeb, Henry) Erratum: "On the uniqueness of the best uniform extended totally positive monospline" [J. Approx. Theory 28 (1980), no. 1, 20-29; MR 81a:41018]. J. Approx. Theory 30 (1980), no. 4, 337. (Editors) 82g:41008 41A15
- Werner, P. (with Karkoschka, E.) Einige Ausnahmen zur Rosserschen Regel in der Theorie der Riemannschen Zetafunktion. (English summary) Computing 27 (1981), no. 1, 57-69.
- (D. H. Lehmer) \$2i:10048 10H05 (10-04)

 Werner, Udo (with Pietzsch, Wolfgang) Die Polynome S_n(x) zur Darstellung der Energiespektralfunktionen idealer Turbulenzfelder. Z. Angew. Math. Mech. \$8 (1978), no. 3, 166-168. (Editors) 82f:33009 33A70 (33A40, 76F05)
- Werner, W. (with Weber, Helmut) On the accurate determination of nonisolated solutions of nonlinear equations. (German summary) Computing 26 (1981), no. 4, 315-326. (Authors' summary) 82e:65062 65H10 (58C15)
 - (with Weber, Helmut) On the numerical solution of some finite-dim bifurcation problems. Numer. Funct. Anal. Optim. 3 (1981), no. 3, 341-366. (Authors' summary) 82h:65044 65J15 (58E07)
- Weron, Aleksander (with Linde, Werner; Mandrekar, V.) p-stable measures and p-absolutely summing operators. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Błażejewko, 1979), pp. 167-178, Lecture Notes in Math., 828, Springer,

Berlin, 1980. (D. J. H. Garling) 82i:47029 47B10 (46G12, 60B11)

(with Nguyễn Duy Tiến) Banach spaces related to a-stable measures. Probability theory on vector spaces, II (Proc. Second Internat. Conf., Błażejewko, 1979), pp. 309-317, Lecture Notes in Math., 828, Springer, Berlin, 1980. (L. Egghe) 82h:60011 60B11

(with Mlak, W.) Dilations of Banach space operator valued functions. At Math. 38 (1980), no. 3, 295–303. (Ju. I. Ljubič) 82b:47003 47A20 (47D05)

(with Niemi, Hannu) Dilation theorems for positive definite operator kernels having rants. J. Funct. Anal. 40 (1981), no. 1, 54-65. (F. H. Szafraniec) 82m:47005 47A20 (47D10, 60G05)

(with Cobanjan, S. A.) Existence of the linear prediction for Banach space valued ssian processes. J. Multivariate Anal. 11 (1981), no. 1, 69-80. (V. S. Mandrekar) 82i:60070 60G25

See also Probability theory on vector spaces, 82d:60004

Werra, D. Fantaisies chromatiques sur diverses partitions. A look at graph theory (Proc. Collog., Cerisy, 1980) (French), pp. 121-143, Presses Polytech. Romandes, Lausanne, 1980. (Jean-Claude Fournier) 82m:05047 05C15

Geography, games and graphs. Discrete Appl. Math. 2 (1980), no. 4, 327-337. ursingh Deo) 82c:05051 05C20 (Narsingh Deo) 82c:05051

Remarks on the requirement matrix of school timetable problems and regular embeddings of graphs. *European J. Oper. Res.* 6 (1981), no. 3, 298–301. (Author's introduction) 824:90067 90835 (05C70)

See also A look at graph theory, 82d:05054

Werschulz, Arthur G. (with Aziz, A. K.) On finite element methods for the Helmholtz equation. Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 132–136, IMACS,
 New Brunswick, N.J., 1979. (Authors' summary) 82b:65111 65N30 (78A25)

Computational complexity of one-step methods for a scalar autonomous differential ation. (German summary) Computing 23 (1979), no. 4, 345-355. (Author's summary) 82g:65038 65L05

Maximal order for quadratures using n evaluations. Aequationes Math. 21 (1980), no. 1, 68–97. (C. Dagnino) 82b:65013 65D30

(with Aziz, A. K.; Leventhal, S.) Higher-order convergence for a finite element method for the Tricomi problem. Numer. Funct. Anal. Optim. 2 (1980), no. 1, 65-78. (H. D. Mittelmann) 82c:65065 65N30

(with Aziz, A. K.) On the numerical solutions of Helmholtz's equation by the finite element method. SIAM J. Numer. Anal. 17 (1980), no. 5, 681-686. (Thomas S. Angell) 82k:65059 65N30

Maximal order for multipoint methods with memory using Hermitian information. Internat. J. Comput. Math. 9 (1981), no. 3, 223-241. (Dietrich Braess) 82h:65038 65H05 (68C25)

On maximal order for local and global numerical problems. J. Comput. System Sci. 65D30 (65L05)

23 (1981), no. 1, 38-48. (Author's summary) 82m:65017 Wertheim, M. S. Factorization of the direct correlation function. II. Relation to walls. J. Chem. Phys. 74 (1981), no. 4, 2466-2476. (Author's summary) 82f:82051 82A50

Wertheimer, D. (with Sterboul, F.) Comment construire un graphe PERT minimal. (English summary) RAIRO Rech. Opér. 15 (1981), no. 1, 85-98. (Authors' summ 90B35 (05C35)

Wertz, Wolfgang Optimal estimation of functions of probability densities. Studia Sci. Math. Hungar. 13 (1978), no. 3-4, 377-383 (1981). (Margaret P. Gessaman) 82h:62071

Methoden der Dichteschätzung. Eleventh Styrian Mathematical Symposium (Graz, 1979). Ber. Math.-Statist. Sekt. Forsch. Graz No. 124-132 (1979), Ber. No. 129, 31 pp. (Paul Deheuvels) 82g:62065 62G05

(with Kozek, Andrzej) On the existence of minimal complete classes of estimators. The First Pannonian Symposium on Mathematical Statistics (Bad Tatzmannsdorf, 1979), pp. 140-155, Lecture Notes in Statist., 8, Springer, New York, 1981. (A. L. Rukhin) 82i:62015 62C07

Nonparametric density estimators in abstract and homogeneous spaces. The First Pannonian Symposium on Mathematical Statistics (Bad Tatzmannsdorf, 1979).

pp. 290-301, Lecture Notes in Statist., 8, Springer, New York, 1981. (S. A. Hašimov) 82k:62083 62G05

A remark on the estimation of functionals of a probability density. (Russian summary) Problems Control Inform. Theory/Problemy Upravlen. Teor. Inform. 10 (1981), no. 4, 279-285. (Paul Deheuvels) 82m:62097 62G05

Wesfreid, Eva Étude du comportement asymptotique pour un modèle visco-plastique. (English summary) C. R. Acad. Sci. Paris Sér. A-B 290 (1980), no. 6, A297-A300. (Author's summary) 82c:73030 73E99

Wesley, Michael A. (with Markowsky, George) Fleshing out wire frames. IBM J. Res. Develop. 24 (1980), no. 5, 582-597. (L. Gyarmathi) 82f:68035 68C05 (51-04, 51M05,

Wesolowski, Tadeusz On some locally pseudocomplemented distributive lattices. Demonstratio Math. 13 (1980), no. 4, 907–918. (Anna Romanowska) 82e:06012

morphisms of idempotent reducts of abelian groups with a prime expo (Polish. English summary) Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. 21 (1980), Algebra, Dydakt. Mat., Geom., Zastos. Mat., 11-13. (W. Narkiewicz) 82a:20060 20K30 (08A35)

volowski, Zbigniew Wave propagation in finitely deformed elastic material. Nonlinear dynamics of elastic bodies, pp. 81-142, CISM Courses and Lectures, 227, Springer, Vienna, 1978. (See 82]:73002) 73D99 (73G05)

See also Nonlinear dynamics of elastic bodies, 82j:73002

Wesolowsky, G. O. (with Drezner, Zvi) A maximin location problem with maximum distance constraints. AIIE Trans. 12 (1980), no. 3, 249-252. (Authors' summary) 90B05

(with Drezner, Zvi) The optimal sight angle problem. AIIE Trans. 12 (1980), no. 4,
 332-338. (Authors' summary) 82f:51015
 51M05 (52A40, 90C30)
 (with Drezner, Zvi) Single facility I_g-distance minimax location. SIAM J. Algebraic

Discrete Methods 1 (1980), no. 3, 315-321. (Gerald Hammer) 82a:90045 90B05 Wess, Julius See New phenomena in lepton-hadron physics, 82h:81135

Wessel, Caspar See Andersen, Kirsti, 82a:01016
Wessel, Horst Ein System der strikten logischen Folgebeziehung. Begriffsschrift—Jena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 505-518, Friedrich-Schiller-Univ., Jena, 1979. (Charles F. Kielkopf) 82&03030 03B45

Wessel, Walter Some color-critical equivalents of the strong perfect graph conjecture Contributions to graph theory and its applications (Internat. Colloq., Oberhof, 1977) (German), pp. 300-309, Tech. Hochschule Ilmenau, Ilmenau, 1977. (E. Olaru) 82h:05033 05C35 (05C15)

Wessels, Jaap (with Groenewegen, Lucas Petrus Jozef) Conditions for optimality in multistage stochastic programming problems. Recent results in stochastic programming (Proc. Meeting, Oberwolfach, 1979), pp. 41–57, Lecture Notes in Econom. and Math. Systems, 179, Springer, Berlin, 1980. (V. N. Igolkin) 82a:90176 90C40 (90C15)

Wesson, Paul S. Scale-invariant gravity: a reformulation and an astrophysical test. Monthly Notices Roy. Astronom. Soc. 197 (1981), no. 1, 157-165. (Author's summary) 82h:83060 83D05 (85A30)

Improved standard cosmology. Phys. Rev. D (3) 23 (1981), no. 10, 2137-2141. https://summary) 821:83018 83C15 (83F05)

(Author's summary) 82:83018 83C15 (83F05)
West, Bruce J. On dissipative nonlinear Hamiltonian systems. Applied stochastic processes (Proc. Conf., Univ. Georgia, Athens, Ga., 1978), pp. 283-301, Academic Press, New York, 1980. (Jean-Pierre Eckmann) 82f:58044 58F05 (82A35)

(with Budgor, Aaron B.) Natural forces and extreme events. Mathematical models as a tool for the social sciences, pp. 35-45, Gordon & Breach, New York, 1980. (See 82g:92002) 92A05

The psychology of speculation: a simple model. Mathematical models as a tool for the social sciences, pp. 71–85, Gordon & Breach, New York, 1980. (See 82g:92802) 92A25 (90A09)

(with Lakatos-Lindenberg, Katja; Seshadri, Venkita; Shuler, Kurt E.) Equal-time second-order moments of a harmonic oscillator with stochastic frequency and driving force. J. Statist. Phys. 23 (1980), no. 6, 755-765. (S. K. Srinivasan) 82i:70028 (60H10, 82A05)

See also Mathematical models as a tool for the social sciences. 82g:92002 and Keilson, Julian, (See 82g:92002)

West, Douglas B. (with Tovey, Craig A.) Semiantichains and unichain coverings in direct products of partial orders. SIAM J. Algebraic Discrete Methods 2 (1981), no. 3, 295-305. (R. P. Dilworth) 82h:06002 06A10 (06A05)

West, Gerhard (with Brill, Michael) Contributions to the theory of invariance of color under the condition of varying illumination. J. Math. Biol. 11 (1981), no. 3, 337-350. (John Cantwell) 82h:92058 92A25

West, M. Robust sequential approximate Bayesian estimation. J. Roy. Statist. Soc. Ser. B

43 (1981), no. 2, 157-166. (Author's summary) 82h:62166 62M10 (62L12)
West, P. C. (with Gates, S. James, Jr.; Stelle, K. S.) Algebraic origins of superspace constraints in supergravity. Nuclear Phys. B 169 (1980), no. 3-4, 347-364. (Authors' summary) 82g:83029 83E50 (58A05)

(with van Nieuwenhuizen, Peter) From conformal supergravity in ordinary space to its superspace constraints. Nuclear Phys. B 169 (1980), no. 5-6, 501-513. (Authors' summary) 82h:83068 83E50

(with Sohnius, Martin F.; Stelle, K. S.) Dimensional reduction by Legendre transformation generates off-shell supersymmetric Yang-Mills theories. Nuclear Phys. B 173 (1980), no. 1, 127–153. (Authors' summary) 82a:81651 81G20 (58B20, 81E10)

Westcott, Mark Letter to the editor. J. Appl. Probab. 18 (1981), no. 2, 568-569. (From the introduction) 82g:62033 62E10

Approximations to hard-core models and their application to statistical analysis. Essays in statistical science. J. Appl. Probab. 1982, Special Vol. 19A, 281-292. (Author's summary) 82m:62218 62M99

(with Gates, D. J.; Rickard, John A.) Exact co-operative solutions of a duopoly model without co-operation. J. Math. Econom. 9 (1982), no. 1-2, 27-35. (Authors' summary) 82m:90036

Westenholz, C. On spontaneous symmetry breakdown and the Higgs mechanism. Acta Phys. Acad. Sci. Hungar. 48 (1980), no. 2-3, 213-224. (Andrzej Trautman) 82c:81067 81D20 (53C05, 53C80)

Wester, Michael Endliche Gruppen, die eine Involution z besitzen, so daß $F^{\bullet}(C(z))$ das direkte Produkt einer extraspeziellen 2-Gruppe von kleiner Weite mit einer elementarabelschen 2-Gruppe ist. II, III. J. Algebra 66 (1980), no. 1, 12–43, 44–60. (W. J. Wong) 82c:20038

Westerlund, T. (with Tysso, A.) Remarks on: "Asymptotic behavior of the extended Kalman filter as a parameter estimator for linear systems" [IEEE Trans. Automat. Control 24 (1979), no. 1, 36-50; MR 80b:93149] by L. Ljung. IEEE Trans. Automat. Control 25 (1980), no. 5, 1011-1012. (Authors' summary) 82a:93063 93E11

Westervelt, P. J. (with Woodsum, H. C.) A general theory for the scattering of sound by

sound. J. Sound Vibration 76 (1981), no. 2, 179-186. (Authors' summary) 82g:76034

Westman, Robert S. Huygens and the problem of Cartesianism. Studies on Christiaan Huygens (Sympos., Amsterdam, 1979), pp. 83–103, Swets & Zeitlinger, Lisse, 1980. (See 82m:01036) 01A45

The astronomer's role in the sixteenth century: a preliminary study. Hist. of Sci. 18 (1980), no. 40, part 2, 105-147. (Peeter Müürsepp) 82e:01030 01A40 (01A80)

Westreich, David (with Cahlon, Baruch) Numerical solutions of Volterra integral equation with continuous or discontinuous terms. J. Inst. Math. Appl. 26 (1980), no. 2, 175-186. 65R20 (45L10) (John M. Bownds) 82a:65101

Westwick, R. A representation theorem for real or complex bivectors. Linear a Multilinear Algebra 10 (1981), no. 2, 89-91. (Philippe Revoy) 82i:15028 Real trivectors of rank seven. Linear and Multilinear Algebra 10 (1981), no. 3, 183-204. (Maurice Flamant) 82j:15024 15A69

Wetherell, C. S. Probabilistic languages: a review and some open questions. Con Surveys 12 (1980), no. 4, 361-379. (Author's summary) 82j:69084 68F05

Wets, Roger J.-B. (with Pavon, M.) A stochastic variational approach to the duality between estimation and control: discrete-time. Analysis and optimisation of stochastic systems (Proc. Internat. Conf., Univ. Oxford, Oxford, 1978), pp. 347-360, Academic Press, London, 1980. (Michiel Hazewinkel) 82g:49014 49A60 (93E12, 93E20)

Stochastic multipliers, induced feasibility and nonanticipativity in stochastic

programming. Stochastic programming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 137–146, Academic Press, London, 1980. (Michel Valadier) 82e:90068

tion problem and its relation to other problems in stochastic programming. Stochastic programming (Proc. Internat. Conf., Univ. Oxford, Oxford, 1974), pp. 245–262, Academic Press, London, 1980. (Klaus Tammer) 82a:90109

(with Salinetti, Gabriella) On the convergence of closed-valued measurable multifunctions. Trans. Amer. Math. Soc. 266 (1981), no. 1, 275–289. (G. Mägerl) 28A20 (54C60)

erling, Wolfgang See Cons ctive methods of finite noni ettstein, H. Locking operations for maximum concurrency. Comput. J. 24 (1981), no. 3, 243-248. (Author's summary) \$2m:68050 68B15 (05C99)

ttstein, Ronald H. Kant et le paradigme newtonien. [Kant and the Newtonian paradigm]
Rev. Internat. Philos. 34 (1980), no. 3-4, 575-598. [J. Z. Buchwald) 82m:01043 01A50 (00A25)

etrel, John E. (with Purdy, George B.) Two-coloring inequalities for Euclidean arrangements in general position. Discrete Math. 31 (1980), no. 1, 53–58. (R. P. Bambah) 82æ05043 05B45 (05B30, 51M20, 52A40)

(with Alexanderson, Gerald) Arrangements of planes in space. Discrete Math. 34 (1981), no. 3, 219-240. (C. Ballester Pereyra) 82i:51028 51M20 (01A55, 01A60, 05A15)

Wexler, D. On frequency domain stability for evolution equations in Hilbert spaces via the algebraic Riccati equation. SIAM J. Math. Anal. 11 (1980), no. 6, 969-983. (R. F. Datko) 82f:34075 34G10 (34K30, 93D10)
Wexler, P. J. (with Bloom, Gary S.; Kennedy, J. W.; Gewirtz, A.) Eodermdromes: a

graph-theoretical tool for linguistics. The theory and applications of graphs (Kala Mich., 1980), pp. 81–93, Wiley, New York, 1981. (Authors' summary) 82k:668E10 (05C99, 68F05, 90D99) ary) 82k:68032

Wexler-Kreindler, Elena Séries formelles tordues et conditions de chaînes. Séminaire d'Algèbre Paul Dubreil 31ème année (Paris, 1977-1978), pp. 99-119, Lecture Notes in

Math., 740, Springer, Berlin, 1979. (R. Raphael) 82a:16007 16A05
Skew power series rings and some homological properties of filtered rings. Ring heory, Antwerp 1980 (Proc. Conf., Univ. Antwerp, Antwerp, 1980), pp. 198-209, Lecture in Math., 825, Springer, Berlin, 1980. (L. A. Koifman) 82f:16030 (16A05)

Hermann See Dick, Auguste, 82::01047 an, Jerzy (with Akin, Kaan; Buchsbaum, David A.) Resolutions of determinantal ideals: the submaximal minors. Adv. in Math. 39 (1981), no. 1, 1-30. (Jürgen Herzog) 13D25 (14M12)

s, G. (with Abresch, U.; Bovier, A.; Lechtenfeld, O.; Lüling, M.; Rittenberg, V.) Finite nonabelian subgroups of SU(n) with analytic expressions for the irreducible representations and the Clebsch-Gordan coefficients. J. Math. Phys. 21 (1980), no. 10, 2481-2486. (William H. Klink) 82a:20009 20C15 (20D15, 81C40)

Weymark, John A. Generalized Gini inequality indices. Math. Social Sci. 1 (1980/81), no. 4, 409–430. (Author's summary) 82g:90033 90A99

Weyuker, Elaine J. (with Ostrand, Thomas J.; Paull, Marvin C.) Parsing regular grammars with finite lookahead. Acta Inform. 16 (1981), no. 2, 125-138. (Authors' summary) 68F25

Wheeden, Richard L. On the dual of weighted H¹(|z|<1). Approximation theory (Papers, VIth Semester, Stefan Banach Internat. Math. Center, Warsaw, 1975), pp. 293-303, Banach Center Publ., 4, PWN, Warsaw, 1979. (From the introduction) 82a:46030</p> 46E15 (42B30, 46J15)

eler, John Archibald Frontiers of time. Problems in the foundations of physics (Proc. Internat. School Phys. "Enrico Fermi", Course LXXII, Varenna, 1977), pp. 395-492, North-Holland, Amsterdam, 1979. (See 82m:81003) 81B05

(with Isenberg, James A.) Inertia here is fixed by mass-energy there in every W model universe. Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein, Vol. 1, II, pp. 267–293, Johnson, New York, 1979. (See 82b:83002) 83D05

The quantum and the universe. Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein, Vol. I, II, pp. 807-825, Johnson, New York, 1979. (See 82b:83002) 83-03 (85A04)

Beyond the black hole. Some strangeness in the proportion (Einstein Centennial Sympos., Inst. Ado. Study, Princeton, N.J., 1979), pp. 341-375, Addison-Wesley, Reading, Mass., 1980. (See 82d:83002) 83F05 (00A69)

Wheeler, John C. (with Pfeuty, Pierre) Polymer statistics, the n-vector model, and Phys. Rev. A (3) 23 (1981), no. 3, 1531-1534. (Authors' thermodynamic stability. summary) 82c:82076 82A42

Wheeler, Lewis T. (with Kunin, Isaak A.) On voids of minimum stress concentration. Internat. J. Solids and Structures 18 (1982), no. 1, 85-89. (Authors' summary) 82m:73013 73C45

Wheeler, Mary Fanett (with Carey, Graham F.) Co-collocation-Galerkin methods. Codes ary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 250-256, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 82b:65074) 65N30

A self-adaptive finite difference procedure for one-dimensional, two-phase, immiscible flow. Seminar on Numerical Analysis and its Applications to Continuum Physics (Rio de Janeiro, 1980), pp. 153-161, Soc. Brasil. Mat., Rio de Janeiro, 1980. (J. D. P. Donnelly) 82a:76084 76T05 (65M05, 76S05)

Percell, Peter) A C1 finite element collocation method for elliptic equations. SIAM J. Numer. Anal. 17 (1980), no. 5, 605-622. (Wolfgang Moldenhauer) 82c:65081

(with Carey, Graham F.; Humphrey, David L.) Galerkin and collocation-Galerkin methods with superconvergence and optimal fluxes. Internat. J. Numer. Methods Engrg. 17 (1981), no. 6, 939-950. (Authors' summary) 82g:80008 80A20 (65L99)

eeler, Robert F. Extensions of a s-additive measure to the projective cover. Measure theory, Oberwolfach 1979 (Proc. Conf., Oberwolfach, 1979), pp. 81-104, Lecture Notes in Math., 794, Springer, Berlin, 1980. (J. D. Knowles) 82c:28028 28C15 Weak and pointwise compactness in the space of bounded continuous functions.

Trans. Amer. Math. Soc. 266 (1981), no. 2, 515-530. (I. Tweddle) 82f:46028 46E15

See also Measure theory and its applications, 82g:28002
eeler, Robert L. On the structure of resolvents of Volterra equations. Integral and functional differential equations (Proc. Conf., West Virginia Univ., Morgantown, W. Va., 1979), pp. 269-276, Lecture Notes in Pure and Appl. Math., 67, Dekker, New York, 1981.

(G. S. Jordan) 82h:45004 45D05 (45J05, 47G05)
Whinston, Andrew B. (with Bullers, William I.; Nof, Shimon Y.) Artificial intelligence in manufacturing planning and control. AIIE Trans. 12 (1980), no. 4, 351-363. (Authors' summary) 82g:90055 90B30 (03B10, 03B35, 68G15)

(with Bonczek, Robert H.; Holsapple, Clyde W.) A generalized decision support system using predicate calculus and network data base management. Oper. Res. 29 (1981), no. 2, 263-281. (Authors' summary) 82m:68139 68J10 (03B10, 90B99, 92A20)

(1981), No. 2, 203–201. (Author's stallmary) destroots of the American Stallmary and statistical mechanics. Internat. J. Math. Ed. Sci. Tech. 12 (1981), no. 6, 637–651. (Author's summary) 82k:90150 90D99 (82A77) hitbeck, Richard F. "Direct" Wiener-Hopf solution of filter/observer and optimal coupler

problems. J. Guidance Control 4 (1981), no. 3, 329-336. (Author's summary) 82h:93090 93F20

White, Albert G. (with Diminnie, Charles R.) Remarks on strict convexity and betweenness postulates. Dem onstratio Math. 14 (1981), no. 1, 209-220. (Robert E. Jamison) 52A01 (46B99, 52A07) 82k:52004

White, Andrew B., Jr. Mesh selection for boundary-value codes. Codes for boundary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 266–273, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See 65-04 (65L10)

White, Arthur T. Strongly symmetric maps. Graph theory and combinatorics (Proc. Conf., Open Univ., Milton Keynes, 1978), pp. 106-132, Res. Notes in Math., 34, Pitman, San Francisco, Calif., 1979. (Author's introduction) 82a:05047 05C10

(with Jungerman, Mark; Stahl, Saul) Imbeddings of hypergraphs. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 545–557. (Jonathan L. Gross) 821:05035 05C10 (05B05, 05C65)

(with Ringeisen, R. D.) On pseudosurface imbeddings of $K_{m,n}$ and certain joins of graphs. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 859-867. (Michael O. Albertson) 82j:05054 05C10 (55M15)

White, Benjamin S. (with Franklin, Joel N.) A limit theorem for stochastic two-point boundary value problems of ordinary differential equations. Comm. Pure Appl. Math. 32 (1979), no. 2, 253–275. (Werner Kohler) 824:60113 60H10 (60F05)

(with Castleman, Kenneth R.) Estimating cell populations (1981), no. 5, 365-370. (Authors' summary) 82h:92009 92A07 (62H30)

White, Chelsen C., III The optimality of isotone strategies for Markov decision problems with utility criterion. Recent developments in Markov decision processes (Proc. Interna-Conf., Univ. Manchester, Manchester, 1978), pp. 261-275, Academic Press, London, 1980. (See 82k:90128) 90C40

Structured policy results for single stage decisionmaking under uncertainty. IEEE Trans. Systems Man Cybernet. 10 (1980), no. 12, 891-894. (Author's summary) 82b:90114 90C31

(with Harrington, David P.) Application of Jensen's inequality to adaptive

aboptimal design. J. Optim. Theory Appl. 32 (1980), no. 1, 89-99. (Authors' sur 82h-90126

(with Kim, Kwang W.) Solution procedures for vector criterion Markov decision processes. Large Scale Systems 1 (1980), no. 2, 129-140. (Authors' summary) 82m:90157

White, D. E. (with Williamson, S. G.) Construction of minimal representative systems. Linear and Multilinear Algebra 9 (1980), no. 3, 167-180. (R. C. Read) 82d:05069 05C30 (04A05)

White, D. J. A survey of algorithms for some restricted classes of Markov decision problems. Proceedings in Operations Research, 8 (Seventh Annual Meeting, Deutsch. Gesellsch. Operations Res., Freie Univ. Berlin, Berlin, 1978), pp. 103–121, Physica, Würzburg, 1979. (G. Hübner) 82a:90179 90C40

Finite state approximations for denumerable state infinite horizon discounted Markov decision processes: the method of successive approximations. Recent developments in Markov decision processes (Proc. Internat. Conf., Univ. Manchester, Manchester, 1978), pp. 57–72, Academic Press, London, 1980. (See 82k:90128)

Optimality and efficiency. I. European J. Oper. Res. 4 (1980), no. 5, 346-355. (Y. I. Kannai) 82a:90011a 90A05

Notes in decision theory: optimality and efficiency. II. European J. Oper. Res. 4 (1980), no. 6, 426-427. (Y. I. Kannai) 82a:90011b 90A05

Rational solution axioms and efficient sets. European J. Oper. Res. 8 (1981), no. 1, 90A08 (90A06) 66-75. (Author's summary) 82m:90020

See also Recent developments in Markov decision processes, 82k:90128

White, Errin Erb On the homological dimension of valuated vector spaces. Canad. Math. Bull. 24 (1981), no. 1, 97-100. (Y. C. Wu) 82d:20054 20K40
White, I. R. (with Lewis, R. W.; Wood, W. L.) The numerical simulation of multiphase

flow through a porous medium and its application to reservoir engineering. Appl. Math. Modelling 5 (1981), no. 3, 165-172. (Authors' summary) 82i:76088 76S05 (65P05 76A60)

White, JoAnn (with Lloyd, Monte) On reconciling patchy microspatial distribution competition models. Amer. Natur. 115 (1980), no. 1, 29-44. (R. M. Cormack) 82d:92033 92A17

White, John T. See American math natical heritage: algebra and applied ma 82k:01002

White, L. R. (with Hughes, B. D.; Pailthorpe, B. A.) The translational and rotational drag on a cylinder moving in a membrane. J. Fluid Mech. 110 (1981), 349-372. (Authors nary) 82k:76081 76Z99 (92A09)

White, L. V. (with Welch, W. J.) A method for constructing valid restricted randomization schemes using the theory of D-optimal design of experiments. J. Roy. Statist. Soc. Ser. B 43 (1981), no. 2, 167-172. (Ch'ing Shui Chêng) 82m:62171 62K05

White, L. W. Approximation of a parabolic optimal control problem by pseudoparabolic Houston J. Math. 6 (1980), no. 4, 595-601. (J. E. Rubio) 82m:49048 49D99 (35K70)

Control problems governed by Sobolev partial differential equations. J. Math. Anal. Appl. 73 (1980), no. 1, 267-277. (Author's summary) 82g:49018 49B22 (35K70)

Convergence properties of optimal controls of pseudoparabolic problems. A. Math. Optim. 7 (1981), no. 2, 141–147. (J. E. Rubio) 82m:49049 49D99 (35K70) Point control of pseudoparabolic problems. J. Differential Equations 42 (1981), no. 3, 366-374. (M. Biroli) 82m:49009 49A22 (35K70)

Penalty approximation of a Sobolev optimal control problem with state constraints.

J. Optim. Theory Appl. 33 (1981), no. 1, 121-135. (M. Biroli) 82e:49052 49D30

White, Lee J. (with Srihari, Sargur N.; Snabb, Thomas) Identity conditions for nearest-neighbor and potential-function classifiers. Inform. Sci. 19 (1979), no. 1, 21-31. (Authors' summary) 82;68092 68G10 (62G99)

(with Dasarathy, B.) A maxmin location problem. Oper. Res. 28 (1980), no. 6,

(with Disastatily, 3.7 maximi location products. Oper. Res. 26 (1901), no. 9, 1385–1401. (Authors' summary) 22:90024 90B05 (90C20)

White, Michael J. An S5 Diodorean modal system. Logique et Anal. (N.S.) 22 (1979), no. 88, 477–487. (John R. Chidgey) 82:e03025 03B45 (03A05) Necessity and unactualized possibilities in Aristotle. Philos. Stud. 38 (1980), no. 3, 287–298. (Stephen Read) 82:e03004 03-03 (01A20, 03A05, 03B45)

On some ascending chains of Brouwerian modal logics. Studia Logica 40 (1981), no. 1, 75-87. (David Makinson) 82g:03031 03B45

White, Neil L. The transcendence degree of a coordinatization of a combinatorial geometry. J. Combin. Theory Ser. B 29 (1980), no. 2, 168-175. (Manfred Stern) 82e:05054 05B35 (13C15, 51D20)

A unique exchange property for bases. Linear Algebra Appl. 31 (1980), 81-91. (Author's summary) 82k:05042 05B35

White, Patrick E. (with Butler, Jon T.) Synthesis of one-dimensional binary scope-2 flexible cellular systems from initial final configuration pairs. Inform. and Control 46 (1980),

no. 3, 241-256. (Authors' summary) 82j:68028 68D20 (92A05)
White, Roscoe Beryl (with Rechester, A. B.; Rosenbluth, M. N.) Statistical description of stochastic orbits in a tokamak. Intrinsic stochasticity in plasmas (Internat. Workshop, Inst. Études Sci. Cargèse, Cargèse, 1979), pp. 239-259, École Polytech., Palaiseau, 1979. (J. S. Joel) 824:76101 76X05 (58F13)

(with Rechester, A. B.; Rosenbluth, M. N.) Fourier-space paths applied to the calculation of diffusion for the Chirikov-Taylor model. *Phys. Rev. A* (3) **23** (1981), *no.* 5, 2664–2772. (Authors' summary) **824:82063** 82A45 (58F13, 60K35)

White, Warren H. A global existence theorem for Smoluchowski's coagulation equations Proc. Amer. Math. Soc. 80 (1980), no. 2, 273-276. (M. Švec) 82c:34016 (34G20, 80A30)

Whitehead, Alfred North (with Russell, Bertrand A. W.) *Principia mathematica (hasta el *56). (Spanish) [Principia mathematica (to *56)] Translated from the English by J. Manuel Dominguez Rodríguez. Colección Lógica y Teoria de la Ciencia. [Logic and Theory of Science Collection] Paraninfo, Madrid, 1981. 471 pp. ISBN 84-283-1144-7 (Editors) 82m:01082 01A75 (03-03, 03B15)

Whitehead, Earl Glen, Jr. (with Loerinc, Beatrice) Chromatic polynomials for regular graphs and modified wheels. J. Combin. Theory Ser. B 31 (1981), no. 1, 54-61. (S. G. Hoggar) 82k:05048 05C15

ead, James M. Projective modules and their trace ideals. Comm. Algebra 8 (1980),

no. 19, 1873-1901. (J. Jirásko) 82a:16026 16A50
Whitehead, John Fitting Cox's regression model to survival data using GLIM. J. Roy. Statist. Soc. Ser. C 29 (1980), no. 3, 268-275. (Benjamin Epstein) 82c:62139 (with Jones, David) Amendments and corrections: "Sequential forms of the log rank and modified Wilcoxon tests for censored data" [Biometrika 66 (1979), no. 1, 105-113; MR 80i:62069]. Biometrika 68 (1981), no. 2, 576. (Editors) 82i:62068 62G10

Whitehead, R. R. Comments on a paper: "Continuum calculus. IV. The Laplace transform method in the evaluation of the Feynman path integrals with a Gaussian measure and applications in quantum mechanics" [J. Math. Phys. 21 (1980), no. 5, 1055-1069; MR 81f:81018] by L. L. Lee. J. Math. Phys. 22 (1981), no. 7, 1329. (Author's summary) 81C35

(with Watt, A.) On the avoidance of cancellations in the matrix moment problem. J. Phys. A 14 (1981), no. 8, 1887-1892. (K. V. Bhagwat) 82i:15031 15A99 (65F30)

Whiteley, Walter Realizability of polyhedra. (French summary) Structural Topology 1979, no. 1, 46-58, 73. (Jim Lawrence) 82j:52016 52A25 (with Roth, B.) Tensegrity frameworks. Trans. Amer. Math. Soc. 265 (1981), no. 2,

419-446. (Robert Connelly) 82m:51018 51F99 (53A17, 73K20)

Whiteman, Albert Leon See Theory of numbers, 82d:10006
Whiteman, J. R. (with Schiff, B.; Fishelov, D.) Determination of a stress intensity factor using local mesh refinement. Mathematics of finite elements and applications, III (Proc. Third MAFELAP Conf., Brunel Univ., Uxbridge, 1978), pp. 55-64, Academic Press, London, 1979. (H. K. Verma) 82e:73078 73M05 (65N30, 73K25)

Whitesides, S. H. An algorithm for finding clique cut-sets. Inform. Process. Lett. 12 (1981), no. 1, 31-32. (From the introduction) 82a:68133 68E10 (05C40)

Whitfield, J. H. M. (with Anantharaman, R.; Lewis, Ted) Smoothability, strong smoothability and dentability in Banach spaces. Canad. Math. Bull. 24 (1981), no. 1, 59-68. (Francis E. Sullivan) 82g:46043 46B22

Whitford, Anthony K. See Monzingo, M. G., 82j:10020

Whitman, G. M. (with Leskiw, D. M.; Schwering, F.) Rigorous theory of scattering by perfectly conducting periodic surfaces with trapezoidal height profile. TE and TM polarization. J. Opt. Soc. Amer. 70 (1980), no. 12, 1495-1503. (Authors' summary) 78A45

Whitman, P. N. (with Goodson, G. R.) On the spectral properties of a class of special flows. ondon Math. Soc. (2) 21 (1980), no. 3, 567-576. (Fumio Hiai) 824:28017

(with Goodson, G. R.) A skew-product with simple singular spectrum. Quaestiones Math. 4 (1980/81), no. 4, 309-322. (Andrés del Junco) 82k:28017 28D05

Whitmore, R. C. (with Harner, E. J.) Analyses of multivariately determined community matrices using cluster analysis and multidimensional scaling. Biometrical J. 22 (1980), no. 8, 715-723. (Authors' summary) 82b:92041 92A17 Whitmore, Roy W. (with Matis, J. H.) Compartmental analysis of carcinogenic experiments: formulation of a stochastic model. J. Math. Biol. 12 (1981), no. 1, 31-43. (Authors' summary) 82j-92017 92A07 (92A09)

Whitney, A. K. (with Schwartz, Leonard W.) A semi-analytic solution for nonlinear standing waves in deep water. J. Fluid Mech. 107 (1981), 147-171. (Authors' summary)

Whitrow, Gerald James *The natural philosophy of time. Second edition. The Claren Press, Oxford University Press, New York, 1980. ix + 399 pp. ISBN 0-19-858212-9 (Lawrence Sklar) 82c:00017 00A69 (01A60, 83-03, 92A05)

Whitt, Lee (with Bloom, John R.) The geometry of rolling curves. Amer. Math. Monthly 88

(1981), no. 6, 420-426. (Hellmuth Stachel) 82h:53013 55A17 (70B10)

Whitt, Ward The effect of variability in the GI/G/s queue. J. Appl. Probab. 17 (1980), no. 4, 1062-1071. (T. Rolski) 82h:60125 60K25

Continuity of generalized semi-Markov processes. Math. Oper. Res. 5 (1980), no. 4, 494-501. (Esa Nummelin) 82e:60145 60K15

Comparing counting processes and queues. Adv. in Appl. Probab. 13 (1981), no. 1, 207-220. (B. M. Kirstein) 82e:60160 60K25 (60G17)

(with Smith, Donald R.) Resource sharing for efficiency in traffic systems. Bell System Tech. J. 60 (1981), no. 1, 39-55. (Ralph L. Disney) 82a:60145 60K25

The stationary distribution of a stochastic clearing process. Oper. Res. 29 (1981), no. 2, 294-308. (Author's summary) 82i:60173 60K30 (with Halfin, Shlomo) Heavy-traffic limits for queues with many exponential servers.

Oper. Res. 29 (1981), no. 3, 567-588. (Authors' summary) 82i:90046 90B22 (60K25) On stochastic bounds for the delay distribution in the GI/G/s queue. Oper. Res. 29 (1981), no. 3, 604-608. (Author's summary) 82i:60169

ittaker, E. T. See Stuart, S. N., 82b:33001

Whittaker, R. H. (with Goodman, Daniel) Classifying species according to their demographic strategy. I. Population fluctuations and environmental heterogeneity.

Amer. Natur. 113 (1979), no. 2, 185–200. (Charles Tier) 82e:92042 92A15 (92A17)

Whitten, Barbara L. (with Koehler, Donald O.; Gregg, Thomas G.) An n locus multiallele model for gene substitution. Genetics 94 (1980), no. 3, 749-762. (Susan Wilson) 92A10

Whitten, Betty Jones (with Cohen, A. Clifford) Estimation of lognormal distributions Amer. J. Math. Management Sci. 1 (1981), no. 2, 139-153. (Authors' summary) 82i:62046

Whittington, S. G. (with Ishinabe, T.) Surface critical exponents for self-avoiding walks on the tetrahedral lattice. J. Phys. A 14 (1981), no. 2, 439-446. (Authors' summary) 82b:82097 82A70 (60J15)

Whittle, P. Negative programming with unbounded costs: a simple condition for regularity. Recent developments in Markov decision processes (Proc. Internat. Conf., Univ. Manchester, Manchester, 1978), pp. 23-34, Academic Press, London, 1980. (See 90C40

Multi-armed bandits and the Gittins index. J. Roy. Statist. Soc. Ser. B 42 (1980), no. 2, 143-149. (John C. Gittins) 82b:62097 62L05 (90B35)

A direct derivation of the equilibrium distribution for a polymerisation process. (Russian summary) Teor. Verojatnost. i Primenen. 26 (1981), no. 2, 350-361. (Hermann

Rost) 82h:82036 82A51 (05A15, 05C30, 52A22, 60C05)
Wiberg, D. M. (with Brovko, O.; Arena, L.; Bellville, J. W.) The extended Kalman filter as a pulmonary blood flow estimator. Automatica—J. IFAC 17 (1981), no. 1, 213–220. (Authors' summary) 82a:92005 92A07 (93E11)

Wichmann, Heide Algorithms for vertical processing. Parallel computers—parallel mathematics (Munich, 1977), pp. 75–77, North-Holland, Amsterdam, 1977. (See 68C05 (68B20)

Wick, Alain (with Fabre, Georges; Zepp, Gérard) Propagation d'une onde électromagnétique à la surface d'un conducteur ou d'un supraconducteur de section circulaire. (English summary) Canad. J. Phys. **59** (1981), no. 7, 902-913. (Authors' summary) 82h:78011 78A40

Wick, J. Zur Abhängigkeit der Lösung von u_i+(h(u))_x=0 von ihren Anfangswerten. (English summary) Math. Methods Appl. Sci. 2 (1980), no. 4, 504-517. (Stefan Balint) 35B30 (35F20)

Wicken, Jeffrey S. A thermodynamic theory of evolution. J. Theoret. Biol. 87 (1980), no. 1, 9–23. (Author's summary) 82b:92006 92A05 (82A35)

Wickens, Thomas D. (with Larkin, Jill H.) Population states and eigenstructure: a simplifying view of Markov learning models. J. Math. Psych. 22 (1980), no. 3, 176–208. (P. Suppes) 82i:92041 92A25 (60G35, 60J70)

Wickham, G. R. Short-wave radiation from a rigid strip in smooth contact with a semi-infinite elastic solid. Quart. J. Mech. Appl. Math. 33 (1980), no. 4, 409-433. (Author's summary) 82c:73084 73T05 (73D25)

The diffraction of stress waves by a plane finite crack in two dimensions: uniquene and existence. Proc. Roy. Soc. London Ser. A 378 (1981), no. 1773, 241-261. (Author's summary) 82k:73024 73D25

Wickless, W. (with Vinsonhaler, C.) A theorem on quasi-pure-projective torsion free abelian groups of finite rank. Pacific J. Math. 91 (1980), no. 1, 239–241. (Luigi Salce)

(with Vinsonhaler, C.) Quasiprojective and quasi-injective finite valuated groups. Collog. Math. 44 (1981), no. 1, 35-40. (L. Fuchs) 82j:20104 20K40

(with Vinsonhaler, C.) The injective hull of a separable p-group as an E-module. J. Algebra 71 (1981), no. 1, 32-39. (P. L. Sperry) 82m:20058 20K10 (20K30)

Wicks, M. J. (with Lyndon, Roger C.) Commutators in free groups. Canad. Math. Bull. 24 (1981), no. 1, 101–106. (I. B. S. Passi) 82i:20047 20F10 (20F12)

Wickstead, Anthony W. Relatively central operators on Archimedean vector lattices. I. Proc. Roy. Irish Acad. Sect. A 80 (1980), no. 2, 191-208. (A. C. Zaanen) 82g:47027 47B55 (46A40, 47D20)

Extremal structure of cones of operators. Quart. J. Math. Oxford Ser. (2) 32 (1981), no. 126, 239-253. (Kung-fu Ng) 82i:47069 47D20 (46A40)
Widiger, A. Über halbprimäre Ringe mit Kettenbedingungen für Ideale. Studia Sci. Math

Hungar. 12 (1977), no. 3-4, 391-398 (1980). (Stuart A. Steinberg) 82h:16014

A remark on restricted serial rings. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 1-2, 49-51. (Harlan Hullinger) 82c:16017

- Decomposition of Artinian alternative rings. (Russian) Mat. Sb. (N.S.) 113(155) (1980), no. 2(10), 285-301, 351. (Harry F. Smith) 82b:17023 17D05
- Nichtprime Cohen-Ringe. Period. Math. Hungar. 12 (1981), no. 2, 141-160. (L. Bican) 821:16022 16A48 (16A33)
- nd, Olof B. (with Szyld, Daniel B.) Applications of conjugate gradient type methods to eigenvalue calculations. Advances in computer methods for partial differential equations, IIII (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 167–173, IMACS, New Brunswick, N.J., 1979. (Authors' summary) 82b:65026 65F15
- Widman, K.-O. (with Hildebrandt, Stefan; Jost, Jürgen) Harmonic mappings and minimal submanifolds. Invent. Math. 62 (1980/81), no. 2, 269-298. (Samuel I. Goldberg) 58E20 (53C40)
- dom, B. The interfaces between fluid phases. Perspectives in statistical physics, pp. 273-291, Stud. Statist. Mech., IX, North-Holland, Amsterdam, 1981. (See 82h:82001)
- Widom, Harold Asymptotics of compressions to spectral subspaces of the Laplacian. Geometry of the Laplace operator (Proc. Sympos. Pure Math., Univ. Hawaii, Honolulu, Hawaii, 1979), pp. 319-323, Proc. Sympos. Pure Math., XXXVI, Amer. Math. Soc., Procidence, R.I., 1980. (M. S. Agranovič) 82e:58101 58G25 (35P20, 43A85) Szegő's limit theorem: the higher-dimensional matrix case. J. Funct. Anal. 39 (1980),
- no. 2, 182-198. (J. V. Baxley) 82c:47034 47B35 (45D05, 47B10, 58G25) m, Michael (with Grest, Gary S.) N-color Ashkin-Teller model. Phys. Rev. B (3) 24
- (1981), no. 11, 6508-6515. (Authors' summary) 82k:82051 82A68 (82A25)
 Wieacker, John André (with Schneider, Rolf) Approximation of convex bodies by olytopes. Bull. London Math. Soc. 13 (1981), no. 2, 149-156. (J. M. Wills) 82g:52008 52A20 (52A25)
- Wiebe, Hartmut (with Scheja, Günter) Zur Chevalley-Zerlegung von Derivationen. (English summary) Manuscripta Math. 33 (1980/81), no. 2, 159-176. (P. Schenzel) 82d:13008 32B05 (13B10, 14B10)
- ludlow-Wiechers, J. See Ludlow-Wiechers, J.
 Wieczorek, Andrzej On the measurable utility theorem. J. Math. Econom. 7 (1980), no. 2, 165-173. (M. I. Ledin) 82c:90016 90A10
- Wieczorek, E. (with Robaschik, D.; Tröger, G.) Light-cone expansion of matrix elements of current commutators. Lett. Math. Phys. 4 (1980), no. 1, 53-60. (Authors' summary) 82c:81064 81D15 (22E70, 32A15)
- Fasc. Math. No. 11 (1979), 217-222. (Jürgen Groh) 82g:60112 60J80 (60G55)
- Wieczorek, Mieczysław (with Szmelter, Jan) An improved method for graphic representation of the results of computations of the finite element method. (Polish. English and Russian summaries) Mechanics and computers, Vol. 2 (Polish), pp. 45-65, PWN, Warsaw, 1980. (Authors' summary) 82a:65093 65N30 (65S05)
- Wieczorkiewicz, Jan K. Some remarks on a result of A. V. Sokolovskij. Funct. Approx. Comment. Math. 8 (1980), 49–58. (É. Gaigalas) 82b:10052 10H10 (12A70)
- edemann, A. Orders with loops in their Auslander-Reiten graph. Comm. Algebra 9 (1981), no. 6, 641-656. (I. Reiner) 82f:16004 16A18 (16A64)
- ir, Karl Heinrich Das Weiterwirken der Hausschen Idee von der Polyedergestalt der Moleküle in der Chemie, die Umgestaltung der Haüyschen Strukturtheorie durch Seeber und Delafosse, und Bravais' Entdeckung der Gittertypen. Centaurus 22 (1978/79), no. 3, 177–186. (Editors) 821:01056 01A55 (82–03)
- gand, M. A quantum statistical proof of von Laue's theorem on entropy of partially coherent radiation. *Phys. Lett. A* 68 (1978), *no.* 3-4, 311–312. (Author's summary) 82b:81159 81K05 (82A15)
- Comm. Algebra 9 (1981), no. 10, 1001-1025. (C. P. L. Rhodes) 82i:13020 13F0: (13C05)
- lt, R. (with Marki, L.) On semisimple classes of semigroups with zero. Semigroups (Proc. Conf., Math. Res. Inst., Oberwolfach, 1978), pp. 55-72, Lecture Notes in Math., 855, Springer, Berlin, 1981. (P. G. Trotter) 82g:20095 20M11 (16A21)
- (with Rjabuhin, Ju. M.) On special radicals, supernilpotent radicals and weakly momorphically closed classes. J. Austral. Math. Soc. Ser. A 31 (1981), no. 2, 152-162.
- nonnonorphically cosecules assess of animal management of the control of the cont renormalization group approach. Path integrals and their applications in qua statistical and solid state physics (Proc. NATO Advanced Study Inst., State Univ. Antwerp, Antwerp, 1977), pp. 419–454, NATO Adv. Study Inst. Ser., Ser. B: Physics, 34, Plenum, New York, 1978. (Author's summary) 82b:81151 81J05 (58F40, 81C35)
 - ★Fluid flow through porous macromolecular systems. Lecture Notes in Physics, 121. Springer-Verlag, Berlin-New York, 1980. v+102 pp. ISBN 3-540-09973-5 (Nina B. Maslova) 82m:76064 76S05 (76-02)
 - (with Perelson, Alan S.) Configurations of a polymeric antigen adsorbed to a B-cell brane. J. Theoret. Biol. 88 (1981), no. 3, 533-568. (B. F. Dibrov) 82m:92039 92A09 (92A07)
- m, P. B. (with Filev, V. M.) A method for solving the Kondo problem. Phys. Lett. A 76 (1980), no. 3-4, 283-286. (Authors' summary) 82a:82011 82A15 (82A65) Towards an exact solution of the Anderson model. Phys. Lett. A 80 (1980), no. 2-3,
 - 163-167. (Author's summary) 82æ82041 82A65 (58F07) (with Filev, V. M.; Cvelik, A. M.) Thermodynamics of the s-d exchange model
 - (Kondo problem). Phys. Lett. A 81 (1981), no. 2-3, 175-178. (Authors' summary) 82g:82053a 82A68
 - (with Fateev, V. A.) The exact solution of the s-d exchange model with arbitrary impurity spin S (Kondo problem). Phys. Lett. A 81 (1981), no. 2-3, 179–184. (Authors summary) 81g/82063b 82A68
- Wiegner, Michael The C^{1,1}-character of solutions of second order elliptic equations with gradient constraint. Comm. Partial Differential Equations 6 (1981), no. 3, 361-371. (Jan Bochenek) 82h:35039 35J65
- nes (with Lennox, John C.) Generators and killers for direct and free products. Arch. Math. (Basel) 34 (1980), no. 4, 296-300. (John F. Bowers) 82c:20062 A problem in Lie rings. Glasgow Math. J. 21 (1980), no. 2, 139-142. (F. Haimo)
 - Growth sequences of finite groups. IV. J. Austral. Math. Soc. Ser. A 29 (1980), no. 1,

- 14-16. (F. Levin) 82i:20041a
- (with Williamson, Alan G.) The factorisation of the alternating and symmetric groups. Math. Z. 175 (1980), no. 2, 171-179. (Gary L. Walls) 82a:20008 20B35 (with Buckley, Joseph) On the number of {Q,I}-closed classes of abelian p-groups.
- Algebra Universalis 12 (1981), no. 2, 265-267. (From the introduction) 82d:20052 20K25
- (with Buckley, Joseph) On the number of outer automorphisms of an infinite tent p-group. II. Arch. Math. (Basel) 36 (1981), no. 1, 1-5. (Thaddeus C. Hurley) 20E36 (20F18, 20F28)
- (with Vaughan-Lee, M. R.) Countable locally nilpotent groups of finite exponent without maximal subgroups. Bull. London Math. Soc. 13 (1981), no. 1, 45–46. (John S. Wilson) 82f:20066 20F50 (20E28)
- (with Meier, David) Growth sequences of finite groups. V. J. Austral. Math. Soc. Ser. A 31 (1981), no. 3, 374-375. (F. Levin) 82i:20041b 20D60
- Wielandt, Helmut Zusammengesetzte Gruppen: Hölders Programm heute. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 161-173, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (Bernd Baumann) 82c:20051 20D35 (20E15)
- Subnormalităt în faktorisierten endlichen Grupppen. J. Algebra 69 (1981), no. 2, 305-311. (W. E. Deskins) 82i:20038 20D35 (20D45)
 Wielenberg, Norbert J. Hyperbolic 3-manifolds which share a fundamental polyhedron.
 Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference (State Univ. New York, Stony Brook, N.Y., 1978), pp. 505-513, Ann. of Math. Studies. 97, Princeton Univ. Press, Princeton, N.J., 1981. (Troels Jørgensen) 82i:57012
- Wiener, Klaus Über ein Randwertproblem bei Differentialgleichungen von nichtganzzahliger Ordnung. Beiträge Anal. No. 15 (1980), 117-125 (1981). (H. Hochstadt) 82e:34028 34R99 (26A33)
 - Über eine Erweiterung des Batemanschen Verfahrens für Integralgleichungen. Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe 30 (1981), no. 1, 67-70. (U. Tippenhauer) 82m:45005 45B05 (65R20)
- Wiener, Norbert See Heims, Steve J., 82f:01111
- Wiener, Richard (with Dorrenbacher, John S.) Stability regions and spectra of discrete oregressive time series. AIIE Trans. 13 (1981), no. 2, 160-163. (Authors' summary) 82i:62133 62M15
- Wiener, Ulrich (with Niculescu, Ștefan P.) Sur un modèle markovien pour la fiabilité des instruments de mesure. [A Markov model for the reliability of measuring instruments] Proceedings of the Sixth Conference on Probability Theory (Braşov, 1979), pp. 363-366, Ed. Acad. R.S. România, Bucharest, 1981. (Authors' summary) 82k:60173
- an, John C. Bond percolation on honeycomb and triangular lattices. Adv. in Appl. Probab. 13 (1981), no. 2, 298-313. (Lawrence Gray) 82k:60216 60K35 (82A42)
- Wierzbicki, Andrzej P. (with Findeisen, Władysław; Szymanowski, Jacek) ★Teoria i metody obliczeniowe optymalizacji. (Polish) [Theory and numerical methods of optimization] Biblioteka Naukowa Inżyniera. [Science Library for Engineers] Państwowe Wydawnictwo Naukowe (PWN), Warsaw, 1980. 708 pp. ISBN 83-01-00976-4 (Editors) 82c:49001 49-01 (65Kxx)
 - A methodological guide to multiobiective optimization. Optimization techniques (Proc. Ninth IFIP Conf., Warsaw, 1979), Part 1, pp. 99-123, Lecture Notes in Control and ation Sci., 22, Springer, Berlin, 1980. (Joseph D. Cole) 82c:90007 (90A06, 90D35)
- Wierzbicki, Tomasz (with Ploch, Jerzy) Bounds for large plastic deformations of dynamically loaded continua and structures. Internat. J. Solids and Structures 17 (1981), no. 2. 183-195. (Authors' summary) 82d:73024 73E99
- Wierzejewski, J. See Model theory of algebra and arithmetic, 82a:03003
- Wiesel, W. E. The origin and evolution of the great resonance in the Jovian satellite system. Astronom. J. 86 (1981), no. 4, 611-618. (Author's summary) 82d:70027
- Wieslaw, Witold Embeddings of fields in complete ones. Math. Nachr. 93 (1979), 133-137. (Niel Shell) 82c:12022 12J05
- (with Dikranjan, Dikran) Rings with only ideal topologies. Comment. Math. Univ. St. Paul. 29 (1980), no. 2, 157-167. (S. Warner) 82h:16031 16A80
- Wiesler, Andreas Derivation of "Bethe's hypothesis" from the quantum inverse scattering transformation for the nonlinear Schrödinger equation. J. Math. Phys. 22 (1981), no. 4, 750-753. (Author's summary) 82g:81088 81E99
- Wiesweg, Ulrich Eine numerische Behandlung von primären Bifurkationszweigen. (English summary) Bifurcation problems and their numerical solution (Proc. Workshop, Univ. Dortmund, Dortmund, 1980), pp. 227-243, Internat. Ser. Numer. Math., 54, Birkhäuser, Basel, 1980. (A. A. Martiniuk) 82f:65090 65L10
- engelbrecht-Wiggans, Richard See Engelbrecht-Wiggans, Richard
 Wiggins, Alvin D. (with Franti, Charles E.) An inverse sampling scheme using blocks.
- Math. Biosci. 49 (1980), no. 1-2, 139-153. (Authors' summary) 82m:62023 (62P10, 92A07)
- Wiggins, K. (with Henry, Myron S.) Approximation theory methods for linear and nonlinear differential equations with deviating arguments. SIAM J. Math. Anal. 12 (1981), no. 3, 342-354, (Syvert P. Nørsett) 82f;34083 34K05 (65L99)
- Wightman, A. S. See Krylov, N. S., 82e:82001 Wigner, Eugene P. (with O'Connell, R. F.) Position operators for systems exhibiting the special relativistic relation between momentum and velocity. Phys. Lett. A 67 (1978), no. 5-6, 319-321. (A. O. Barut) 82f:81100 81M05 (81B05, 81E05)
- Thirty years of knowing Einstein. Some strangeness in the prop Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 461-468,
- Addison-Wesley, Reading, Mass., 1980. (See 824:83002) 01A60 (01A70, 83-03) (with O'Connell, R. F.) Quantum-mechanical distribution functions: conditions for
- eness. Phys. Lett. A 83 (1981), no. 4, 145-148. (Franklin E. Schroeck, Jr.) 81C20 (81B99) Wijngaard, J. A dynamic program ing model for an assembling problem and a building
- game. Survey of mathematical programming (Proc. Ninth Internat. Math. Programming Sympos., Budapest, 1976), Vol. 2, pp. 233-238, North-Holland, Amsterdam, 1979. (F. A. van der Duyn Schouten) 82a:90074 90B35 (90C39)
- Wilansky, Albert Mazur spaces. Internat. J. Math. Math. Sci. 4 (1981), no. 1, 39–53.
 (Robert L. Ellis) 82f:46001 46A05 (46E10, 54C99)
- Wilbrink, H. A. (with Cohen, Arjeh M.) *Eindige groepen. (Dutch) [Finite groups] Een

inleidende cursus. [An introductory course] MC Syllabus, 43. Mathematisch Centrum, Amsterdam, 1980. iv + 173 pp. (loose errata). ISBN 90-6196-203-X (Editors) 82a:20001 20-01

Wilcox, Calvin H. Theory of Bloch waves. J. Analyse Math. 33 (1978), 146-167. (A. H. Klotz) 82b:82068 82A60 (35P10, 35Q20, 42C05, 78A99, 81H20)

The S-matrix and sonar echo structure. Mathematical methods of scattering theory (Proc. Conf., Catholic Univ., Washington, D.C., 1979), pp. 10-16, Lecture Notes in Phys., 130, Springer, Berlin, 1980. (See 82h:81117) 76Q05 (35P25) Wilczek, Frank (with Goldstone, Jeffrey) Fractional quantum number

Rev. Lett. 47 (1981), no. 14, 986–989. (Authors' summary) 82i:81114 81E99
Wilczyński, W. (with Wagner, Elżbieta) Convergence of sequences of measurable functions.
Acta Math. Acad. Sci. Hungar. 36 (1980), no. 1-2, 125–128. (B. Rodríguez-Salinas)

82c-28014 28A20 Wild, C. J. Variance estimation with matched pairs. Biometrika 67 (1980), no. 2, 507-510.

(Author's summary) 823.62097 62H12
Loss functions and admissibility of normal variance estimators. (French summary) Canad. J. Statist. 8 (1980), no. 1, 95-101. (Chien-Pai Han) 82d:62019 62C15

Wilde, Louis L. On the formal theory of inspection and evaluation in product markets. etrica 48 (1980), no. 5, 1265-1279. (Sigrid Moga) 82a:90030 de Wilde, Marc See De Wilde, Marc

Wildenauer, Peter Ein Abbrechkriterium für einen numerischen Algorithmus. (English summary) Computing 20 (1978), no. 3, 257-265. (Author's summary) 82f:65027 65D99 (65R20)

Ein Beweisprinzip bei der Berechnung von Fixpunkten. Math.-Phys. Semesterber. 26 (1979), no. 1, 84-94. (Author's summary) 82g-65031 65115 (54H25, 65H10, 90C30)

Existence of a minimal solution and a maximal solution of nonlinear elliptic boundary value problems. Indiana Univ. Math. J. 29 (1980), no. 3, 455-462. (P. W. Bates) 82h:35040 35J65 (35B05)

Wildenhain, Günther (with Gonzáles, Luis; Keller, Eckart) Über das Randverhalten des Poisson-Integrals der polyharmonischen Gleichung. Math. Nachr. 95 (1980), 157-164. (V. M. Isakov) 82g:31007 31B25 (35J67)

(with Hogh, Hans-Jürgen) Eine Bemerkung zum Balayage-Prinzip für Riesz-Kerne. 31B15 (31C15) Rostock. Math. Kollog. No. 13 (1980), 65-72. (I. Netuka) 82d:31006 Über die Darstellbarkeit polyharmonischer Funktionen in der Kugel. Rostock. Math. Kollog. No. 16 (1981), 59-74. (Ü. Kuran) 82g:31009 31B30 (35J40)

Wilder, Raymond Louis *Topology of manifolds. Reprint of 1963 edition. American Mathematical Society Colloquium Publications, 32. American Mathematical Society, Providence, R. I., 1979. xiii + 403 pp. ISBN 0-8218-1032-4 (Editors) 82a:57001 57001 57001 Wildermuth, Karl (with Toyoda, Tadashi) Charged Schrödinger particle in a c-number

radiation field. Phys. Rev. D (3) 22 (1980), no. 10, 2391-2399. (Authors' summary) 82h:81132 81G10 (81C05, 81D30)
Wildheim, Jörgen Vibrations of rotating circumferentially periodic structures. Quart. J.

Mech. Appl. Math. 34 (1981), no. 2, 213-229. (From the summary) 82g:73021 73D99 (70E99)

Wiles, Andrew Modular curves and the class group of $Q(\zeta_p)$. Invent. Math. 58 (1980), no. 1,

1-35. (Lawrence Washington) 82j:12009 12A35
Will, Herbert S. (with Nijenhuis, Albert) The enumeration of connected graphs and linked diagrams. J. Combin. Theory Ser. A 27 (1979), no. 3, 356-359. (Nicholas Wormald) 05C30

An algorithm-inspired proof of the spectral theorem in E^n . Amer. Math. Monthly 88 (1981), no. 1, 49-50. (From the text) 82h:15010 15A18

Wilhelm, F. (with Steeb, W.-H.) Nonlinear autonomous systems of differential equations and Carleman linearization procedure. J. Math. Anal. Appl. 77 (1980), no. 2, 601-611. (D. Bainov) 82b:34012 34A45 (80A30, 92A09, 92A15)

(with Steeb, W.-H.) Exponential functions of Kronecker products and trace calculation. Linear and Multilinear Algebra 9 (1980/81), no. 4, 345-346. (Authors' summary) 82h:15022 15A24 (17B05, 82A15)

Wilhelm, H. E. (with Hong, S. H.) Anomalous propagation of probability in quantum mechanics. Acta Phys. Acad. Sci. Hungar. 48 (1980), no. 4, 425–437. (Authors' summary) 81C05 (81B05)

Wilhelm, J. (with Bartolomaus, G.) Existence and uniqueness of the solution of the nonstationary Boltzmann equation for the electrons in a collision dominated plasma by means of operator semigroups. (German summary) Ann. Physik (7) 38 (1981), no. 3, 211-220. (Authors' summary) 82j:82053 82A45

Wilhelm, Marek On a question of B. J. Pettis. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 7-8, 591-592 (1980). (Anne K. Steiner) 82a:54022

Wilhelm, R. See Jahrestagung: Gesellschaft für Informatik, 82b:68003 Wilhelmsen, D. (with Lether, Frank G.; Frazier, R.) On the positivity of Cotes numbers for

interpolatory quadratures with Jacobi abscissas. (German summary) Computing 21 (1978/79), no. 2, 171-175. (J. P. Singhal) 82g-41029 41A55 (65D32)
Wilhelmsson, H. (with Lisak, M.; Peterson, Bo A.) Coupled nonlinear Schrödinger

equations including growth and damping. Phys. Lett. A 66 (1978), no. 2, 83-85. (Authors' summary) 82c:81022 81C05 (35Q20)

Wilimowska, Zofia Combinatorial method of feature selection in pattern recognition based on risk increase. (Polish. Russian and English summaries) Arch. Automat. Telemech. 25 (1980), no. 3, 405-417. (Author's summary) 82f:68097 68G10

Wilke, F. W. An algorithmic search for replaceable translation nets. Geom. Dedicata 8 (1979), no. 2, 213–217. (F. C. Piper) 82i:51011 51A40

A nonuniform replaceable net in the quaternion plane. Geom. Dedicata 11 (1981), no. 2, 239-248. (Elwyn H. Davis) 82h:51008 51A40

Wilke, Gerhard (with Dobbertin, Hans) Local regularity for distributive p-algebras and distributive double p-algebras. Algebra Universalis 10 (1980), no. 1, 70–73. (I. Petrescu) 820-06022 06D15

Wilkens, David L. Length functions and normal subgroups. J. London Math. Soc. (2) 22 (1980), no. 3, 439-448. (R. C. Lyndon) 82c:20077 20F32

Wilker, John B. Generalized symmetry. Bull. Austral. Math. Soc. 18 (1978), no. 3, 373–393. (Author's summary) 82g:20068 20F99 (51M10)

Illior's summary) 3022-2000 2017 (21617) (with Friedlander, John B.) A budget of boxes. Math. Mag. 53 (1980), no. 5, 2–286. (Jacques Dubois) 824:26002 26A06 (52A40) 282-286. (Jacques Dubois) 82d:26002

When is the inverse of an ellipse convex? Utilitas Math. 17 (1980), 45-50. (O. Bottema) 82e:51030 51M10

Inversive geometry and certain chains of circles. C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 1, 37-42. (Editors) 82j:51011 51B10

Topologically equivalent two-dimensional isometries. Topology Appl. 12 (1981), no. 1, 105-114. (Author's summary) 82c:20086 20H15 (51F15, 54E40, 54H15)

Wilkerson, Clarence (with Adams, John Frank) A correction: "Finite H-spaces and algebras over the Steenrod algebra" [Ann. of Math. (2) 111 (1980), no. 1, 95-143; MR 81h:55006]. Ann. of Math. (2) 113 (1981), no. 3, 621-622. (From the text) 82i:55010

(with Miller, Haynes R.) Vanishing lines for modules over the Steenrod algebra. J. Pure Appl. Algebra 22 (1981), no. 3, 293-307. (Harvey Margolis) 82m:55024 55S10

The cohomology algebras of finite-dimensional Hopf algebras. Trans. Amer. Math. Soc. 264 (1981), no. 1, 137–150. (J. F. Adams) 82e:16019 16A61 (16A24, 57T05)

Wilkerson, Ralph (with Gregory, John) New numerical algorithms for eigenvalues and eigenvectors of second order differential equations. Applicable Anal. 12 (1981), no. 1,

47-56. (E. R. Hansen) 82i:65048 65L10
Wilkes, J. M. (with Debney, G. C.; Zund, Joseph) A spin-coefficient approach to type N fields with twist. Tensor (N.S.) 35 (1981), no. 3, 267-275. (Garry Ludwig) 82m:83013 83C20 (53B50, 83C15)

Wilkes, N. S. On the nonexistence of semigroups for some equations of continuum mechanics. Proc. Roy. Soc. Edinburgh Sect. A 86 (1980), no. 3-4, 303-306. (C.-C. Wang) 82e:73013 73C02 (73H10)

Wilkie, A. J. Applications of complexity theory to Σ₀-definability problems in arithmetic. Model theory of algebra and arithmetic (Proc. Conf., Karpacz, 1979), pp. 363-369, Lecture Notes in Math., 834, Springer, Berlin, 1980. (Roman Murawski) 82h:03085 03D55 (03D15, 03F30)

(with Paris, J. B.) Models of arithmetic and the rudimentary sets. Proceedings of the Model Theory Meeting (Univ. Brussels, Brussels/Univ. Mons, Mons, 1980). Bull. Sci Math. Belg. Sér. B 33 (1981), no. 1, 157-169. (Leonard Lipshitz) 82k:03074 (03C62, 03H15)

See also Model theory of algebra and arithmetic, 82a:03003
Wilkinson, D. A. (with Collins, C. B.; Glass, E. N.) Exact spatially homogeneous cosmologies. Gen. Relativity Gravitation 12 (1980), no. 10, 805–823. (Brian O. J. Tupper) 82c:83071 83F05 (83C20)

Wilkinson, David (with Creamer, Dennis B.; Thacker, H. B.) Quantum Gel'fand-Levitan method as a generalized Jordan-Wigner transformation. Phys. Lett. B 92 (1980), no. 1-2, 144-148. (Authors' summary) 82h:81127 81F99 (22E70, 81E99, 81H99)

(with Creamer, Dennis B.; Thacker, H. B.) Some exact results for the two-point function of an integrable quantum field theory. Phys. Rev. D (3) 23 (1981), no. 12, 3081-3084. (Authors' summary) 82h:81082 81E10 (58A15)

Wilkinson, J. H. (with Symm, Hilary J.) Almost defective matrices. Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. I (Winnipeg, Man., 1980). Congr. Numer. 30 (1981), 89-131. (Alan L. Andrew) 82m:15009 15A12 (65F15)

Wilkinson, John Craven Operational aspects of water resource problems. The mathematics of hydrology and water resources (Proc. Conf., Univ. Lancaster, Lancaster, 1976), 86A05 (60K30)

pp. 39-56, Academic Press, London, 1979. (See 82k:86001) 86A05
See also Mathematics of hydrology and water resources, 82k:86001
kinson, T. S. See Modelling and simulation in practice, 82c:65001

Wilks, Graham (with Hunt, Roland) On the behaviour of the laminar boundary-layer equations of mixed convection near a point of zero skin friction. J. Fluid Mech. 101 (1980), no. 2, 377-391. (Authors' summary) 82e:76060 76R99

(with Bramley, J. S.) Dual solutions in mixed convection. Proc. Roy. Soc. Edinburgh Sect. A 87 (1980/81), no. 3-4, 349-358. (Authors' summary) 82j:76076 76R99 (65P05, 76E15)

(with Hunt, Roland) Continuous transformation computation of boundary layer equations between similarity regimes. J. Comput. Phys. 40 (1981), no. 2, 478-490. (Authors' summary) 82i:76030 76D10 (76A60)

(with Hunt, Roland) The assimilation of a strong, two-dimen sional laminar jet into an aligned uniform stream. Proc. Roy. Soc. Edinburgh Sect. A 90 (1981), no. 1-2, 13-23. (Authors' summary) 82k:76025 76D25

Will, Clifford M. (with Smith, A. G.) Force on a static charge outside a Schwarzschild black hole. Phys. Rev. D (3) 22 (1980), no. 6, 1276-1284. (Andrew King) 824:83011 83C10 (with Walker, Martin) Gravitational radiation quadrupole formula is valid for gravitationally interacting systems. Phys. Rev. Lett. 45 (1980), no. 22, 1741–1744. (J. D. Finley, III) 82f:83038 83C35 (83C30)

Willam, K. J. (with Argyris, J. H.; Doltsinis, J. St.; Knudson, W. C.; Szimmat, J.; Wüstenberg, H.) Eulerian and Lagrangian techniques for elastic and inelastic large deformation processes. Computational methods in nonlinear mechanics (Proc. Seco Internat. Conf., Univ. Texas, Austin, Tex., 1979), pp. 13-66, North-Holland, Amsterdam, 1980. (Authors' summary) 82c:73024 73E99

Willard, Stephen (with Lewis, Ted) The rotating table. Math. Mag. 53 (1980), no. 3, 174-179. (From the text) 82g:90068 90D99 (10A99)
Willcox, M. E. (with Fisher, N. I.; Lewis, Toby) Tests of discordancy for samples from

Fisher's distribution on the sphere. J. Roy. Statist. Soc. Ser. C 30 (1981), no. 3, 230-237. (Authors' summary) 82m:62123 62H15

Wille, Rudolf Cancellation and refinement results for function lattices. Houston J. Math. 6 (1980), no. 3, 431-437. (J. Kist) 82g:06004 06A10

Mathematics and music theory. (Polish) Translated from the German by Anna Romanowska. Wiadom. Mat. (2) 23, no. 1, 55-67 (1980). (Editors) 82m:01085 (with Ganter, Bernhard; Poguntke, Werner) Finite sublattices of four-generated dar lattices. Algebra Universalis 12 (1981), no. 2, 160-171. (Ralph Freese) 82f:06012 06005

(with Rival, Ivan) The smallest order variety containing all chains. Discrete Math.

35 (1981), 203-212 (R. P. Dilworth) 82;66009 06A10 (06B20)
Wille, Sven Øivind Pressure and flow in arterial aneurysms simulated in mathematical models. MIC-Modeling Identification Control 2 (1981), no. 2, 71-82. (Author's

summary) 82e-92021 92A09 (35Q10, 76Z05)
leta, Michel (with Mawhin, Jean) Range of nonlinear perturbations of linear operators
with an infinite-dimensional kernel. Ordinary and partial differential equations (Proc.
Fifth Conf., Univ. Dundee, Dundee, 1978), pp. 165-181, Lecture Notes in Math., 827,
Springer, Berlin, 1980. (Donald Kershaw) 82e-47081 47H15 (45N05)

Densité de l'image de la différence de deux opérateurs (English summary) C. Acad. Sci. Paris Sér. A-B 290 (1980), no. 19, A881-A883. (B. Fishel) 82e:47086

Periodic solutions of wave equations with jumping nonlinearities. J. Differentions 36 (1980), no. 1, 20–27. (Mitsuhiro Nakao) 82f:35013 35B10 (35L70)

Variational methods and almost solvability of semilinear equations. Ordinary and al differential equations (Proc. Sixth Conf., Univ. Dundee, Dundee, 1980), 177-384, Lecture Notes in Math., 846, Springer, Berlin, 1981. (Alfonso Castro)

pp. 377-384, Lectus 82h:47062 47H1 47H15 (58E07)

Topology and semilinear equations at resonance in Hilbert space. Nonlinear Anal. 5 (1981), no. 5, 517-524. (Ulrich Kosel) 82j-47063 47H15
Density of the research and the control of the c

Density of the range of potential operators. Proc. Amer. Math. Soc. 83 (1981), no. 2, 341-344. (D. E. Edmunds) 82k:47000 47H15 (35L70)

lems, Jacques L. (with Callier, Frank M.) Criterion for the convergence of the solution of the Riccati differential equation. *IEEE Trans. Automat. Control* **26** (1981), no. 6, 1232–1242. (Authors' summary) **82m:49023** 49B10 (34H05)

Willems, Jan C. (with Van Schuppen, J. H.) Stochastic systems and the problem of state space realization. Geometrical methods for the study of linear systems (Proc. NATO Adv. Study Inst., Harvard Univ., Cambridge, Mass., 1979), pp. 283-313, NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci., 62, Reidel, Dordrecht, 1980. (Guy Ruckebusch) 93E03

(with Molander, Per) Synthesis of state feedback control laws with a specified gain and phase margin. IEEE Trans. Automat. Control 25 (1980), no. 5, 928-931. (Authors' mmary) 82f:93019 93B25 (93D15)

(with van de Water, Henk) The certainty equivalence property in stochastic control theory. IEEE Trans. Automat. Control 26 (1981), no. 5, 1080-1087. (Authors' summary)

(with Commault, Christian) Disturbance decoupling by measurement feedback with stability or pole placement. SIAM J. Control Optim. 19 (1981), no. 4, 490–504. (Authors' summary) 82g.93019 93B55

Willems, Wolfgang (with Cossey, John; Hawkes, Trevor) On irreducible representations of p-soluble groups in characteristic p. Math. Z. 174 (1980), no. 1, 19-22. (John F. Humphreys) 824:20023 20D10

Willemsen, Jorge F. Functional methods in random classical field theory. J. Math. Phys. 22 (1981), no. 4, 685-689. (R. L. Ingraham) 82g:82036 82A42 (60H15, 81C35)
Willey, M. A. L. (with Maddox, Ivor J.) Multiplication on the generalized entire sequences.

Indian J. Math. 16 (1974), no. 1, 23-31. (Editors) 82f:40005

Hamowski, K.-D. (with Göbber, F.) Ljapunov approach to multiple Hopf bifurcation. J. Math. Anal. Appl. 71 (1979), no. 2, 333–350. (N. Chafee) 82h:34052 34C25 (34D20, 58F14, 92A09)

Williams, Bob See Williams, Robert F.

Williams, Bruce (with Rigdon, Robert) Embeddings and immersions of manifolds. Geometric applications of homotopy theory (Proc. Conf., Evanston, Ill., 1977), I, pp. 423-454, Lecture Notes in Math., 657, Springer, Berlin, 1978. (From the text) 82j:57031 57R40 (57R42, 58D10)

(with Madsen, Ib; Taylor, Laurence R.) Tangential homotopy equivalences.
mment. Math. Helv. 55 (1980), no. 3, 445-484. (Edgar H. Brown, Jr.) 821:57015 57N65 (55P10)

sh-Williams, C. St. J. A. See Nash-Williams, C. St. J. A.

Williams, Dana P. The topology on the primitive ideal space of transformation group C*-algebras and C.C.R. transformation group C*-algebras. Trans. Amer. Math. Soc. 266 (1981), no. 2, 335–359. (Elliot C. Gootman) 82h:46081 46L05 (22D25, 54H15)

Williams, David Conditional excursion theory. Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 490-494, Lecture Notes in Math., 721, Springer, lin, 1979. (Jack Cuzick) **824:60149** 60J60 (60J85) (with Barlow, Martin; Rogers, L. C. G.) Wiener-Hopf factorization for matrices. Berlin, 1979. (Jack Cuzick) 824:60149

Seminar on Probability, XIV (Paris, 1978/1979) (French, pp. 324–331, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Martin Jacobsen) 82h:60089a 60J25 (60J10)

(with Rogers, L. C. G.) Time-substitution based on fluctuating additive functionals (Wiener-Hopf factorization for infinitesimal generators). Seminar on Probability, XIV Paris, 1978/1979) (French), pp. 332-342, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Martin Jacobsen) 82h:60089b 60J See also Stochastic integrals, 82f:60009 60J25 (60J55)

ns, David N. Bounds for the cutoff, Euclidean: Φ⁴: perturbation expansion. Phys.

Rev. D (3) 19 (1979), no. 10, 2935-2946. (Author's summary) 82c:81099 81E15
Williams, E. R. (with Ratcliff, D.) A note on the analysis of lattice designs with repeats. metrika 67 (1980), no. 3, 706-708. (Bhagwandas) 82c:62107

(with Bailey, R. A.) A note on designs for neighbor configurations. Math. Bit (1981), no. 1-2, 153-154. (Authors' summary) 82h:92050 92A17 (52A45)

Williams, F. A. (with Peters, N.) Coherent structures in turbulent combustion. The role of coherent structures in modelling turbulence and mixing (Proc. Internat. Conf., Madri 1980), pp. 364-393, Lecture Notes in Phys., 136, Springer, Berlin, 1981. (See 82c:76062) 86A25 (76F99)

(with Liñán, A.) Note on ignition by a hot catalytic surface. SIAM J. Appl. Math. 40 (1981), no. 2, 261-265. (From the text) 82i:80007 80A20

ns, Floyd L. Vanishing theorems for type (0,q) cohomology of locally symmetric ces. Osaka J. Math. 18 (1981), no. 1, 147-160. (S. Murakami) 82k:22013 (32L20, 32N15)

illiams, Frank (with Calder, Allan) Incompressibility of maps and the homotopy invariance of Čech cohomology. Pacific J. Math. 94 (1981), no. 1, 13-20. (Jerzy Dydak) 82m-55009 55P20 (55N05)

Williams, G. O. (with Ruján, P.; Frisch, H. L.; Forgács, G.) Phase diagrams of onal Z(q) models. Phys. Rev. B (3) 23 (1981), no. 3, 1362-1370. (C. A. Hurst) 82f:82019 82A25 (82A67, 82A68)

Williams, Gareth A discussion of the relation "closer than" within simple regions of curved

ace-time. J. Math. Phys. 22 (1981), no. 7, 1443-1444. (H. Rund) 82g:83022 83C99

Williams, Graham H. Nonlinear nonhomogeneous elliptic variational inequalities with a nonconstant gradient constraint. J. Math. Pures Appl. (9) 60 (1981), no. 2, 213-226. (M. Biroli) 82f:49008 49A29 (35J85)

Surfaces of prescribed mean curvature with a volume constraint. Proc. London Math. Soc. (3) 42 (1981), no. 1, 121-150. (V. I. Oliker) 82e:53015 53A10 (53C42)

Hams, H. C. Errata: "Certain pure cubic fields with class-number one" [Math. Comp. 31 (1977), no. 138, 578-580; MR 55 #5578]. Math. Comp. 33 (1979), no. 146, 847-848. (Editors) 82k12012 12A50 (12A30)

(with Newman, Morris; Shanks, Daniel) Simple groups of square order and an interesting sequence of primes. Acta Arith. 38 (1980/81), no. 2, 129-140. (Leo J. Alex) 82h:20022 20D05 (10A40)

Improving the speed of calculating the regulator of certain pure cubic fields. Math. Comp. 35 (1980), no. 152, 1423-1434. (D. H. Lehmer) 82a:12003 12A30 12A30

(with Shanks, Daniel) Gunderson's function in Fermat's last theorem. Math. Comp. 36 (1981), no. 153, 291-295. (Mohan Nair) 82g:10004 10-04 (10B15)

A numerical investigation into the length of the period of the continued fraction nsion of √D. Math. Comp. 36 (1981), no. 154, 593-601. (Péter Kiss) 82f:10011 10A32 (10-04)

Some results concerning Voronoi's continued fraction over $Q(\sqrt[3]{D})$. Math. Comp. 36 (1981), no. 154, 631-652. (Maurice Mignotte) 82j:12011 12A45

See also Proceedings: Manitoba Conference on Numerical Mathematics and Computing, 82j:00010; Proceedings: Manitoba Conference on Numerical Mathematics and Computing, 82j:00011 and Keller, Wilfrid, 82k:10011

Williams, J. K. (with Doman, B. G. S.) Fibonacci and Lucas polynomials. Cambridge Philos. Soc. 90 (1981), no. 3, 385-387. (L. Carlitz) 82k:10013 (33A70)

Williams, Jack (with Dunham, Charles B.) Rate of convergence of discretization in Chebyshev approximation. *Math. Comp.* 37 (1981), *no.* 155, 135–139. (John P. Coleman) 82:41024 41A25 (30E10, 41A50, 65D15)

Williams, James S. (with Mielke, Paul W.; Berry, Kenneth J.; Brockwell, Peter J.) A class of nonparametric tests based on multiresponse permutation procedures. Biometrika 68 (1981), no. 3, 720-724. (Authors' summary) 82k:62088 62G10

ms, John H. Formal representations for recursively defined functional programs. Formalization of programming concepts (Proc. Internal. Colloq., Peliscola, 1981), pp. 460–470, Lecture Notes in Comput. Sci., 107, Springer, Berlin, 1981. (From the introduction) 82j:68009 68B10 (03B40, 03D20)

Williams, Julian S. The prime graph components of finite groups. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 195–196, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R.I., 1980. (From the text) 82i:20050 20G05 (05C25)

Prime graph components of finite groups. J. Algebra 69 (1981), no. 2, 487-513. (Andrew Chermak) 82j:20054 20D60 (05C25)

ms, Kenneth S. Remark on an assertion of Chowla. Norske Vid. Selsk. Skr (Trondheim) 1979, no. 1, 3-4. (A. L. Whiteman) 82m:10060 10G15 (10A20) (with Kaplan, Pierre) An Artin character and representations of primes by binary

quadratic forms. Manuscripta Math. 33 (1980/81), no. 3-4, 339-356. (Duncan A. Buell) 10C05 (12A45)

(with Hudson, Richard H.) Some new residuacity criteria. Pacific J. Math. 91 (1980), no. 1, 135-143. (H. L. Abbott) 82f:10004 10A15

(with Hudson, Richard H.) A new criterion for 7 to be a fourth power (mod p). Israel J. Math. 38 (1981), no. 3, 221-230. (Jack P. Tull) 82e:10007

The class number of $\mathbb{Q}(\sqrt{p})$ modulo 4, for $p \equiv 5 \pmod{8}$ a prime. Pacific J. Math. 92 (1981), no. 1, 241–248. (T. Lepistò) 82i:12008 12A50 (12A25)

iams, Lynn R. (with Leggett, Richard W.) A fixed point theorem with application to an infectious disease model. J. Math. Anal. Appl. 76 (1980), no. 1, 91-97. (W. F. Ames) 82a:47055 47H10 (92A15) Quasisimilarity and hyponormal operators.

127-139. (Mehdi Radjabalipour) 821-47030 47820 (47A66) (with Leggett, Richard W.) Unique and multiple solutions of a family of differential

equations modeling chemical reactions. SIAM J. Math. Anal. 13 (1982), no. 1, 122-133. (Frederick A. Howes) 82k:34020 34B15 (80A30, 92A40)
Williams, M. M. R. (with Ackroyd, R. T.; Galliara, J.) A finite element technique for the

even-parity neutron transport equation. Mathematics of finite elements and applications, III (Proc. Third MAFELAP Conf., Brunel Univ., Uxbridge, 1978), pp. 349-357, Academic
 Press, London, 1979. (J. Hejtmanek) 82b:82099 82A75 (65N30)

Williams, Michael (with Stech, Harlan W.) Stability in a class of cyclic epidemic models with delay. J. Math. Biol. 11 (1981), no. 1, 95-103. (H. W. Hethcote) 82k:92055 92A15 (34K20, 45D05)

Williams, P. M. Bayesian conditionalisation and the principle of minimum information British J. Philos. Sci. 31 (1980), no. 2, 131-144. (I. J. Good) 82f:62016 62B10 (62A15) (with Dodson, C. T. J.; Sulley, L. J.) An acceleration condition for b-incomplete timelike curves. Math. Proc. Cambridge Philos. Soc. 90 (1981), no. 1, 191-193. (Editors) 83C99 (53C50)

Williams, Paul T. (with Karlin, Samuel; Cameron, Edward C.) Sibling and parent-offspring correlation estimation with variable family size. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 5, part 1, 2664-2668. (Authors' summary) 82h:92026 92A10 (62J10)

Williams, R. J. Mixed strategy solutions for N-person quadratic games. J. Optim. T Appl. 30 (1980), no. 4, 569–582. (A. B. Kuržanskii) 82k:90140 90D12 (90D25) Williams, Raymond E. (with Pathak, Pramod K.; Zimmer, William J.) Nonparan

estimation of an acceleration parameter. Comm. Statist. A-Theory Methods 8 (1979), no. 4, 367-383. (Z. Govindarajulu) 82h:62070 62G05 (62N05)

Williams, Robert F. The bifurcation space of the Lorenz attractor. Bifurcation theory and applications in scientific disciplines (Papers, Conf., New York, 1977), pp. 393-399, Ann. New York Acad. Sci., 316, New York Acad. Sci., New York, 1979. (L. A. Bunimovich) 34D30 (58F13, 58F14)

(with Guckenheimer, John) Structural stability of Lorenz attractors. Inst. Hautes Études Sci. Publ. Math. No. 50 (1979), 59-72. (Zbigniew Nitecki) 82h:58055a

The structure of Lorenz attractors. Inst. Hautes Etudes Sci. Publ. Math. No. 50 (1979), 73-99. (Zbigniew Nitecki) 82b:58055b 58F13 (58F25)

(with Franks, John) Anomalous Anosov flows. Global theory of dyna (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 158-174, Lecture Notes in Math., 819, Springer, Berlin, 1980. (D. K. Arrowsmith) 82e:58078 58F15

Williams, Ruth M. (with Ellis, G. F. R.) Regge calculus and observations. I. Formalism and applications to radial motion and circular orbits. Gen. Relativity Gravitation 13 (1981), no. 4, 361-395. (M. J. Perry) 82i:83011 83C10
(with Roček, Martin) Quantum Regge calculus. Phys. Lett. B 104 (1981), no. 1,

31-37. (M. J. Perry) 82i:83034 83C45 (57Q15)

oates-Williams, Sheila See Oates-Williams, Sheila
Williams, Stephen A. Analyticity of the boundary for Lipschitz domains without the Pompeiu property. Indiana Univ. Math. J. 30 (1981), no. 3, 357-369. (Albert Baernstein, II) 82i:31009 31B99 (35J05)

Williams, T. M. Nonpreemptive multiserver priority queues. J. Oper. Res. Soc. 31 (1980),

no. 12, 1105-1107. (Micha Yadin) 82c:60174 60K25 (90B22) liams, T. W. C. (with Antsaklis, P. J.) On the dimensions of the supremal

(A, B)-invariant and controllability subspaces. IEEE Trans. Automat. Control 25 (1980), no. 6, 1223-1225. (Authors' introduction) 82h:93006
 93B05
 (with Roberts, P. D.) On an algorithm for combined system optimisation and

parameter estimation. Automatica-J. IFAC 17 (1981), no. 1, 199-209. (Authors' 90B30 summary) 82c:90046

Williams, W. E. (with Chakrabarti, Aloknath) A note on a singular integral equation. J. Inst. Math. Appl. 26 (1980), no. 3, 321-323. (E. Meister) 82c:45008 45E05 (44A15, 65R20)

Note on a paper by B. M. Singh and R. S. Dhaliwal: "Dual integral equations with a trigonometric kernel" [Proc. Edinburgh Math. Soc. (2) 22 (1979), no. 3, 213-215; MR 81b:45011]. Proc. Edinburgh Math. Soc. (2) 24 (1981), no. 2, 81. (From the text) 45H05

(with Rawlins, A. D.) Matrix Wiener-Hopf factorisation. Quart. J. Mech. Appl.

 Math. 34 (1981), no. 1, 1-8. (Thomas Laffey) 82e:15020 15A90 (30E20, 45E10)
 Williams, W. O. (with Fernandez-Diaz, J.) A generalized Stefan condition. (German summary) Z. Angew. Math. Phys. 30 (1979), no. 5, 749-755. (Authors' introduction) 80A20

Williamson, Alan G. (with Wiegold, James) The factorisation of the alternating and symmetric groups. Math. Z. 175 (1980), no. 2, 171–179. (Gary L. Walls) 82a:20008

son, Frank, Jr. Richard Courant and the finite element method: a further look. (French and German summaries) Historia Math. 7 (1980), no. 4, 369-378. (Bertram Ross) 82f:01069 01A60 (65N30)

An historical note on the finite element method. Internat. J. Numer. Methods Engrg. 15 (1980), no. 6, 930-934. (Garry J. Tee) 82b:01026 01A55 (01A45, 01A50, 49-03, 65N30)

Williamson, S. G. The tree of paths of a graph. Trees in algebra and programming (Proc. 5th

Lille Colloq., Lille, 1980), pp. 241-261, Univ. Lille I, Lille, 1980. (See 82e:68004) 68C05 (05C10) (with White, D. E.) Construction of minimal representative systems. Linear and

Multilinear Algebra 9 (1980), no. 3, 167-180. (R. C. Read) 82d:05069 05C30 (04A05) (with Canfield, E. Rodney) Hook length products and Cayley operators of classical invariant theory. Linear and Multilinear Algebra 9 (1980/81), no. 4, 289-297. (M. E. Keating) 82e:15019 15A72 (20C30)

Symmetry operators, polarizations, and a generalized Capelli identity. Linear at Multilinear Algebra 10 (1981), no. 2, 93-102. (Marvin Marcus) 82h:15032 15A (20C30)

on, T. E., Jr. See Narang, T. D.; et al., 82i:47089

Willie, Helmut (with Barbey, Klaus; Hackenbroch, Wolfgang) Partially translation invariant linear systems. Integral Equations Operator Theory 3 (1980), no. 3, 311-322.

(Authors' summary) 82h:93044 93C45 (46F10)

Willis, J. R. (with Talbot, D. R. S.) The effective sink strength of a random array of voids in irradiated material. *Proc. Roy. Soc. London Ser. A* 370 (1980), no. 1742, 351-374. (A. J. M. Spencer) 82d:82070 82A55 (73S99)

Variational principles for dynamic problems for inhomogeneous elastic media. Wave Motion 3 (1981), no. 1, 1-11. (S. Dost) 82d:73021 73D99 (49H05)

(with Eatwell, G. P.; Simmons, John A.) A new representation for the dynamic Green's tensor of an elastic half-space or layered medium. Wave Motion 4 (1982), no. 1, 53-73. (Authors' summary) 82m:73020 73D25

Willis, Philip J. (with Bowyer, Adrian; Woodwark, John R.) A multiprocessor architecture for solving spatial problems. Comput. J. 24 (1981), no. 4, 353-357. (Authors' summary) 82m:68051 68B20

Willman, Warren W. Edgeworth expansions in state perturbation estimation. IEEE Trans. Automat. Control 26 (1981), no. 2, 493-498. (Author's summary) 82e:93108

Willmer, D. G. Multipole moments in general relativity. J. Phys. A 14 (1981), no. 10, 2653–2671. (Author's summary)
 82k:83017 83C30 (53B50)
 Willmore, T. J. An extension of Pizzetti's formula to Riemannian manifolds. (French

mmary) Analysis on manifolds (Conf., Univ. Metz., Metz., 1979) (French), pp. 3, 53-56,

Astérisque, 80, Soc. Math. France, Paris, 1980. (From the text) 82h:53060 53C20
Willmott, Richard Two fuzzier implication operators in the theory of fuzzy power sets. Fuzzy Sets and Systems 4 (1980), no. 1, 31-36. (A. K. Vjatkin) 82d:03087

Willsky, Alan S. *Digital signal processing and control and estimation theory. Points of tangency, areas of intersection, and parallel directions. MIT Press Series in Signal Processing, Optimization, and Control, 2. MIT Press, Cambridge, Mass.-London, 1979. viii + 256 pp. ISBN 0-262-23091-7 (Bill Walker) 82b:94002 94A05 (93-02, 94-02) (with Wall, Joseph E., Jr.; Sandell, Nils R., Jr.) On the fixed-interval smoothing

problem. Stochastics 5 (1981), no. 1-2, 1-41. (Authors' summary) 82m:93092 on, P. D. (with Polo, S. R.) Polynomial filters of any degree. J. Opt. Soc. Amer. 71

(1981), no. 5, 599-603. (Authors' summary) 82d:93066 93E11
Wilmers, George Minimally saturated models. Model theory of algebra and arithmetic (Proc. Conf., Karpacz, 1979), pp. 370-380, Lecture Notes in Math., 834, Springer, Berlin, 1980.

(A. T. Nurtazin) 824:00651 03C50
Wilson, B. M. (with Berndt, Bruce C.; Joshi, Padmini T.) Chapter 2 of Ramanujan's

second notebook. Glasgow Math. J. 22 (1981), no. 2, 199-216. (E. Grosswald) 82h:01038 01A60 (10-03, 10A40, 33A99)

(with Berndt, Bruce C.) Chapter 4 of Ramanujan's second notebook. Proc. Roy. Soc Edinburgh Sect. A 89 (1981), no. 1-2, 87-109. (Gordon Fisher) 82j:01051 01A60 (05A15, 10-03, 33A10)

son, Clive Alistair (with Moore, M. A.) A new approach to polymer solution theory. J. Phys. A 13 (1980), no. 11, 3501-3523. (A. K. Rajagopal) 82b:82052 82A42 (92A09) Wilson, Cartis Horrocks, harmonies, and the exactitude of Kepler's third law. Science and

history, pp. 235-259, Studia Copernicana, XVI, Ossolineum, Wrocław, 1978. (See 82e:01003) 01A45

Wilson, D. G. (with Gray, Len J.) Nonnegative factorization of positive semidefinite nonnegative matrices. Linear Algebra Appl. 31 (1980), 119-127. (James R. Wall) 82b:15007 15A23

Wilson, David C. Recent advances in continua theory. General topology and modern analysis (Proc. Conf., Unio. California, Riverside, Calif., 1980), pp. 337–339, Academic Press, New York, 1981. (From the text) 82h:54053 54F15

Mappings with 1-dimensional absolute neighborhood retract fibers. General to and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 341-343, Academic Press, New York, 1981. (From the text) 82f:54020 54C10 (54C55)

(with Mason, Alice; Walsh, John J.) Inverse limits which are not hereditarily indecomposable. Proc. Amer. Math. Soc. 83 (1981), no. 2, 403-407. (Iózef Krasinkiewicz) 82k:54054 54F15 (57Q99)
Wilson, Edward N. (with Boothby, William M.) Determination of the transitivity of bilinear

systems. SIAM J. Control Optim. 17 (1979), no. 2, 212-221. (Authors' summary)

Sam-93003 93B05 (57R27)
Wilson, James A. Some hypergeometric orthogonal polynomials. SIAM J. Math. Anal. 11 (1980), no. 4, 690–701. (R. G. Buschman) 82a:33014 33A65 (33A30, 81C40)

Wilson, Leslie C. Infinitely determined map germs. Canad. J. Math. 33 (1981), no. 3, 671–684. (J. O. Bedford) 82k:58023 58C27

Jets with regular zeros. Pacific J. Math. 93 (1981), no. 2, 471-478. (J. O. Bedford) 82i:58023 58C27

Wilson, P. M. H. The behaviour of the plurigenera of surfaces under algebraic smooth deformations. Invent. Math. 47 (1978), no. 3, 289-299. (Daniel Comenetz) 82b:14021

The pluricanonical map on varieties of general type. Bull. London Math. Soc. 12 (1980), no. 2, 103-107. (Daniel Comenctz) 82e:14041 14J15 (14D20)

On complex algebraic varieties of general type. Symposia Mathematica, Vol. XXIV (Sympos., INDAM, Rome, 1979), pp. 65-73, Academic Press, London, 1981. (Jayant M. Shah) 82:14008 14D20 (14J30, 14J99, 32J99)

Wilson, R. A. An optimal control algorithm for monotonically structured functions Numerical optimisation of dynamic systems, pp. 175-182, North-Holland, Amsterdam, 1980. (Edwin H. Neave) 82e:49041 49B99

ilson, R. G. (with Sharma, C. S.) Perturbation method for relativistic energies of atoms. J. Phys. B 13 (1980), no. 17, 3285-3295. (M. Bundaru) 82e:81060 81G40 (81C12)

Wilson, Richard G. (with Meyer, Paul R.; Neumann-Lara, Victor) Is every GO-topology a join of two orderable topologies? Proc. Amer. Math. Soc. 84 (1982), no. 2, 291-296. (Richard A. Alò) 82k:54053 54F05

Wilson, Robert B. (with Kreps, David M.) Temporal resolution of uncertainty in: "A multiperiod equilibrium asset pricing model" [Econometrica 46 (1978), 1077-1096; MR 80c:90024] by R. C. Stapleton and M. G. Subrahmanyam. Econometrica 48 (1980), no. 6, 1565-1566. (J. A. Rickard) 82a:90033 90A15

(with Manne, Alan S.; Chao, Hung Po) Computation of competitive equilibria by a sequence of linear programs. Econometrica 48 (1980), no. 7, 1595-1615. (Authors' 90A14 summary) 82m:90039

Wilson, Robert Lee A "new" proof of Kaplansky's theorem on simple Lie algebras of rank one. Algebra, Carbondale 1980 (Proc. Conf., Southern Illinois Univ., Carbondale, Ill., 1980), pp. 1-12, Lecture Notes in Math., 848, Springer, Berlin, 1981. (F. D. Veldkamp) 17B50

The classification problem for simple Lie algebras of characteristic p. Algebra, Carbondale 1980 (Proc. Conf., Southern Illinois Univ., Carbondale, Ill., 1980), pp. 13-32, Lecture Notes in Math., 848, Springer, Berlin, 1981. (F. D. Veldkamp) 82i:17021 17B50 (17-02)

(with Berman, Stephen) Obstructions to modular classical simple Lie algebras. Math. J. 48 (1981), no. 1, 109-120. (Joseph C. Ferrar) 82g:17012 17B50 (17B20)

(with Lepowsky, James) The Rogers-Ramanujan identities: Lie theoretic interpretation and proof. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 2, part 1, 699–701. (Authors' summary) \$2a:17004 17B05 (05A17, 17B65)

(with Lepowsky, James) A new family of algebras underlying the Rogers-Ramanujan identities and generalizations. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 12, part 1, 7254-7258. (Authors' summary) 82k:10016 10A45 (05A19.

Wilson, Robert Ross Anti-f-rings. Ordered groups (Proc. Conf., Boise State Univ., Boise, Idaho, 1978), pp. 47-51, Lecture Notes in Pure and Appl. Math., 62, Dekker, New York, 1980. (Melvin Henriksen) 82e:06020 06F25 (16A86)

Ison, Stephen E. (with Doro, Stephen) Rotary maps of type {6,6}4. Quart. J. Math. Oxford Ser. (2) 31 (1980), no. 124, 403-414. (S. C. Althoen) 82e:20048 20F32

son, Stephen M. J. Some counterexamples in the theory of the Galois module structure of wild extensions. *Ann. Inst. Fourier (Grenoble)* 30 (1980), no. 3, 1–9. (S. Yuan)

Limit points in the Lagrange spectrum of a quadratic field. (French summary) Bull. Soc. Math. France 108 (1980), no. 2, 137-141. (Harvey Cohn) 82m:10056 10F20

Ison, Susan R. Analyzing gene-frequency data when the effective population size is finite. Genetics 95 (1980), no. 2, 489-502. (Charles J. Mode) 82k:92047 92A10 (with Bhatia, Kuldeep) A note on isonymy in a Bhatia leut. Ann. Human Genetics 45

(1981), no. 2, 213-214. (From the text) 82m:92040 92A10 An alternative approach to modelling the assortative mating process. Biometrical J.

23 (1981), no. 6, 581-589. (Author's summary) 82k:62199 62P10 (with Bhatia, Kuldeep) The application of gene diversity analyses to surra

diversity data. J. Theoret. Biol. 88 (1981), no. 1, 121-133. (Authors' summary) 82h:92024 92A10 (92A17)

- ton, Thomas P. General models of set theory. Notre Dame J. Formal Logic 22 (1981), no. 1, 36-44 (E. Mendelson) 82f:83943 03E30 (03C62)

 tson, W. Stephen (with Thomason, Robert W.) Hopf rings in the bar spectral sequence.

 Quart. J. Math. Oxford Ser. (2) 31 (1980), no. 124, 507-511. (Stewart B. Priddy) 55T99 (55P42)
- M R. (with Glisson, Allen W.) Simple and efficient numerical methods for ering from surfaces. IEEE Trai as and Propagation 28 (1980), no. 5, 593-603. (Charles I. Goldstein) 82b:78017 78A45 (65P05)
- mberty, C. R. Determination of forces on arbitrary concave bodies in high-speed rarefied gases. AIAA J. 18 (1980), no. 9, 1027–1028. (Author's summary) 82:76072 76P05 mmer, Gelza Minimum mean square error estimation. (Slovak and Russian summaries) Apl. Mat. 24 (1979), no. 5, 382–388. (H. Neudecker) 82e:62078 62H12
- On equivalence problem in linear regression models. I. BLUE of the mean value. With a loose Russian summary. Apl. Mat. 25 (1980), no. 6, 417-422. (C. R. Rao)
- On equivalence problem in linear regression models. II. Unbiased estimation of the
- covariance matrix scalar factor. (Czech summary) With a loose Russian summary. Apl. Mat. 25 (1980), no. 6, 423-431. (C. R. Rao) 82e-62104b 62J05
- Wimp, Jet Uniform scale functions and the asymptotic expansion of integrals. Ordinand partial differential equations (Proc. Fifth Conf., Univ. Dundee, Dundee, 1978), pp. 251-271, Lecture Notes in Math., 827, Springer, Berlin, 1980. (F. W. J. Olver)
 - s in sequences of functions arising from singular On uniqueness sets for exp enerating functions. Canad. J. Math. 33 (1981), no. 4, 803-816. (R. C. Buck) 30B50 (30D40, 33A70)
- Win, Sein On a conjecture of Las Vergnas concerning certain spanning trees in graph. Resultate Math. 2 (1979), no. 2, 215–224. (From the introduction) 82h:05058 05Cl
- s, Charles F. The Fibonacci series in the decimal equivalents of fractions. A collection of manuscripts related to the Fibonacci sequence, pp. 78-81, Fibonacci Assoc., Santa Clara, Calif., 1980. (Author's summary) 82g:10834 10A45 (10A30)

 ndham, Michael P. (with Bezdek, James C.; Ehrlich, Robert) Statistical parameters of
- cluster validity functionals. Internat. J. Comput. Inform. Sci. 9 (1980), no. 4, 323-336. (Abraham Kandel) 82a:68166 68G10 (03E72, 62H30, 92A05, 92A27)
- Windhorst, U. (with Kochler, W.) Frequency response characteristics of a multiloop representation of the segmental muscle stretch reflex. Biol. Cybernet. 40 (1981), no. 1, 59-70. (Authors' sum ary) 82b:92015 92A09 (93C10)
- Winfield, A. F. T. (with Goodman, R. M. F.) Soft-decision minimum-distance sequential decoding algorithm for convolutional codes. Proc. IEE-F 128 (1981), no. 3, 179-186. (Authors' summary) 82e:94053 94B10 (94B35)
- Winfree, Arthur T. 24 hard problems about the mathematics of 24 hour rhythms. Nonlinear ions in biology (Proc. Tenth Summer Sem. Appl. Math., Univ. Utah, Salt Lake City, Utah, 1978), pp. 93-126, Lectures in Appl. Math., 17, Amer. Math. Soc., Providence, R.I., 1979. (F. Brauer) 82g:92011 92A05 (58F40)
 - ★The geometry of biological time. Biomathematics, 8. Springer-Verlag, New York-Heidelberg, 1980. xiv+530 pp. ISBN 0-387-09373-7 (J. E. Keesling) 82c:92003 92-02 (34C35, 58Fxx, 92A05)
- ngberg, Kay (with Jannsen, Uwe) Einbettungsprobleme und Galoisstruktur lokaler Körper. J. Reine Angew. Math. 319 (1980), 196-212. (Jack Sonn) 82i:12018
- Existenz unendlicher algebraischer Zahlkörper, über denen jedes Einbettungsproblem lösbar ist. Math. Ann. 247 (1980), no. 2, 133-142. (Jack Sonn) 82f:12014
- ngerath, K. (with Mihelčić, M.) $A(\alpha)$ -stable cyclic composite multistep methods of orders 6 and 7 for numerical integration of stiff ordinary differential equations. (German and Russian summaries) Z. Angew. Math. Mech. 61 (1981), no. 6, 261-264. (Authors' 65L20
- nes (with Hughes, Thomas J. R.) Finite rotation effects in numerical integration of rate constitutive equations arising in large-deformation analysis. Internat. J. Numer Methods Engrg. 15 (1980), no. 12, 1862-1867. (Authors' summary) 82c:73027 73E99
- Winiarska, Teresa Continuity of solutions of elliptic equations of the high order with parameter. Zeszyty Nauk. Uniw. Jagiellon. Prace Mat. No. 22 (1981), 163-166. (Z. C. Motteler) 82j:35051 35J30
- Winiarski, Tadeusz Inverse of polynor ial automorphisms of C". (Rus Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 9, 673-674. (M. Kalka) 82d:32020b
 - (with Drużkowski, Ludwik M.) Composition of polynomial with entire mapping. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 3-4, 107–109 (1981). (M. Hervé) 82k:32060 32H25
 - (with Rusek, Kamil) Criteria for regularity of holomorphic mappings. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 9-10, 471-475 (1981). (R. R. Simha) 82i:32055 32J20 (14C30, 32J25)
- cour, Jeffrey Angular momentum in general relativity. General relativity and n, Vol. 2, pp. 71-96, Plenum, New York, 1980. (J. R. Vanstone) 82j:83020
- (with Geroch, Robert) Linkages in general relativity. J. Math. Phys. 22 (1981), no. 4,
- 803-812. (Richard Hansen) 82f:83032 83C30 (with Schendel, J.) Restrictions on relativistically rotating fluids. J. Math. Phys. 22
- (1981), no. 8, 1696-1702. (C. J. S. Clarke) 82m:83029 83C55 (83C20, 85A40) nkelbauer, Karel Discrete communication channels decomposable into finite-memory components. Contributions to statistics, pp. 277-306, Reidel, Dordrecht, 1979. (Author's summary) 82e:94051 94A40 (94A24, 94B99) mary) 82e:94051
 - Nonergodic stationary information sources. The First Pannonian Symposium on Mathematical Statistics (Bad Tatzmannsdorf, 1979), pp. 302-305, Lecture Notes in Statist., 8, Springer, New York, 1981. (John C. Kieffer) 82h:94013 94A15 (28D20, 94A17)
- skels, Heinz-Michael An algorithm to determine all equilibrium points of a bimatrix game. Game theory and related topics (Proc. Sem., Bonn and Hagen, 1978), pp. 137–148, North-Holland, Amsterdam, 1979. (Author's summary) 82i:90121 90D05
 - ★Die Bestimmung aller Lösungen eines linearen Restriktionssystems und Anwendungen. (German) [The determination of all solutions to a linear restriction system and applications] Second edition. With an English summary. Arbeitsbericht [Report], 15.

- Ruhr-Universität, Bochum, 1980. ix + 277 pp. (K. Schittkowski) 82c:90056 90C05
- Winker, S. K. (with Wos, L.; Lusk, E. L.) Semigroups, antiautomorphisms, and involutions: a computer solution to an open problem. I. Math. Comp. 37 (1981), no. 156, 533-545. (R. S. Pierce) 82k:20103 20M15 (03B35, 20-04, 68G20)
- Winkler, C. Basis factorization for block-angular linear programs. Studio programming (Papers, Third Conf. Math. Programming, Matrafüred, 1975), pp. 161-178, Math. Methods Oper. Res., 1, Akad. Kiadó, Budapest, 1980. (W. F. Tyndall) 82a:90087
- Winkler, Peter M. Computational characterization of abelian groups. The Kleen Symposium (Proc. Sympos., Univ. Wisconsin, Madison, Wis., 1978), pp. 423-425, Stud. Logic Foundations Math., 101, North-Holland, Amsterdam, 1980. (Carol Wood) 82h:20051 20F10 (03D05)
 - On connectivity of triangulations of manifolds. Discrete Math. 32 (1980), no. 1, 93-94. (A. K. Dewdney) 82g:05070 05C65 (05C40, 57Q15)
- Winkler, Robert L. Prior information, predictive distributions, and Bayesian model-building. Bayesian analysis in econometrics and statistics, pp. 95-109, Stud. Bayesian Econometrics, 1, North-Holland, Amsterdam, 1980. (See 82d:62170) (with Kadane, Joseph B.; Dickey, James M.; Smith, Wayne S.; Peters, Stephen C.)
 - Interactive elicitation of opinion for a normal linear model. J. Amer. Statist. Assoc. 75 (1980), no. 372, 845-854. (D. V. Lindley) 82a:62092 62J05 (62A15) (with Sarin, Rakesh K.) Performance-based incentive plans. Management Sci. 26
- (1980), no. 11, 1131-1144. (Authors' summary) 82a:90009 Winkler, Wilhelm See Adam, Adolf, 82b:01032
- Winkler, Wolfgang Sequential estimation in processes with independent increments. cal statistics, pp. 325-331, Ba nach Center Publ., 6, PWN, Warsaw, 1980. (Ryszard Magiera) 82i:62121 62L12 (62M05)
- Winkowski, Józef (with Maggiolo-Schettini, Andrea; Wedde, Horst) Modeling a solution for a control problem in distributed systems by restrictions. Theoret. Comput. Sci. 13 (1981), no. 1, 61-83. (N. N. Mirenkov) 82e:68028 68B20 (68A05, 93A10)
- Winley, Graham (with Tognetti, Keith) A growth function for a column of cells. Math. Biosci. 56 (1981), no. 3-4, 209-216. (Authors' summary) 82k:92059
- muel On the complexity of symmetric filters. 1979 International Sym on Circuits and Systems (Tokyo, 1979), pp. 262-265, IEEE, New York, 1979. (See 68C25 (93E11)
 - (with Auslander, L.) The multiplicative complexity of certain semilinear systems defined by polynomials. Adv. in Appl. Math. 1 (1980), no. 3, 257-299. (V. Ju. Meĭtus) 68C25 (03D15)
 - On multiplication of polynomials modulo a polynomial. SIAM J. Comput. 9 (1980),
- no. 2, 225-229. (Author's summary) 82j:12001 12-04 (12A20, 68C25)
 Winograd, Terry Extended inference modes in reasoning by computer systems. Special issue on nonmonotonic logic. Artificial Intelligence 13 (1980), no. 1-2, 5-26. (J. S. Joel) 82i:68056 68G10 (00A25, 92A25)
- Winsberg, S. (with Ramsay, J. O.) Monotonic transformations to additivity using splines. Biometrika 67 (1980), no. 3, 669-674. (Authors' summary) 82h:62112 62J05
- Winskel, Glynn (with Nielsen, Mogens; Plotkin, Gordon D.) Petri nets, event structures and domains. I. Theoret. Comput. Sci. 13 (1981), no. 1, 85-108. (Ryszard Janicki) 68D90 (68B05)
- Winslow, Alicia Browner Continua in the Stone-Čech remainder of R². Pacific J. Math. 90 (1980), no. 1, 45-49. (Allan Calder) 82b:54037 54D40 (54F15)
 Winston, Clifford Identification of dependent probit models: a simplified approach.
- Econom. Lett. 7 (1981), no. 3, 243-247. (Author's summary) 82k:62212
- Winston, Kenneth J. (with Kleitman, Daniel J.) Ensembles and largest sojourns of random walks. SIAM J. Algebraic Discrete Methods 1 (1980), no. 1, 15-20. (Aart J. Stam) 60J15 (60C05)
 - (with Kleitman, Daniel J.) Forests and score vectors. Combinatorica 1 (1981), no. 1,
- 49-54. (Guy Chaty) 82e:05073 05C20 (05C30, 92A25)
 Winston, Patrick Henry ★Искусственный интеллект. (Russian) [Artificial intelligence]
 Translated from the English by V. L. Stefanjuk. "Mir", Mascow, 1980. 520 pp. (Editors) 68Gxx (68-02) 82c:68058
- Winston, Wayne L. (with Lippman, Steven A.) Optimal control of price through restricted production. Naval Res. Logist. Quart. 28 (1981), no. 3, 463-474. (Authors' summary) 82g:90017 90A11
- Winter, David J. Cartan subalgebras of a Lie algebra and its ideals. II. Pacific J. Math. 94 (1981), no. 2, 493-494. (D. A. Towers) 82m:17006 17B50
- ter, Gerd (with Trottenberg, Ulrich) On faces and W-irreducible operators in finite-dimensional linear spaces. Linear Algebra Appl. 33 (1980), 87–109. (Robert Beauwens) 82e:15016 15A48 (47B55)
- Winter, P. D. (with Holt, David; Smith, T. M. F.) Regression analysis of data from complex surveys. J. Roy. Statist. Soc. Ser. A 143 (1980), no. 4, 474-487. (Authors' summary) 82a:62025 62D05
- Winter, Rolf G. *Quantum physics. Wadsw xi+403 pp. ISBN 0-534-00697-3 (Paul F. Zweifel) 82i:81003 81-01
 Winternitz, P. (with Patera, J.; Zassenhaus, Hans) On the maximal abelian subgroups of
- the linear classical algebraic groups. C. R. Math. Rep. Acad. Sci. Canada 2 (1980), no. 5, 231-236. (From the text) 82a:20051 20G15
- (with Miller, Willard, Jr.; Patera, J.) Subgroups of Lie groups and separation of variables. J. Math. Phys. 22 (1981), no. 2, 251-260. (Anthony J. Bracken) 82h:81055
- (with Anderson, Robert Leonard; Harnad, John) Group theoretical approach to superposition rules for systems of Riccati equations. Lett. Math. Phys. 5 (1981), no. 2, 143-148. (Kenneth G. Miller) 82k:34003 34A05
- Wintgen, Peter Courbure totale des surfaces ayant des singularités. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 10, 515-517. (Author's summary)
- Winther, Ragnar (with Arnold, Douglas N.) A superconvergent finite element method for the Korteweg-de Vries equation. *Math. Comp.* 38 (1982), no. 157, 23-36. (Authors' summary) 82m:65087 65M60 (76A60, 76B15)
- zell, Bengt A boundary value problem with an oblique derivative. Comm. Partial Differential Equations 6 (1981), no. 3, 305-328. (Maurizio Chicco) 82j:35048 35125

- Winzor, D. J. (with Sculley, M. J.; Nichol, L. W.) Interactions between micellar ligand systems and acceptors: forms of binding curves. J. Theoret. Biol. 90 (1981), no. 3, 365-376. (Authors' summary) 82f:92018 92A09 (80A32)
- Wipf, A. (with Schweizer, M.; Straumann, N.) Post-Newtonian generation of gravitational aves in a theory of gravity with torsion. Gen. Relativity Gra witation 12 (1980), no. 11, 951-961. (Authors' summary) 82h:83063 83D05 (83C25, 83C35)
- 951-961. (Authors' summary) exceeded with the summary of the form p+1.

 Arth. 47th. 37 (1980). 345-357. (Evelyn Scriba) 82b:10056 10H20 (10H99)
- Wirsing, Martin (with Broy, Manfred) On the algebraic specification of nondeterministic programming languages. CAAP '81 (Proc. Sixth Colloq., Genoa, 1981), pp. 162–179, Lecture Notes in Comput. Sci., 112, Springer, Berlin, 1981. (Authors' summary) 82h:68169
 - (with Broy, Manfred) On the algebraic extensions of abstract data types. Formalization of programming concepts (Proc. Internat. Colloq., Peñiscola, 1981), pp. 244–251, Lecture Notes in Comput. Sci., 107, Springer, Berlin, 1981. (See 821:68005) 68B15
- Wirth, Karl (with Dreiding, André S.) The multiplex. A classification of finite ordered point sets in oriented d-dimensional spaces. Match No. 8 (1980), 341-352. (N. Trinajstić) 82e:52003 52A25
 - (with Huber, Martin K.) Numbering of finite relational systems. Match No. 12 (1981), 3-14. (Fred W. Roush) 82m:68079 68C20 (04A05, 05C99, 92A40)
- müller, K. Singularities determined by their discriminant. Math. Ann. 252 (1980),
- no. 3, 237-245. (H. B. Laufer) 82c:32011 32C40
 Wirths, K.-J. (with Klouth, Richard) Two new extremal properties of the Koebe-function.
- Proc. Amer. Math. Soc. 80 (1980), no. 4, 594–596. (G. Schober) 824:30017 30C50
 Wisan, W. L. Galileo and the emergence of a new scientific style. Proceedings of the 1978
 Pisa Conference on the History and Philosophy of Science (Second Internat. Conf., Pisa, 1978), Vol. I, pp. 311-339, Synthese Library, 145, Reidel, Dordrecht, 1981. (William R.
- Shea) 82m:01034 01A45 (00A25, 01A40)
 Wischnewsky, Manfred B. A lifting theorem for right adjoints. Cahiers Topologie Géom.
 Différentielle 19 (1978), no. 2, 155-168. (From the text) 82i:54025 54B30 (18B30)
- Wise, Gary L. (with Devroye, Luc) Consistency of a recursive nearest neighbor regression function estimate. J. Multivariate Anal. 10 (1980), no. 4, 539–550. (Margaret P. Gessaman) 82b:62071 62H30 Gessaman) 82b:62071
- (with Gallagher, Neal C.) A novel approach for the computation of orthonormal polynomial expansions. J. Comput. Appl. Math. 7 (1981), no. 3, 157–160. (Authors' summary) 82j:65006 65D10 summary) 82j:65006
- Wise, M. Norton See Anniversary: Death of Maxwell, James Clerk, 82f:01160
 Wise, Mark B. (with Trainor, L. E. H.) Group theory and many-body diagrams. III.
 Many-particle Green diagrams. Proc. Roy. Soc. London Ser. A 359 (1978), no. 1696, 111–119. (Authors' summary) 82b:81041
 81C40
- (with Abbott, L. F.) Dimension of a quantum-mechanical path. Amer. J. Phys. 49 (1981), no. 1, 37-39. (Authors' summary) 82a:81004 81B05
- Wishart, D. (with Mojena, R.) Stopping rules for Ward's clustering method. Compstat 1980 Wishart, D. (with Mojena, K.) Stopping rules for Ward's clustering method. Compstal 1980 (Proc. Fourth Sympos. Comput. Statist., Edihburgh, 1980), pp. 426–432, Physica, Vienna, 1980. (Authors' summary) 82d:62107 62H30
 Wismath, S. K. (with Scong, H. P.; Akl, S. G.) Feature selection by interactive clustering.
 Pattern Recognition 14 (1981), no. 1-6, 75–80. (Authors' summary) 82k:68057 68G10
 Wissemann-Hartmann, Cornelia Spherical fibrations and manifolds. Math. Z. 177 (1981), no. 2, 187–192. (H. Osborn) 82e:57006 57P10 (55R25)

- Wisztová, Elena (with Nebeský, Ladislav) Regular factors in powers of connected graphs. With a loose Russian summary. Casopis Pest. Mat. 106 (1981), no. 1, 52-59, 101. (David P. Sumner) 82g:05074 05C70 (05C99)
- de Wit, B. (with Nicolai, H.) Extended supergravity with local SO(5) invariance. Nuclear Phys. B 188 (1981), no. 1, 98–108. (M. A. Namazie) 82m:83057 83E50 (81G20)
- taszek, Jacek The LR(k) parser. Mathematical foundations of computer science, 1980 (Proc. Ninth Sympos., Rydzyna, 1980), pp. 686–697, Lecture Notes in Comput. Sci., 88, Springer, Berlin, 1980. (From the introduction) 82c:68057 68F25 Witaszek, Jacek
- Witczyński, Krzysztof Generalized Pappus theorem in the projective space P^n . (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 9, 705-709. (J. Strommer) 82f:51004 51A05
 - Projective collineations as products of cyclic collineations. Demonstratio Math. 12 (1979), no. 4, 1111-1125. (Robert A. Liebler) 82a:51017 51N15
- Withers, C. S. Central limit theorems for dependent variables. I. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 4, 509-534. (J. E. A. Dunnage) 82k:60055 60F05
- ski, Patrick (with Duchon, Jean; Robert, Raoul) Problème de Dirichlet dans l'image bilipschitzienne d'un demi-espace. (English summary) Numer. Math. 36 (1980/81), no. 2, 129-149. (Authors' summary) 82e:65096 65M99 (65N99)
- Witsch, Karl J. A uniqueness result for the geodetic boundary problem. J. Differenti Equations 38 (1980), no. 1, 104-125. (Gottfried Anger) 82j:58106 58G20 (31B20) 35R30, 86A30)
- Witschel, W. Analytical results for the partition function of a generalized anharmoni oscillator. Z. Naturforsch. A 36 (1981), no. 5, 481–488. (A. J. O'Connor) 82h:82014 82A15 (65P05)
- isen, H. S. (with Beneš, Václav E.; Shepp, L. A.) Some solvable stochastic control problems. Analysis and optimisation of stochastic systems (Proc. Internal. Conf., Univ. Oxford, Oxford, 1978), pp. 3-10, Academic Press, London, 1980. (D. M. Sudakov) 82a:93072 93E20 (90A16, 90A19) problems.
- Witt, D. W. Vibrations of a spherical shell with a vibration-damping laminar coating. Izv. Akad. Nauk SSSR Meh. Tverd. Tela 15 (1980), no. 3, 132–142 (Russian); translated as Mech. Solids 15 (1980), no. 3, 126-133. (Author's summary) 82i:73044
- Witt, Kurt-Ulrich On linearizing graphs. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 32-41, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Author's summary) 82j:68015 68B15 (05C99, 68E10)
- Witte, B. See Freeden, Willi, 82i:65017 Witte, Paul A single axiom for closure operations. Algebra Universalis 12 (1981), no. 2, 268-269. (Editors) 82c:06020 06B99
- Witten, Edward Search for a realistic Kaluza-Klein theory. Nuclear Phys. B 186 (1981), no. 3, 412-428. (Andrzej Trautman) 82j:83062 83E15 (53C80, 81G20)
- Witten, Ian H. Probabilistic behaviour/structure transformations using transitive Moore

- models. Internat. J. Gen. Systems 6 (1980/81), no. 3, 129-137. (Author's summary) 824:93069 93E12 (68D25)
- Witten, Louis (with Cosenza, M.; Herrera, L.; Esculpi, M.) Some models of anisotropic spheres in general relativity. J. Math. Phys. 22 (1981), no. 1, 118-125. (Authors' summary) 82a:83033 83C55 (83C20)
 - (with Papadopoulos, Demetrios) Covariant boundary conditions in gravitational radiation theory: a new covariant definition of spatially asymptotically flat space-times.

 Phys. Rev. D (3) 23 (1981), no. 2, 267-271. (Authors' summary) 82a:83020 83C35 (with Papadopoulos, Demetrios; Stewart, Bob) Some properties of a particular
 - static, axially symmetric space-time. Phys. Rev. D (3) 24 (1981), no. 2, 320-326. (Colin B. G. McIntosh) 82h:83021 83C20
- Witten, Matthew A note on the structure of system state spaces and its implications on the existence of nonrepeatable experiments. Bull. Math. Biol. 42 (1980), no. 2, 267-272. (Author's summary) 82k:92006 92A05 (93A10)
- irg, Jens *Динамика систем твердых тел. (Russian) [Dynamics of systems of rigid bodies] Translated from the English by V. N. Rubanovskii, V. S. Sergeev and S. Ja. Stepanov. "Mir", Moscow, 1980. 294 pp. (Editors) 82c:70003 70Exx (70-01)
 Wittenmark, Björn Self-tuning algorithms for control, prediction and smoothing. Directic
- in time series (Proc. Meeting, Iowa State Univ., Ames, Iowa, 1978), pp. 219-227, Inst. Math. Statist., Hayward, Calif., 1980. (Author's summary) 82i:93087 93F12
- Wittig, Joachim Einige Bemerkungen zum Energiesatz und zu seiner Reflexion bei Dühring und Engels. Jenaer "Anti-Dühring"-Konferenz (Friedrich-Schiller-Univ., Jena, 1978).
- pp. 270–276. Friedrich-Schiller-Univ., Jena, 1979. (M. Kline) 82a:01022 01A55
 Witting, Hermann ★Mathematische Statistik. (German) [Mathematical statistics] Eine Einführung in Theorie und Methoden. [An introduction to theory and methods] Third edition. Teubner Studienbücher: Mathematik. [Teubner Study Books: Mathematics] Leitfäden der Angewandten Mathematik und Mechanik [Guides to Applied Mathematics and Mechanics], 9. B. G. Teubner, Stuttgart, 1978. 223 pp. ISBN 3-519-22036-9 (Editors) 82e:62003 62-01
- deWitt-Morette, C. See DeWitt-Morette, C.
- Wittwer, Gisela (with Mühleis, Wiltrud) Minimum-Kontrast-Schätzungen für stochastische Processe. (English and Russian summaries) Math. Operationsforsch. Statist. Ser. Statist. 11 (1980), no. 2, 219–226. (Steffen Lauritzen) 82f.62160 62M09 (62F12) (with Blume, Wolfgang) On the asymptotic distribution of covariance estimates of stationary random sequences. (German and Russian summaries) Math. Operationsforsch.
 - Statist. Ser. Statist. 12 (1981), no. 2, 193-199. (Robert V. Foutz) 82h:62148
- Witzgall, Christoph (with Shier, Douglas R.) Properties of labeling methods for determining shortest path trees. J. Res. Nat. Bur. Standards 86 (1981), no. 3, 317-330. (Authors' summary) 82j:68067 68E10 (05C05, 05C35, 68C25)
- Włodarczyk, E. General closed-form solutions of the equations of one-dimensional nonstationary isentropic motions of isotropic elastic media subject to finite deformations. (Polish and Russian summaries) Arch. Mech. (Arch. Mech. Stos.) 33 (1981), no. 1,
- 73-81. (Author's summary) 82k:73018 73C50 (35C05)
 Włodarczyk, Kazimierz Analogues of the Garabedian-Schiffer theorem for pairs of vector functions. Demonstratio Math. 14 (1981), no. 2, 321-341. (James A. Hummel) 82k:30020 30C45 (30A10)
- Włodarski, Ludomir On the Pappus, Desargues and related theorems of affine geometry. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 27 (1979), no. 11-12, 869-873 (1981). (Dov Avishalom) 82h:51005 51A30 (51E15)
- Wnuk, Henryk (with Duczmal, Marian; Szczepankiewicz, Eugeniusz) Moments of some random quasi-isotropic variables. (Polish. English summary) Zeszyty Nauk. Wyż. Szkoł y Ped. w Opolu Mat. 22 (1981), 27-50. (Authors' summary) 82i:60031
- Wochnik, Helmut (with Dornfeld, Engelbert) Axial symmetries in the Lorentz group (Polish. German summary) Zeszyty Nauk. Wyż. Szkoł y Ped. w Opolu Mat. 21 (1980), Algebra, Dydakt. Mat., Geom., Zastos. Mat., 63-73. (Authors' summary) 82g:51000 51B20 (22E43, 83A05)
 - (with Dornfeld, Engelbert) Angles in the Lorentz group. (Polish. German summary) (with Dornieta, Engelocity August in the Lotenia grow, Cosan, Cosan, Carlotte Street, Carlo
- Zastos. Mai., 75-81. (Authors' summary) 82g:51008a 51B20 (22E43, 83A05)
 Wodecki, Mieczysław (with Adrabiński, Andrzej; Grabowski, Józef) An algorithm for solving the general sequencing problem. (Polish. English and Russian summaries) Prace Nauk. Inst. Mat. Politech. Wrocław. Ser. Stud. Materiały No. 14 Analiza Dyskretna (1980), 15-35. (Authors' summary) 82c:68041 68E10 (90B99)
- Wódkiewicz, K. (with Rzążewski, Kazimierz) Gauge-independent canonical formalism for nonrelativistic electrodynamics. Ann. Physics 130 (1980), no. 1, 1-13. (Authors' 81L05 summary) 82c:81184
 - Matrix-continued fraction solutions of some stochastic equations with random telegraph noise. Z. Phys. B 42 (1981), no. 2, 95-98. (Author's summary) 82i:81179 81K05 (60H20, 82A05)
- Woess, Wolfgang Aperiodische Wahrscheinlichkeitsmaße auf topologischen Gruppen (English summary) Monatsh. Math. 90 (1980), no. 4, 339-345. (Wilfried Hazod) 60B15 (22D05, 43A05, 60J15)
- Wofsy, Carla Lipow Behavior of limiting diffusions for density-dependent branching processes. Biological growth and spread (Proc. Conf., Heidelberg, 1979), pp. 130-137, Lecture Notes in Biomath., 38, Springer, Berlin, 1980. (R. L. Tweedie) 82k:60161 60J70 (60J85, 92A15)
 - (with Goldstein, Byron) Theory of equilibrium binding of a bivalent ligand to cell surface antibody: the effect of antibody heterogeneity on cross-linking. J. Math. Biol. 10 (1980), no. 4, 347-366. (Authors' summary) 82e:92006 92A07 (92A09)
- Wogen, W. R. (with Cima, Joseph A.) On isometries of the Bloch space. Illinois J. Math. 24 (1980), no. 2, 313–316. (Authors' introduction) 82m:30052 30H05 (46J15)
- th, Andrew Labeled reaction matrices, a histocompatibility model. Discret Math. 26 (1979), no. 3, 285-292. (Abraham Berman) 824:92005 92A07 (05B20) (with Markowsky, George) Uncovering antibody incidence structure. Math. Biasci. 52 (1980), no. 1-2, 141-156. (P. Ecsedi-Tóth) 82e:92007 92A07
- Wohlhauser, Affred Les applications analytiques de l'espace qui conservent les angles solides. (English summary) C. R. Math. Rep. Acad. Sci. Canada 3 (1981), no. 3, 129–132. (Author's summary) 82h:31009 31B15
 Wohlleben, D. (with Boersch, H.; Grohmann, K.; Hamisch, H.; Lischke, B.) On the
- Aharonov-Bohm effect. Lett. Nuovo Cimento (2) 30 (1981), no. 9, 257-258. (From the text) 82i:81005

- nann, Hans-Werner Complete, perfect, and maximal controllability of discrete momic systems. Z. Nationalökonom. 41 (1981), no. 1-2, 39-58. (From the omic systems. Z. Nationalökono duction) 82m:90057 90A16
- imod, I. P. The role of spatial analysis in the Rothamsted insect survey. Statisti applications in the spatial sciences, pp. 268-285, Pion, London, 1979. (See 82f:9003)
- Wôjcicki, Ryszard Entailment semantics for T. Proceedings of the Third Brazilian Conference on Mathematical Logic (Inst. Math., Fed. Univ. Pernambuco, Recife, 1979), pp. 309-336, Soc. Brasil. Lógica, São Paulo, 1980. (Merric Bergmann) 82g-03032 03B45
- ta (with Tchoń, Krzysztof) Towards a formal theory of description. Internat. J. Gen. Systems 6 (1980/81), no. 4, 217-224. (Authors' summary) 82h:92005
- ciechowski, S. The SU(2) symmetry group generators for the classical Calogero system

 Phys. Lett. A 66 (1978), no. 4, 265–267. (L. S. Wollenberg) 82g:70037

 70H05 (58F07) 70H05 (58F07)
- ijcik, A. On the least principal fundamental solution of a parabolic differential equation. . Polon. Math. 38 (1980), no. 2, 133-140. (Rüdiger Landes) 82g:35005 (35K10)
- Wôjcik, Robert The method of elastic solutions in boundary value problems of the theory of torsion of physically nonlinear rods. (Polish. Russian and English summaries) Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. No. 31 (1980), 169-174. (Author's summary) 82f:73020 73C50
- Wojda, A. P. Meyniel's theorem for strongly (p,q)-Hamiltonian digraphs. J. Graph Theory 5 (1981), no. 3, 333-335. (Carsten Thomassen) 82k:05077 05C45 (05C20)
- Wojtas, Mieczysław New Wilson-type constructions of mutually orthogonal Latin squares. Discrete Math. 32 (1980), no. 2, 191-199. (J. Dénes) 82b:05037
- tassecryk, P. On projections in spaces of bounded analytic functions with application.

 Studia Math. 65 (1979), no. 2, 147-173. (T. W. Gamelin) 82a:46059 46J15 (32E2 46J15 (32F25. 46E15)
- Wojtkowiak, Zdzisław Free actions of finite groups on finite CW complexes. Comment.

 Math. Helv. 55 (1980), no. 2, 225-232. (C. B. Thomas) 82a:57037 57S17

 Wojtylak, Piotr Matrix representations for structural strengthenings of a propositional logic.
- Studia Logica 38 (1979), no. 3, 263-266. (A. Rose) 82h:03066 03B99
 - Mutual interpretability of sentential logic. I. Rep. Math. Logic No. 11 (1981), 69-89.

 (A. Rose) 82k:03033a 03B99 (03B50)

 Mutual interpretability of sentential logics. II. Rep. Math. Logic No. 12 (1981),
- 03B99 (03B20) 51-66. (A. Rose) 82k:03033b
- Wojtyński, Wojciech Associative algebras generated by Lie algebras of compact operators. sian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 5-6, 237-241 (1981). (Pierre de la Harpe) 82j:47063 47D30 (17B60, 47B05)
- Wold, Herman Soft modelling: intermediate between traditional model building and data analysis. Mathematical statistics, pp. 333-346, Banach Center Publ., 6, PWN, Warsaw, 1980. (M. Knott) 82c:62151
 - (with Boardman, Anthony E.; Hui, Baldwin S.) The partial least squares-fix point method of estimating interdependent systems with latent variables. Comm. Statist. A-Theory Methods 10 (1981), no. 7, 613-639. (Authors' summary) 82d:62164
- Wolde-Tsadik, Girma (with Afifi, A. A.) A comparison of the "sometimes pool",
 "sometimes switch" and "never pool" procedures in the two-way ANOVA random
 effects model. Technometrics 22 (1980), no. 3, 367–373. (R. J. McKay) 82a:62103 62110
- Wolf, D. Approximation des invarianten Wahrscheinlichkeitsmaßes eines Markoffschen Kerns bezüglich schwacher Konvergenz. Z. Angew. Math. Mech. 60 (1980), no. 7, T372-T374. (O. K. Zakusilo) 82m:60078 60J05
- (with Zittartz, J.) On the one-dimensional spin-½-chain and its related fermion models. Z. Phys. B 43 (1981), no. 2, 173-183. (Authors' summary) 82h:82048 82A68
- r-Wolf, E. See Mayer-Wolf, E.
- Wolf, Emil Phase conjugacy and symmetries in spatially bandlimited wavefields containing no evanescent components. J. Opt. Soc. Amer. 70 (1980), no. 11, 1311-1319. (G. S. Agarwal) 82b:78013 78A40 (78A45)
- Wolf, G. K. Praktische Erfahrung mit R-robusten Verfahren bei klinischen Versuchen. Robust methods (25th Biometric Colloq., Bad Nauheim, 1979) (German), pp. 78-86, Med. Inform. Statist., 20, Springer, Berlin, 1980. (See 82i:62003) 62F35
- Wolf, Gottfried (with Gössel, Michael) Stable configurations of linear and generalized linear binary cellular automata. Z. Elektr. Inform. Energietech. 11 (1981), no. 1, 1-12. (From the introduction) 82c-68031 68D15
 Wolf, Jack K. (with Chang, Shih Chun) On the T-user M-frequency noiseless
- - multiple-access channel with and without intensity information. IEEE Trans. Inform. Theory 27 (1981), no. 1, 41-48. (Authors' summary) 82a:94058 See also Dass, Bal Kishan; et al., 82k:94020
- Wolf, Joseph Albert Representations that remain irreducible on parabolic subgroups. Differential geometrical methods in mathematical physics (Proc. Conf.,
 - nca, 1979), pp. 129-144, Lecture Notes in Math., 836, Springer, Berlin, 1980. (Martin L. Karel) 82i:22017 22E45 (22E50, 81C40) See also Symposium: Chern, Differential Geometry, 82c:58002
- Wolf, Kurt Bernardo Canonical transforms. IV. Hyperbolic transforms: continuous series of SL(2, R) representations. J. Math. Phys. 21 (1980), no. 4, 680-688. (N. Mukunda) 22E43 (81C40) 824:22012
 - (with Steinberg, Stanly) Symmetry, conserved quantities and moments in diffusive tions. J. Math. Anal. Appl. 80 (1981), no. 1, 36-45. (Wolf von Wahl) 82g:35113 35O20 (35B99)
 - On time-dependent quadratic quantum Hamiltonians. SIAM J. Appl. Math. 40 (1981), no. 3, 419-431. (P. G. L. Leach) 82f:81033 81C99 (58G11)
- Wolf, Robert S. A highly efficient "transfinite recursive definitions" axiom for set theory. Notre Dame J. Formal Logic 22 (1981), no. 1, 63-75. (N. C. A. da Costa) 82d:03082
- Wolf, W. Some remarks on large deviations for weighted sums if Cramér's condition is not satisfied. Mathematical statistics, pp. 347–352, Banach Center Publ., 6, PWN, Warsaw, 1980. (Sujit K. Basu) 821:60060 60F10
- Wolfart, Jürgen (with Kirchheimer, Franz) Explizite Präsentation gewisser Hilbertscher

- Modulgruppen durch Erzeugende und Relationen. (English summary) J. Reine Angew.
- Math. 315 (1980), 139–173. (G. van der Geer) 82c-19034 10D21 (10D07, 20F05)
 Wolfe, Douglas A. (with Randles, Ronald H.) ★Introduction to the theory of nonparametric statistics. Wiley Series in Probability and Mathematical Statistics. John Wiley & Sons, New York-Chichester-Brisbane, 1979. xiii + 450 pp. ISBN 0-471-04245-5 62G99 (62-01) (From the preface) 82c:62071
 - (with Mack, Gregory A.) k-sample rank tests for umbrella alternatives. J. Amer. Statist. Assoc. 76 (1981), no. 373, 175–181. (Authors' summary) 82d:62084 62G10
- Wolfe, Jerry M. Interpolation and best L_p local approximation. J. A. (1981), no. 2, 96-102. (Philip W. Smith) 82k:41017 41A50 (41A05) J. Approx. Theory 32 (with Fraser, W.) Conditions for a rational approximation to be locally best in the l₁
 - sense. J. Approx. Theory 32 (1981), no. 4, 271-280. (M. Brannigan) 82m:41013 41A20 (65D10)
- Wolfe, M. A. An existence-convergence theorem for a class of iterative methods. J. Optim. Theory Appl. 31 (1980), no. 1, 125-129. (M. Z. Nashed) 82i:65039 65J15 (47H17,
- Wolfenson, M. (with da Rocha, V. C., Jr.) Soft decision decoding with unknown source distribution. Electron. Lett. 16 (1980), no. 25-26, 949-950. (Authors' summary) 94B35 (94A24)
- Wolfersdorf, Lothar Optimal control with semilinear first order complex differential equations of I. N. Vekua's type. Applicable Anal. 11 (1980/81), no. 4, 259-277. (Wolfgang Tutschke) 82k:49010 49A22
 - A counterexample to the maximum principle of Pontryagin for a class of distributed parameter systems. Z. Angew. Math. Mech. 60 (1980), no. 4, 204. (V. V. Krahotko)
 - A modification of the Dirichlet variational problem. Wiss. Z.
- Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe 27 (1978), no. 4, 119-122. (From the text) 82a:35036 35J20
- Wolff, E. F. n-dimensional measures of dependence. Stochastica 4 (1980), no. 3, 175-188. (Jiří Anděl) 82e:62084 62H20
- Wolff, H. (with Schüler, L.) Automatic classification in the case of unknown number of clusters using global density estimates. (German summary) Biometrical J. 22 (1980),
- no. 8, 745-753. (Authors' summary) 82d:62075 62G05
 Wolff, Harvey Relative injectives and free monads. Canad. Math. Bull. 24 (1981), no. 1, 29-35. (Tadashi Ohkuma) 82e:18012 18C15
- The orthogonal subcategory problem for pointed endofunctors. Comm. Algebra 9 (1981), no. 3, 235-246. (M. Barr) 82d:18003 18A40 (18A20)
- Wolff, Karl Erich Uniqueness of the rank polynomials of point stable designs. Math. Z. 175
- (1980), no. 3, 261-266. (Arnold Neumaier) 82d:05030 05B05 Wolff, Manfred (with Greiner, Günther; Voigt, Jürgen) On the spectral bound of the
- generator of semigroups of positive operators. J. Operator Theory 5 (1981), no. 2, 245-256. (J. A. Goldstein) 82h:47039 47D05 de Wolff, P. M. (with Janssen, T.; Janner, A.) The superspace groups for incommensurate
- crystal structures with a one-dimensional modulation. Acta Cryst. Sect. A 37 (1981), no. 5, 625-636. (From the summary and text) 82k:20082 20H15 (82A60)
 Wolff, Robert (with Schuster, Peter; Sigmund, Karl) Dynamical systems under constant
- organization. III. Cooperative and competitive behavior of hypercycles. J. Differential Equations 32 (1979), no. 3, 357-368. (C. P. Bruter) 82b;34035b 34C05 (58F12, 80A30,
 - (with Schuster, Peter; Sigmund, Karl) Mass action kinetics of self-replication in flow reactors. J. Math. Anal. Appl. 78 (1980), no. 1, 88-112. (J. P. Kernevez) 82c:92012 92A09 (35R10, 80A30, 92A17)
 - (with Hofbauer, Josef; Schuster, Peter; Sigmund, Karl) Dynamical systems under constant organization. II. Homogeneous growth functions of degree p=2. SIAM J. Appl. Math. 38 (1980), no. 2, 282-304. (C. P. Bruter) 82b:34035a 34C05 (58F12, 80A30, 34C05 (58F12, 80A30,
 - (with Schuster, Peter; Sigmund, Karl; Hofbauer, Josef) Self-regulation of behaviour in animal societies. I. Symmetric contests. Biol. Cybernet. 40 (1981), no. 1, 1-8. (Peter D. 92A15 (90D40)
 - (with Schuster, Peter; Sigmund, Karl; Hofbauer, Josef) Self-regulation of behaviour in animal societies. II. Games between two populations without self-interaction. Biol. Cybernet. 40 (1981), no. 1, 9-15. (Peter D. Taylor) 82e:92039b 92A15 (90D40)
- Ground state energy for a model gas in one dimension. Z. Phys. C 8 (1981), o. 2, 145-147. (Author's summary) 82f:82016 82A15 (81E99, 81H05)
- Wolff, Ulli A quaternion quantum system. Phys. Lett. A 84 (1981), no. 3, 89-92. (Author's summary) 82g:81008 81B10
- Wolff von Gudenberg, J. Determination of minimum sets of the set of zeros of a function. (German summary) Computing 24 (1980), no. 2-3, 203-212. (Author's summary) 82h:65037 65G10
- Wolfmann, J. A new construction of the binary Golay code (24, 12, 8) using a group algebra over a finite field. Discrete Math. 31 (1980), no. 3, 337-338. (From the text) 82a:94067 94B05
- Wolfowitz, J. Coding of correlated sources with prescribed distortion by separated encoders. Proc. Nat. Acad. Sci. U.S.A. 77 (1980), no. 10, part 1, 5618-5619. (G. Dueck) 82a:94049 94A24
- Wolfsdorf, Kurt Der Beweis eines Satzes von G. Choodnovsky. (English summary) Arch. Math. Logik Grundlag. 20 (1980), no. 3-4, 161-171. (Peter Vojtáš) 82c:03071 03E10 (03E55)
- Wolfshtein, M. (with Berger, Moshe; Israeli, Moshe) Numerical solution of transitional boundary layers. Simulation of systems '79 (Proc. Ninth IMACS Congress, Sorrento, 1979), pp. 437-446, North-Holland, Amsterdam, 1980. (Authors' summary) 82a:76054 76N05 (65P05, 76F99)
- Wolkenfelt, P. H. M. (with Brunner, H.; Nørsett, S. P.) ★On Vo-stability of numerical methods for Volterra integral equations of the second kind. Afdeling Numerieke
- Wiskunde [Department of Numerical Mathematics], 84. Mathematisch Centrum, m, 1980. ii + 12 pp. (H. Brunner) 82g:65062 65R20
- (with van der Houwen, P. J.) On the stability of multistep formulas for Volterra integral equations of the second kind. (German summary) Computing 24 (1980), no. 4, 341–347. (Authors' summary) 82e:65132 65R20
 - Reducible quadrature methods for Volterra integral equations of the first kind. BIT

21 (1981), no. 2, 232-241. (Author's summary) 82h:65101

(with van der Houwen, P. J.; Baker, Chr. T. H.) Analysis of numerical methods for second kind Volterra equations by imbedding techniques. J. Integral Equations 3 (1981), no. 1, 61-82. (Gustaf Gripenberg) 821:65143 65R20 (45D05)

On the numerical stability of reducible quadrature methods for second kind Volterra integral equations. Z. Angew. Math. Mech. 61 (1981), no. 8, 399-401. (Author's summary) 82k:65085 65R20

Wolkowicz, Henry Shadow prices for an unstable convex program. Utilitas Math. 18 (1980),

119-139 (Roger Hartley) 824:90100 90C25

Wollenberg, L. S. Characterisation of homogeneous quadratic invariants for

one-dimensional homogeneous quadratic Hamiltonians. Phys. Lett. A 79 (1980), no. 4, 269-272. (P. D. F. Ion) 82k:81032 81C99 (58F05, 70H99)

Wollenberg, M. (with Amrein, W. O.; Pearson, D. B.) Evanescence of states and asymptotic completeness. Helv. Phys. Acta 53 (1980), no. 3, 335-351 (1981). (Lawrence E. Thomas) 82i:81124 81F05 (47A40, 81C12)

Wollkind, David J. (with Notestine, Ronald D.) A nonlinear stability analysis of the solidification of a pure substance. IMA J. Appl. Math. 27 (1981), no. 1, 85–104. (Authors' summary) 82k:80004 80A20 (82A25)

Wollmark, J. Torkel Is there a minimum linewidth in integrated circuits? New decelopments in semiconductor physics (Proc. Internat. Summer School, Univ. Szeged, Szeged, 1979), pp. 263–276, Lecture Notes in Phys., 122, Springer, Berlin, 1980. (See 821:82004) 81C99

Wollny, Wolfgang Dualität von Cayley-diagramm und Fundamentalbereichsparkett bei den diskreten 1-dimensionalen Bewegungsgruppen. Geom. Dedicata 11 (1981), no. 1, 31-46. (A. M. Cohen) 82h:51024 51F25 (20H15)

Wolniewicz, Bogusław On the lattice of elementary situations. Polish Acad. Sci. Inst. Philos Sociol. Bull. Sect. Logic 9 (1980), no. 3, 115-121. (David Makinson) 82g:03047

The Boolean algebra of objectives. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect.

Logic 10 (1981), no. 1, 17-23. (Author's summary) 821:06024 06E99
Wolniewicz, Tomasz M. On the Banach-Mazur distance between annulus algebras. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Math. 28 (1980), no. 3-4, 125-130 (1981). (Jacques Mayer) 82h:46074 46J15 (30H05)

Wolovich, William A. Multipurpose controllers for multivariable systems. IEEE Trans. nat. Control 26 (1981), no. 1, 162-170. (Author's summary) 82e:93036

Wolpert, Scott The length spectrum as moduli for compact Riemann surfaces. Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference (State Univ. New York, Stony Brook, N.Y., 1978), pp. 515-517, Ann. of Math. Studies, 97, Princeton Univ. Press, Princeton, N.J., 1981. (Editors) 82i:58074 58G25 (10D40, 30F20)

An elementary formula for the Fenchel-Nielsen twist. Comment. Math. Helv. 56 (1981), no. 1, 132-135. (C. Earle) 82k:32053 32G15 (30F35)

A generalization of the Ahlfors-Schwarz lemma. Proc. Amer. Math. Soc. 84 (1982), no. 3, 377-378. (J. Ferrand) 82m:53013 53A30 (32H15)

Wolsey, Laurence A. (with Tind, Jørgen) An elementary survey of general duality theory in mathematical programming. Math. Programming 21 (1981), no. 3, 241-261. (Authors' 90Cxx summary) 82i:90039

A resource decomposition algorithm for general mathematical program Mathematical progra mming at Oberwolfach (Proc. Conf., Math. Forschungsinstitut, Oberwolfach, 1979). Math. Programming Stud. No. 14 (1981), 244–257. (Author's summary) 824:65053 65K05 (90C10, 90C30)

Wolska-Bochenek, Janina On some Stefan like problem. Nonlinear analysis (Berlin, 1979), pp. 433-435, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1981, 2,

Akademie-Verlag, Berlin, 1981. (See 82k:49004) 35K05 ut (with Herre, Heinrich) The decision problem for the theory of linear orderings in extended logics. Begriffsschrift-Jena Frege Conference

(Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 162-165, Friedrich-Schiller-Univ., Jena, 1979. (Matt Kaufmann) 82c:03055 03C80 (03B25)

(with Herre, Heinrich) Untersuchungen zur Theorie der linearen Ordnung in

Logiken mit Mächtigkeitsquantoren. Z. Math. Logik Grundlag. Math. 27 (1981), no. 1, 73-94. (G. Fuhrken) 82j:03008 03B25 (03C65, 03C80, 06A05)

Wolter, Kirk M. Composite estimation in finite populations. J. Amer. Statist. Assoc. 74 (1979), no. 367, 604–613. (Author's summary) 82h:62011 62D05

rätzel-Wolters, Dieter See Prätzel-Wolters, Dieter

Wolters, Gereon ★Basis und Deduktion. (German) [Foundation and deduction] Studien ng und Bedeutung der Theorie der axiomatischen Methode bei J. H. Lambert (1728-1777). [Studies on the development and significance of the theory of the axiomatic method of J. H. Lambert (1728-1777)] Quellen und Studien zur Philosophie [Sources and Studies in Philosophy], 15. Walter de Gruyter, Berlin-New York, 1980. xiii+194 pp. (1 plate). ISBN 3-11-007932-1 (B. van Rootselaar) 82h:01033 (00A25, 03-03)

Theorie" und "Ausübung" in der Methodologie von Johann Heinrich Lambert. Theory and practice: on the relationship of theory and practice in the securieenth and eighteenth centuries, Vol. 1 (Hannover, 1977), pp. 109–114, Studia Leibnitiana Suppl., XIX, Steiner, Wiesbaden, 1980. (D. J. Struik) 82j:01042 01A50 (03A05)

Wolters, Jürgen *Stochastic dynamic properties of linear econometric models. Lecture Notes in Economics and Mathematical Systems, 182. Springer-Verlag, Berlin-New York, 1980. viii + 154 pp. ISBN 3-540-10240-X (Andrew Harvey) 82m:62246

omack, Baxter F. See Fahmý, Moustafa M.; et al., 82e:15012

Wondratschek, H. Crystallographic orbits, lattice complexes, and orbit types. Proceedings of the Conference on Kristallographische Gruppen (Univ. Bielefeld, Bielefeld, 1979), Part I. Match No. 9 (1980), 121–125. (Editors) 82g:20077 20H15 (51F15, 82A60)

(with Neubüser, Joachim; Plesken, Wilhelm) An emendatory discursion on defining crystal systems. Proceedings of the Conference on Kristallographische Gruppen (Univ. Bielefeld, Bielefeld, 1979), Part II. Match No. 10 (1981), 77-96. (Daniel B. Litvin) 20H15 (51F15, 82A60)

Wong, Bun (with Lai, K. F.) Two moduli problems and some of their connections with differential geometry. Southeast Asian Bull. Math. 3 (1979), no. 2, 175–192. (Eduardo H. Cattani) 82b:14006 14D20 (10D25, 14K22, 32G13)

Curvature and pseudoconvexity on complex manifolds. Adv. in Math. 37 (1980),

no. 2, 99-104. (H. Wu) 82h:53086 53C55 (32J15)

Erratum: "Curvature and pseudoconvexity on complex manifolds" [Adv. in Math. 37 (1980), no. 2, 99-104; MR 82b:53086]. Adv. in Math. 42 (1981), no. 3, 306. (Editors) 53C55 (32F25)

ng, C. K. (with Chung, K. M.; Luccio, F.) A new permutation algorithm for bubble memories. Inform. Process. Lett. 10 (1980), no. 4-5, 226-230. (From the introduction) 68B15 (68C25)

(with Chung, K. M.; Luccio, F.) Minimum number of steps for permutation in a bubble memory. Inform. Process. Lett. 11 (1980), no. 2, 81-83. (From the introduction) 82a:68178 68H05 (68C25)

(with Bongiovanni, G.; Coppersmith, D.) An optimum time slot assignment algorithm for an SS/TDMA system with variable number of transponders. IEEE Trans.

Comm. 29 (1981), no. 5, 721–726. (Authors' summary) 824:94004 94A05 (94C10, 94C30)

(with Lee, Der Tsai; Chang, Hsu) An on-chip compare/steer bubble sorter. IEEE Trans. Comput. 30 (1981), no. 6, 396-405. (Authors' summary) 82h:68004

(with Gupta, U. I.; Lee, Der Tsai; Leung, Joseph Y.-T.; Pruitt, J. W.) Record allocation for minimizing seek delay. Theoret. Comput. Sci. 16 (1981), no. 3, 307-319. (Authors' summary) 82m:68136 68H05 (68C25, 90B40)

Wong, Chi Song (with Wong, Kai Sang) A first derivative test for the maximum likelihood estimates. Bull. Inst. Math. Acad. Sinica 7 (1979), no. 3, 313-321. (Authors' summary) 82e:62082 62H17 (62H15)

(with Chan, N. N.) Existence of an A-optimal model for a regression experiment. J. Math. Anal. Appl. 77 (1980), no. 2, 403-415. (Andrej Pázman) 82f:62139

Wong, Danny S. Maximum likelihood, entropy maximization, and the geometric programming approaches to the calibration of trip distribution models. Transportation Res. Part B 15 (1981), no. 5, 329-343. (Author's summary) 82k:90052 90B20 (90C30)

ng, Edward T. Polygons, circulant matrices, and Moore-Penrose inverses. Monthly 88 (1981), no. 7, 509-515. (John D. McFall) 82m:15004 15A04 (15A09)

Wong, Eugene (with Hajek, Bruce) Representation and transformation of two-parameter ngales under a change of measure. Z. Wahrsch. Verw. Gebiete 54 (1980), no. 3, 313-330. (Ditley Monrad) 82h:60095 60G48 (60G60, 60H05)

(with Hajek, Bruce) Set-parametered martingales and multiple stochastic integration. Stochastic integrals (Proc. Sympos., Unio. Durham, Durham, 1980), pp. 119-151, Lecture Notes in Math., 851, Springer, Berlin, 1981. (Halim Doss) 82h:60105 60H05 (60G48.

(with Ogier, Richard G.) Recursive linear smoothing of two-dimensional random fields. IEEE Trans. Inform. Theory 27 (1981), no. 1, 77-83. (Authors' summary) 82i:94002 94A05 (93E11)

Wong, H. Ship-Fah (with Deo, Chandrakant M.) On Berry-Esseen approximation and a functional LIL for a class of dependent random fields. Pacific J. Math. 91 (1980), no. 2, 269-275. (Sándor Csörgő) 82e:60054 60F17 (60F05, 60F15, 60G60)

Wong, James C. S. A characterisation of locally compact amenable subsemigroups. Canad. Math. Bull. 23 (1980), no. 3, 305-312. (V. V. Muhin) 82b:43005 43A07

Wong, James S. W. Remarks on nonoscillation theorems for a second order nonlinear differential equation. Proc. Amer. Math. Soc. 83 (1981), no. 3, 541-546. (Uri Elias) 82i:34034 34C10

Wong, K. Y. (with Bayoumi, M. M.; El-Bagoury, M. A.) A self-tuning regulator for multivariable systems. Automatica—J. IFAC 17 (1981), no. 4, 575-592. (Authors' summary) 82h:93079 93E12

Wong, Kai Sang (with Wong, Chi Song) A first derivative test for the maximum likelihood estimates. Bull. Inst. Math. Acad. Sinica 7 (1979), no. 3, 313-321. (Authors' summary) 82e:62082 62H17 (62H15)

Wong, M. K. F. (with Yeh, Hsin Yang) A unified treatment of the representation functions of SO(n, 1), SO(n+1), and ISO(n). J. Math. Phys. 22 (1981), no. 8, 1559-1565. (A. O. Barut) 82k-81028 81C40 (22E70)

Wong, Pak Ken (with O'Keefe, M.) The smallest graph of girth 6 and valency 7. J. Graph Theory 5 (1981), no. 1, 79-85. (Norman Biggs) 82j:05075

Wong, Pit Mann (with Sibony, Nessim) Some results on global analytic sets. Séminaire Pierre Lelong-Henri Skoda (Analyse), Années 1978/79 (French), pp. 221-237, Lecture Notes in Math., 822, Springer, Berlin, 1980. (V. V. Moržakov) 82h:32017 32C25

Holomorphic mappings into abelian varieties. Amer. J. Math. 102 (1980), no. 3, 493-502. (Shoshichi Kobayashi) 82tt.32018 32H25 (32J25)

(with Sibony, Nessim) Some remarks on the Casorati-Weierstrass theorem. Ann. Polon. Math. 39 (1981), 165-174. (Marcus Wright) 82k:32015 32A22 (32H30)

Wong, Richard T. (with Golden, Bruce L.) Capacitated are routing problems. Networks 11 (1981), no. 3, 305-315. (Authors' summary) 82;-90030 90B10 (68C25, 90C10) (with Magnanti, T. L.) Accelerating Benders decomposition: algorithmic

enhancement and model selection criteria. Oper. Res. 29 (1981), no. 3, 464-484.

(Authors' summary) 82j:90051 90C10 (90C30) Wong, Roderick Error bounds for asymptotic expans (1980), no. 4, 401–435. (L. Berg) 82a:41030 41A0 ons of integrals. SIAM Rev. 22

41A60 (65R10) Wong, S. P. (with Tan, W. Y.) On the probabilities of obtaining negative estimates of

variance components. Metron 37 (1979), no. 1-2, 53-64 (1980). (From the introduction)

(with Tan, W. Y.) On approximating the null and nonnull distributions of the F ratio in unbalanced random-effect models from nonnormal universes. J. Amer. Statist. Assoc. 75 (1980), no. 371, 655-662. (M. Atiqullah) 82a:62036 62E20

mg, S. S. M. (with Brody, T. A.; Flores, J.; French, J. B.; Mello, P. A.; Pandey, A. Random-matrix physics: spectrum and strength fluctuations. Rev. Modern Phys. 53 (1981), no. 3, 385-479. (Authors' summary) 82f:81090 81G35

erman Hölder continuous derivatives and ergodic theory. J. London Math. Soc. (1980), no. 3, 506-520. (Zbigniew Nitecki) 82e:88061 58F11 (28D05) (2) 22 (1980), no. 3, 506-520. (Zbigniew Nitecki) 82e:58061

Wong, W. J. Maps on simple algebras preserving zero products. I. The associative case. Pacific J. Math. 89 (1980), no. 1, 229-247. (L. M. Chawla) 82k:15002a (16A20)

Maps on simple algebras preserving zero products. II. Lie algebras of linear type. Pacific J. Math. 92 (1981), no. 2, 469–488. (L. M. Chawla) 828:15002b 15A04 (16A46, 17B60)

Wong, Wing Hung See Tobler, Waldo R., 82b:62147

Numerical methods in thermal problems (Proc. First Internat. Conf., Univ. College, Swansea, 1979), pp. 967-979, Pineridge, Swansea, 1979. (See 82g:80001) 65F10

ag. Yau Chnen A factorization theorem for Schwartz linear mappings. Math. Japon. 25 (1980), no. 6, 655-659. (Tosun Terzioghu) 82c47024 47B05 (46A22) agtawatnugool, C. (with Wu, Shi Yu; Shih, Chia C.) Eigenvalue problem for an infinite

tridiagonal matrix. natrix. J. Math. Phys. 22 (1981), no. 4, 633-636. (Authors' summary) 15A18 (15A57, 47A70, 82A42)

82e:15008 15A18 (15A57, 47A70, 82A42)
mmacott, Ronald J. (with Wonnacott, Thomas H.) ★Regression: a second course in
statistics. Wiley Series in Probability and Mathematical Statistics. John Wiley & Sons,
Inc., New York, 1981. xix+556 pp. 15BN 0-471-95974-X (From the preface) 82f:62003

nnacott, Thomas H. (with Wonnacott, Ronald J.) *Regression: a second course in statistics. Wiley Series in Probability and Mathematical Statistics. John Wiley & Sons, Inc., New York, 1981. xix+556 pp. ISBN 0-471-95974-X (From the preface) 82f:62003

nneberger, W. On the rate theory for thermal soliton generation. Phys. A 103 (1980), no. 3, 543-557. (Author's summary) 82a:82030 82A35

o, Moo Ha (with Sakong, Jungsook) On o-semidevelopable spaces. J. Korean Ma Soc. 17 (1980/81), no. 2, 235–238. (V. J. Mancuso) 82g:54045 54E99 (54E25)

Wood, Bruce (with Bownds, John M.) A smoothed projection method for singular, nonlinear Volterra equations. J. Approx. Theory 25 (1979), no. 2, 120-141. (Authors' 45L05 (65R20) ary) 82j:45012

(with Swetits, John J.) L_p saturation of positive convolution operators.

Approximation theory, III (Proc. Conf., Unio. Texas, Austin, Tex., 1980), pp. 877–880, demic Press, New York, 1980. (Z. Ditzian) 82e:41035 41A40

Observations on the combined recursive collocation and kernel approximation technique for solving Volterra integral equations. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 919-925, Academic Press, New York, 1980. (Frank G. Hagin) 824:45019 45L10 (65R20)

(with Eisenberg, Sheldon M.) An asymptotic result for the operators of Korovkin.

Bull. Malaysian Math. Soc. (2) 3 (1980), no. 1, 5-8. (A. Meir) 82d:41027 41A36

(with Swetits, John J.) A note on the degree of approximation with an optimal, discrete polynomial. J. Approx. Theory 28 (1980), no. 4, 293-298. (J. Szabados)

82a:41020 41A40 (41A35, 65D15)

Wood, Derick (with Vaishnavi, V. K.; Kriegel, H. P.) Height-balanced 2-3 trees. (German

nary) Computing 21 (1978/79), no. 3, 195-211. (Authors' summary) 82k:68039 68E10 (05C05)

as; Six, H. W.) One-sided k-height-balanced trees. (German ary) Computing 22 (1979), no. 4, 283-290. (Authors' summary) 82m:68114

(with Maurer, Hermann A.; Salomaa, Arto) Context-free grammar forms with strict erpretations. J. Comput. System Sci. 21 (1980), no. 1, 110-135. (S. Ginsburg) 68F05

(with Ottmann, Thomas: Six, H. W.) The analysis of search trees: a survey, Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 234–249, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Authors' 68H05 (68E05) nary) 82h:68130

(with Culik, K., II; Ottmann, Thomas) Dense multiway trees. ACM Trans Database Systems 6 (1981), no. 3, 486-512. (Authors' summary) 82m:68038 68B15 (05C05)

(with Maurer, Hermann A.: Salomaa, Arto) Colorings and interpretations: a connection between graphs and grammar forms. Discrete Appl. Math. 3 (1981), no. 2, 119-135. (B. Zelinka) 82k:05049 05C15 (68F05) (with Jürgensen, H.; Matthews, D.) Life and death in Markov deterministic tabled

OL systems. Inform. and Control 48 (1981), no. 1, 80-93. (Authors' summary) 82h:68111 68F15 (68D22)

(with Kobuchi, Youichi) On the complete simulation of DOL schemes and locally catenative schemes. Inform. and Control 49 (1981), no. 1, 64-80. (Authors' summary) 68D22

(with Gotlieb, L.) The construction of optimal multiway search trees and the monotonicity principle. Internat. J. Comput. Math. 9 (1981), no. 1, 17-24. (Authors' summary) 82m:68111 68E05 (94B45)

(with Maurer, Hermann A.; Salomaa, Arto) Derivation languages of gramma forms. Internat. J. Comput. Math. 9 (1981), no. 2, 117-130. (Authors' summary) 68F05

(with van Leeuwen, Jan) The measure problem for rectangular ranges in d-space. Algorithms 2 (1981), no. 3, 282-300. (V. Medek) 82k:68018 68C25 (51-04, 51M25, 52-04)

wers of Brahma and Hanoi revisited. J. Recreation no. 1, 17-24. (Author's introduction) 82i:68031 68C25 (05A05, 68B05)

Wood, E. F. (with Cooper, D. M.) Estimation of the parameters of the Markovian representation of the autoregressive-moving average model. Biometrika 68 (1981), no. 1, 320-322. (Gy. Terdik) 82f:62162 62M10

(with Nguyen, V. V.) Review and unification of linear identifiability concepts. SIAM Rev. 24 (1982), no. 1, 34-51. (Authors' summary) 82m:93027 93B30 (93E12)

Wood, G. V. Measures with bounded powers on locally compact abelian groups. Amer. Math. Soc. 268 (1981), no. 1, 187-210. (B. Schreiber) 82m:43003 43A10

Wood, Houston G. (with Morton, J. B.) Onsager's pancake approximation for the fluid dynamics of a gas centrifuge. J. Fluid Mech. 101 (1980), no. 1, 1-31. (Authors' summary) 82a:76063 76N99 (76U05, 80A20)

Wood, J. E. A statistical-mechanical model of the molecular dynamics of striated muscle Od. J. E. A statistical incoloring in the formal state of physiology (Proc. Summer Sem., Unio. Utah, Salt Lake City, Utah, 1980), pp. 213–259, Lectures in Appl. Math., 19, Amer.

Math. Soc., Providence, R. I., 1981. (Author's summary) 82h:92021 92A09

Wood, John C. An extension theorem for holomorphic mappings. Math. Proc. Cambridge

Philos. Soc. 88 (1980), no. 1, 125–127. (Y.-T. Siu) 82d:32021 32H99 (53C55, 58E20) On the holomorphicity of harmonic maps from a surface. Global differential go

and global analysis (Berlin, 1979), pp. 239–242, Lecture Notes in Math., 838, Springer, Berlin, 1981. (Editors) 82m:58027 58E20

Wood, John W. (with Kulkarni, Ravindra S.) Topology of nonsingular complex hypersurfaces. Adv. in Math. 35 (1980), no. 3, 239–263. (R. Mandelbaum) 82j:57008 57N15 (14J99, 32C10)

(with Libgober, Anatoly; Zagier, Don) Congruences modulo powers of 2 for the signature of complete intersections. Quart. J. Math. Oxford Ser. (2) 31 (1980), no. 122, 209–218. (R. Mandelbaum) 82j:57009 57N15 (14M10)

Wood, R. C. (with Coffman, Edward G., Jr.; Pollak, H. O.; Gelenbe, Erol) An analysis of parallel-read sequential-write systems. Performance Evaluation 1 (1981), no. 1, 62-69.

(Authors' summary) 82c:68020 68C15
Wood, W. L. (with Bossak, M.; Zienkiewicz, O. C.) An alpha modification of Newmark's method. Internat. J. Numer. Methods Engrg. 15 (1980), no. 10, 1562-1566. (Authors' summary) 82e:65082

amary) 82e:65082 65L05 (with White, I. R.; Lewis, R. W.) The numerical simulation of multiphase flow through a porous medium and its application to reservoir engineering. Appl. Math. Modelling 5 (1981), no. 3, 165-172. (Authors' summary) 82i:76088 76S05 (65P05,

Numerical integration of structural dynamics equations including natural damping and periodic forcing terms. Internat. J. Numer. Methods Engrg. 17 (1981), no. 2, 281-289. (Author's summary) 82d:73054 73K30 (65L99)

(with Craig, A. W.) Cost-efficiency study of various methods for solving the seepage through dam problem using variational inequalities. Internat. J. Numer. Methods Engrg. 17 (1981), no. 9, 1325-1333. (From the introduction) 82i:76085 76S05 (49A29, 76A60)

Wood, W. W. Inertial modes with large azimuthal wavenumbers in an axisymmetric container. J. Fluid Mech. 105 (1981), 427-449. (Author's summary) 82f:76038 761105

Woodall, D. R. Dividing a cake fairly. J. Math. Anal. Appl. 78 (1980), no. 1, 233-247. (D. H. Fremlin) 821:28006 28A75 (05A05, 05A17, 52A40, 90A16)

ad-Galloway, John (with Young, W. Hugh; Hukins, David W. L.) Description of irregularity in biological structures. Acta Cryst. Sect. A 36 (1980), no. 2, 198-205. (A. L. Rebenko) 82a:92003 92A05 (82A60)

suse, N. M. J. Twistor cohomology without sheaves. Advances in twistor theo pp. 37-45, Res. Notes in Math., 37, Pitman, San Francisco, Calif., 1979. (See 82e:83002) 83A05 (81D25)

bert See Becher, Harvey W., 82i:01027

Woodroofe, Michael A one-armed bandit problem with a concomitant variable. J. Amer. Statist, Assoc. 74 (1979), no. 368, 799-806. (John C. Gittins) 82b:62100 62L05

(with LePage, Raoul; Zinn, Joel) Convergence to a stable distribution via order tics. Ann. Probab. 9 (1981), no. 4, 624-632. (D. A. Darling) 82k:60049

(with Takahashi, Hajime) Asymptotic expansions in nonlinear renewal theory.

mm. Statist. A—Theory Methods 10 (1981), no. 21, 2113–2135. (D. Siegmund) 82m:62186 62L10

Woodrow, Robert E. (with Lachlan, A. H.) Countable ultrahomogeneous undirected graphs. Trans. Amer. Math. Soc. 262 (1980), no. 1, 51-94. (O. V. Belegradek) 82c:05083 05C99 (03C10, 03C65)

(with Rose, Bruce I.) Ultrahomogeneous structures. Z. Math. Logik Grundlag. Math. 27 (1981), no. 1, 23-30. (A. T. Nurtazin) 82c:03044 03C50 (03C10)

odruff, David S. Complete function algebras with values in a uniform field. J. India Math. Soc. (N.S.) 42 (1978), no. 1-4, 321-338 (1979). (E. Beckenstein) 82c:46084 46P05 (46J10, 54C35, 54D35)

Woodruff, Edythe P. Decompositions of S^3 which are weakly definable by crumpled cubes. The Proceedings of the 1980 Topology Conference (Univ. Alabama, Birmingham, Ala., 1980). Topology Proc. 5 (1980), 247-252 (1981). (From the text) 82g:54014

(with McAuley, Louis F.) Certain point-like decompositions of E3 with

I-dimensional images of nondegenerate elements. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 265–280, Academic Press, New York, 1981. (M.-E. Hamstrom) 82h:54013 54C10 (57N12)

ds, A. C. The asymmetric product of three homogeneous linear forms. Pacific J. Math. 93 (1981), no. 1, 237-250. (T. H. Jackson) 82k:10032 10E15 (10C25, 10E20)

Woods, E. J. (with Connes, Alain) A construction of approximately finite-dimensional non-ITPFI factors. Canad. Math. Bull. 23 (1980), no. 2, 227-230. (Ş. Strătilă) 82m:46069 46L55 (46L10)

Woods, John W. (with Ingle, Vinay K.) Kalman filtering in two dimensions: further results. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 2, 188–197. (Authors' summary) 824:94011 94A05 (93E11)

(with Stark, Henry; Paul, Indraneel; Hingorani, Rajesh) Direct Fourier reconstruction in computer tomography. IEEE Trans. Acoust. Speech Signal Process. 29 (1981), no. 2, 237-245. (Avraham A. Melkman) 82e:68099 68G10 (94A12)

ods, L. C. On the thermodynamics of nonlinear constitutive relations in gasdynamics. J. Fluid Mech. 101 (1980), no. 2, 225-241. (Author's summary) 82c:76081

On the local form of the second law of thermodynamics in continuum mechanics Quart. Appl. Math. 39 (1981/82), no. 1, 119-126. (R. R. Huilgol) 82j:80001 80A05 (00A69, 73B30)

Woods, R. Grant Epireflective subcategories of Hausdorff categories. Topology Appl. 12 (1981), no. 2, 203–220. (H. Herrlich) 82j-54014 54B30 (18B30)
 Woodsum, H. C. (with Westervelt, P. J.) A general theory for the scattering of sound by sound. J. Sound Vibration 76 (1981), no. 2, 179–186. (Authors' summary) 82g:76034

odward, Wayne A. (with Gray, H. L.) On the relationship between the S array and the Box-Jenkins method of ARMA model identification. J. Amer. Statist. Assoc. 76 (1981), no. 375, 579-587. (Basilio de B. Pereira) 82m:62208 62M10

Woodwark, John R. (with Bowyer, Adrian; Willis, Philip J.) A multiprocessor architecture for solving spatial problems. Comput. J. 24 (1981), no. 4, 353–357. (Authors' summary)

orth, George G. Numerical evaluation of preposterior expectations in the

two-parameter normal model, with an application to preposterior consensus analysis. in analysis in econometrics and statistics, pp. 133-140, Stud. Bayesian Econometrics, 1, North-Holland, Amsterdam, 1980. (See 82d:62170) 62F15
Woolcock, W. S. (with Nenciu, G.; Rasche, G.) General solution of multichannel

partial-wave dispersion relations. II. Noncoincident thresholds, one pole approximation. Helo. Phys. Acta 53 (1980), no. 1, 134-158. (Authors' summary) 82b:81119

Woolf, Harry Albert Einstein: encounter with America. Some strangeness in the proportion (Einstein Centennial Sympos., Inst. Adv. Study, Princeton, N.J., 1979), pp. 28–37,

Addison-Wesley, Reading, Mass., 1980. (See 82d:83002) 01A70 (01A60)

See also Some strangeness in the proportion, 82d:83002

Woolford, Samuel W. (with Puri, Prem S.) On a generalized storage model with moment assumptions. J. Appl. Probab. 18 (1981), no. 2, 473-481. (Hideo Osawa) 82h:60173 60K15 (60K30)

de Woolfson, Gary L. See De Woolfson, Gary L.

rd (with Bardsley, William G.; Mazat, J.-P.) Relationships between the magnitude of Hill plot slopes, apparent binding constants and factorab polynomials and their Hessians. *J. Theoret. Biol.* **85** (1980), no. 2, 247-284. (Y. Cherruault) **82c:92007** 92A09

Woollam, C. R. (with Panwalkar, S. S.; Smith, M. L.) Counterexamples to optimal permutation schedules for certain flow shop problems. Naval Res. Logist. Quart. 28 (1981), no. 2, 339-340. (Authors' summary) 82f:90050 90B35

Woolley, Barry Lee Acoustic scattering from a submerged plate. I. One reinforcing rib. J.

Acoust. Soc. Amer. 67 (1980), no. 5, 1642-1653. (R. F. Millar) 82c:73021a (73J06, 76Q05)

Acoustic scattering from a submerged plate. II. Finite number of reinforcing ribs. J. Acoust. Soc. Amer. 67 (1980), no. 5, 1654-1658. (R. F. Millar) 82e:73021b 73D99 (73J06, 76Q05)

Woolley, R. G. The angular overlap model in ligand field theory. Molecular Phys. 42 (1981), no. 3, 703-720. (R. Mirman) 82f:81093 81G55 (92A40)

See also Quantum dynamics of molecules, 82d:81175
Woolson, Robert F. (with Lachenbruch, Peter A.) Rank tests for censored matched pairs. Biometrika 67 (1980), no. 3, 597-606. (James N. Adichie) 82e:62073 62G10 (with Lachenbruch, Peter A.) Rank tests for censored randomized block designs. metrika 68 (1981), no. 2, 427-435. (P. K. Sen) 82k:62091 62G10

Wootters, W. K. Statistical distance and Hilbert space. Phys. Rev. D (3) 23 (1981), no. 2, 357–362. (Author's summary) 82a:81007 81B05 (90A07, 92A27)

Workman, David A. Abstract families of context-free grammars. Internat. J. Comput. Math. 9 (1981), no. 2, 97-115. (Author's summary) 82c:68054 68F05

981), no. 2, 97–113. (Author's summary, SR(s,k)) parsers: a class of shift-reduce bounded-context parsers. J. Comput. System Sci. 22 (1981), no. 2, 178-197. (Author's summary) 82f:68088 68F25

Worley, R. T. Estimating $|\alpha - p/q|$. J. Austral. Math. Soc. Ser. A 31 (1981), no. 2, 202-206.

(Jeffrey D. Vaaler) 82m:10052 10F05 (10F20)
Wormald, C. N. (with Fakhouri, S. Y.; Billings, S. A.) Analysis of estimation errors in the identification of nonlinear systems. Internat. J. Systems Sci. 12 (1981), no. 2, 205-225. (Authors' summary) 82h:93042 93E12

now, Alexander Morphometric consistency with the Hausdorff-Besicovich dimension J. Internat. Assoc. Math. Geol. 13 (1981), no. 3, 201-216. (Author's summary) 82i:00029 00A69 (86A99)

wicz, S. L. Operator systems and their application to the Tomita-Takesaki theory. J. Operator Theory 2 (1979), no. 2, 169–209. (Trond Digernes) 82b:46081 46L10
Pseudospaces, pseudogroups and Pontriagin duality. Mathematical problems in theoretical physics (Proc. Internat. Conf. Math. Phys., Lausanne, 1979), pp. 407–412, Lecture Notes in Phys., 116, Springer, Berlin, 1980. (È. V. Kissin) 82e:46079 46L05

(22D25, 46M99) Worrall, John Is the empirical content of a theory dependent on its rivals? The logic and epistemology of scientific change (Proc. Colloq., Helsinki, 1977). Acta Philos. Fenn. 30 (1978), no. 2-4, 298-310 (1979). (See 82i:00024) 00A25 (03A05)

Worsey, A. J. (with Papamichael, N.) A class of C² piecewise quintic polynomials. Internat. J. Comput. Math. 8 (1980), no. 4, 357–372. (A. K. Varma) 82a:41006 41A0 (with Papamichael, N.) A cubic spline method for the solution of a linear fourth-order two-point boundary value problem. J. Comput. Appl. Math. 7 (1981), no. 3, 187-189. (Authors' summary) 82j:65056 65L10

Wortis, Michael (with Chang, Shau Jin; Wright, Jon A.) Iterative properties of a one-dimensional quartic map: critical lines and tricritical behavior. Phys. Rev. A (3) 24 (1981), no. 5, 2669-2684. (Authors' summary) 82;58087 58F14 (26A18, 58F22,

(with Rottman, Craig) Exact equilibrium crystal shapes at nonzero temperature in two dimensions. Phys. Rev. B (3) 24 (1981), no. 11, 6274-6277. (Authors' summary) 82k:82054 82A68

Wörz-Busekros, Angelika Erratum: "Solutions to a degenerate system of parabolic equations from marine biology" [J. Math. Biol. 3 (1976), no. 3-4, 393-406; MR 54 #13326]. J. Math. Biol. 5 (1977/78), no. 4, 405. (Editors) 82m:35087 35K60 *Algebras in genetics. Lecture Notes in Biomathematics, 36. Springer-Verlag,

Berlin-New York, 1980. vi + 237 pp. ISBN 0-387-09978-6 (I. M. H. Etherington) 82e:92033 92A10 (17D99)

Wos, L. (with Winker, S. K.; Lusk, E. L.) Semigroups, antiautomorphisms, and involutions: a computer solution to an open problem. I. Math. Comp. 37 (1981), no. 156, 533-545. (R. S. Pierce) 82k:20103 20M15 (03B35, 20-04, 68G20)

Wosiek, J. (with Jurkiewicz, J.) Convergence properties of the Padé approximants on a lattice. Nuclear Phys. B 145 (1978), no. 2-3, 445-458. (Authors' summary) 82b:82072

Wotschke, D. (with Bucher, W.; Maurer, Hermann A.; Culik, K., II) Concise description of finite languages. Theoret. Comput. Sci. 14 (1981), no. 3, 227-246. (Authors' summary) 821:68075 68F05 (03D05)

van Wouwe, J. M. Hereditary properties in GO-spaces; a decomposition theorem and some applications. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979). Topology Proc. 4 (1979), no. 1, 201–211 (1980). (H. R. Bennett) 82a:54058

(with Bennett, Harold R.; Lutzer, David J.) Linearly ordered Eberlein compact ces. Topology Appl. 12 (1981), no. 1, 11-18. (C. M. Pareek) 82f:54046 54E35

Woyczyński, Wojbor A. (with Sundaresan, K.) Laws of large numbers and Beck convexity in metric linear spaces. J. Multivariate Anal. 10 (1980), no. 3, 442-459. (A. Bozorgnia) 82h:60018 60B12

On Marcinkiewicz-Zygmund laws of large numbers in Banach spaces and related rates of convergence. Probab. Math. Statist. 1 (1980), no. 2, 117-131 (1981). (V. K. 60B12 (60F15)

Woźniak, A. (with Findeisen, Władysław; Bailey, F. N.; Brdyś, M.; Malinowski, K.; Tatjewski, Piotr) *Control and coordination in hierarchical systems. International Series on Applied Systems Analysis, 9. Wiley-Interscience [John Wiley & Sons] Chichester-New York, 1980. x+467 pp. ISBN 0-471-27742-8 (Tamer Başar) 82b:93001 93-02 (49D27, 90A16, 92A25, 93A13)

Wożniak, Czesław Analytical mechanics of elastic media. Nonlinear dyn bodies, pp. 55-79, CISM Courses and Lectures, 227, Springer, Vienna, 1978. (See

82i:73002) 73B99

Physical and numerical discretizations in the mechanics of structures. (Polish. English and Russian summaries) Mechanics and computers, Vol. 2 (Polish), pp. 31–43, PWN, Warsaw, 1980. (Vadim Komkov) 82e:73011 73B99 (49H05, 65N30)

Nonstandard analysis and material systems in mechanics. I, II. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Tech. 28 (1980), no. 1-2, 33-36, 37-40. (Author's summary) 82m:73002 73A05 (03H10, 73B99)

Woźniak, Małgorzata Balance equations and conservation laws for multiconstituent porous media. (Polish. Russian and English summaries) Mech. Teoret. Stos. 18 (1980), no. 2, 247-263. (Author's summary) 824:73010 73B99 (35L65)

Wożniakowska, Barbara (with Palasiński, Marek) Finitely generated ideals in directed commutative BCK-algebras. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 9 (1980), no. 4, 166–169. (From the text) 82c:06024 06D99 (03G25)

(with Palasiński, Marek) Finitely generated ideals in directed commutative BCK-algebras. Math. Japon. 26 (1981), no. 3, 267-269. (Authors' summary) 82g:06019 06D99 (03G25)

Woźniakowski, H. (with Traub, J. F.) Convergence and complexity of interpolatory-Newton iteration in a Banach space. Comput. Math. Appl. 6 (1980), no. 4, 385-400. (B. Jankó)

82g:58012 58C15 (47H17, 65J15)
Woźniakowski, M. (with Kacki, E.) On the simulation methodology and its implementation for optimization by Ritz procedure. Simulation of systems '79 (Proc. Ninth IMACS) Congress, Sorrento, 1979), pp. 311-320, North-Holland, Amsterdam, 1980. (Authors' mary) 82a:49035 49D10

Wraith, Gavin C. Localic groups. Third Colloquium on Categories (Amiens, 1980), Part II. Cahiers Topologie Géom. Différentielle 22 (1981), no. 1, 61-66. (C. J. Mikkelsen) 18B25 (18F20)

Wrase, Burghard (with Tasche, Manfred) Über lineare Differentialgleichungen gebrochener Ordnung und verallgemeinerte Abelsche Integralgleichungen. Demonstratio Math. 12 (1979), no. 3, 803–820. (D. Przeworska-Rolewicz) 82e:44003 44A99 (26A33, 34A25)

Wrathall, Celia (with Miller, Webb) ★Software for roundoff analysis of matrix algorithms. Computer Science and Applied Mathematics. Academic Press, Inc. [Harcoust Brace Jovanovich, Publishers], New York-London, 1980. x + 151 pp. ISBN 0-12-497250-0 (N. N.

Abdelmalek) 82e:65047 65G05 (05C20)

Wren, Anthony General review of the use of computers in scheduling buses and their crews. Computer scheduling of public transport (Internat. Workshop, Univ. Leeds, Leeds, 1980), pp. 3-16, North-Holland, Amsterdam, 1981. (See 821:90053) 90B35

See also Computer scheduling of public transport, 827:90053

Wreszinski, W. (with Cattaneo, U.) Contraction of Lie algebra representations and Glauber coherent states. Group theoretical methods in physics (Proc. Eighth Internat. Collog., Kiryat Anavim, 1979), pp. 364-366, Ann. Israel Phys. Soc., 3, Hilger, Bristol, 1980. (See

81C40 (17B10) Wretman, Jan H. (with Cassel, Claes-Magnus; Sarndal, Carl-Erik) Prediction theory for finite populations when model-based and design-based principles are combined. With an application to a study of choice of transportation mode across the Öresund Straits. Scand. J. Statist. 6 (1979), no. 3, 97-106. (Authors' summary) 82e:62016

Scana. J. Statars. 6 (1979), no. 3, 97-100. (Authors summary) 82e-02016 62203 wriedt, Michael Charakterisierungen lokal uniform konvexer Mengen. Arch. Math. (Basel) 35 (1980), no. 6, 548-553 (1981). (P. D. Morris) 82k:46029 46B20 (52A07) 35 (1980), no. 6, 548-553 (1981). (P. D. Morris) 82k:46029 46B20 (52A07) Prākompakte Mengen in lokalkonvexen Rāumen. Math. Nachr. 98 (1980), 329-339. (Tosun Terzioğlu) 82k:46013 46A50 (46A20)

Wrigge, Staffan Calculation of the Taylor series expansion coefficients of the Jacobian elliptic function sn(x,k). Math. Comp. 36 (1981), no. 154, 555-564. (Author's summary) 824:65023 65D20 (33A25)

See also Fransén, Arne, 82m:65002

Wright, A. L. Nonexistence of complete sufficient statistics for stationary k-state Markov chains, k > 3. Ann. Inst. Statist. Math. 32 (1980), no. 1, 95-97. (Shelemyahu Zacks) 62M05 (62B05)

(with Newman, C. M.) An invariance principle for certain dependent sequences. Probab. 9 (1981), no. 4, 671-675. (S. K. Srinivasan) 82m:60034

Wright, C. C. Arcs and cars: an approach to road traffic management based on graph theory. Graph theory and combinatorics (Proc. Conf., Open Univ., Milton Keynes, 1978), pp. 133-146, Res. Notes in Math., 34, Pitman, San Francisco, Calif., 1979. (Colin J. H. Diarmid) 82b:90053 90B20 (90B10) (with Cummings, P. T.) Solution of the Ornstein-Zernike equation for a soft-core McDiarmid) 82h:90053

Yukawa fluid. II. Numerical results. J. Statist. Phys. 24 (1981), no. 2, 389-401. (Authors' 82A50 mary) 82f:82052a

(with Cummings, P. T.) Solution of the Ornstein-Zernike equation for a soft-core Yukawa fluid. III. A restricted model for electrolytes and fused salts. J. Statist. Phys. 24 (1981), no. 3, 405-412. (Authors' summary) 82f:82052b 82A50 (82A55)

(with Cummings, P. T.; Morriss, G. P.) Analytic solution of the RISM equation for symmetric diatomics with Yukawa closure. Molecular Phys. 43 (1981), no. 6, 1299-1309. (Authors' summary) 82h:81151 81G55

Wright, D. J. See Wright, Donald J.

Wright, David (with Herzog, Marcel) Characterization of a family of simple groups by their character table. II. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 2, 168-170. (Authors' 20D08 (20C15) mary) 82e:20023

Summary) december 2010s (20.15)
Wright, Donald J. (with Styer, D.) Results on bi-univalent functions. Proc. Amer. Math. Soc. 82 (1981), no. 2, 243–248. (T. J. Suffridge) 82c:30018 30C45 (30C75) Wright, E. M. (with Walsh, T. R. S.) The k-connectedness of unlabelled graphs. J. London

The Tarry-Escott and the "easier" Waring problems. J. Reine Angew. Math. 311/312 (1979), 170-173. (O. H. Körner) 82f:10059 10J06 (10A45)

1/314 (1979), 10-15. (C. H. Kuther) eathers 1000 (10040) The number of connected sparsely edged graphs. III. Asymptotic results. J. Graph etc. 4 (1980), no. 4, 393–407. (R. C. Read) 824:05670 05C30

arnside's lemma: a historical note. J. Combin. Theory Ser. B 30 (1981), no. 1, 89-90. (David E. Daykin) 824-05004 05-03 (01A55, 01A60)
Wright, F. J. (with Berry, M. V.) Phase-space projection identities for diffraction

atastrophes. J. Phys. A 13 (1980), no. 1, 149-160. (J. S. Joel) 82k:78006 78A45 (58C28)

The Stokes set of the cusp diffraction catastrophe. J. Phys. A 13 (1980), no. 9, 2913–2928. (I. Stewart) 82b:58020 58C28 (35B32, 58G15, 78A45) Singularities of plane curves which occur as singular sections of the bifurcation sets of the cuspoid catastroph es. J. Phys. A 14 (1981), no. 7, 1587-1599. (James Callahan)

58C28 (78A10) Wright, F. T. A strong law for variables indexed by a partially ordered set with applications to isotone regression. Ann. Probab. 7 (1979), no. 1, 109-127. (T. Robertson) 82c:60058

(with Robertson, Tim) Statistical inferences for ordered parameters: a personal view of isotonic regression since the work by Barlow, Bartholomew, Bremner and Brunk. Modern statistics: methods and applications (Amer. Math. Soc. Short Course, San Anton Tex., 1980), pp. 55-71, Proc. Sympos. Appl. Math., XXIII, Amer. Math. Soc., Providence, R.I., 1980. (See 82c:62003) 62G05 R.I., 1980. (See 82c:62003)

The empirical discrepancy over lower layers and a related law of large numb Ann. Probab. 9 (1981), no. 2, 323-329. (M. D. Burke) 821:60065 60F15 (62G99)

The asymptotic behavior of monotone regression estimates. Ann. Statist. 9 (1981), no. 2, 443-448. (C. G. Khatri) 82k:62047 62E20

ns of random variables indexed by a partially ordered set and the estimation of ntegral regression functions. Ann. Statist. 9 (1981), no. 2, 449-452. (M. M. Leonenko)

60F17 (60G50, 62G05) (with Engelhardt, Max; Bain, Lee J.) Inferences on the parameters of the nunders fatigue life distribution based on maximum likelihood estimation.

netrics 23 (1981), no. 3, 251-256. (Authors' summary) 82i:62139 Technon 62N05 (62F10)

Monotone regression estimates for grouped observations. Ann. Statist. 10 (1982), no. 1, 278-286. (Author's summary) 82m:62098 62G05

von Wright, Georg Henrik Problems and prospects of deontic logic: a survey. Modern logic

—a survey, pp. 399-423, Synthese Library, 149, Reidel, Dordrecht, 1981. (See 82f:03002)

Explanation and understanding of action. Rev. Internat. Philos. 35 (1981), no. 1, 127-142. (N. C. A. da Costa) 82k:03028 03B60 (03A05)

See also Hottois, Gilbert, 82a:03020 Wright, Jon A. (with Chang, Shau Jin) Transitions and distribution functions for chaotic systems. Phys. Rev. A (3) 23 (1981), no. 3, 1419-1433. (Frederick R. Marotto) 82f:58058

(with Chang, Shau Jin; Wortis, Michael) Iterative properties of a one-dim quartic map: critical lines and tricritical behavior. Phys. Rev. A (3) 24 (1981), no. 5, 2669-2684. (Authors' summary) 82j:58067 58F14 (26A18, 58F22, 82A05)

Wright, Larry A. (with Tucker, Howard G.) An integral strong law of large numbers for processes with independent increments. Israel J. Math. 38 (1981), no. 3, 177-181. (W. E. Pruitt) 82e:60116 60J30 (60F15)

Wright, Lynne C. A comparison theorem for higher order elliptic differential equati Math. Nachr. 98 (1980), 49–52. (C. A. Swanson) 82k:35007 35B05 (35J5) (with Lewis, Roger T.) Comparison and oscillation criteria for selfadjoint 35B05 (35J50)

vector-matrix differential equations. Pacific J. Math. 90 (1980), no. 1, 125-134. (G. J. Etgen) 82bc34041 34C10

Wright, Margaret H. (with Gill, Philip E.; Murray, Walter; Saunders, Michael A.) Methods for large-scale nonlinear optimization. Electric power problems: the natical challenge (Proc. Conf., Seattle, Wash., 1980), pp. 352-377, SIAM, Philadelphia, Pa., 1980. (Authors' summary) 82c:90079 90C30 (90-02, 90C06) (with Gill, Philip E.; Murray, Walter; Saunders, Michael A.) Aspects of mathematical modelling related to optimization. Appl. Math. Modelling 5 (1981), no. 2, 71-83. (Authors' summary) 82e:90116 90C99 (00A69)

Wright, Steve Similarity orbits of approximately finite C*-algebras. Pacific J. Math. 87 (1980), no. 1, 223–231. (Mi-Soo Smith) 82g:46103 46L05

Wright, Tommy Truncated Bayes stratified sequential procedures. Optimizing methods in statistics (Proc. Internat. Conf., Indian Inst. Tech., Bombay, 1977), pp. 525-540, Academic Press, New York, 1979. (Shelemyahu Zacks) 824:62129 62L12

Wright, William G. (with Brown, Gerald G.) Automatic identification of embedded structure in large-scale optimization models. Computer-assisted analysis and model simplification (Proc. First Sympos., Univ. Colorado, Boulder, Colo., 1980), pp. 369–388,
Academic Press, New York, 1981. (See 82g:00016) 90C08 (90C05)
Wrightson, Graham (with Sickmann, Jörg) Paramodulated connection graphs. Acta Inform.

13 (1980), no. 1, 67-86. (M. M. Richter) 82b:03036 03B35 (68G15)

Wrigley, Neil See Statistical applications in the spatial sciences, 82f:90003
Wrobel, Volker The asymptotic behavior of polynomially compact operators. Arch.
(Basel) 34 (1980), no. 3, 254–258. (T. A. Gillespie) 82a:47023 47B05 (47A65)

bblevski, Roger (with Reilly, Norman R.) Suprema of classes of generalized Scringer varieties of lattice ordered groups. Math. Z. 176 (1981), no. 3, 293–309. (Marlow Anderson) 82k:06023 06F15 (08B15)

iski, Andrzej On reducts of intermediate logics. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 9 (1980), no. 4, 176–179. (Helen Skala) 82æ03033 03B55 (with Kabziński, Jacek K.; Porębska, M.) On the {↔, ~}-reduct of the intuitionistic consequence operation. Studia Logica 40 (1981), no. 1, 55–66. (Authors'

summary) 82e:03023 03B55 (03B99) Wschebor, M. (with Cabaña, E. M.) An estimate for the tails of the distribution of the supremum for a class of stationary multiparameter Gaussian processes. J. Appl. Probab. 18 (1981), no. 2, 536-541. (William C. Torrez) 82e:60067 60G17 (60G15)

Wu, Alexander S. (with Barlow, Richard E.) Preposterior analysis of Bayes estimators of

ean life. Biometrika 68 (1981), no. 2, 403-410. (A. P. Basu) 82i:62137 62N05 (62F15)

Wu, Angela Y. (with Rosenfeld, Azriel) SIMD machines and cellular d-graph automata. IEEE Trans. Comput. 30 (1981), no. 5, 370-372. (Authors' summary) 82d:68038 68D20 (68B20)

Wu, C. H. (with Scher, H.) Random walk theory of a trap-controlled hopping transport process. Proc. Nat. Acad. Sci. U.S.A. 78 (1981), no. 1, part 1, 22-26. (Authors' summary) 82a:82053 82A70

Wu, Cang Pu The optimal search for random objects. (Chinese) Acta Math. Appl. Sinica 2 (1979), no. 3, 197–205. 82e-90049 90B40

Wu, Cheng Li (with Feng, Da Hsuan) The boson-fermion hybrid representation

ation. I. Ann. Physics 135 (1981), no. 1, 166-207. (Authors' summary) 82i:81168 81H10

Wu, Cheng Xun (with Guo, Mao Zheng) The stationary diffusion processes generated by second-order differential operators and their probability currents. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 3-4, 523-540. (Authors' summary) 82;60151 60J60 (60J25)

Wu, Chien Fu Some iterative procedures for generating nonsingular optimal designs. Optimal design theory. Comm. Statist. A-Theory Methods 7 (1978), no. 14, 1399-1412. (See 82g:62106) 62K05

(with Cheng, Ch'ing Shui) Balanced repeated measurements designs. Ann. Statist. 8 (1980), no. 6, 1272-1283. (Stratis Kounias) 82c:62100 62K05 (05B05)

On the robustness and efficiency of some randomized designs. Ann. Statist. 9 (1981), no. 6, 1168-1177. (Ch'ing Shui Chèng) 82m:62182 62K99

(with Scott, Alastair) On the asymptotic distribution of ratio and regression stimators. J. Amer. Statist. Assoc. 76 (1981), no. 373, 98-102. (K. Afsarinejad) 62D05 (62E20)

(with Bohrer, Robert; Chow, Winston; Faith, Ray; Joshi, V. M.) Multiple three-decision rules for factorial simple effects: Bonferroni wins again! J. Amer. Statist.

Assoc. 76 (1981), no. 373, 119-124. (Authors' summary) 821:62106 62H30

Wu, Chien H. (with Canfield, Thomas R.) Wrinkling in finite plane-stress theory. Quart. Appl. Math. 39 (1981/82), no. 2, 179-199. (Authors' summary) 82h:73003

Wu, Ching Jung (with Seiden, Esther) On construction of three mutually orthogonal Latin squares by the method of sum composition. Essays in probability and statistics, pp. 57-64, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 82j:05031 05B15 (62K10) Wu, Chong Xin See Wu, Cong Xin

Wu, Chu Tao (with Posner, Marc E) Linear max-min programming. Math. Program 20 (1981), no. 2, 166–172. (Authors' summary) 82j:90043 90C05

Wu, Chuan Lin (with Feng, Tse Yun) The reverse-exchange interconnection network. Proceedings of the 1979 International Conference on Parallel Processing (Bellaire, Mich., 1979), pp. 160-174, IEEE, New York, 1979. (Authors' summary) 82d:94085 94C10 (with Feng, Tse Yun) Fault-diagnosis for a class of multistage interconnection

networks. Proceedings of the 1979 International Conference on Parallel Processing (Bellaire, Mich., 1979), pp. 269-278, IEEE, New York, 1979. (See 82b:68024) 94C10 (with Feng, Tse Yun) The universality of the shuffle-exchange network. IEEE Trans. Comput. 30 (1981), no. 5, 324-332. (Authors' summary) 82d:68006

(68B20) Wu, Chuan Y. (with Fang, Kai Tai) The extreme value problem for some probability functions. (Chinese) Acta Math. Appl. Sinica 2 (1979), no. 2, 132-148. (Winston T. Lin)

82b:62135 62N10 (62H99)

Wu, Cong Xin Perfect matrix algebras. I. The problems of multiplicative continuity. , Coing Ain Petreet matrix algebras. 1 nie problems of multiplicative continuity. (Chinese English summary) Acta Math. Sinica 21 (1978), no. 2, 161–170. (From the summary) 82c:46062 46H99 (46L99)

Wu, F. Y. On the equivalence of the Ising model with a vertex problem. J. Phys. A 13 (1980), no. 9, L303-L305. (Author's summary) 82f:82012 82A05 (05C99, 82A68) Exact results for a dilute Potts model. J. Statist. Phys. 23 (1980), no. 6, 773-782. (H. N. V. Temperley) 82b:82034 82A25

Dilute Potts model, duality and site-bound percolation. J. Phys. A 14 (1981), no. 2, L39-L44. (Author's summary) 82h:82057 82A42 (82A67)

(with Zia, R. K. P.) Critical point of a triangular Potts model with two-and three-site interactions. J. Phys. A 14 (1981), no. 3, 721–727. (Authors' summary) 82A25 (82A67)

(with Kinzel, Wolfgang; Selke, W.) A Potts model with infinitely degenerate ground state. J. Phys. A 14 (1981), no. 10, L399-L404. (Authors' summary) 82j:82028 82A25 (82A68)

(with Sun, Xin) The critical isotherm of the modified F model. (French summary) Statphys 14 (Proc. Fourteenth Internat. Conf. Thermodynamics and Statist. Mech., Univ. Alberta, Edmonton, Alta., 1980). Phys. A 106 (1981), no. 1-2, 292-300. (See 824:82003) 82A25

Wu, Fei (with Wu, Lin Xiang) The flow field in a force-free magnetic field. Chinese Astronom. Astrophys. 5 (1981), no. 2, 235–241. (Authors' summary) 82i:76104 76W05
Wu, Hua Mo (with Guo, Ben Yu) Numerical solution of KdV equation. J. Math. Anal.
Appl. 82 (1981), no. 2, 334–345. (Authors' summary) 82m:65113 65P05 (35Q20)

Wu, Hui Fang (with Yu, You Wen) The relativistic deuteron wave function. (Chinese English summary) Phys. Energi. Fort. Phys. Nuclear. 4 (1980), no. 1, 1-7. (Tuan W. Chen) 82h:81063 81D10 (81G35)

Wu, Hung Hsi Some theorems on projective hyperbolicity. J. Math. Soc. Japan 33 (1981), no. 1, 79-104. (Robert E. Greene) 82j:53061 53C05 (32H20, 53B10) (with Greene, R. E.) Harmonic forms on noncompact Riemann

n and Kähler manifolds. Michigan Math. J. 28 (1981), no. 1, 63-81. (Józef Dodziuk) 82e:58005 58A14 (53C21)

n: Chern, Differential Geometry, 82c:58002 and Chern, Shiing See also Sym n. 82h:01074

Wu, Ja Ling (with Pei, Soo Chang) Fast biased polynomial transforms for two-dimensional convolutions. Electron. Lett. 17 (1981), no. 15, 547-548. (Authors' summary) 82h:94005 94A05 (12C20, 65R10)

Jang Mei G. L^p-densities and boundary behaviors of Green potentials. India Math. J. 28 (1979), no. 6, 895-911. (H. L. Jackson) 82b:31012 31B25 (31A20)
On parabolic measures and subparabolic functions. Trans. Amer. Math. Soc. 251 (1979), 171-185. (J. C. Taylor) 82b:31019a 31C99 (31D05, 35K99)

(with Kaufman, Robert P.) Removable singularities for analytic or subharmonic Ark. Mat. 18 (1980), no. 1, 107-116. (Albert Baernstein, II) 82e:30048

Harmonic measures and level sets of conformal mappings. J. London Math. Soc. (2) 22 (1980), no. 2, 263-268. (Bernt Øksendal) 82e:30015 30C35 (30C55, 30C85) Erratum to: "On parabolic measures and subparabolic functions". Math. Soc. 259 (1980), no. 2, 636. (Editors) 82b:31019b 31C99 (31D05, 35K99)

- Wu, Julian J. Variational methods of convolution integral and of large spring constants—a numerical comparison. Proceedings of the 1980 Army Numerical Analysis and Computers Conference (NASA Res. Center, Moffett Field, Calif., 1980), pp. 427-439, ARO Rep. 80, U. S. Army Res. Office, Research Triangle Park, N.C., 1980. (Author's sum 82a:65052 65L05 (73K20)
- Wu, Jun Heng (with Chang, Geng Zhe) On mathematical foundations of Bézier's method. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 1, 41-49. (Authors' summary) 82i:65007 65D15
- Wu, Kathleen John m Natural deduction rules for free logic. Logique et Anal. (N.S.) 22
- (1979), no. 88, 435-445. (Henry Africk) 82:403009 03810

 Wu, Li Sheng (with Feng, Ke Qin; Zhu, Lie) Affine classification of Boolean functions and the construction of 3-(λ, k, 2") designs. (Chinese) Acta Math. Appl. Sinica 1977, no. 3, 46-55. (Derbian F. Hsu) 82d:94071a 94C10 (05B05, 62K10)
- (with Zhu, Lie) Affine classification of Boolean functions and the construction of $3-(\lambda, k, 2^n)$ designs. II. (Chinese) Acta Math. Appl. Sinica 2 (1979), no. 4, 344-349. 94C10 (05B05, 62K10)
- Wu, Lian Da (with Tong, Fu) A third-order solution of Vinti's problem with explicit expressions for the Poisson brackets. Chinese Astronom. Astrophys. 5 (1981), no. 2, 192-201. (From the introduction) 82h:70032 70M05 (58F05, 70F15)
- Wu, Lin Xiang (with Wu, Fei) The flow field in a force-free magnetic field. Chin Astronom. Astrophys. 5 (1981), no. 2, 235-241. (Authors' summary) 82i:76104
- Wu, Mao Qing (with Jiang, Li Shang; Shen, Shu Min; Qin, Gan; Yan, Da Kang) Finite element methods for solving structures composed of plate-beams, with their error estimate. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 2, 154-171. (From the summary) 82f:73033 73K25
- Wu, Min Yen Solution of certain classes of linear time-varying systems. Internat. J. Control 31 (1980), no. 1, 11-20. (Author's summary) 82b:93026
 - A successive decomposition method for the solution of linear time-varying systems.

 Internat. J. Control 33 (1981), no. 1, 181–186. (Asen L. Dončev) 82e:93073 93C50
- Wu, Ming Jing (with Ling, Chih Bing) Evaluation of integrals of Howland type involving a Bessel function. Math. Comp. 38 (1982), no. 157, 215-222. (Authors' sum 65A05 (65D20) 82m:65003
- Wu, Pei Yuan Conditions for completely nonunitary contractions to be spectral. J. Funct. Anal. 31 (1979), no. 1, 1-12. (Author's summary) 82d:47014 47A45 (47B40)
 - On the weakly closed algebra generated by a weak contraction. J. Operator Theory 2 (1979), no. 1, 141-148. (E. Durszt) 82b:47011 47A45
 - On a conjecture of Sz.-Nagy and Foiaș. Acta Sci. Math. (Szeged) 42 (1980), no. 3-4, 331-338. (Editors) 82f:47013 47A45
 - On the quasisimilarity of hyponormal contractions. Illinois J. Math. 25 (1981), no. 3,
 - 498-503. (William W. Hastings) 82j:47037 47B20 (47A45) C.0 contractions: cyclic vectors, commutants and Jordan models. J. Operator Theory
 - 5 (1981), no. 1, 53-62. (Mitsuru Uchiyama) 82f:47014 47A45 C11 contractions are reflexive. II. Proc. Amer. Math. Soc. 82 (1981), no. 2, 226-230. (E. Durszt) 82j:47008 47A15 (47A45, 47C05)
- Wu, Shi Yu (with Wongtawatnugool, C.; Shih, Chia C.) Eigenvalue problem for an infinite tridiagonal matrix. J. Math. Phys. 22 (1981), no. 4, 633-636. (Authors' summary) 15A18 (15A57, 47A70, 82A42)
- (with Chen, Y. C.; Sinai, J. J.) Excitation spectra of disordered systems. I. General theory. Phys. Status Solidi (B) 104 (1981), no. 2, 441-452. (S. K. Srinivasan) 82j:82061
- Wu, Shun Tang (with Wang, Ren Hong) On a problem of rational spline interpolation. (Chinese English summary) Numer. Math. J. Chinese Univ. 3 (1981), no. 2, 165-175. (Authors' summary) 82m:65010 65D07 (41A15)
- Wu, Shyue B. (with Liu, Ming T.) A cluster structure as an interconnection network for large multimicrocomputer systems. *IEEE Trans. Comput.* **30** (1981), no. 4, 254–264. (Authors' summary) **82b:68023** 68B20 (68E10)
- Wu, T. S. (with McMahon, Douglas C.) Notes on topological dynamics. IV. Relative equicontinuity and its variations. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 2-3, part 1, 277-281. (J. Auslander) 82b:54057a 54H20
 - (with McMahon, Douglas C.) Notes on topological dynamics. V. Equicontinuous structure relations of minimal transformation groups. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 2-3, part 1, 283-294. (J. Auslander) 82b:54057b 54H20
 - (with McMahon, Douglas C.) Distal homomorphisms of nonmetric minimal flows. Proc. Amer. Math. Soc. 82 (1981), no. 2, 283-287. (M. Shmuel Glasner) 82i:54074 54H20
- Wu, Tai Tsun (with Stamatescu, Ion Olimpiu) Perturbation theory for two-dimensional gauge models. Nuclear Phys. B 143 (1978), no. 3, 503-520. (Authors' summary) 81E10
 - (with McCoy, Barry M.) Some properties of the nonlinear partial difference equation for the Ising-model correlation function. Phys. Lett. A 80 (1980), no. 2-3, 159-162. (Authors' summary) 82b:82076 82A67 (39A12)
 - (with McCoy, Barry M.) Lattice gauge theory in four dimensions: decoupling points and a dual symmetric perturbation theory. Nuclear Phys. B 190 (1981), no. 3, FS 3, 519-541. (Authors' summary) 82i:81106 81E25 (82A68) 519-541. (Authors' summary) 82i:81106
 - (with Albeverio, Sergio; Hoegh-Krohn, Raphael) A class of exactly solvable
 - three-body quantum mechanical problems and the universal low energy behavior. Phys. Lett. A 83 (1981), no. 3, 105-109. (Authors' summary) 82h:81017
 - (with Ruijgrok, Th. W.) A solvable nonlinear Boltzmann equation. Phys. Lett. A 85 (1981), no. 8-9, 420-422. (Authors' summary) 82i:82042 82A40 (with Gaudin, Michel; McCoy, Barry M.) Normalization sum for the Bethe's
 - hypothesis wave functions of the Heisenberg-Ising chain. *Phys. Rev. D* (3) 23 (1981), no. 2, 417–419. (Authors' summary) 82a:82044 82A67 (with McCoy, Barry M.; Perk, Jacques H. H.) Ising field theory: quadratic

- difference equations for the n-point Green's functions on the lattice. Phys. Rev. Lett. 46
- (1981), no. 12, 757-760. (Authors' summary) 82b:82077 82A67 (39A10) Wu, Wen Jun de Rham-Sullivan measure of spaces and its calculability. Symposium 1979 (Proc. Internat. Sympos., Berkeley, Calif., 1979), pp. 229-245, Springer, New York, 1980. (J. Stasheff) 82i:55022 55P62 (55-02)
- Wu, Wên Têng (with Chin, Yung Chang) Suboptimal control of output-regulator problems with incomplete output feedback via moving model. (Chinese summary) J. Chi Engrs. 4 (1981), no. 2, 125-129. (Authors' summary) 82m:93055 93C10 (93C35)
- Wu, Wen Tsûn See Wu, Wen Jun Wu, X. (with Hurst, S. L.) A new universal logic gate (ULG3) based on the Reed-Muller canonic expansion. Internat. J. Electron. 51 (1981), no. 6, 747-762. (Authors' summary) 82m:94063 94C10
- (with Chen, Xie Xiong; Hurst, S. L.) Mapping of Reed-Muller coefficients and the isation of exclusive OR-switching functions. Proc. IEE-E 129 (1982), no. 1, 15-20. (Authors' summary) 82m:94064 94C10
- Wu, Xue Mou Piecewise and unified polynomial approximation. Transforming concepts inmathematics. III. (Chinese) Wuhan Daxue Xuebao 1977, no. 3, 13-38. (Author's summary) 82m:41009 41A10
 - Studies and applications of pansystems analysis. Ia. A brief survey of pansystems analysis. (Chinese) Wuhan Daxue Xuebao 1978, no. 3, 87-105. (Editors) 82j:93002a 93A10 (03B52, 03E72)
 - Fuzziness, reliability and pansystems analysis. III. (Chinese) J. Wuhan Inst. Iron Steel Tech. 1979, no. 1, 7-16. (Editors) 82g:94033a 94D05 (68G99, 90Bxx)
 - Fuzziness, reliability and pansystems analysis. IV. (Chinese) J. Wuhan Inst. Iron
 - Steel Tech. 1979, no. 4, 1-9. (Editors) 82g;94033b 94D05 (68G99, 90Bxx)
 Studies and applications of pansystems analysis. Ib. A brief survey of pansystems analysis. (Chinese) Wuhan Daxue Xuebao 1979, no. 1, 104-117. (Editors) 82j:93002b 93A10 (03B52, 03E72)
 - (with Yu, Hong Zu; Li, Chu Lin) Binary comparison average method for fuzzy pattern recognition. (Chinese. English summary) J. Huazhong Inst. Tech. 1980, no. 2, Special Issue on Fuzzy Math, iv-v, 67-70. (Authors' summary) 82a:68176
 - Studies and applications of pansystems analysis, IV. Pansystem
 - observocontrollability, pansystem logic and fuzziness. (Chinese. English summary) J. Huazhong Inst. Tech. 1980, no. 2, Special Issue on Fuzzy Math, i, 1–14. (Editors) 93A10 (03B52, 03E72)
 - (with Zhu, Yuan Zhao) Pansystem analysis of dynamic yinyang logic and fuzziness. I. (Chinese. English summary) J. Huazhong Inst. Tech. 1980, no. 2, Special Issue on Fuzzy Math, ii, 39–41. (Authors' summary) 824:03037 03B52 (03E72, 68B10, 94D05)

 Some problems concerning pansystems analysis and fuzziness of vision. (Chinese.
 - English summary) J. Huazhong Inst. Tech. 1980, no. 2, Special Issue on Fuzzy Math, iv, 61-66. (Author's summary) 82f:92055 92A27 (03E72)
 - Pansystems analysis—a new exploration of interdisciplinary investigation. Studies and applications of pansystems analysis. III. (Chinese. English summary) With appendices of certain discussions of medicine, chemistry, logic and econ
- Exploration 1981, no. 1, 125-164. (Editors) 82j:93002c 93A10 (03B52, 03E72, 92A07) Wu, Yong Shi (with Parisi, Giorgio) Perturbation theory without gauge fixing. Sci. Sinica 24 (1981), no. 4, 483-496. (Authors' summary) 82k:81075 81E99
- Wu, Zhen De The KO-groups and J-groups of the complex Stiefel manifolds W_{n,2}. (Chinese) Acta Math. Sinica 24 (1981), no. 2, 185–189. (From the introduction) 82m:55021 55R40
 - J-groups of lens spaces L"(32). (Chinese) Acta Math. Sinica 24 (1981), no. 3, 365-371. (Editors) 82m:55018 55050 (55052, 57R40)
 - (with Liu, Zong Ze) The KO-groups and J groups of real (quaternionic) Stiefel manifolds V_{n,2}(X_{n,2}). (Chinese) Acta Math. Sinica 24 (1981), no. 3, 378-382. (Authors'
 - summary) 82m:55022 55R50 (55Q50, 55R40) J-groups of lens spaces Ln(4). (Chinese) Acta Math. Sinica 24 (1981), no. 4, 492-493. 55Q50 (55Q52) (From the text) 82m:55019
- Wuidar, J. (with Munster, M.) Majoration de type analytique pour une intégrale particulière. (English summary) Bull. Soc. Roy. Sci. Liège 49 (1980), no. 1-2, 38-43. (Angelo Favini) 82e:46057 46F10 (35S05)
 - (Angelo Favini) 82e:46057 Sur un critère de J. Sjöstrand caractérisant le "wave front set" analytique des distributions. (English summary) Bull. Soc. Roy. Sci. Liège 49 (1980), no. 5-8, 219-234. (Gunther A. Uhlmann) 82j:35143 35805 (58G15)
- Wulbert, D. E. (with Fisher, S. D.; Morris, Peter D.) Unique minimality of Fourier projections. Trans. Amer. Math. Soc. 265 (1981), no. 1, 235–246. (Colin Bennett) 46E15 (41A35, 42A05) 82e:46038
- Wulczyn, Gregory A generalization of some L. Carlitz identities. A collection of manuscripts cci sequence, pp. 159–160, Fibonacci Assoc., Santa Clara, Calif., 1980. 15 10A40 (05A19) ited to the Fibo (L. Carlitz) 82k:10015
- (U. Carinz) Bazziousi (Control Wall, Wm. A. Abstract data types: a retrospective and prospective view. Mathematical foundations of computer science, 1980 (Proc. Ninth Sympos., Rydzyna, 1980), pp. 94–112, Lecture Notes in Comput. Sci., 88, Springer, Berlin, 1980. (Author's summary) 82a:68039
- Wulfsohn, Aubrey Produit tensoriel d'espaces de Fréchet nucléaires. Québec 4 (1980), no. 2, 175-177. (N. Tipa) 82a:46039 46F05 (46M05)

 Wulst, Michael On a system of nonlinear partial differential equations arising in the theory
- of heat and mass transfer in a nonlinear second-order fluid. Nonlinear analysis (Berlin, 1979), pp. 437-439, Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1981, 2, Akademie-Verlag, Berlin, 1981. (See 82k:49004) 80A20 (35Q20)
 Wunderlich, Marvin C. (with Guy, Richard K.) Computing unitary aliquot sequences-
- preliminary report. Proceedings of the Ninth Manitoba Conference on Numerical Mathematics and Computing (Univ. Manitoba, Winnipeg, Man., 1979), pp. 257-270, Congress. Numer., XXVII, Utilitas Math., Winnipeg, Man., 1980. (Rodney T. Hansen) 10A40 (10A20)
- Wunderlich, Walter Regelflächen mit oskulierendem Striktionsband. Österreich. Akad. Wiss. Math.-Natur. Kl. Sitzungsber. II 188 (1979), no. 8-10, 361-384. (C. Thas)
 - Neue Wackelikosaeder. Anz. Österreich. Akad. Wiss. Math.-Natur. Kl. 117 (1980), no. 2, 28-33. (H. Sachs) 82d:51012 51N20 (52A25, 53A17)

Wackeige Doppelpyramiden. Anz. Osterreich. Akad. Wiss. Math.-Natur. Kl. 117 (1980), no. 5, 82-87. (O. Bottema) 82e:51034 51M20
Zur projektiven Invarianz von Wackelstrukturen. (English and Russian summaries)

Math. Mech. 60 (1980), no. 12, 703-708. (Hellmuth Stachel) 82h:53017 Z. Angew. Math. Med 53A17 (51N05, 70B15)

Regelflächen festen Dralls mit konstant gedralltem Striktionsband. With a loose ssian summary. Czechoslovak Math. J. 31(106) (1981), no. 3, 457-468. (Hans Sachs) Russian sum 82j:53023 53A25

Wackelikosaeder, Geom. Dedicata 11 (1981), no. 2, 137-146. (J. Hoschek) 82h:51031 51M20 (52A25)

rfel, Tilmann Ein Freiheitskriterium für pro-p-Gruppen mit Anwendung auf die Struktur der Brauer-Gruppe. Math. Z. 172 (1980), no. 1, 81–88. (S. P. Demuškin) 82c:20057

On the divisible part of the Brauer group of a field. Proc. Amer. Math. Soc. 84

On the divisione part of the Brader group of a lent. Froc. Amer. Main. Soc. 84 (1982), no. 2, 173–174. (F. DeMeyer) \$2m:12016 12G05 (20E18)

Warges, Harald A specification technique based on predicate transformers. Acta Inform. 15 (1981), no. 4, 425–445. (Author's summary) 82i:68013 68B10

Wussing, Hans Prof. Dr. habil. Kurt-R. Biermann zum 60. Geburtstag. NTM Schr.

Geschichte Natur. Tech. Medizin 17 (1980), no. 1, 124. (Editors) 82e:01106 01A70 See also Flacksmeyer, J. H.; Doltsinis, J. St.; Knudson, W. C.; Szimmat, J.;

willam, K. J.) Eulerian and Lagrangian techniques for elastic and inelastic large deformation processes. Computational methods in nonlinear mechanics (Proc. Second Internat. Conf., Univ. Texas, Austin, Tex., 1979), pp. 13–66, North-Holland, Amsterdam, 1980. (Authors' summary) 82c-73024 73E99 stmann, Felix Zwei unbekannte Briefe von F. W. Bessel in der Universitätsbibliothek

Leipzig. NTM Schr. Geschichte Natur. Tech. Medizin 16 (1979), no. 2, 64-69. (Editors) 01A55 (01A70)

Wuttich, Klaus Fragen des Psychologismus in der epistemischen Logik.

Begriffsschiffer-dena Frege Conference (Friedrich-Schiller-Univ., Jena, 1979) (German), pp. 519-533, Friedrich-Schiller-Univ., Jena, 1979. (Charles F. Kielkopf) 82h:03023 03A05 (03B60)

Wuytack, L. (with Bultheel, A.) Stability of numerical methods for computing Padé approximants. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 267-272, Academic Press, New York, 1980. (A. Magnus) 82e:65018 (41A21)

Wyatt, John L., Jr. (with Chua, Leon O.; Gannett, Joel W.; Göknar, İzzet Cem; Green, Douglas N.) Energy concepts in the state-space theory of nonlinear n-ports. I. Passivity. IEEE Trans. Circuits and Systems 28 (1981), no. 1, 48-61. (François Aribaud) 82a:94109 94C05 (58F40, 93C10, 93C15)

Wyatt, Robert E. (with Hutchinson, John S.) Quantum ergodicity for time-dependent wave-packet dynamics. Phys. Rev. A (3) 23 (1981), no. 4, 1567-1584. (Steven M. Moore) 82f:81020 81C20 (58G15)

bourne, B. G. Enumeration of group-invariant quartic polynomials in Higgs scalar fields. Austral. J. Phys. 33 (1980), no. 6, 941–949. (Author's summary) 82d:81055 81C40 (22E70, 81E99)

(with Luan, De Huai) The alternating group: branching rules, products and plethysms for ordinary and spin representations. J. Phys. A 14 (1981), no. 8, 1835-1848. (Authors' summary) 82:20030 20C35 (81C40)

Wybraniec-Skardowska, Urszula On the theory of labels-tokens. Polish Acad. Sci. Inst.

Philos. Sociol. Bull. Sect. Logic 10 (1981), no. 1, 30-34. (Editors) 82e:03026

Wyler, D. (with Rittenberg, V.) Sequ ences of $Z_2 \oplus Z_2$ graded Lie algebras and eralgebras. J. Math. Phys. 19 (1978), no. 10, 2193-2200. (Authors' summary) 17A70 (17B70)

Wyler, Oswald Function spaces in topological categories. Categorical topology (Proc. Internat. Conf., Free Univ. Berlin, Berlin, 1978), pp. 411-420, Lecture Notes in Math. 719, Springer, Berlin, 1979. (From the summary) 82m:54004 54B30 (18B30, 54C35)

stwick F. (with Sain, Michael K.) Essential right inverses and system zeros. Proceedings of the 18th IEEE Conference on Decision and Control (Fort Lauderdale, Fla., 1979), Vol. 1, 2, pp. 23-28, IEEE, New York, 1979. (Authors' summary) 82g:93032

(with Sain, Michael K.) The zero module and essential inverse systems. IEEE Trans. Circuits and Systems 28 (1981), no. 2, 112-126. (A. A. Pervozvanskii) 82e:93026 93B25 (13N05, 93C05)

Wyman, Max Static spherically symmetric scalar fields in general relativity. Phys. Rev. D (3) 24 (1981), no. 4, 839-841. (Author's summary) 82h:83022 83C20 (53B50)

Wynn, H. P. (with Giovagnoli, Alessandra) A majorization theorem for the C-matrices of binary designs. J. Statist. Plann. Inference 4 (1980), no. 2, 145-154. (Bhagwandas) 82e:62116 62K10

(with Kiefer, Jack Carl) Optimum balanced block and Latin square designs for correlated observations. Ann. Statist. 9 (1981), no. 4, 737-757. (Michael Titterington)

pior, Peter A parallel simplex algorithm. Parallel computers—parallel mathematics (Munich, 1977), pp. 235–237, North-Holland, Amsterdam, 1977. (See 82k:68003) 90C05 (68C05)

Wyrwich, Herbert (with Pittnauer, F.) Ganze Funktionen mit gebrochenen asymptotischen Potenzreihen-Entwicklungen. (English and Serbo-Croatian summaries) Glas. Mat. Ser. III 15(35) (1980), no. 2, 269-278. (S. M. Shah) 82c:30060 30E15 (30D15)

(with Schlosser-Haupt, Silke) Über die Stokes-Multiplikatoren gewisser linearer Differentialgleichungen n-ter Ordnung. Math. Nachr. 95 (1980), 107–117. (M. Otelbaev) 824:34009 34A20 (34E05)

Wyrwińska, Aleksandra (with Bobrowski, Dobiesław) Asymptotic behaviours of square integrable solutions of a certain differential equation. Fasc. Math. No. 11 (1979), 81-87.

(J. O. C. Ezeilo) 82h:34063 34D05 (34CII)

Wyskup, Michal On a nonlinear equation of the type of nonstationary filtration. instratio Math. 14 (1981), no. 2, 297-304. (Vasile Ionescu) 82j:35027

-x-

hthopoulos, Basilis C. Perturbations of spherically symmetric black holes. Phys. Lett. A 77 (1980), no. 1, 7-8. (Author's summary) 82h:83041 83C50

Exterior spacetimes for rotating stars. J. Math. Phys. 22 (1981), no. 6, 1254–1259. (Petr Hājiček) 82h:83023 83C20

Harmonic maps and self-dual SU(3) gauge fields. J. Phys. A 14 (1981), no. 6, 1445–1455. (Andrzej Trautman) 82g:81067 81E10 (58E20)
Gribov vacua and Einstein space-times. Phys. Lett. B 98 (1981), no. 5, 377–380. (Author's summary) 82b:81076 81E10 (53C05, 58D25, 83C20)

Xavier, Frederico V. (with Jorge, Luguesio Petrola de Melo) On the existence of complete bounded minimal surfaces in R³. Bol. Soc. Brasil. Mat. 10 (1979), no. 2, 171-173. (Robert Reilly) 82e:53088 53A10

(with Jorge, Luguésio Petrola de Melo) A complete minimal surface in R3 between . Ann. of Math. (2) 112 (1980), no. 1, 203-206. (Robert Reilly) 53C42

The Gauss map of a complete nonflat minimal surface cannot omit 7 points of the re. Ann. of Math. (2) 113 (1981), no. 1, 211-214. (R. Osserman) 82b:53015 53A10 (49F10)

(with Jorge, Luguésio Petrola de Melo) An inequality between the exterior diameter at the mean curvature of bounded immersions. Math. Z. 178 (1981), no. 1, 77-82. (A. 53C42

H. Hakimov) 82k:53080 Xenikakis, Polychronis J. (with Miller, Harry I.) Some results connected with a problem of Erdős, (Serbo-Croatian summary) Akad. Nauka Umjet. Bosne Hercegov. Rad. Odjetj. Prirod. Mat. Nauka No. 19 (1980), 71–75. (T. Neubrunn) 82c:28002 28A05 (26A21)

oudakes, Georgios On Pythagorean triangles. Eleutheria 1978, 151-155. (S. P. Mohanty) 82h:10019 10B10 (51M25)

A theorem of Diophantos. Eleutheria 1978, 266-272. (S. P. Mohanty) 82h:10020 10B10 (01A20)

Xia, Dao Xing On the scattering matrix with indefinite metric. Complex analysis, microlocal calculus and relativistic quantum theory (Proc. Internat. Colloq., Centre Phys., Les Houches, 1979), pp. 306-310, Lecture Notes in Phys., 126, Springer, Berlin, 1980. (Teruo Ikebe) 826:47012 47A40 (47B50, 81E10, 81F99)

On the representation of the local current algebra. Complex analysis, microlocal alculus and relativistic quantum theory (Proc. Internat. Colloq., Centre Phys., Les Houches, 1979), pp. 311-315, Lecture Notes in Phys., 126, Springer, Berlin, 1980. (P. D. F. Ion) 81D15 (22E65)

On the characteristic function of semihyponormal operators. Chinese Ann. Math. 1 80). no. 1. 1-8. (Ju. I. Ljubič) 82g:47019 47B20 (1980), no. 1, 1-8. (Ju. I. Ljubič) 82g:47019

(with Li, Shao Kuan) On functional transformation of the semihyponormal operators. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 3-4, 501-504.

(Authors' summary) 82f:47031 47B20

On the nonnormal operators—semihyponormal operators. Sci. Sinica 23 (1980), no. 6, 700-713. (Kevin Clancey) 82g:47020 47B20 (47A10)

Spectral mapping of hyponormal or semihyponormal operators. J. Math. Anal. Appl. 79 (1981), no. 2, 409-427. (Hari Bercovici) 82i:47039 47B20

On the spectrum of hyponormal or semihyponormal operators. J. Operator Theory 5 (1981), no. 2, 257–266. (Mehdi Radjabalipour) 82g:47021 47B20 (47A10)

(with Li, Shao Kuan) On functional transformation of hyponormal operators. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 14, 625-627. Kexue Tongbao (English) 26 (1981), no. 1, 1-4. (Tavan T. Trent) 82i:47040 47B20

Xia, Meng Fen (with Hu, Hui Ling) Kinetic equation in a stochastic magnetic field. (Chinese. English summary) Acta Phys. Sinica 29 (1980), no. 10, 1254-1262. (Authors' summary) 82f:82072 82A70 (82A45)

Xiang, Ke Feng The C_p statistic and variable analysis in the regression equation. (Chinese) Acta Math. Appl. Sinica 2 (1979), no. 1, 81-91. (From the introduction) 82g:62100 62105

Xie, Bang Jie Existence theorems for the canonical diagonal form and the weak canonical form of characteristic matrices over a skew field. (Chinese) Acta Math. Sinica 23 (1980), no. 3, 398-410. (From the introduction) 82k:15015 15A33 (16A39)

Applications of characteristic roots and standard forms of matrices over a skew field. (Chinese) Acta Math. Sinica 23 (1980), no. 4, 522-533. (Editors) 82m:15021

Xie, Shen Quan Convergence of Muller's method for finding roots. (Chinese) Knowledge Practice Math. No. 2 (1980), 18–25. (From the introduction) 82i:c65028 65H05 Quadratic and cubic spline interpolation and their variational properties. (Chinese) Numer. Math. J. Chinese Univ. 2 (1980), no. 1, 94-96. (Author's introduction) 82j:65005 65D07 (41A15, 49D99)

Xie, Ting Fan On smoothness and differentiability of functions. (Chinese. English summ Chinese Ann. Math. 1 (1980), no. 3-4, 429-436. (Cheng-Ming Lee) 82i:26002

Modulus of continuity of fractional order and absolute convergence of Fourier series. (Chinese. English summary) J. Math. Res. Exposition 1981, no. 1, First Issue, 47-56. (Yung-Ming Chen) 82h:42005 42A10 (42A20)

M. D. (with Hsu, J. P.) Incompatibility of unitarity and gauge symmetry in the SL(2, C) Yang-Mills field theory. Phys. Rev. D (3) 24 (1981), no. 2, 471-474. (Authors' summary) 82g:81056 81E10 (53C05, 58E20)

Xin, Y. L. The characteristic numbers of 4-dimensional Kähler manifolds. J. Differential Geom. 16 (1981), no. 1, 153-159. (R. E. Stong) 82j:53109 53C55 (57R20)

Topology of certain submanifolds in the Euclidean sphere. Proc. Amer. Math. Soc. 82 (1981), no. 4, 643-648. (J. Eells) 82e:58036 58E20 (53C20, 57N15)

ng, Gui Jing (with Xu, Xian Yu; Shi, Ying Guang; Li, Jia) Some notes on E. W. Cheney's book Introduction to approximation theory [McGraw-Hill, New York, 1966; MR 36 #5568]. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 2, 189-191. (Authors' summary) 82g:41001 41-01

Xiong, Yi Qi (with Lu, Jian Ke; Huang, Zhi Yuan; Yang, Wen Mao) On the mesh smoothing problem. (Chinese) Wuhan Daxue Xuebao 1978, no. 3, 9–22. (From the text) 821:65014 65D10 (41A15)

Xiong, Zhen Xiang Splines of (2n+1)th degree with coefficients expressed by even-order derivatives. (Chinese English summary) Math. Numer. Sinica 2 (1980), no. 1, 69–76. (Author's summary) 82b:41013 41A15 (65D07)

Uniform convergence of the sequences of functions $\{f_{2j+1}(t)\}$ and $\{g_{2j+1}(t)\}$. (Chinese, English summary) Math. Numer. Sinica 3 (1981), no. 2, 117–128. (From the introduction) 82k:65004 65D07 (41A15)

Xu, Bo Wei The maximal kinematical group of the general Schrödinger equation. J. Phys. A 14 (1981), no. 5, L123-L124. (Editors) 82;81019 81C05 (22E70, 53B20, 58G35) (with Barut, Asim O.) Conformal covariance and the probability interpretation of wave equations. Phys. Lett. A 82 (1981), no. 5, 218-220. (Authors' summary) 82c:81058 81D05 (81B05, 81C40)

Xu, Da Mao (with Shi, Wei Gang; Fan, Mao Qian) The equations of motion on S2 stream surface and the method of their solution. (Chinese. English summary) Acta Mech. Sinica Beijing) 1980, no. 1, 29-37. (H. K. Cheng) 82e:76048 76N15

Xu, Da Ming (with Su, Chun; Bai, Zhi Dong) A note on U-statistics. (Chinese. English summary) J. Math. Res. Exposition 1981, no. 1, First Issue, 29-30. (Authors' summary) 62E10 (62G99)

Xu, Dian Yan (with Liu, Liao) The Hawking evaporation of Dirac particles. (Chinese. ary) Acta Phys. Sinica 29 (1980), no. 12, 1617-1624. (Authors' summ 83C99 (81M05)

(with Chen, Chong Guang) Decoupled unified field equations of arbitrary spin in Kerr spacetime. (Chinese. English summary) Acta Phys. Sinica 30 (1981), no. 5, 671-678. (Authors' summary) 82k:83039 83C99 (81E20)

Xu, Guang Hui (with Yan, Ji Yi) First entrance time in a stochastic service system. se) Acta Math. Appl. Sinica 3 (1980), no. 1, 34-40. (Authors' summary) 82j:60180 60K25

Xu, Guang Shan (with Zhang, Yong Xiao; Wang, Yuan) A number-theoretic method for numerical integration in high dimensions. (Chinese) Acta Math. Appl. Sinica 1 (1978), no. 2, 106-114. (Editors) 82i:65018 65D32 (10K05)

(with Wang, Lian Xiang) On a Diophantine inequality involving a class of G-functions in p-adic form. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 9, 389-392. Kexue Tongbao (English) 25 (1980), no. 10, 801-806. (F. Beukers) 82j:10066 10F35 (10F37)

Lower bounds of linear forms of a class of G-functions. (Chinese) Acta Math. Sinica 24 (1981), no. 4, 578-586. (Ming-Chit Liu) 82k:10035 10F05 (10F37)

Xu, Ji Zhong (with Yang, Wen Mao; Hu, Hai Ruo) The space with torsion and the scalar-tensor theory of the gravitational field. (Chinese) Wuhan Daxue Xuebao 1979, no. 1, 1-9. (Authors' summary) 82d:83054 83D05

Xu, Ke Kang A type of state estimation of reduced dimension for systems with uncertainties. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 1, 41-46. 93E10 (Author's summary) 82b:93039

(with Han, Jing Qing) Pole assignment of the closed loop system. (Chinese. English nary) Acta Automat. Sinica 7 (1981), no. 2, 81-87. (Authors' summary) 82k:93033

Xu, Li Zhi (with Zhu, Zi Qiang) A survey of certain iteration methods with global convergence. (Chinese. English summary) Numer. Math. J. Chinese Univ. 1 (1979), no. 2, 131-142. (Authors' summary) 82h:65039 65H05

(with Zhou, Yun Shi) On the asymptotic expansion of $\iint (x, \{Nx\}) dx$ and its application. (Chinese) Acta Math. Appl. Sinica 3 (1980), no. 3, 204-209. (Roderick Wong) 82i:41039 41A60

(with Yang, Jia Xin; Bao, Xue Song) A class of generalized complex Newton interpolation series. (Chinese. English summary) J. Math. Res. Exposition 1981, First Issue, 69–72. (Authors' summary) 82g-30663 30E05

An extension of the Möbius-Rota inversion theory with applications. (Chinese.

English summary) J. Math. Res. Exposition 1981, no. 1, First Issue, 101-112. (Author's mary) 82e:06003 06A10 (05A15)

Xu, Meng Jie (with Liu, Yu Tian) Analysis for accelerating the convergence of second-order quasilinear parabolic boundary value problems. (Chinese. English mary) Numer. Math. J. Chinese Univ. 3 (1981), no. 1, 44-49. (Authors' summary) 65N30

Xu, Shi Long A note on Perko's Theorem B. A translation of Kexue Tongbao (Chinese) 26 (1981), no. 3, 138-139. Kexue Tongbao (English) 26 (1981), no. 3, 205-206. (Freddy Dumortier) 82f:58075 58F21 (34C05)

Xu, Shi Ying The convergence of cubic spline interpolation. (Chinese) Acta Math. Appl. Sinica 2 (1979), no. 3, 231-235. (Editors) 82g:65012 65D07 (41A15)

Xu, Xian Yu (with Shi, Ying Guang; Li, Jia; Xiong, Gui Jing) Some notes on E. W. Chency's book Introduction to approximation theory [McGraw-Hill, New York, 1966; MR 36 #5568] (Chinese, English summary) Math. Numer. Sinica 2 (1980), no. 2, 189–191. (Authors' summary) 82g41001 41–01

Xu, Ye Ji Linear prediction theory of a homogeneous random field with discrete parameters. (Chinese. English summary) Chinese Ann. Math. 2 (1981), no. 1, 33-46. (From the summary) 82f:60086 60G25 (60G60)

Xu, Yi Chao (with Wang, De Lin) On the classification of bounded semicircular domains in (Chinese) Acta Math. Sinica 23 (1980), no. 3, 372-384. (H. Wu) 82a:32005 32A07

A note on homogeneous Siegel domains. (Chinese) Acta Math. Sinica 24 (1981), no. 1, 99-105. (Wu Yung Ch'èn) 82g:32035 32M10

Xu, Yong Hua A theory of rings that are isomorphic to complete rings of linear transformations. V. (Chinese) Acta Math. Sinica 23 (1980), no. 4, 547-553. (From the summary) 82j:16030a 16A42

A theory of rings that are isomorphic to complete rings of linear transformations. VI. (Chinese) Acta Math. Sinica 23 (1980), no. 5, 646-657. (From the summary) 82j:16030b

cao Xuan Chuan See Cao Xuan Chuan nghiệm Xuân Hải See Nghiệm Xuân Hải nguyen-Xuan-Loc See Nguyen-Xuan-Loc Xue, Ai See Wu, Xue Mou

Xue, Pi You (with Ma, Zhong Qi; Du, Dong Sheng) A new criterion for constructing SU(N) grand unified models and residual discrete symmetry. Phys. Lett. B 99 (1981), no. 2, 107-109. (Authors' summary) 82b:81132 81G20

(with Dongfang, Xiao; Huang, Tao; Ma, Zhong Qi; Zhou, Xian Jian; Huang, Nian Ning) Classical static and static spherically symmetric solutions of SU(N) gauge theory with external extended source. Sci. Sinica 24 (1981), no. 4, 466-475. (Authors' summary) 81E10 (53C05)

hen-Va'acov, Uri See Ben-Va'acov, Uri

muchi, Kiyoshi Astronomy in the East and the West: the development and characteristics. Historia Sci. No. 19 (1980), 1-9. (Lay Yong Lam) 82g:01006

nizaki, T. (with Kitano, Masao; Ogawa, Toru) Optical tristability. Phys. Rev. Lett. 46 (1981), no. 14, 926-929. (Authors' summary) 824:81183 81K05 (58C28)

Yacobi, Yacov (with Even, Shimon) Cryptocomplexity and NP-completeness. Automata, languages and programming (Proc. Seventh Internat. Colloq., Noordwijkerhout, 1980), pp. 195-207, Lecture Notes in Comput. Sci., 85, Springer, Berlin, 1980. (Authors' mmary) 82a:94085 94B99 (68C25)

(with Even, Shimon) An observation concerning the complexity of problems with few solutions and its application to cryptography. Graph-theoretic concepts in computer science (Proc. Sixth Internat. Workshop, Bad Honnef, 1980), pp. 270-278, Lecture Notes in Comput. Sci., 100, Springer, Berlin, 1981. (Authors' summary) 82h:68065 68C25 (03D15, 94B99)

Jav, B. S. Attainable lattices. Aligarh Bull. Math. 7 (1977), 1-8 (1980). (P. Rosenthal) 82j:47009 47A15 (47D25)

(with Arora, S. C.) A generalization of Weyl's spectrum. (Serbo-Croatian summary) Glas. Mat. Ser. III 15(35) (1980), no. 2, 315-319. (P. Saphar) 82f:47010

(with Chatterjee, Supriya) Invariant subspaces of weighted shifts. (Serbo-Croatian amary) Glas. Mat. Ser. III 15(35) (1980), no. 2, 321-325. (Thomas Hoover) 47B37 (47A15)

(with Chatterjee, Supriya) Cyclic vectors of weighted shifts on 1° spaces. Proc. Amer. Math. Soc. 80 (1980), no. 1, 95-99. (D. A. Herrero) 82d:47038 47B37

(with Chatterjee, Supriya) Cyclic vectors of Lambert's weighted shifts. Proc. Amer.

Math. Soc. 80 (1980), no. 1, 100-104. (D. A. Herrero) 82d:47039 47B37

Yadav, R. B. S. (with Singh, Triloki) A note on spherically symmetric self-gravitating fluids with pressure equal to energy density. J. Math. Phys. Sci. 15 (1981), no. 3, 283-289. (Authors' summary) 82i:83049 83C55
Yadav, Sarjoo Prasad On the absolute convergence of Jacobi series at end points. Bull.

Calcutta Math. Soc. 72 (1980), no. 2, 87-94. (Daniel P. Maki) 82j:33021 (42C10)

Yadava, H. C. (with Singh Chandel, R. C.) A note on a generating function for certain polynomial systems. Ranchi Univ. Math. J. 10 (1979), 61-66. (James M. Horner) 82m:33010 33A70

Yadava, S. L. (with Sinha, Bipin Behari) Almost product structures on tangent bundle Indian J. Pure Appl. Math. 12 (1981), no. 1, 61-70. (R. Miron) 82h:53056 53C1 53C15

Yadegari, Moh d The binomial theorem: a widespread concept in medieval Islamic mathematics. (Arabic and French summaries) Historia Math. 7 (1980), no. 4, 401-406. (J. L. Berggren) 82g:01013 01A30

See Jafaev, D. R.

Yaffe, Laurence G. (with Gross, David J.; Pisarski, Robert D.) QCD and instantons at finite temperature. Rev. Modern Phys. 53 (1981), no. 1, 43-80. (From the summary) 81G05 82e:81053

Yagawa, G. (with Hirayama, H.; Ando, Yutaka) Contact analysis in crack mechanics using penalty function method. Numerical methods in fracture mechanics (Proc. Second Internat. Conf., University College, Swansea, 1980), pp. 161-178, Pineridge, Swansea, 1980. (See 82c:73005) 73M05 (49D30)

Sangwine-Yager, J. R. See Sangwine-Yager, J. R.
Yager, Ronald R. Fuzzy thinking as quick and efficient. Cybernetica 23 (1980), no. 4, 265-298. (James T. Wong) 82d:03089 03E72 (92A90, 94D05)

On the lack of inverses in fuzzy arithmetic. Fuzzy Sets and Systems 4 (1980), no. 1, 73-82. (A. K. Vjatkin) 82h:03063 03E72 (10N99) Some observations on probabilistic qualification in approximate reasoning. *Inform.*

Sci. 22 (1980), no. 3, 217-234. (Jiří Šústal) 82c:03032 03B52 (60A99, 94D05)

An approach to inference in approximate reasoning, Internat. J. Man-Mach. Stud
13 (1980), no. 3, 323-338. (Kabekode V. S. Bhat) 82a:94135 94D05 (03B50, 03B52 94D05 (03B50, 03B52,

Some properties of fuzzy relationships. Cybernet. Systems 12 (1981), no. 1-2, 123-140. (Umberto Cerruti) 82j-03072 03E72 (68G10)

An exponential model for optimal time allocation in decision making. J. Inform Optim. Sci. 2 (1981), no. 2, 137-146. (Author's summary) 82d:92036 92A25 (90A05)

Yagi, Katsumi On the Hessian of the square of the distance on a manifold with a pole. Proc. Japan Acad. Ser. A Math. Sci. \$6 (1980), no. 7, 332-337. (Robert E. Greene) 82i:53075 53C20

Yagil, Gad (with Bard, Jonathan L. B.; Ghozlan, Aline; Goldbeter, Albert; Hardt, Shoshana; Levitzki, Alexander; Liron, Nadav; Odell, Garrett M.; Parnas, Hanna; Perelson, Alan S.; Rapp, P. E.; Rubinow, Sol I.; Segel, Lee A.; Tolkovsky, Aviva M.; Wehrhahn, Christian; Zeigler, Bernard P.) *Mathematical models in molecular and cellular biology. Cambridge University Press, Cambridge-New York, 1980. x+757 pp.

cellular biology. Cambriage University (1980) 182-92001 92-01 (92A09) 18BN-0-521-2295-1 (John J. Tyson) 82c-92001 92-01 (92A09) 19BN-0-521-5800 On the Steenrod algebra of Morava K-theory. J. London Math. Soc. (2) 22 19BN-0-521-5300 (1980) 19BN-0-5300 (1980) 19

Yaglom, A. M. See Jaglom, A. M.

Yahagi, Takashi A new algorithm for the numerical solution of linear equations and its application to dynamic systems. Systems-Comput.-Controls 9 (1978), no. 2, 1–10. (Andrzej W. Olbrot) 82b:65921 65F10 (93B15, 93C05)

ata, Hideo A simple model for the Taylor vortex flow. Progr. Theoret. Phys. Suppl. No. 69 (1980), 200-211 (1981). (Author's summary) 82;76040 76E10 (58E07, 76U05) Yahya, S. M. On cocyclic modules. Acta Math. Acad. Sci. Hungur. 36 (1980), no. 1-2, 147–153. (Ana Nijā) 82k:16020 16A53

(with Al-Daffa', Ali A.) On cogenerators in modules over Dedekind domains. Math. Sem. Notes Kobe Univ. 8 (1980), no. 1, 91-102. (David W. Sharpe) 82d:13017

Yajima, Kenji The quasiclassical limit of quantum scattering theory. II. Long-range Duke Math. J. 48 (1981), no. 1, 1-22. (H. Wakita) 82e:81049 (35P25, 58G15, 58G25)

ima, Shuro (with Kambayashi, Yahiko; Nakatsu, Narao) Hierarchical pattern matching algorithms for strings. Systems-Comput.-Controls 10 (1979), no. 3, 20–26 (1981). (Authors' summary) 82h:68129 68H05 (68B15, 68E05)

na, Yoshihiro On an effect of overdifferencing on the prediction of ARIMA processes.

Recent developments in statistical inference and data analysis (Proc. Internat. Conf., Inst. Italist. Math., Tokyo, 1979), pp. 335-345, North-Holland, Amsterdam, 1980. (Robert Recent develop 62M20 (62M10)

Fernholz) 82x62145 62M20 Yakhuo, O. M. See Jahno, O. M. Yakimov, N. D. See Jakimov, N. D. Yakobson, M. V m, M. V. See Jakimov, N. D. m, M. V. See Jakobson, M. V.

Yakovlev, N. N. See Jakovlev, N. N. Yakowitz, Sidney J. (with Murray, Daniel M.) The application of optimal control methodology to nonlinear programming problems. Math. Programming 21 (1981), no. 3, 331–347. (Authors' summary) 82;90065 90C30 (90C39)

Yakubaitis, E. Ya. See Jakubaitis, E. A.

Yakubovich, V. A. See Jakubovič, V. A. Yakushev, Yu. F. See Jakušev, Ju. F. Vakushkin, I. G. See Jakuškin, I. G.

ada, Akio (with Funakoshi, Hiroumi) On von Foerster equation in biomathematics n. Numer. Math. No. 7 (1980), 29-52. (Hal Leslie Smith) 82a:92033 (92A17)

nada, Haruki Boundary value problems for real linear partial differential equations of first order. Kodai Math. J. 2 (1979), no. 3, 346-361. (E. C. Zachmanoglou) 82b:35028

On the first boundary value problems for some degenerate second order elliptic ferential equations. Kodai Math. J. 3 (1980), no. 3, 341-357. (Johannes Elschner) differential equations

Remarks on the existence and the nonexistence of some kind of periodic orbits for iltonian systems. Kodai Math. J. 4 (1981), no. 2, 315-326. (Richard C. Churchill) 58F22 (58F05, 70K15)

nada, Hiromichi Standard subgroups isomorphic to PSU(5,2). J. Algebra 58 (1979), no. 2, 527-562. (From the introduction) 82k:20030 20D05

Standard subgroups of type G₂(3). The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 95–97, Proc. Sympos. Pure Math., 37, Amer. Math. Soc., Providence, R. I., 1980. (From the text) 82c:20039 20D05

ada, Keigo Explicit formula of optimal replacement under additive shock proces Stochastic Process. Appl. 10 (1980), no. 2, 193-208. (Bo Bergman) 82c:60154 (90B99)

mada, Masaji A convergence proof about an integral sequence. Fibonacci Quart. 18 (1980), no. 3, 231-242. (J. C. Lagarias) 82d:10026 10A99

anda, Miyuki On a certain class of regular semigroups. Proceedings of a Symposium on Regular Semigroups (Northern Illinois Univ., De Kalb, Ill., 1979), pp. 146–179, Northern nois Unio, Dekalb, III., 1979. (See 82):20120) 20M10

Note on the congruences generated by Green's relations. Proceedings of the 3rd

Symposium on Semigroups (Inter-Univ. Sem. House of Kansai, Kobe, 1979), pp. 105-120, Osaka Univ., Osaka, 1980. (T. Tamura) 82h:20093 20M10

Regular semigroups satisfying R • LCH. Proceedings of the 4th Symposiu Semigroups (Yamaguchi Univ., Yamaguchi, 1980), pp. 117–126, Yamaguchi Univ., Yamaguchi, 1980. (See 821:20008)

On the structure of regular semigroups in which the maximal subgroups form a band of groups. Semigroups (Proc. Conf., Monash Univ., Clayton, 1979), pp. 47-55, Academic Press, New York, 1980. (R. J. Warne) 82e:20074 20M10

da, Sakutarō (with Rao, B. V.) Note on a problem of Diepenbrock. Osaka J. Math. 17 (1980), no. 2, 325-327. (P. Gérard) 82b:28026 28C15 (60B05)

(with Ghosh, J. K.: Morimoto, H.) Neyman factorization and minimality of pairwise

sufficient subfields. Ann. Statist. 9 (1981), no. 3, 514-530. (Dieter Mussmann) 82h:62010

Yamada, Takeo Comments on: "Two-level form of Kalman filter" [IEEE Trans. Automat. Control 16 (1971), 128-133; MR 45 # 1630) by A. R. M. Noton. *IEEE Trans. Automat. Control* 25 (1980), no. 4, 856-857. (Author's summary) 824:93060 93E10

nada, Tomoji (with Fujisaka, H.) Limit cycles and chaos in realistic models of the Belousov-Zhabotinskii reaction system. Z. Phys. B 37 (1980), no. 3, 265-275. (Authors' nary) 82e:80010 80A30 (58F13, 92A09)

nada, Toshikiyo On conharmonic and concircular transformations. J. Asahikawa Tech. College No. 16 (1979), 163-170. (J. Ferrand) 82m:53014 53A30 (53C20)

Remark on Finster spaces with closed indicatrices. J. Asahikawa Tech. College No. 18 (1981), 161–163. (R. Miron) 82k:53088 53C60

(with Fukui, Masaki) On projective mappings in Finsler geometry. Tensor (N.S.) 35 (1981), no. 2, 216–222. (Yoshihiro Ichijyō) 82j:53110 53C60
 nada, Toshio On the successive approximation of solutions of stochastic differential

equations. J. Math. Kyoto Univ. 21 (1981), no. 3, 501-515. (Eckhard Platen) 82k:60133

(with Ogura, Yukio) On the strong comparison theorems for solutions of stochastic differential equations. Z. Wahrsch. Verw. Gebiete 56 (1981), no. 1, 3-19. (V. G. Kolomiec) 82f:60142 60H10 (58G32)

da, Yoshio (with Ôtani, Mitsuharu) On the Navier-Stokes equations in noncylindrical domains: an approach by the subdifferential operator theory. J. Fac. Sci. Univ. Tokyo Sect. IA Math. 25 (1978), no. 2, 185-204. (Authors' review (Zbl 391:35053)) 82e:35092

nafuji, Kaoru (with Toko, Kiyoshi; Urahama, Kiichi) Time-dependent Ginzburg-Landau equations for hard-mode instabilities. *J. Phys. Soc. Japan* **50** (1981), no. 11, 3819–3825. (Authors' summary) **82k:58077** 58F14 (92A09)

gami, Shigeru (with Araki, Huzihiro) An inequality for Hilbert-Schmidt norm. Comm. Math. Phys. 81 (1981), no. 1, 89-96. (R. Høegh-Krohn) 82j:46076 (47B10, 82A15)

gata, Kunio Hereditary Artinian rings of right local representation type. Representation theory, II (Proc. Second Internat. Conf., Carleton Univ., Ottawa, Ont., 1979), pp. 648-673, Lecture Notes in Math., 832, Springer, Berlin, 1980. (From the text) 16A64

On extensions over Artinian rings with self-dualities. Tsukuba J. Math. 4 (1980), no. 1, 67-75. (Idun Reiten) 82e:16010 16A35 (16A53)

naguchi, Hiroshi On certain function spaces and group structures. B. Soc. 19 (1978), no. 2, 217-244. (From the text) 82h:43003 43A15

On the product of a Riesz set and a small p set. Proc. Amer. Math. Soc. 81 (1981), no. 2, 273-278. (Ron C. Blei) 82f:43008 43A46

naguchi, Masaru Existence and stability of bounded and almost periodic solutions of perturbed quasilinear partial differential equations of standard types. Proc. Fac. Sci. Tokai Univ. 14 (1979), 45-57. (H. Günzler) 82m:35009 35B35 (35B15)

Existence and stability of global bounded classical solutions of initial-boundary value problem for semilinear wave equations. Funkcial. Ekvac. 23 (1980), no. 3, 289–308. (R. Glassey) 82m:35102 35L70

naguchi, Satoru (with Takemoto, Yoshio) Affine structures of maximal solvable subalgebras of noncompact semisimple Lie algebras. Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 1, 39-44. (L. Corwin) 82m:17003 17B30

naguchi, Seiichi (with Ikawa, Toshihiko) Totally real and C-totally real submanifolds of positive curvature operator. TRU Math. 16 (1980), no. 2, 87-92. (C. S. Houh) 82j:53099 53C40 (53C25)

aguchi, Shizuma (with Ohta, Mitsuo; Ikuta, Akira) Generalization of Stratonovich's theory for random points system and a prediction method of road traffic noise generated by the general traffic flow of nonstationary and non-Poisson type. (Japanese. English summary) Systems and Control 25 (1981), no. 4, 231-240. (From the summary) 82i:90043

chi, Tadashi (with Goto, Midori S.; Goto, Morikuni) Sectional curvatures of y²ⁿ⁻¹(d). Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 2, 353-365. (R. E. Stong) 53C20

aguchi, Takeshi (with Takahashi, Shin; Suzuki, Katsuyoshi) Vibrations of Mindlin's circular plates with thickness varied along radius. Bull. JSME 24 (1981), no. 187, 229-235. (Authors' summary) 824:73047 73K12

aguti, Kiyosi (with Asano, Hiroshi) A construction of Lie algebras by gene Jordan triple systems of second order. Nederl. Akad. Wetensch. Indag. Math. 42 (1980), no. 3, 249-253. (Joseph C. Ferrar) 82b:17018 17B60

Yamaguti, Masaya (with Ushiki, Shigehiro) Discretisation of differential equation and chaos. Boundary and interior layerstational and asymptotic methods (Proc. Conf., Trinity College, Dublin, 1980), pp. 179-189, Boole, Dún Laoghaire, 1980. (From the summary) 82:65051 65L20

(with Ushiki, Shigehiro) Discrétisation et chaos. (English summary) C. R. Acad. Sci. 58F13 (65L99) Paris Sér. A-B 290 (1980), no. 14, A637-A640. (D. L. Rod) 82d:58050 (with Fujii, Hiroshi) Structure of singularities and its numerical realization in

near elasticity. J. Math. Kyoto Univ. 20 (1980), no. 3, 489-590. (J. E. Marsden) 82e:73044 73H05 (47H15, 58C28, 58E07, 65N30)

(with Niizeki, Shyōzō) On the Cauchy problem for a semilinear hyperbolic system Math. Kyoto Univ. 20 (1980), no. 4, 625-634. (Alan Jeffrey) 82e:35043 35L4 (92A17)

(with Ushiki, Shigehiro) Chaos in numerical analysis of ordinary differential equations. Phys. D 3 (1981), no. 3, 618-626. (Authors' sum mary) 82j:58085 (65L05)

oto, Hikaru Phase transitions in two-dimensional classical pseudoharmonic model. Progr. Theoret. Phys. 65 (1981), no. 2, 427-436. (Author's summary) 82h:82019

uke Source coding theory for cascade and branching communication systems. IEEE Trans. Inform. Theory 27 (1981), no. 3, 299-308. (Author's summary) 94A24 (94A05)

amoto, Ichiro See Shimodaira, Kazuo, 82f:01143

oto, Kaneyuki On the equilibrium existence in abstract economies. Hokkaido Math. J. 7 (1978), no. 2, 289-299. (Hildegard Dierker) 82i:90016

o, Kazuhiro The Cauchy problem for some class of hyperbolic differential operators with variable multiple characteristics. J. Math. Soc. Japan 31 (1979), no. 3, 481-502. (Author's review (Zbl 403:35059)) 82k:35072 35L30 (35S10)

to, Kunio (with Taguchi, Yukio; Tanaka, Azuma) A solvable model for spontaneous symmetry breaking. Nuovo Cimento A (11) 62 (1981), no. 3, 186-195. (G. Vitiello) 82i:81033 81D20 (81E99)

to, Minoru (with Sakata, Sadahisa) On the boundedness and the attractivity properties of nonlinear second order differential equations. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 2, 111-116. (John R. Graef) 82c:34040 34C10 (with Sakata, Sadahisa) Further results on the boundedness and the attractivity properties of nonlinear second order differential equations. Proc. Japa

34C11

Math. Sci. 57 (1981), no. 5, 254-259. (Ch. G. Philos) 82i:34037 Yamamoto, Sumiyasu (with Tamari, Fumikazu) An existence condition for multidimensional partially balanced association schemes. Essays in probability and statistics, pp. 65-71, Shinko Tsusho, Tokyo, 1976. (From the introduction) 82e:05049 05B30 (62K10)

(with Shirakura, Teruhiro: Kuwada, Masahide) Characteristic polynomials of the information matrices of balanced fractional 2^m factorial designs of higher (2l+1)resolution. Essays in probability and statistics, pp. 73-94, Shinko Tsusho, Tokyo, 1976. (Authors' summary) 82b:62096 62K15

(with Tazawa, Shinsei) Hyperclaw decomposition of complete hypergraphs. Combinatorial mathematics, optimal designs and their applications (Proc. Sympos. Combin. Math. and Optimal Design, Colorado State Univ., Fort Collins, Colo., 1978).

Ann. Discrete Math. 6 (1980), 385–391. (Bruno D'Amore) 82b:05101 05C65

See also Essays: Probability and statistics, 82a:62005 namoto, Taku Predictions of multivariate autoregressive-moving average models.

Biometrika 68 (1981), no. 2, 485–492. (I. V. Basawa) 82j:62070 62M20

Yamamoto, Tetsuro Error bounds for computed eigenvalues and eigenvectors. Numer. Math. 34 (1980), no. 2, 189-199. (Ludwig Elsner) 82bc65028 65F15 (15A42, 65H10) Yamamoto, Yoshitsugu A group-theoretic dual problem without duality gaps for bounded integer programs. (Japanese summary) J. Oper. Res. Soc. Japan 23 (1980), no. 2,

146-155. (Author's summary) 82g:90070 90C10 Yamamura, Masatoshi A simple example of the exactly soluble Hamiltonian with coordinate-dependent mass in the semiclassical theory. Progr. Theoret. Phys. 64 (1980), no. 1, 94–100. (Nicolae Angelescu) 82c:81027a 81C05 (81G35)

A description of the rotator as an example of Hamiltonian with coordinate-dependent mass. Semiclassical theory. *Progr. Theoret. Phys.* **64** (1980), no. 1, 101–113. (Nicolae Angelescu) **82c.81027h** 81CO5 (81G35) mamuro, S. (with Truong Công Nghè) Locally convex spaces, differentiation and

Yamamuro, S. (with Truong Cong Nghè) Locally convex spaces, differentiation and manifolds. Special issue dedicated to Władysław Orlicz on the occasion of his seventy-fifth birthday. Comment. Math. Special Issue 2 (1979), 329–338. (Theodore S. Bolis) 82e:58017 58C20 (46C05)

Yamanaka, H. (with Matsumoto, Hideki; Umezawa, Hiroomi) Role of the Wigner rotation in quantum field theory with extended objects. Phys. Rev. D (3) 24 (1981), no. 10, 2607-2614. (Authors' summary) 82k:81046 81E05

Yamani, Hashim A. The equivalence of the Feshbach and J-matrix methods. J. Math. Phys.
 23 (1982), no. 1, 83–86. (Author's summary) 82m:81072 81F05
 Yamanoi, Takahiro (with Sato, Yoshiharu; Kawaguchi, Michiaki) A bilinear model of

Yamanoi, Takahiro (with Sato, Yoshiharu; Kawaguchi, Michiaki) A bilinear model of factor analysis. Tensor (N.S.) 35 (1981), no. 1, 58-62. (Minoru Siotani) 82g:62082 62H15

Yamasaki, Maretsugu Quasiharmonic classification of infinite networks. Discrete Appl. Math. 2 (1980), no. 4, 339–344. (Author's summary) 82g-31010 31C12 (94C99) Biharmonic Green function of an infinite network. Mem. Fac. Sci. Shimane Univ. 14 (1980). 55–62. (M. Hervé) 82f-31005 31C20 (94C15)

(1980), 55-62. (M. Hervė) 82f:31005 31C20 (94C15)
Yamasaki, Shuichiro (with Hirooka, Masahiko) Three-particle correlations in the ground state of a Bose fluid. Progr. Theoret. Phys. 66 (1981), no. 4, 1200-1218. (Authors' summary) 82m:81089 81H20

Sumasaki, Yasuo Translationally invariant measure on the infinite-dimensional vector space. Publ. Res. Inst. Math. Sci. 16 (1980), no. 3, 693–720. (Hiroaki Shimomura) 82c:28029 28C20 (60B1)

Quasi-invariance of measures on an infinite-dimensional vector space and the continuity of the characteristic functions. *Publ. Res. Inst. Math. Sci.* **16** (1980), *no.* 3, 767–783. (Richard Becker) **82i:28018** 28C15 (28C20, 54E99)

Vamashita, Masakatsu (wih Ikeda, Hiroshi) Closed 4-manifolds covered by three 4-balls.
Yokohama Math. J. 26 (1978), no. 2, 109-117. (James M. Kister) 82a:57013 57N15

Yamashita, Shinji Cowling's theorem on a Dirichlet finite holomorphic function in the disk. Amer. Math. Monthly 87 (1980), no. 7, 551-552. (Kenneth Stephenson) 82a:30043 30D50

A nonnormal function whose derivative is of Hardy class H^p , $0 . Canad. Math. Bull. 23 (1980), no. 4, 499–500. (D. Protas) 82a:30046 30D55 (30D45) Gap series and <math>\alpha$ -Bloch functions. Yokohama Math. J. 28 (1980), no. 1-2, 31–36. (L. R. Sons) 82k:30003 30B10

R. Sons) 82k:30003 30B10
The hyperbolic M. Riesz theorem. Acta Sci. Math. (Szeged) 43 (1981), no. 1-2,

141-146. (P. Lappan) 82i:30034 30C80 (30C35)
The order of normality and meromorphic univalent functions. Colloq. Math. 44 (1981), no. 1, 159-163. (S. M. Shah) 82j:30044 30D45 (30C45)

(1701), no. 1, 137-103. (3. nr. sman) 643-30044 30U-93 (30U-93) On hyperbolic Hardy classes. Comment. Math. Univ. St. Paul. 30 (1981), no. 1, 65-69. (Kenneth Stephenson) 82h:30036 30D55 (30D50, 30H05)

Dirichlet-finite functions and harmonic majorants. Illinois J. Math. 25 (1981), no. 4, 626-631. (N. I. Skiba) 82m:31001 31A05 (31B05)

0.26-0.1. (N. I. Sation) 82m:31001 31A0 (31B05) Dirichlet-finite outer functions. J. Austral. Math. Soc. Ser. A 31 (1981), no. 3, 289-293. (J. A. Cima) 82j:30047 30D55 (30E20)

289-295. (J. A. Cuna) 842-30447 301535 (30120)

The meromorphic Hardy class is the Nevanlinna class. J. Math. Anal. Appl. 80 (1981), no. 2, 298-304. (D. Protas) 82f:30027 30D35 (30D30)

Bi-Fatou points of a Blaschke quotient. Math. Z. 176 (1981), no. 3, 375–377. (A. È. Eremenko) 82h:30034 30D50 (30D40)

Yamashira, Yuji (with Shohoji, Takao; Tarumi, Tomoyuki) Generalization of Fisher's z-transformation. J. Statist. Plann. Inference 5 (1981), no. 4, 347–354. (Authors' summary) 82m:62190 62H20

Yamato, Kazuharu (with Omoto, Norio) An approach to the minimization for ternary logic function. Systems-Comput.-Controls 10 (1979), no. 1, 27–35 (1981). (W. Wechler) 82f;94028 94C10

Yamato, Yuiti Stochastic differential equations and nilpotent Lie algebras. Z. Wahrsch. Verw. Gebiete 47 (1979), no. 2, 213–229. (K. R. Parthasarathy) 82i:60143 60H10 (SSG32, 60160)

Yamauchi, Norio On algebra with universal finite module of differentials. Nagoya Math. J.
 83 (1981), 107–121. (Jean-Luc Chabert)
 82m:13007
 13C15 (13B10)

Yamazaki, Akira Continuously dispersed preferences, regular preference-endowment distribution, and mean demand function. General equilibrium, growth, and trade, pp. 13-24, Academic Press, New York, 1979. (Peter H. Farquhar) 82d:90016 90A08.

Yamazaki, Genji An ordering relation of the blocking two-stage tandem queueing system to the reduced single server queueing system. Ann. Inst. Statist. Math. 33 (1981), no. 1, 115-123. (U. Narayan Bhat) 82i:60170 60K25

The interchangeability of the sojourn and delay times in a $GI/M/1 \rightarrow /M/1$ (0) queue. (Japanese summary) J. Oper. Res. Soc. Japan 24 (1981), no. 3, 229-236. (Author's summary) 82k:90059 90B22

Yamazaki, Haruaki (with Liu, Jane W. S.; Liu, Chung L.; Miyazaki, Nabuyoshi) Performance evaluation of multiprocessor systems containing special purpose processors. (Polish and Russian summaries) Podstawy Sterowania 10 (1980), no. 3, 201–222. (Authors' summary) 82e:68047 68C40

Yamazaki, Hideki (with Ito, Keisuke; Oono, Yoshitsugu; Hirakawa, Kazuyoshi) Chaotic behavior in great earthquakes—coupled relaxation oscillator model, billiard model and electronic circuit model. J. Phys. Soc. Japan 49 (1980), no. 1, 43-52. (J. D. Atkinson) 82k:58068 58F13 (70K50, 86A15)
Yamazaki, Masatoshi On a family of solutions to the Einstein-Maxwell equations. Phys.

Yamazaki, Masatoshi On a family of solutions to the Einstein-Maxwell equations. Phys. Lett. A 67 (1978), no. 5-6, 337-338. (Author's summary) 82b:83026
 S3C20 (53B50)
 On the Taub-NUT family of solutions. Phys. Lett. A 68 (1978), no. 5-6, 412-414.
 (Author's summary) 82a:83017
 83C20

A new family of spinning mass solutions. J. Phys. Soc. Japan 49 (1980), no. 5, 1649–1653. (Colin B. G. McIntosh) 82b:83020 83C15 (83C20)
On a new family of spinning mass solutions. Progr. Theoret. Phys. 64 (1980), no. 3,

861-865. (L. K. Patel) 82b:83027 83C20 (53B50)

On the Hoenselaers-Kinnersley-Xanthopoulos spinning mass fields. J. Math. Phys. 22 (1981), no. 1, 133-135. (Author's summary) 82a:83018 83C20 nazaki, Yoshitake (with Hilhorst, Henk J.; Meissner, Günther) Differential real-space

Yamazaki, Yoshitake (with Hilhorst, Henk J.; Meissner, Günther) Differential real-space renormalization of the d-dimensional Gaussian model. J. Statist. Phys. 23 (1980), no. 5, 609-625. (R. Delbourgo) 82h:82025 82A15 (82A67)

Yammine, Sleiman Localisation des idéaux semi-premiers et extension des scalaires dans les algèbres noethériennes sur un corps. Séminaire d'Algèbre Paul Dubreil et Marie-Paule Malliaoin, 32ème année (Paris, 1979), pp. 251-290, Lecture Notes in Math., 795, Springer, Berlin, 1980. (L. C. A. van Lecuwen) 82a:16008 16A08 (16A33, 17B35)

Yan, Da Kang (with Jiang, Li Shang; Shen, Shu Min; Wu, Mao Qing; Qin, Gan) Finite element methods for solving structures composed of plate-beams, with their error estimate. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 2, 154–171. (From the summary) 82t:73033 73K25

Yan, Ji Yi (with Xu, Guang Hui) First entrance time in a stochastic service system. (Chinese) Acta Math. Appl. Sinica 3 (1980), no. 1, 34-40. (Authors' summary) 82j:60180 60K25

Yan, Jia An Caractérisation d'une classe d'ensembles convexes de L¹ ou H¹. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 220-222, Lecture Notes in Math., 784, Springer, Berlin, 1980. (W. A. Woyczyński) 82c:60090 60G46 (46E30)

Remarques sur certaines classes de semimartingales et sur les intégrales stochastiques optionnelles. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 223-226, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Louis Blake) 82h:60091 60G44 (60H05)

A note on E. Lenglart's results. (Chinese) Acta Math. Sinica 23 (1980), no. 4, 638-640. (Tack-Wang Lee) 82c:60088 60G44

Some formulas for the local time of semimartingales. (Chinese. English summary)

Some formulas for the local time of semimartingales. (Chinese. English summary Chinese Ann. Math. 1 (1980), no. 3-4, 545-551. (From the summary) 82;60077 60G44 (60J55)

Propriété de représentation prévisible pour les semimartingales spéciales. Sci. Sinica 23 (1980), no. 7, 803–813. (Ralph Henstock) 82e:60083 60G48 (60G44, 60H05, 60I05)

Yan, Shi Jian (with Li, Zhan Bing) Stochastic models for nonequilibrium systems and the formulation of the master equations. (Chinese: English summary) Acta Phys. Sinica 29 (1980), no. 2, 139–152. (Authors' summary) 82c:82053 82A35 (35Q20, 92A09) (with Li, Zhan Bing; Liu, Ruo Zhuang) On the stability of the multivariable master equation for nonequilibrium systems. (Chinese: English summary) Acta Phys. Sinica 30

(1981), no. 4, 448-458. (Authors' summary) 82k:82024 82A35
Yanabe, Shigeo Nonstationary vibration during acceleration through two critical speeds (without damping). Bull. JSME 24 (1981), no. 188, 405-412. (Author's summary) 82k:70019 70110

Yanagawa, Takaaki Knot-groups of higher-dimensional ribbon knots. Math. Sem. Notes Kobe Univ. 8 (1980), no. 3, 573-591. (Yoshihiko Marumoto) 82he57020 57Q45 (573A05).

(with Asano, Kouhei; Marumoto, Yoshihiko) Ribbon knots and ribbon disks.

Osaka J. Math. 18 (1981), no. 1, 161-174. (Bradd Evans Clark) 82d:57010 57Q45

Yanagawa, Takashi A note on the efficiency of the pairwise individual matching design in a case-control study in epidemiology. J. Japan Statist. Soc. 11 (1981), no. 1, 9–14. (F. Pecka) 82m:62240 62P10 (92A15)

Validity and efficiency of matching: categorical matching vs. unmatched design in a case-control study in epidemiology. Mem. Fac. Sci. Kyushu Univ. Ser. A 35 (1981), no. 1, 71-81. (George W. Williams) 82f:62187 62P10 (62K99)

Yanagi, Shigeru (with Sasaki, Masafumi) Maintainability analysis of a system with partial redundancy. (Japanese summary) J. Oper. Res. Soc. Japan 23 (1980), no. 2, 134–145. (Wayne Winston) 82h:60112 60K05 (60K25)

Yanagihara, Niro (with Kawase, Shin) Realizability criterion of infinite-dimensional nonlinear systems. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 330–333, IEEE, New York, 1979. (See 82e:94002) 93C10 Meromorphic solutions of some difference equations. Funkcial. Ekvac. 23 (1980),

no. 3, 309-326. (I. M. Sheffer) 82m:39006a 39A10 (30D30)
 Meromorphic solutions of some difference equations. II. Funkcial. Ekvac. 24 (1981),
 no. 1, 113-124. (I. M. Sheffer) 82m:39006b 39A10 (30D30)

Yanai, H. (with Ozawa, M.; Kaneko, S.) Interpolation methods in one-dimensional optimization. (German summary) Computing 27 (1981), no. 2, 155–163. (Authors' summary) 82m:65056 65K05

Yanai, Haruo Explicit expressions of projectors on canonical variables and distances between centroids of groups. J. Japan Statist. Soc. 11 (1981), no. 1, 43-53. (S. John) 82i:62089 62H20

Yanase, Shinichiro (with Tatsumi, Tomomasa) The modified cumulant expansion for two-dimensional homogeneous turbulence with a mean flow. J. Phys. Soc. Japan 50 (1981), no. 9, 3144-3153. (Authors' summary) 82m:76034 76F05

Yannse, Tatsuro (with Inagaki, Yasuyoshi; Fukumura, Teruo) A recurrence formula for the configuration transition relation of a nondeterministic cellular automaton and its application to the Garden of Eden problem. Systems-Comput.-Controls 10 (1979), no. 1, 65-73 (1981). (Authors' summary) 82bcs9044 68D25 (68D20)

Yanbykh, G. F. See Janbihs, G.

Yancey, Thomas A. (with Judge, George G.; Bock, M. E.) Testing multiple equality and inequality hypotheses in economics. Econom. Lett. 7 (1981), no. 3, 249-255. (Authors' summary) 82k:62213 62P20

(with Judge, George G.) Sampling properties of an inequality restricted estimator. Econom. Lett. 7 (1981), no. 4, 327-333. (Authors' introduction) 82k-62022 62D0: (62P20)

Yanenko, N. N. See Janenko, N. N.

Yanev, N. M. See Janev, N. M.

Yang, Chen Ning (with Bethe, Hans; Goldberger, Marvin L.; Adler, Stephen L.; Weinberg, Steven; Dyson, Freeman J.) Einstein and the physics of the future. Some strangeness in the proportion (Einstein Centennial Sympas., Inst. Adv. Study, Princeton, N.J., 1979), pp. 493–506, Addison-Wesley, Reading, Mass., 1980. (See 82d:83002) 01A65

Fibre bundles and the physics of the magnetic monopole. The Chern Symposium 1979 (Proc. Internat. Sympos., Berkeley, Calif., 1979), pp. 247–253, Springer, New York, 1980. (Editors) 82h:81133 81G10 (53C05, 55R10)

Yang, Chang Chan (with Chen, Kuang Ho) Spectral theory for the acoustic wave equations with generalized Neumann boundary conditions in exterior domain. J. Math. Phys. 19 (1978), no. 5, 924–929. (Authors' summary) 82h:35111 35P05 (35L05, 76Q05)

On nonreal complex roots of a certain class of entire functions. Indian J. Math. 21 (1979), no. 2, 99-103. (P. K. Jain) 82j:30010 30C15 (30D35)

(with Chen, Kuang Ho) On n-dimensional sampling theorems. Appl. Math. Comp 7 (1980), no. 3, 247-257. (John L. Brown, Jr.) 82k:94013 94A99 (30D20, 42B10)

(with Gross, Fred; Koont, Sinan) On right and left factors of a certain class of e ns. J. Math. Anal. Appl. 77 (1980), no. 2, 416-424. (S. Hellerstein) 82a:30034

g. Chung Tao Odd-dimensional wiedersehen manifolds are spheres. J. D. Geom. 15 (1980), no. 1, 91-96 (1981). (Y. Mutò) 82g:53049 53C20 (53C22)

(with Montgomery, Deane) Dihedral group actions. I. General topology and modern analysis (Proc. Conf., Univ. California, Riverside, Calif., 1980), pp. 295–304, Academic Press, New York, 1981. (Authors' introduction) 82g.57014 57817 (57825) ng. Dong Ping a-splitting theorem restricted to Δ_2^0 sets. (Chinese) Acta Math. Sinica 23 (1980), no. 5, 730–739. (From the introduction) 82k:63044 03D60

g. Hung Chang On some order preserving properties of the generalized in nonnegative definite matrices. Chinese J. Math. 8 (1980), no. 2, 125–135. (C. F. Moppert) 82h:15006 15A09 Yang, Hung Che

Yang, J. N. (with Juang, J. N.; Sae-Ung, S.) Active control of large building structures. Structural control (Proc. Internat. IUTAM Sympos., Unio. Waterloo, Waterloo, Ont., 1979), pp. 663–676, North-Holland, Amsterdam, 1980. (See 82g:93083) 93C99

ig See Yang, Qi Bin

ng, Jia Xin (with Xu, Li Zhi; Bao, Xue Song) A class of generalized complex Newton interpolation series. (Chinese. English summary) J. Math. Res. Exposition 1981, First Issue, 69-72. (Authors' summary) 82g:30063 30E05 ang, Jun Hui (with Dai, Zong Duo; Ni, Lu Qun; Chen, Wen De) The estimation of the

correlations of a class of binary sequences. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 2, 207–213. (Authors' summary) 82;34014 94,334 (10L10, 94B99) ang, Kung Wei The reflexive dimension of an R-space. Acta Math. Acad. Sci. Hungar. 35 (1980), no. 1-2, 249–255. (Y. Benyamini) 82;46015 46B10

Integration in the umbral calculus. J. Math. Anal. Appl. 74 (1980), no. 1, 200-211. (William R. Allaway) 82i:05008 05A99 (33A65)

Vang, Kuo Ho Gauge transformations, Foldy-Wouthuysen transformations and conservation of energy. J. Phys. A 15 (1982), no. 2, 437-450. (Author's sun 81C20 (81B05)

Yang, Mark C. K. (with Schreckengost, Jack F.) Difference sign test for comovements between two time series. Comm. Statist. A—Theory Methods 10 (1981), no. 4, 355–369. (Theo Gasser) 82m:62209 62M10

Yang, Ping (with Hajj, Ibrahim N.; Trick, Timothy N.) Avoiding zero pivots in the modified nodal approach. IEEE Trans. Circuits and Systems 28 (1981), no. 4, 271-279. (Siegmar Gerber) 82g-94024 94C05 (90C08, 94C30)

Yang, Qi Bin (with Ye, Heng Qiang) The geometry of lattice planes. (Chinese. English

ary) Acta Phys. Sinica 29 (1980), no. 8, 1033-1038. (Authors' summary) 82h:15033 15A99 (82A60)

Composite lattice of two phases with a coincidence site lattice relationship. I. Coincidence site lattice. (Chinese: English summary). Acta Phys. Sinica 29 (1980), no. 12, 1517–1525. (Author's summary) 321:82057a 82A60

Composite lattice of two phases with a coincidence site lattice relationship. II. Coincidence coefficients of space lattices and plane lattices. (Chinese. English summary)

Acta Phys. Sinica 29 (1980), no. 12, 1526–1534. (Author's summary) 82:82057b 82A60

ng, Seung Kab (with Chung, Kyung Tae) On the relations of two Einstein's 4-dimensional unified field theories. J. Korean Math. Soc. 18 (1981), no. 1, 43-48. (J. D. Zund) 82k:83044 83E10

Yang, Shie Shien Linear functions of concomitants of order statistics with application to nonparametric estimation of a regression function. J. Amer. Statist. Assoc. 76 (1981), no. 375, 658-662. (Author's summary) 82i:62078 62G30

Yang, Shu Wên (with Hsti, Chên Jung) A direct proof that a partition lattice is meet-continuous. Tamkang J. Math. 10 (1979), no. 2, 241–243. (T. S. Blyth) 82e:96017 06B99 (05A17, 05B99)

Quadratic function and surgery obstruction. Chinese J. Math. 8 (1980), no. 2, 157-169. (Edgar H. Brown, Jr.) 82h:57026 57R65

Order of the canonical vector bundle on $C_n(k)/\Sigma_k$. Illinois J. Math. 25 (1981), no. 1, 136-146. (J. P. May) 82c:55008 55P35 (55N15)

g, Wei H. (with Watson, Layne T.) Optimal design by a homotopy method. *Applicable Anal.* 10 (1980), no. 4, 275–284. (Hj. Wacker) 82b:58021 58C30 (65H10, 73K40, Yang, Wei H. 90C30)

(with Watson, Layne T.) Methods for optimal engineering design problems based on globally convergent methods. Comput. & Structures 13 (1981), no. 1-3, 115–119. (Authors' summary) 82j:73060 73K40 (49D37, 65H10, 90C30)

(Authors' summary) 82:73060
73K40 (49137, 65H10, 90C30)
Yang, Wen Mao (with Xiong, Yi Qi; Lu, Jian Ke; Huang, Zhi Yuan) On the mesh smoothing problem. (Chinese) Wuhan Daxue Xuebao 1978, no. 3, 9-22. (From the text) 826-65014 65D10 (41A15)

(with Xu, Ji Zhong; Hu, Hai Ruo) The space with torsion and the scalar-tensor theory of the gravitational field. (Chinese) Wuhan Daxue Xuebao 1979, no. 1, 1-9. ors' summary) 82d:83054 83D05

Yang, Xiang Qun (with Wang, Zi Kun) Construction of terminating birth and death processes. (Chinese) Acta Math. Sinica 21 (1978), no. 1, 66-71. 82j:60161 60J80 W transformation and strong limit for denumerable Markov processes. Sci. Sinica 23 (1980), no. 9, 1092-1109. (Rashid Ahmad) 82b:60083 60305 (60380)

Yang, Xiao Dong Algebraic logic and the diagnostic technique of the fault function method. (Chinese) Kexue Tongbao 24 (1979), no. 8, 337–341. (Editors) 82h:94032 94C10

Yang, Yi Qun A kind of extremum in L space. (Chinese) Acta Math. Appl. Sinica 2 (1979), no. 4, 325-330. (Charles K. Chui) 82f:41046 41A99 (42A05)

iitskii, P. A. See Janickii, P. A.

Vaniv, Sara (with Geffen, Nima) Isoparametric characteristic elements for the Tricomi equation. Advances in computer methods for partial differential equations, II (Proc. Second IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1977), pp. 114-118, IMACS, New Brunswick, N.J., 1977. (Authors' summary) 82c:76071 76H05 (65N30)

Yan'kov, V. V. See Jankov, V. V. Yankov, Ya. D. See Jankov, Ja. D. Yannakakis, Mihalis (with Aho, A. V.; Ullman, Jeffrey D.) Modeling commun protocols by automata. 20th Annual Symposium on Foundations of Computer Science (San Juan, Puerto Rico, 1979), pp. 267–273, IEEE, New York, 1979. (See 82a:68004) 68I10 (94A05)

dimitriou, Christos H.; Kung, H. T.) Locking policies: safety and (with Papa tions of Comp freedom from deadlock. 20th Annual Symposium on Foundations of Computer Scie (San Juan, Puerto Rico, 1979), pp. 286-297, IEEE, New York, 1979. (See 82a:68004)

(with Sagiv, Yehoshua) Equivalences among relational expressions with the union and difference operators. J. Assoc. Comput. Mach. 27 (1980), no. 4, 633-655. (Authors' summary) 82a:68038 68B15 (68C25)

no, Kentaro (with Kon, Masahiro) Infinitesimal variations of submanifolds of a Kaehlerian manifold. J. Korean Math. Soc. 16 (1979/80), no. 2, 117-124. (Bang-yen Chen) 82j:53037 53B25 (53C40)

(with Kon, Masahiro) Generic subr nifolds. Ann. Mat. Pura Appl. (4) 123 (1980), 59-92. (Bang-yen Chen) 82h:53076 53C40 (53B25)

(with Kon, Masahiro) Generic submanifolds of Sasakian manifolds. Kodai Math. J.

3 (1980), no. 2, 163-196. (R. Roşca) 82a:53051 53C25

(with Kon, Masahiro) Differential geometry of CR-submanifolds. Geom. Dedicata 10 (1981), no. 1-4, 369-391. (Aurel Bejancu) 82f:53067 53C40
(with Hiramatu, Hitosi) Isometry of Kaehlerian manifolds to complex projective

spaces. J. Math. Soc. Japan 33 (1981), no. 1, 67-78. (Raymond Couty) 82g:53075 53C55

Yano, Koichi A remark on the topological entropy of homeomorphisms. Invent. Math. 59 (1980), no. 3, 215-220. (Peter Walters) 82b:58082 58F99 (28D20, 54H20)

Topologically stable homeomorphisms of the circle. Nagoya Math. J. 79 (1980), 145-149. (Alan Dankner) 82e:58058 58F10

(with Inoue, Hisao) The Gromov invariant of negatively curved manifolds. Topology 21 (1982), no. 1, 83–89. (Karsten Grove) 82k:53091 53C65 (57R19, 57R95)
no. M. (with McKenzie, Lionel) Some corrections: "Turnpike theory" [Econometrica 44

(1976), no. 5, 841-865; MR 56 #17735] by the first author. Econometrica 48 (1980), no. 7, 1839-1840. (Editors) 82f:90024 90A15

Yanovitskii, É. G. See Janovickii, E. G.

Yantsen, N. Ya. See Jancen, N. Ja.
Yanushka, Arthur On order in generalized polygons. Geom. Dedicata 10 (1981), no. 1-4, 451-458. (Joseph A. Thas) 82g:51017 51E30 (05B30)

(with Shult, Ernest E.) Near n-gons and line systems. Geom. Dedicata 9 (1980), no. 1, 1-72. (D. W. Erbach) 82b:51018 51E30 (05B99)

Yao, Andrew Chi Chih (with Bentley, Jon Louis; Weide, Bruce W.) Optimal expected-time algorithms for closest point problems. ACM Trans. Math. Software 6 (1980), no. 4, 563-580. (Wolfgang Boehm) 82g:68084 68G10 (52-04, 52A45, 68E10, 90C10)

A note on the analysis of extendible hashing. Inform. Process. Lett. 11 (1980), no. 2, 84-86. (From the introduction) 82a:68180 68H05

An analysis of (h,k,1)-Shellsort. J. Algorithms 1 (1980), no. 1, 14-50. (G. O. H.

Katona) 82a:68118 68E05 (05A15, 68C25)

(with Graham, Ronald L.; Yao, F. Frances) Information bounds are weak in the shortest distance problem. J. Assoc. Comput. Mach. 27 (1980), no. 3, 428-444. (H.-J. Voss) 82d:05075 05C38 (05C35, 68E10, 90C08)

(with Graham, Ronald L.; Yao, F. Frances) Some monotonicity properties of partial orders. SIAM J. Algebraic Discrete Methods 1 (1980), no. 3, 251–258. (Mauro Cerasoli) 60C05 (06A10, 60E15, 68E05)

(with Rivest, Ronald L.) On the polyhedral decision problem. SIAM J. Comput. 9 (1980), no. 2, 343-347. (Jaroslav Morávek) 82h:68071 68C25 (52A25, 90C25)

(with Borodin, Allan B.: Guibas, Leo J.: Lynch, Nancy A.) Efficient searching using partial ordering. Inform. Process. Lett. 12 (1981), no. 2, 71-75. (From the introduction) 68E05

Should tables be sorted? J. Assoc. Comput. Mach. 28 (1981), no. 3, 615-628. (Author's summary) 82f:68099 68H05 (68B15)

Yao, F. Frances An alternative representation of transitive closures. 1979 International Property of the Prope sium on Circuits and Systems (Tokyo, 1979), pp. 275, IEEE, New York, 1979. (See 82e:94002) 68C05

(with Chung, F. R. K.; Erdős, Paul; Graham, Ronald L.; Ulam, Stanislaw M.) Minimal decompositions of two graphs into pairwise isomorphic subgraphs. Proceedings of the Tenth Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1979), pp. 3–18, Congress. Numer.,

XXIII-XXIV, Utilitas Math., Winnipeg, Man., 1979. (Donald L. Goldsmith) 82b:05080

(with Graham, Ronald L.: Yao, Andrew Chi Chih) Information bounds are weak in the shortest distance problem. J. Assoc. Comput. Mach. 27 (1980), no. 3, 428-444. (H.-J. Voss) 82d:05075 05C38 (05C35, 68E10, 90C08)

(with Graham, Ronald L.; Yao, Andrew Chi Chih) Some monotonicity properties of partial orders. SIAM J. Algebraic Discrete Methods 1 (1980), no. 3, 251-258. (Mauro Cerasoli) 82k:60022 60C05 (06A10, 60E15, 68E05)

Yao, Kung Quadratic-exponential moment error bounds for digital communication systems. J. Franklin Inst. 310 (1980), no. 6, 365-371. (Author's summary) 82a:94007 94A6

Yao, Qi (with Lou, Shi Tuo) Lower bound for zeros of Riemann's zeta function on $\sigma = \frac{1}{2}$. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 7, 292-295. Kexue Tongbao (English) 25 (1980), no. 5, 374-377. (C. Ryavec) 82a:10043 10H05

(with Lou, Shi Tuo) The exceptional set of Goldbach numbers in a short interval. (Chinese) Acta Math. Sinica 24 (1981), no. 2, 269-282. (Ming-Chit Liu) 82i:10068

(with Lou, Shi Tuo) A lower bound for zeros of Riemann's zeta function on the line $\sigma = \frac{1}{2}$. (Chinese) Acta Math. Sinica 24 (1981), no. 3, 390–400. (Kee Wai Lau) 82m:10063

Yap, Hian Poh On graphs whose edge-deleted subgraphs have at most two orbits. Ars Combin. 10 (1980), 27-30. (From the introduction and summary) 82a:05066 05C60 A construction of chromatic index critical graphs. J. Graph Theory 5 (1981), no. 2, 159-163. (Joan Hutchinson) 82i:05049 05C35 (05C15)

Yap, Leonard Y. H. (with Quek, T. S.) Multipliers from L_r(G) to a Lipschitz-Zygmund class. J. Math. Anal. Appl. 81 (1981), no. 1, 278-289. (Hans G. Feichtinger) 82:43006 43A22 (43A70)

Yaqub, Adil (with Abu-Khuzam, Hazar) Some conditions for commutativity of rings with constraints on nilpotent elements, Math. Japon. 24 (1979/80), no. 5, 549-551. (Hal G. Moore) 82b:16035 16A70

(with Abu-Khuzam, Hazar; Tominaga, Hisao) A commutativity theorem for rings with constraints involving an additive subsemigroup. II. Math. J. Okayama Univ. 22 (1980), no. 2, 107-109. (Howard E. Bell) 82a:16032 16A70

(with Abu-Khuzam, Hazar; Tominaga, Hisao) Commutativity theorems for s-unital rings satisfying polynomial identities. Math. J. Okayama Univ. 22 (1980), no. 2, 111-114. (D. Z. Spicer) 82b:16036 16A70 (16A38)

(with Abu-Khuzam, Hazar) Rings and groups with commuting powers. Internat. J. Math. Math. Sci. 4 (1981), no. 1, 101-107. (Howard E. Bell) 82d:16031 (16A38, 20A05)

(with Psomopoulos, Evagelos; Tominaga, Hisao) Some commutativity theorems for torsion free rings. Math. J. Okayama Univ. 23 (1981), no. 1, 37-39. (Howard E. Bell) 82i:16060 16A70

Yaqub, Fawzi M. Equationally definable Post L-algebras. Algebra Universalis 13 (1981), no. 2, 225-232. (Tôru Miyama) 82m:03070 03G20 (06D25, 08B05)

ub, Mohd. (with Khan, A. H.) Distribution of a distance function. Ann. Inst. Statist. Math. 32 (1980), no. 2, 247-253. (Takeaki Kariya) 82c:60022 60D05 (52A22, 92A17) (with Khan, A. H.) The offset multivariate normal distribution. Aligarh J. Statist. 1 (1981), no. 1, 23-27. (Authors' summary) 82m:62115 62H05

(with Khan, A. H.) Geometric failure law in life testing. Pure Appl. Math. Sci. 14 (1981), no. 1-2, 69-76. (Authors' summary) 82d:62157 62N05

See Jarin, A. L.

adda, Rao (with Hershey, John E.) Architecture of the fast Walsh-Hadamard and fast Fourier transforms with charge transfer devices. Internat. J. Electron. 51 (1981), no. 5, 669-681. (Authors' summary) 82k:94005 94A05

(with Allen, Jont B.) Aliasing errors in short-time analysis. (German and French naries) Signal Process. 4 (1982), no. 1, 79-84. (Authors' summary) 82m:94019 94A05 (94A12)

rmish, Joshua (with Quintas, Louis V.) The number of chiral alkanes having given diameter and carbon automorphism group, a symmetric group. Second International Conference on Combinatorial Mathematics (New York, 1978), pp. 436–443, Ann. New York Acad. Sci., 319, New York Acad. Sci., 319, New York Acad. Sci., New York, 1979. (D. H. Rouvray) 82m:95058 05C30 (05A15, 05C05, 92A40)

Yaroshevskiy, V. Ya. See Jaroševskii, V. Ja. Yashin, A. I. See Jašin, A. I.

Yashkov, S. F. See Jaškov, S. F.

Yassaee, Hedayat On analysis of contingency tables. Bull. Iranian Math. Soc. 7, no. 2, 11-32 (1980). (Graham J. G. Upton) 82e:62083 62H17

Two kinds of rotation: an argument for torsion. Gen. Relativity n 13 (1981), no. 5, 463-471. (Author's summary) 82i:83064 Yastremskii, A. I. See Jastremskii, A. I.

Yasuda, Hiroshi On Finsler geometry and analytical dynamics. Tensor (N.S.) 35 (1981), no. 1, 63-72. (H. Rund) 82f:53044 53B40 (49C10, 70H30)

Yasuda, Kazunori (with Hirai, K.) Optimization of large-scale systems by means of decentralized state feedback. Fourteenth Asilomar Conference on Circuits, Systems and Computers (Pacific Grove, Calif., 1980), pp. 516-520, IEEE, New York, 1981. (See 49E25 (93A15)

Yasuda, Masami (with Kurano, Masami; Nakagami, Junichi) Multivariate stopping problem with a majority rule. (Japanese summary) J. Oper. Res. Soc. Japan 23 (1980), no. 3, 205–223. (Bert Fristedt) 82b:90132 90D10 (90D20)

(with Nakagami, Junichi) A saddle point of an inventory problem. J. Inform.
Optim. Sci. 2 (1981), no. 2, 181-191. (Authors' summary) 824:90052 90B05 (90D45) uda, Tomoshige (with Shinoda, Shoji; Sakuma, Hiroshi) Semimatroids. 1979

International Symposium on Circuits and Systems (Tokyo, 1979), pp. 1004–1007, IEEE, New York, 1979. (See 82e:94002) 94C30

la, Yutaka On the synthesis of model-following two-dimensional digital system Internat. J. Control 34 (1981), no. 2, 201-217. (Author's summary) 82k:93024 93B15
Yasue, Kunio The Onsager-Machlup Lagrangian and the optimal control for diffusion processes. Functional integration theory and applications (Proc. Collog., Loucain-la-Newe,

1979), pp. 281-290, Plenum, New York, 1980. (Author's summary) 82f:82034 (60H10, 93E20)

Stochastic calculus of variations. J. Funct. Anal. 41 (1981), no. 3, 327-340. (Z. Schuss) 82g:60086 60H10 (49C99, 49H05, 60G48, 81C20)

Quantum mechanics and stochastic control theory. J. Math. Phys. 22 (1981), no. 5, 1010-1020. (M. Demuth) 82i:81043 81C20 (93E03)

A path-probability representation for wavefunctions. Lett. Math. Phys. 5 (1981), no. 2, 93-97. (A. Badrikian) 82i:81044 81C20 (28C20, 60J35)

Yasugi, Mariko A progression of consistency proofs. Comment. Math. Univ. St. Paul. 28 (1980), no. 1, 31–49. (Jane E. Kister) 82d:03093 03F15 (03F25)

(with Takeuti, Gaisi) An accessibility proof of ordinal diagrams. J. Math. Soc. Japan 33 (1981), no. 1, 1-21. (Jane E. Kister) 824:03092 03F15

Yasui, Kazumi (with Motoori, Mitsuo; Nakagawa, Toshio; Sawa, Yoshiya) Reliability analysis of an inspection policy and its application to a computer system. (Japane English summary) J. Oper. Res. Soc. Japan 23 (1980), no. 3, 273-286. (From the summary) 82a:90066 90B25 (68A05)

to, Masahiro Classes on ZF models. J. Math. Soc. Japan 32 (1980), no. 4, 615-621. (A. Lévy) 824:03057 03C62 (03E99)

Yates, J. W. (with Schellenberg, P. J.; Stinson, D. R.; Vanstone, S. A.) The existence of Howell designs of side n+1 and order 2n. Combinatorica 1 (1981), no. 3, 289–301. (W. D. Wallis) 82m:05028 05B30 (05B15)

Yates, R. G. Fibre bundles and supersymmetries. Comm. Math. Phys. 76 (1980), no. 3, 255-268. (Martine J. Perrin) 82a:83056 83E99 (53C05, 55R65)

(with Kunstatter, G.) The geometrical structure of a complexified theory of gravitation. J. Phys. A 14 (1981), no. 4, 847–854. (Authors' summary) 82i:83060 83D05 (53B30, 53C05)

Vatomi, Chikayoshi (with Gurtin, Morton E.) On the energy release rate in elastodynas crack propagation. A 82f:73041 73M05 Arch. Rational Mech. Anal. 74 (1980), no. 3, 231-247. (C.-C. Wang)

Yatsenko, V. A. See Jacenko, V. A.

un, V. A. See Jacum, V. A.

Yau, Shing Tung The total mass and the topology of an asymptotically flat space-time Chern Symposium 1979 (Proc. Internal. Sympos., Berkeley, Calif., 1979), pp. 255–259, Springer, New York, 1980. (Mauro Francaviglia) 82g:83023 83C99 (58D10)

(with Cheng, Shiu Yuen) On the existence of a complete Kähler metric on noncompact complex manifolds and the regularity of Fefferman's equation. Comm. Pure Appl. Math. 33 (1980), no. 4, 507-544. (Daniel M. Burns, Jr.) 82f:53074 (32F15, 53C25, 58G20)

(with Schoen, Richard) The energy and the linear momentum of space-times in general relativity. Comm. Math. Phys. 79 (1981), no. 1, 47-51. (Beverly K. Berger) 83C99 (53C55, 58E20, 83C30)

(with Cheeger, Jeff) A lower bound for the heat kernel. Comm. Pure Appl. Math. 34 (1981), no. 4, 465–480. (Th. Friedrich) 82½58065 58G11 (35K05, 58G20)

Yau, Stephen S. T. Kohn-Rossi cohomology and its application to the complex Plateau problem. I. Ann. of Math. (2) 113 (1981), no. 1, 67–110. (G. M. Henkin) \$2k:32038 32C45 (32F25, 49F10)

Yavin, Yaakov Proper representation and optimal control of a nonlinear stochastic system. Internat. J. Systems Sci. 10 (1979), no. 2, 123-133. (Author's summary) 82m:93105

(with Venter, A.) Computation of impulse control laws for a nonlinear stochastic oscillator. Comput. Methods Appl. Mech. Engrg. 28 (1981), no. 2, 129-143. (Authors' summary) 82m:70027 70L05 (70Q05, 93E20)

(with Reuter, G.) Optimal bang-bang control of partially observable stochastic ems. Internat. J. Systems Sci. 12 (1981), no. 2, 147-161. (Norbert Christopeit) 93F20

(with Friedman, Menahem) Estimation and control for a class of nonlinear astic systems. Internat. J. Systems Sci. 12 (1981), no. 5, 587-600. (R. S. Bucy) 93E11

82j:93049 An alternative approach to nonlinear filtering. Internat. J. Systems Sci. 12 (1981), no. 7, 795-812. (R. S. Bucy) 82j:93050 93E11 (93E20)

An alternative approach to nonlinear filtering: jump process observations. Intern J. Systems Sci. 12 (1981), no. 9, 1061-1081. (Michel Fliess) 82k:93069 93E11

(with Pachter, M.) A stochastic homicidal chauffeur pursuit-evasion differential game. J. Optim. Theory Appl. 34 (1981), no. 3, 405-424. (Emmanuel Nicholas Barron) 12j:93043 93E05 (90D26)

(with Pachter, M.) The homicidal chauffeur game-a stochastic model. Optimal Control Appl. Methods 2 (1981), no. 2, 145-163. (Authors' summary) 82d:93059 93E05 (90D25, 90D26)

Yavor, Elic Extremal problems on moment cones and the Karlin representation theorem. J. Analyse Math. 39 (1981), 279-295. (Allan Pinkus) 82k:41023

Yavorskaya, I. M. See Javorskaja, I. M.

Mittlere Materiedichte und räumliche Ausdehnung des Universums. (English and Turkish summaries) Comm. Fac. Sci. Univ. Ankara Sér. A. Phys. 27 (1978), no. 3, 43-56 (1979). (Author's summary) 82e:83045 83F05 (85A40)

Ye, Bi Quan (with Feng, Zhen Xing; Li, Mao Xiang; Shen, Cheng Wu) A direct method of decomposition by segments and pieces for the solution of large systems (sets) of linear equations and its coupling with the idea of substructures. (Chinese. English sun Numer. Math. J. Chinese Univ. 2 (1980), no. 1, 1-6. (Authors' summary) 82i:65023

Ye, Da Xing (with Mo, Shao Kui) On recursion schemas defining operators. (Chinese. English summary) J. Huazhong Inst. Tech. 7 (1979), no. 4, 7, 1-9. (Authors' summary) 82i:03054 03D20 (68D99)

Ye, Heng Qiang (with Yang, Qi Bin) The geometry of lattice planes. (Chinese. English summary) Acta Phys. Sinica 29 (1980), no. 8, 1033-1038. (Authors' summary) 82h:15033 15A99 (82A60)

Ye, Yan Qian (with Luo, Ding Jun) Qualitative investigation of a toral differential equation having critical points. (Chinese summary) Chinese Ann. Math. 1 (1980), no. 3-4, 335-349. (Richard C. Swanson) 82k:58078 58F14 (34C05, 58F22)

Ye, Zai Ying Stability of difference equations in the sense of Hadamard. (Chinese. English ummary) Numer. Math. J. Chinese Univ. 1 (1979), no. 1, 40-49. (Author's summary) 65M10 82e:65050

Yeadon, F. J. (with Kopp, P. E.) Inequalities for noncomm application. J. London Math. Soc. (2) 19 (1979), no. 1, 123-128. (D. J. H. Garling) 82b:46087 46I.50 (46E30, 47D25)

Isometries of noncommutative LP-spaces. Math. Proc. Cambridge Philos. Soc. 90

(1981), no. 1, 41-50. (Shinzo Kawamura) 82g-46108 461.50

Yechiali, Uri (with Mendelson, Haim) Controlling the GI/M/1 queue by conditional acceptance of customers. European J. Oper. Res. 7 (1981), no. 1, 77-85. (B. W. Stuck) 60K25 (90B22)

(with Mendelson, Haim) Optimal policies for data base reorganization. Oper. Res. 29 (1981), no. 1, 23–36. (Authors' summary) 82m:88047 68B15 (60K 10, 68H05)
Yee, John A nonlinear, second-order population model. Theoret. Population Biol. 18 (1980),

no. 2, 175-191. (T. J. Mahar) 82e:92043 92A15 (34C10)

Yefimov, A. N. See Elimov, A. N. Yeh, Cheh Chih (with Chen, Lu San) On the Fourier's first problem for a system of nonlinear parabolic equations with unbounded coefficients. Portugal. Math. 36 (1977), no. 3-4, 205-226 (1980). (Kenneth J. Brown) 82b:35087 35K60 (35B05)

Fixed point theorems in orbitally complete spaces. Progr. Math. (Allahabad) 12 (1978), no. 1-2, 81-86. (From the introduction) 82a:54092 54H25

(with Chen, Lu San; Lin, Jer San) On the weak solutions for the Cauchy problem of parabolic equations with discontinuous and unbounded coefficients. Yokohama Math. J.

(with Murakami, Haruo) Correction to: "Fixed point theorems in complete metric spaces" [Math. Japon. 23 (1978/79), no. 1, 77-83; MR 58 #12982]. Math. Japon. 24 (1979/80), no. 6, 665. (Editors) 82k:54075

- (with Chen, Lu San) Oscillations of wth order functional-differential equations with perturbations. (Italian summary) Rend. Istit. Mat. Univ. Trieste 11 (1979), no. 1-2, 83-90 (1980). (I. P. Stavroulakis) 82c34683 34K15
- nct metric spaces. Kyungpook Math. J. 20 (1980), 4 54H25 On fixed point theorems in compact no. 1, 33-35. (Alessio Volčič) 82c:54044
- Common fixed point of continuous mappings in metric spaces. Publ. Inst. Math. (Beograd) (N.S.) 27(41) (1980), 21-25. (S. P. Singh) 82g:54074 54H25
- ih, Mou Hsiang) Successive approxima al. Appl. 81 (1981), no. 1, 182-188. (V. P. Havin) 82f:30040 30E10 (30D05)
- Yeh, Gour Tsyh Numerical solutions of Navier-Stokes equations with an integrated compartment method (ICM). Internat J. Numer. Methods Fluids 1 (1981), no. 3, 207-223. (Author's summary) 82:76033 76D25 (65P05, 76A60)
- Yeh, H. C. Modeling of biological tree structures. Bull. Math. Biol. 41 (1979), no. 6, 893-898. (Author's summary) 82k-92036 92A09 (92A05)

 Yeh, Hsi Han (with Chung, Kan Kuei) Simplification of discrete-time transfer functions via step-response matching. J. Nat. Chiao Tung Univ. 7 (1980), 1–12. (Authors' summary) 82k-92047 82493043 93C55
- (with Chung, Kan Kuei; Han, K. W.) Simplification and identification of discrete transfer function via step-response matching. J. Franklin Inst. 311 (1981), no. 4, 231-241. (Authors' summary) 82e:93027 93B30

 Yeh, Hsin Yang (with Wong, M. K. F.) A unified treatment of the representation functions
- of SO(n, 1), SO(n+1), a nd ISO(n). J. Math. Phys. 22 (1981), no. 8, 1559-1565. (A. O. Barut) 82k:81028 81C40 (22E70)
- Baruti Saccitatas of Carlot (22270)
 Lomput. System Sci. 19 (1979), no. 1, 63-78. (Authors' summary) 82m:68119
 68F05
 The decidability of equivalence for a family of linear grammars. Inform. and Control 47 (1980), no. 2, 122-136. (Author's summary) 826:68049
 68F05 (30105)
 (with Itzhaik, Yair) A decision procedure for the equivalence of two dpdas one of
 - which is linear (extended abstract). Automata, languages and programming (Akko, 1981), pp. 229-237, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (From the introduction) 82mc68102 (with Harrison Victor)
 - (with Harrison, Michael A.) Eliminating null rules in linear time. Comput. (1981), no. 2, 156–161. (Authors' summary) 82e:68076 68F05 (03D05, 03D15)
- Yelles, C. B. See Ben-Yelles, C. B.
- Yellott, John I., Jr. Generalized Thurstone models for ranking: equivalence and rsibility. J. Math. Psych. 22 (1980), no. 1, 48-69. (Fumiko Samejima) 82c:62144 62P15 (90A10, 92A25)
- Yemel'yanov, S. V. See Emel'janov, S. V. Yen, Chen Te On the commutativity of 449-452. (J. Luh) 82b:16039 16A70 stativity of primary rings. Math. Japon. 25 (1980), no. 4,
- Yen, Chi Lin A minimax inequality and its applications to variational inequalities. Pacific
- J. Math. 97 (1981), no. 2, 477-481. (J. Warga) 82m:49016 49A29 (47H05)
 Yen, Chin Ta (with Chang, Da Gan) Sur les représentations linéaires réelles irréductibles d'une algèbre de Lie semi-simple. (English summary) C. R. Acad. Sci. Paris Sér. I Math.
- 292 (1981), no. 3, 175–177. (Authors' summary) 82i:17011 17810
 Yen, Shao Wen Buckling of cylindrical shells with spiral stiffeners under uniform compression and torsion. Comput. & Structures 11 (1980), no. 6, 587–595. (V. K. Arya) 73L99
- in, S. V. See Enin, S. V.
- Yesha, Yaacov (with Fraenkel, Aviezri S.) Complexity of solving algebraic equations Inform. Process. Lett. 10 (1980), no. 4-5, 178-179. (From the text) 82a:68071 68C2
 - (with Perl, Yehoshua) Mean flow scheduling and optimal construction of a treelike nmunication network. Networks 11 (1981), no. 1, 87-92. (Authors' summary) 68C25 (68C15, 90B35, 94C15)
- Yfantis, E. A. On the estimation of the spreading function to the directional spectra. Time series analysis (Houston, Tex., 1980), pp. 643–649, North-Holland, Amsterdam, 1981. (See
- A subplane partition of the cyclic plane of order 81. (Arabic summary) Arab J.
- Math. 1 (1980), no. 1, 32–37. (E. J. F. Primrose) 82;51019 51E15

 Yger, Alain Systèmes de distributions à support fini et à spectre discret. (English summary)

 C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 11, 543–546. (Author's summary) 46F10
- Yin, Hong Sheng (with Zhao, Jun Feng; Wang, Chong Hu) On λ-separated subsets of unit spheres of normed linear spaces. (Chinese. English summary) Nanjing Daxue Xuebao 1980, Special Issue on Mathematics, 123–129. (Bor-Luh Lin) 82g-46042 46B20
- Yin, Ke Zhen An inversion formula for switching functions. (Chinese. English summary) J. Math. Res. Exposition 1981, no. 1, First Issue, 63-68. (Hsi-han Yeh) 82g:94029
- Yin, Peng Cheng (with Li, Xin Zhou; Gu, Ming Gao) The graded algebra SU(I|m|n). (Chinese. English summary) Acta Phys. Sinica 30 (1981), no. 1, 147–152. (Authors' summary) 82f:81087 81G20 (17A70)
- Yin, Wan Lee (with Owen, David Ross) Plane irrotational flows of rigid-viscoplastic bodies. (German summary) Z. Angew. Math. Phys. 32 (1981), no. 4, 396–407. (Authors' ary) 82i:73018 73E99 (73F99)
- Yin, Wei Ping (with Lu, Qi Keng) The solution of the Cauchy problem for a wave equation with variable coefficients. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 1, 115-129. (Authors' summary) 82i:35104 35L05 (58D30, 83C99)
- Yin, Xie Yuan (with Ling, Guo Can) The early stages of unsteady flow around a circular cylinder at high Reynolds number and under laminar conditions. (Chinese: English summary)

 Acta Mech. Sinica (Beijing) 1981, no. 2, 109–120. (From the summary)

 76C05 (76D10)
- Yin, Yong Quan The integral equation $\varphi(x) = \int_0^{1.5} \varphi(x+y) dF(y)$. (Chinese. English summary) Beijing Daxue Xuebao No. 4 (1980), 31–35. (Author's summary) 82k:45013
- Ying, Long An Convergence of the infinite similar element method. (Chinese) Acta Math. Appl. Sinica 2 (1979), no. 2, 149-166. (From the introduction) 82g:65056 65N30 (with Han, Hou De) The infinite element method for unbounded regions and inhomogeneous problems. (Chinese) Acta Math. Sinica 23 (1980), no. 1, 118–127. (Authors' summary) 82j:65085 65N30 (73K30)

- (with Wang, Jing Hua) Global solutions of the Cauchy problem for a
- nonhomogeneous quasilinear hyperbolic system. Comm. Pure Appl. Math. 33 (1980), no. 5, 579-597. (C. Bardos) 82a:35067 35L60
- (with Wang, Ching Hua) The discontinuous initial value problem of a reacting gas Trans. Amer. Math. Soc. 266 (1981), no. 2, 361-387. (R. G. Airapetjan) 82k:35076 35L67 (80A30)
- Ying, Mei Qian Necessary and sufficient conditions and criteria of efficient and weak Appl. Sinica 2 (1979), no. 3, 268–277. 82k=90112 90C31
 - (with Wei, Quan Ling) The properties of solutions and computational methods for single variable multiobjective mathematical programming. (Chinese) Acta Math. Appl. Sinica 3 (1980), no. 4, 382-388. (Su-shing Chen) 82i:90110 90C31
 - The least sum of squares with constraints. (Chinese) Acta Math. Sinica 23 (1980), no. 2, 301-312. (Author's introduction) 82j:65042 65K05
- Yip, Elizabeth L. (with Sincovec, Richard F.; Erisman, Albert M.; Epton, Michael A.) Analysis of descriptor systems using numerical algorithms. *IEEE Trans. Automat. Control* 26 (1981), no. 1, 139–147. (Authors' summary) 82c:65048 65L05 (93B30) (with Sincovec, Richard F.) Solvability, controllability, and observability of
 - continuous descriptor systems. IEEE Trans. Automat. Control 26 (1981), no. 3, 702-707. (Authors' summary) 82k:93018 93B05
- Yip, P. C. On a conjecture for the design of low-pass recursive filters. IEEE Trans.
- Speech Signal Process. 28 (1980), no. 6, 768. (Author's summary) 82i:94003 94A05
 Yivisaker, Donald (with Sacks, Jerome) Asymptotically optimum kernels for density estimation at a point. Ann. Statist. 9 (1981), no. 2, 334-346. (C. Stone) 82i:62066
 - (with Sacks, Jerome) Variance estimation for approximately linear models. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Statist. 12 (1981), no. 2, 147-162. (From the summary) 821:62024 62C20 (62J05)
- huráin, F. J. A letter to the editor: "Gauge unification of fundamental forces" by Salam. Rev. Modern Phys. 53 (1981), no. 2, 359. (Editors) 82d:81001d 81-03 (01A65)
- Yoccoz, Jean-Christophe Sur la disparition de propriétés de type Denjoy-Koksma en dimension 2. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 13, A655-A658. (Author's summary) 82a:28014 28D05 (58F11)
 - (with Arnoux, Pierre) Construction de difféomorphismes pseudo-Anosov. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 1, 75–78. (Authors' summary) 82b:57018 57R30 (58F15, 58F18)
- Yochmowitz, M. G. (with Krishnaiah, P. R.) Inference on the structure of interaction in two-way classification model. Analysis of variance, pp. 973-994, Handbook of Statistics, 1, North-Holland, Amsterdam, 1980. (See 82f:62102) 62105
- Yodzis, Peter ★Competition for space and the structure of ecological communities. Lecture Notes in Biomathematics, 25. Springer-Verlag, Berlin-New York, 1978. vi + 191 pp. ISBN 3-540-08936-5 (Hal Leslie Smith) 82a:92034 92A15 (92A17)
- eurp, Chantha Sauts additifs et sauts multiplicatifs des semi-martingales. Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 118-125, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Dominique Lépingle) 82a:60070
 - Rectificatif à l'exposé: "Démonstration simple d'un résultat sur le temps local" Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/1978), pp. 441-442, Lecture Notes in Math., 721, Springer, Berlin, 1979; MR 82a:60065a] de C. S. Chou. Seminar on Probability, XIV (Paris, 1978/1979) (French), p. 254, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Jean Mémin) 82a:60065b 60G44
 - Sur la dérivation stochastique au sens de M. H. A. Davis. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 399-412, Lecture Notes in Math., 850, Springer, Berlin, 1981. (M. H. A. Davis) 82j:60100 60H05 (60G44)
- Yokogawa, Kenji Noncommutative Hopf Galois extensions. Osaka J. Math. 18 (1981), no. 1, 63-73. (Kazuo Kishimoto) 82i:16008a 16A24
 - The cohomological aspects of Hopf Galois extensions over a commutative ring. Osaka J. Math. 18 (1981), no. 1, 75-93. (Kazuo Kishimoto) 82i:16008b
- Yokoi, Yoshitaka Remark on measurability properties for the flow built on a measure preserving transformation under a function. Mem. Fac. Gen. Ed. Kumamoto Univ. Natur. Sci. No. 16, part 1 (1981), 15-18. (Karl Petersen) 82c:28037 28/005
- Yokomoto, C. F. (with Sinha, A. S. C.) Null controllability of a nonlinear system with variable time delay. IEEE Trans. Automat. Control 25 (1980), no. 6, 1234-1236. (From
- the introduction) 82i:93011 93B05

 Yokota, Ichiro Simply connected compact simple Lie group E_{6i-78i} of type E_6 and its involutive automorphisms. J. Math. Kyoto Univ. 20 (1980), no. 3, 447–473. (D. B. Persic) 17C40 (22E15)
- Yokoyama, Kan-ichi (with Fukuda, Takashi) The Higgs-Kibble model on the basis of a canonical Yang-Mills field theory with gauge covariance. II. Progr. Theoret. Phys. 64 (1980), no. 3, 1058-1064. (Authors' summary) 82c:81107 81E99 (81D20)
- (with Takeda, Minoru; Monda, Minoru) Gauge covariance in nonabelian gauge theories. Progr. Theoret. Phys. 64 (1980), no. 4, 1412-1424. (Tuan W. Chen) 82h:81096
- Yokoyama, Ryozo A note on weak convergence of empirical processes for φ-mixing random variables. Yokohama Math. J. 28 (1980), no. 1-2, 37-40. (Ken-ichi Yoshihara) 82i:60054
- oyama, Shozo (with Nei, Masatoshi) Population dynamics of sex-determining alleles in honey bees and self-incompatibility alleles in plants. Genetics 91 (1979), no. 3, 609-626. (Ivar Heuch) 82a:92025 92A10 (92A15)
- ndin, Y. Some estimates for a decomposition of hypersurface singularities into the simplest ones. Israel J. Math. 36 (1980), no. 2, 126-132. (Richard Randell) 82h:32015 32B30
- a, Kaoru Control functions of a.e. convergences appearing in analysis. Math. Japon. 25 (1980), no. 4, 443-447. (Roger L. Jones) 82b:42005 42A20
- Yoneya, Tamiaki A path-functional field theory of lattice gauge models and the large-N limit. Nuclear Phys. B 183 (1981), no. 3, 471-496. (Author's summary) 82h:81106 81E25 (81C35)
- Yoneyama, Kanji (with Huang, Jun Ming; Nishida, Toshio) Commutative tandem queue with two types of customers. Math. Japon. 25 (1980), no. 5, 533-543. (B. R. K. Kashyap) 60K25 (90B22)
- eyama, Toshiaki (with Hara, Tadayuki; Okazaki, Yoshinori) On the boundedness of

solutions of perturbed linear systems. J. Math. Anal. Appl. 83 (1981), no. 1, 188–208. (Wolfdietrich Müller) 82j:34033 34C11 (34D10, 34D40)

Yontchev, Ch. A. See Jončev, Ch. A.

Yoo, Y. B. (with Kowalik, J. S.) Implementing a distributive partitioning sort program. J.

Inform. Optim. Sci. 2 (1981), no. 1, 28–33. (Authors' summary) 82j:68048 68E05

Yoon, Kwangsum (with Hwang, Ching Lai) ★Multiple attribute decision making. Methods and applications. A state-of-the-art survey. Lecture Notes in Economics and Mathematical Systems, 186. Springer-Verlag, Berlin-New York, 1981. xi+259 pp.

ISBN 3-540-10558-1 (Rakesh K. Sarin) 82g:90003 90A05 on, Kyonggeum (with Chae, Dong Ghi; Ree, Taikyue; Ree, Francis H.) Computer simulation of a grand canonical ensemble of rodlike molecules. J. Chem. Phys. 74 (1981), no. 2, 1412–1423. (Authors' summary) 82c:82001 82-04 (65C05, 82A67)

no. 2, 1412-1423. (Authors' summary) 82e:82001 82-04 (65C05, 82A67)

Yoon, Youngjoo (with Puri, Madan L.; Rao, Jammalamadaka Sreenivasa) A simple test for goodness-of-fit based on spacings with some efficiency comparisons. Contributions to statistics, pp. 197-209, Reidel, Dordrecht, 1979. (From the introduction) 82i:62070 62G10

Yor, Marc (with Azéma, Jacques) Une solution simple au problème de Skorokhod. Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 90-115, Lecture Notes in Math., 721, Springer, Berlin, 1979. (M. A. Maher) 82c:60073a 60G40 (60G44, 60I65)

Un exemple de J. Pitman. Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), p. 624. Lecture Notes in Math., 721, Springer, Berlin, 1979. (M. A. Maher) 82b-60106 60165

(with Jeulin, Thierry) Inégalité de Hardy, semimartingales, et faux-amis. Séminaire de Probabilités, XIII (Unic. Strasbourg, Strasbourg, 1977/78), pp. 332-359, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Aline Bonami) 82d:60084 60G44
 (with Jeulin, Thierry) Sur l'expression de la dualité entre H¹ et BMO. Séminaire de

(with Jeulin, Thierry) Sur l'expression de la dualité entre H¹ et BMO. Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 360-370, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Aline Bonami) 82d:60085 60G44

En cherchant une définition naturelle des intégrales stochastiques optionnelles. Séminaire de Probabilités, XIII (Unic. Strasbourg, Strasbourg, 1977/78), pp. 407-426, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Maurizio Pratelli) 82e:60091

Sur le balayage des semi-martingales continues. Séminaire de Probabilités, XIII (Unic. Strasbourg, Strasbourg, 1977/78), pp. 453–471, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Jacques Azéma) 821:60118a 60G48 (60H05, 60H45) (60H45) (with Meyer, Paul-André; Stricker, Christophe) Sur une formule de la théorie du

(with Meyer, Paul-André; Stricker, Christophe) Sur une formule de la théorie du balayage. Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 478-487, Lecture Notes in Math., 721, Springer, Berlin, 1979. (Jacques Azéma) 821:60118e 60G48 (60H05, 60J45)

(with Azéma, Jacques) Le problème de Skorokhod: compléments à "Une solution simple au problème de Skorokhod". Séminaire de Probabilités, XIII (Univ. Strasbourg, Strasbourg, 1977/78), pp. 625–633, Lecture Notes in Math., 721, Springer, Berlin, 1979. (M. A. Maher) 82c:60073b 60640 (600644, 60165)

Quelques interactions entre mesures vectorielles et intégrales stochastiques.

Séminaire de Théorie du Potentiel, No. 4 (Paris, 1977/1978), pp. 264–281, Lecture Notes in Math., 713, Springer, Berlin, 1979. (Author's introduction) 82b:60061

(28B05)

(with Azéma, Jacques; Gundy, Richard F.) Sur l'intégrabilité uniforme des martingales continues. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 53-61, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Michael Sharpe) 824-60083.

(with Barlow, Martin) Sur la construction d'une martingale continue, de valeur absolue donnée. Seminar on Probability, XIV (Paris, 1978/1979) (French, pp. 62-75, Lecture Notes in Math., 784, Springer, Berlin, 1980. (R. F. Gundy) 821:60099 60G44

(with Auerhan, J.; Lépingle, D.) Construction d'une martingale réelle continue, de filtration naturelle donnée. Seminar on Probability. XIV (Paris, 1978/1979) (French), pp. 200–204, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Maurizio Pratelli) 82e:60076 60C34

Remarques sur une formule de Paul Lévy. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 343-346, Lecture Notes in Math., 784, Springer, Berlin, 1980. (M. H. A. Davis) 82c:60144 60J65 (60J25)

(with Cocozza, C.) Démonstration d'un théorème de F. Knight à l'aide de martingales exponentielles. Seminar on Probability, XIV (Paris, 1978/1979) (French), pp. 496-499, Lecture Notes in Math., 784, Springer, Berlin, 1980. (Louis Blake) 821:60085 60C44 (60H05, 60I65)

(with Stroock, Daniel W.) On extremal solutions of martingale problems. Ann. Sci. École Norm. Sup. (4) 13 (1980), no. 1, 95–164. (Robert Kertz) 82b:60051 (60H05, 60J60)

(with Pitman, Jim W.) Processus de Bessel, et mouvement brownien, avec "drift". (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 2, A151-A153. (Authors' summary) 82b:60105

Loi de l'indice du lacet brownien, et distribution de Hartman-Watson. Z. Wahrsch. Verw. Gebiete 53 (1980), no. 1, 71-95. (Michele Mastrangelo-Dehen) 82a:60120 60165 Sur certains commutateurs d'une filtration. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 526-528, Lecture Notes in Math., 850, Springer, Berlin, 1981. (Rolando Rebolledo) 82a:60065 60G07 (60G40)

(with Stroock, Daniel W.) Some remarkable martingales. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 590-603, Lecture Notes in Math., 850, Springer, Berlin, 1981. (B. Marchal) 82:60085 60G44 (60H05, 60J65)

(with Lépingle, D.; Meyer, Paul-André) Extrémalité et remplissage de tribus pour certaines martingales purement discontinues. Seminar on Probability, XV (Univ. Strasbourg, Strasbourg, 1979/1980) (French), pp. 604-617, Lecture Notes in Math., 850, Springer, Berlin, 1981. (B. Marchal) 82:60086 60G44 (60175) (with Pitman, Jim W.) Bessel processes and infinitely divisible laws. Stochastic

(with Pitman, Jim W.) Bessel processes and infinitely divisible laws. Stochastic integrals (Proc. Sympos., Univ. Durham, Durham, 1980), pp. 285-370, Lecture Notes in Math. 831. Suringer Review 1981 (D. A. Darlings, 823:60146). 60160 (60FG)

Math., 851, Springer, Berlin, 1981. (D. A. Darling) 82;60149 60J60 (60E07) (with Bouleau, Nicolas) Sur la variation quadratique des temps locaux de certaines semimartingales. (English summary) C. R. Acud. Sci. Paris Sér. I Math. 292 (1981), no. 9, 491–494. (Authors' summary) 82d:60143 60J55 (60G44)

(with Barlow, Martin) (Semi-) martingale inequalities and local times. Z. Wahrsch. Verw. Gebiete 55 (1981), no. 3, 237-254. (E. Cinlar) \$\mathbb{Z}\$15-60092. 60G48 (60G44) See also Jeulin, Thierry, \$\mathbb{Z}\$45-60154 and Seminsa: Probability, \$\mathbb{Z}\$15-60093.

See also Jeulin, Thierry, 82t:60154 and Seminar: Probability, 82t:60008

Yorinaga, Masataka Search for absolute pseudoprime numbers. (Japanese) Sûgaku 31 (1979), no. 4, 374–376. (Masao Kishore) 82c:10008 10A20

York, James W., Jr. (with Choquet-Bruhat, Yvonne) The Cauchy problem. General relativity and gravitation, Vol. 1, pp. 99-172, Plenum, New York, 1980. (Mauro Francaviglia) 82k:58028 58D25 (83C05)

Francaviglia) 82t-85028 58D25 (83C05)
 Yorke, James A. (with Li, Tien Yien) A simple reliable numerical algorithm for following homotopy paths. Analysis and computation of fixed points (Proc. Sympos., Math. Res. Center, Univ. Wisconsin, Madison, Wis., 1979), pp. 73-91, Publ. Math. Res. Center Univ. Wisconsin, 43, Academic Press, New York, 1980. (B. T. Poljak) 82h:65047 65H10 (58C15, 90C30)

(with Auslander, Joseph) Interval maps, factors of maps, and chaos. Töhoku Math. J. (2) 32 (1980), no. 2, 177–188. (L. A. Bunimovich) 82h:58049 58F12 (58F13)

J. (2) 32 (1980), no. 2, 177–188. (L. A. Bunmovich) 828:58049 58F12 (58F13)
Verozu, Shinsuke Holomorphic vector fields on complete Kahler manifolds. Ann. Sci. Kanazawa Univ. 17 (1980), 17–21 (1981), (B. Wong) 82i:53054 53C55

Yortsos, Y. C. (with Gavalas, G. R.) Short-time asymptotic solutions of the heat conduction equation with spatially varying coefficients. J. Inst. Math. Appl. 26 (1980), no. 3, 209-219 (A. D. Solomon) 82k:35053 35K05 (80A20) (with Fokas, A. S.) The transformation properties of the sixth Painlevé equation and

(with Fokas, A. S.) The transformation properties of the sixth Painlevé equation and one-parameter families of solutions. Lett. Nuovo Cimento (2) 30 (1981), no. 17, 539–544.
(D. A. Luty) 323-34019
34A25 (58A15)

(D. A. Lutz) 82k:34010 34A25 (58A15)

Yoshida, Hidenobu Asymptotic values of meromorphic functions of smooth growth.

Hiroshima Math. J. 11 (1981), no. 1, 195–214. (A. É. Eremenko) 82k:30027 (30D35)

A boundedness criterion for subharmonic functions. J. London Math. Soc. (2) 24 (1981), no. 1, 148-160. (D. H. Armitage) 82k:31007 31B05 (31A05)

Yoshida, Hideo (with Kawai, Toshiharu) de Sitter gauge theory of gravitation. II. Progr. Theoret. Phys. 64 (1980), no. 5, 1596-1607. (M. Carmeli) 82f:83668 83D05
 Yoshida, Hiroshi (with Mita, Tsutomu) Undershooting phenomenon and its control in

Yoshida, Hiroshi (with Mita, Tsutomu) Undershooting phenomenon and its control in linear multivariable servomechanisms. IEEE Trans. Automat. Control 26 (1981), no. 2, 402-407. (Authors's summary) 824:93038 93C35
Yoshida, Hiroyuki On Artin L-functions. Japan. J. Math. (N.S.) 3 (1977), no. 2, 369-380.

Yoshida, Hiroyuki On Artin L-functions. Japan. J. Math. (N.S.) 3 (1977), no. 2, 369-380. (Robert Perlis) 82g:12012 12A70 (10H10)

Weil's representations of the symplectic groups over finite fields. J. Math. Soc. Japan 31 (1979), no. 2, 399–426. (R. Howe (Zbl 425:20033)) 82]:20084 20G05

Abelian varieties with complex multiplication and representations of the Weil groups Ann. of Math. (2) 114 (1981), no. 1, 87-102. (Thomas Zink) 82k:14044 14K2: (10D25, 12A65, 14G25)

Yoshida, Junzo Topology of the negative energy-manifold of the Kepler motion. (Japanese summary) Acta Human. Sci. Unio. Sangio Kyotien. Natur. Sci. Ser. No. 9 (1980), 29-57. (From the introduction) 82i:70009 70F05 (58F05)

Yoshida, K. The spontaneous breakdown of chiral symmetry in the semiclassical method. I. Boundary condition on the path integral. Nucleur Phys. B 187 (1981), no. 1, 103–140. (José M. Cerverò) 82:81140 81G05 (81C35)

Yoshida, Katsuhiko Dr. Motokichi Kondô (1906–1980). (Japanese) Sûgakushi Kenkyû No. 87 (1980), 15–17 (1981). (K. Inoue) 82j:01017 01A27

Yoshida, Ken-ichi On the coefficient ring of a torus extension. Osaka J. Math. 17 (1980), no. 3, 769–782. (Paul M. Eakin) 82e:13008 13B25 (14M20)

Polynomial rings which are simple birational extensions over k[X, Y]. Math. Rep. Toyama Univ. 4 (1981), 63-71. (J. Ohm) 82m:14005 14E05 (14E35) oshida, Mamoru On an R3-like Finsler space and its special cases. Tensor (N.S.) 34

(1980), no. 2, 157-166. (Author's introduction) 82i:53025 53B40
Yoshida, Masaaki On the confluence of regular and irregular singularities. Japan. J. Math.

(N.S.) 6 (1980), no. 1, 165-172. (J. A. Marlin) 82h:34012 34A30

Yoshida, Nobuaki (with Arima, Akito; Ginocchio, Joseph N.) A test of boson mappings of

Termina, Producting, Astron. Connecting, Joseph N., A less of boson mappings of fermina systems. Phys. Lett. B 101 (1981), no. 4, 209–215. (Authors' summary) 824:81162 81G35

Yoshida, Norio (with Kusano, Takaŝi) Nonlinear oscillation criteria for singular elliptic differential operators. Funkcial. Ekvac. 23 (1980), no. 2, 135-142. (E. S. Noussair) 82e:35006 35B05 (35J60)

(with Kusano, Takaši) Oscillation criteria for a class of nonlinear partial differential equations. J. Math. Anal. Appl. 79 (1981), no. 1, 236-243. (K. Kreith) 82à:35013 35B05 (35L30)

(with Travis, Curtis C.) Oscillation criteria for third order hyperbolic characteristic initial value problems. Proc. Roy. Soc. Edinburgh Sect. A 88 (1981), no. 1-2, 135-140. (E. S. Noussair) 82i:35014 35B05 (35L75)

Yoshida, Reikichi MID-free completely 0-simple semigroups. Proceedings of the 4th Symposium on Semigroups (Yamaguchi Univ., Yamaguchi, 1980), pp. 127–131, Yamaguchi Univ., Yamaguchi, 1980. (See 821:2008) 20M10

Yoshida, Tomoyuki Transfer theorems. The Santa Cruz Conference on Finite Groups (Univ. California, Santa Cruz, Calif., 1979), pp. 213-216, Proc. Sympas. Pure Math., 37, Amer. Math. Soc., Providence, R. J., 1980, (Stefan Jackowski) 82h:18013 18G25 (20199) On G-functors. I. Transfer theorems for cohomological G-functors. Hokkaido Math. J. 9 (1980), no. 2, 222-257. (P. Donovan) 82d:20016 20C20 (20106)

J. 9 (1980), no. 2, 222–257. (P. Donovan) 82d:20016 20C20 (20J06) On the Hall-Higman and Shult theorems. II. Hokkaido Math. J. 9 (1980), no. 2, 275–276. (From the text) 82g-20017 20C05

Transfer theory in topoi. Use of finite group theory. (Japanese) Sügaku 32 (1980), no. 3, 193–212. (Editors) 82e:20035 20D99 (18B25, 18G99)

no. 3, 193-212. (Editors) 82e:20035 201599 (18823, 186399)

Voshida, Toshio Wu classes and unoriented bordism classes of certain manifolds.

Hiroshima Math. J. 10 (1980), no. 3, 567-596. (R. E. Stong) 82a:57030 57R75

Yoshida, Yuuji (with Imai, Masaharu; Fukumura, Teruo) A parallelized branch-and-bound algorithm implementation and efficiency. Systems-Comput.-Controls 10 (1979), no. 3, 62-70 (1981). (From the introduction) 82e:90063 90C10

Yoshihara, Hisao Applications of Plücker's formula. (Japanese) Süguku 32 (1980), no. 4, 367–369. (Masaaki Homma) 82k:14032 14H45

Structure of complex tori with the automorphisms of maximal degree. Tsukuba J. Math. 4 (1980), no. 2, 303-311. (K.-B. Gundlach) 82k:14045 14K99 (32J20)
Yoshihara, Ken-ichi Some estimates of the concentration function of sums of absolutely

quences. Yokohama Math. J. 27 (1979), no. 1, 57-61. (Yutaka Kato) 60F05

A weak convergence theorem for functionals of sums of strong mixing sequences. Rep. Yokohama Nat. Univ. Sect. I No. 27 (1980), 19-25. (H. Vishnu Hebbar) 829-60072 60F17

Correction to: "Se ular sequences". Yokohama Math. J. 28 (1980), no. 1-2, 169. (Editors) 82c:60047b 60F05

hikawa, Katsuyuki On 2-knot groups with the finite commutator subgroups. Math. Sem. Notes Kobe Univ. 8 (1980), no. 2, 321–330. (Jonathan A. Hillman) 82a:57021 57Q45

shikawa, Tsuneo (with Kobayashi, Hiroaki) Separation property and suboptimal control of decentralized stochastic control systems. 1979 International Symposium on Circuits and of decentralized stochastic control systems. 1979 International Symposium on Circuits and Systems (Tokyo, 1979), pp. 427–430, IEEE, New York, 1979. (See 82e:94002) 93E20 ith Sugie, Toshiharu) Inverse systems for reproducing linear functions of inputs. ntica—J. IFAC 17 (1981), no. 5, 763-769. (Authors' summary) 821:93025 (with Sugie, Toshil 93B15

Condition for existence of solutions of linear equations with arbitrary vectors and its relation to controllability. IEEE Trans. Automat. Control 26 (1981), no. 3, 728-730.

Acta Math. Acad. Sci.

Hungar. 36 (1980), no. 1-2, 19-24. (M. A. Akcoglu) 82e:28021 28D05 (47A35)

ura, Tetz Existence and local uniqueness of solutions of the Percus-Yevick equati Phys. Lett. A 75 (1979/80), no. 4, 299-300. (Author's summary) 82c:82020 (45G10, 47H15, 82A50)

rura, Toshio (with Konishi, Katsunobu; Soeda, Takashi) A modified extended Kalman filter for linear discrete-time systems with unknown parameters. Auto 93E11 IFAC 17 (1981), no. 4, 657-660. (Authors' summary) 82h:93078

(with Watanabe, Keigo; Soeda, Takashi) A diagnosis method for linear stochastic systems with parametric failures. Trans. ASME Ser. G.J. Dynamic Systems Measurement Control 103 (1981), no. 1, 28-35. (Authors' summary) 82e:93112

(with Tomizuka, Masayoshi) Application of model reference adaptive techniques to a class of nonlinear systems. Trans. ASME Ser. G. J. Dynamic Systems Measurement

class of nonlinear systems. Trans. ASNE Ser. G. J. Dynamic Systems measurement Control 103 (1981), no. 2, 158–163. (Authors' summary) 821:93024 93B30 (with Watanabe, Keigo; Soeda, Takashi) A discrete-time adaptive filter for stochastic distributed parameter systems. Trans. ASME Ser. G. J. Dynamic Systems Measurement Control 103 (1981), no. 3, 266–278. (From the summary) 821:93077 93E11

naga, Etsuo (with Ohyanagi, Shigeki) Two-dimensional quasihomogeneous isolated singularities with geometric genus equal to two. Sci. Rep. Yokohama Nat. Univ. Sect. I No. 27 (1980), 1–9. (H. B. Laufer) 82g:32018 32C40 (14J17)

(with Ohyanagi, Shigeki) Some examples of weakly elliptic singularities. Sci. Rep Yokohama Nat. Univ. Sect. I No. 27 (1980), 11-18. (H. B. Laufer) 82i:32037

no, Kunio (with Morimoto, Mitsuo) Some examples of analytic functionals with carrier at infinity. Proc. Japan Acad. Ser. A Math. Sci. 56 (1980), no. 8, 357-361. (M. Hasumi) 82c:46051 46F15 (32A45)

ni On the solvability of Goursat problems and a function of number no, Masafur theory. Duke Math. J. 48 (1981), no. 3, 685-696. (Jean Leray) 82j:35029 On the solvability of nonlinear Goursat problems. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 5, 247-248. (Jean Leray) 82k:35024 35G25

On the solvability of Goursat problems and a function of number theory. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 6, 294-296. (Jean Leray) 82j:35028 35F99

ni Remarks on the Goursat problems. Tokyo J. Math. 3 (1980), no. 1, 115-130. (H. Kumano-go) 82a:35004 35A05

shino, Yuji The canonical modules of graded rings defined by generic matrices. Nagoya Math. J. 81 (1981), 105-112. (E. Graham Evans, Jr.) 82j:13028

Yoshioka, Akira (with Omori, Hideki; Maeda, Yoshiaki) On regular Fréchet-Lie groups. I. Some differential geometrical expressions of Fourier integral operators on a Riemannian manifold. Tokyo J. Math. 3 (1980), no. 2, 353-390. (J. J. Duistermaat) 82b:58089 58G15 (22E65)

shioka, Tsuneo Cohomologie à estimation L^2 et extension des fonctions holomorphes avec contrôle de la croissance. Proc. Japan Acad. Ser. A Math. Sci. 57 (1981), no. 3, 181-184. (B. A. Taylor) 82f:32029 32D15 (32A15)

Yoshizawa, Mitsuo Remarks on distant ce-regular graphs. Discrete Math. 34 (1981), no. 1, 05C99 93-94. (Norman Biggs) 82g:05082

ku *Functional analysis. Sixth edition. Grundlehren der Mathematischen Wissenschaften [Fundamental Principles of Mathematical Sciences], 123. Springer-Verlag, Berlin-New York, 1980. xii + 501 pp. ISBN 3-540-10210-8 (From the preface) 82i:46002

Some aspects of E. Hille's contribution to semigroup theory. Integral Equations Operator Theory 4 (1981), no. 3, 311-329. (Jesús Hernández) 82k:01037 (35K22, 47D05)

ra, Zen-ichi (with Johnson, David Copeland; Landweber, Peter S.) Injective BP_aBP-comodules and localizations of Brown-Peterson homology. *Illinois J. Math.* 25 (1981), no. 4, 599–610. (W. Stephen Wilson) 82k:55007 55N22 (55S25)

M-ideals, the strong 2-ball property and some renorming theorems. Proc.

Amer. Math. Soc. 81 (1981), no. 2, 299–303. (O. I. Reinov) 82t:46019 46B20
Youn, Heekyung Kang (with Richards, Ian) On the general definition of convolution for distributions. J. Korean Math. Soc. 17 (1980/81), no. 1, 13–37. (E. L. Koh) 82t:46065 46F10

(with Richards, Ian) On the general definition of convolution for several distributions. J. Korean Math. Soc. 17 (1980/81), no. 2, 161-168. (E. L. Koh) 82:46049 46F10

Young, D. H. (with Al-Saadi, S. D.) Critical values of some nonparametric statistics used for tests of total stochastic independence. J. Statist. Comput. Simulation 12 (1980/81),

no. 3-4, 217-224. (Authors' summary) 821e62072 62G10

Young, David M. (with Jea, Kang C.) Generalized conjugate-gradient acceleration of nonsymmetrizable iterative methods. Linear Algebra Appl. 34 (1980), 159-194. (Ph. L. Toint) 82c:65020 65F10

(with Hageman, L. A.; Luk, Franklin T.) On the equivalence of certain iterative

acceleration methods. SIAM J. Numer. Anal. 17 (1980), no. 6, 852-873. (D. S. Henderson) 82c:65018

Henderson) 82c:65018 65F10

mg, Eutiquio C. (with Chan, C. Y.) Regular regions for parabolic and elliptic equations.

Portugal. Math. 36 (1977), no. 1, 7–12. (Authors' summary) 82k:35056 35K10 (35J15) (with Chan, C. Y.) Comparison theorems for a coupled system of singular hyperbolic differential inequalities. I. Time-independent uncoupling coefficients. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 4, 250-254. (K. 35B05 (35L55)

(with Chan, C. Y.) Comparison theorems for a coupled system of singular hyperbolic differential inequalities. II. Time-dependent coefficients with mixed coupled boundary conditions. (Italian summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 5, 361–364. (K. Kreith) 82j:35009b 35805 (351.55) ung. George (with Bhargava, V. K.; Bhargava, A. K.) A characterization of a (56,28) extremal self-dual code. IEEE Trans. Inform. Theory 27 (1981), no. 2, 258–260.

(Authors' summary) 82i:94030 94B40

ng, J. E. (with Chang, T. S.; Nicoll, J. F.) A closed-form differential renormalization-group generator for critical dynamics. Phys. Lett. A 67 (1978), no. 4, 82A25 (58E99) 287-290. (Authors' summary) 82h:82026

ng, L. C. See Spiliotis, Jean, 82g:60077 ng, Lai Sang (with Block, Louis; Guckenheimer, John; Misiurewicz, Michal) Periodic points and topological entropy of one-dimensional maps. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 18-34, re Notes in Math., 819, Springer, Berlin, 1980. (Ethan M. Coven) 82j:58097 58F20 (28D20, 54C70)

On the prevalence of horseshoes. Trans. Amer. Math. Soc. 263 (1981), no. 1, 75-88. (M. I. Brin) 82g:58070 58F15 (28D20)

mg, N. J. Matrices which maximise any analytic function. Acta Math. Acad. Sci. Hungar. 34 (1979), no. 3-4, 239-243 (1980). (From the text) 82b:15016 15A60 (47A30, 65F99)

(with Ptak, Vlastimil) A generalization of the zero location theorem of Schur and Cohn. IEEE Trans. Automat. Control 25 (1980), no. 5, 978-980. (M. Marden) 82a:30006

(with Ptak, Vlastimil) Functions of operators and the spectral radius. Linear Algebra

Appl. 29 (1980), 357-392. (Lawrence Williams) 82e:47009 47A30 (15A60, 47A60)
Norm and spectral radius for algebraic elements of a Banach algebra. Math. Proc. Cambridge Philos. Soc. 88 (1980), no. 1, 129-133. (V. Istrățescu) 82d:46071 (47A12)

The solution of Lyapunov's matrix equation by a geometric method. Proc. Roy. Soc. Edinburgh Sect. A 86 (1980), no. 3-4, 347-354. (Edward J. Davison) 82d:15008 (93D05)

A maximum principle for interpolation in H^{∞} . Acta Sci. Math. (Szeged) 43 (1981), no. 1-2, 147–152. (D. Sarason) 82i:46083 46J15 (30D50, 32F05)

A bound for norms of functions of matrices. Linear Algebra Appl. 37 (1981), 181–186. (Donald Kershaw) 82k:15011 15A18 (15A45)
Young, Paul (with Joseph, Deborah) Independence results in computer science? J. Comput.

System Sci. 23 (1981), no. 2, 205-222. (Authors' summary) 82m:68060 (03D99)

Young, Peter Parameter estimation for continuous-time models—a survey. Automatica—J. IFAC 17 (1981), no. 1, 23-39. (Author's summary) 82a:93002 93-02 (93B30, 93E12)

ng, R. D. Branch and Bound: an enumerative algorithm for integer program Quantitative planning and control, pp. 9-22, Academic Press, New York, 1979. (O. Pokorná) 82x:90088 90C05 (90C10)

ng, Stephen K. (with Mitter, Sanjoy K.) Quantum estimation theory. Inter Symposium on Systems Optimization and Analysis (Rocquencourt, 1978), pp. 127-136, Lecture Notes in Control and Information Sci., 14, Springer, Berlin, 1979. (See 80m:4

Young, Thomas See Arago, D. F., 82g:01038 and Chappert, André, 82h:01027 Young, W. Hugh (with Woodhead-Galloway, John; Hukins, David W. L.) Description of irregularity in biological structures. Acta Cryst. Sect. A 36 (1980), no. 2, 198-205. (A. L.

Rebenko) 82a:92003 92A05 (82A60) Youngson, M. A. (with Bojadžiev, H. N.) Alternators on Banach Jordan algebras. C. R. Acad. Bulgare Sci. 33 (1980), no. 12, 1589-1590. (E. Størmer) 82m:17009

Nonunital Banach Jordan algebras and C*-triple systems. Proc. Edinburgh Math. Soc. (2) 24 (1981), no. 1, 19-29. (Horst Behncke) 82j:46071 46K99 (17C65, 46L05)

mis, Rahman M. Extension results in the Hardy space associated with a logmodular algebra. J. Funct. Anal. 39 (1980), no. 1, 16-22. (Sheldon Axler) 82a:46052 46J10 (42B30, 46J15)

urgrau, Wolfgang (with Treder, Hans-Jürgen) On general-relativistic and gauge field theories. Found. Phys. 8 (1978), no. 9-10, 695-708. (Editors) 82i:83063 83D05 (53C60, 81E99)

(with Treder, Hans-Jürgen) Dirac's classical theory of electrons in the unitary field theory of Einstein with teleparallelism. Phys. Lett. A 68 (1978), no. 5-6, 415-417. (Authors' summary) 82b:83073 83E99

See also Perspectives in quantum theory, 82d:81002

Youschkevitch, A. P. See Juškevič, A. P.

Yousif, Salah M. Generation of Fibonacci numbers by digital filters. A collection of manuscripts related to the Fibonacci sequence, pp. 75-78, Fibonacci Assoc., Santa Clara, Calif., 1980. (Author's summary) 82g:10025 10A35 (94A11)

Yorits, Marshall C. See Advances in computers, 82:68002

Yehrar, M. Agelia (with Velleman, Paul F.) Constructing regressions with controlled features: a method of probing regression performance. J. Amer. Statist. Assoc. 75 (1980), no. 372, 839-844. (A. I. Khuri) 82a:62097 62J05 (62F35)

(with Lam, Kin; Siu, M. K.) A generalized counter scheme. Sci. 16 (1981), no. 3, 271-278. (Authors' summary) 82m:68043 68B15

Yu, Chung Ming See Yu, Zhong Ming Yu, Fong Ming (with Chen, Lu San)

an) On oscillatory and asymptotic behavior of the solutions of nth order retarded differential equations. Math. Japon. 26 (1981), no. 1, 145-151. (G. Ladas) 82e:34077 34K15 (34K25)

ong Zu (with Li, Chu Lin; Wu, Xue Mou) Binary comparison average method for

- fuzzy pattern recognition. (Chinese. English summary) J. Huazhong Inst. Tech. 1980, no. 2, Special Issue on Fuzzy Math, iv-v, 67-70. (Authors' summary) 82a:68176 68G10 (03E72)
- Yu, Jing A cuspidal class number formula for the modular curves X₁(N). Math. Ann. 252 (1980), no. 3, 197-216. (L. Alayne Parson) 82b:10030 10D12 (10D45, 12A50, 14G20)
- Yu, Jing Yuan (with Song, Jian) On stability theory of population systems and critical fertility rates of women. (Chinese. English summary) Acta Automat. Sinica 7 (1981), no. 1, 1-12. (Authors' summary) 82k:92053 92A15 (34D20)
 - (with Song, Jian) Remarks on stability theory of population systems. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 23, 1061-1062. Kexue Tongbao (English) 26
 - (1981), no. 1, 9-11. (K. E. Swick) 82k:92054 92A15 (92A10) (with Song, Jian; Li, Guang Yuan) Theory on prospect of population evolution processes. Sci. Sinica 24 (1981), no. 3, 431-444. (Authors' summary) 82f:92039 92A15 (34K05)
- Yu, Kai Fun (with Chow, Y. S.; Hsiung, Chao Agnes) Limit theorems for a positively drifting process and its related first passage times. Bull. Inst. Math. Acad. Sinica 8 (1980), no. 2-3, part 1, 141-172. (Allan Gut) 82a:60127 60K05 (60F05, 60F15, 60G50, 62L10)
 - Note on a theorem of Woodroofe's. Ann. Probab. 9 (1981), no. 6, 1030-1033. (Isaac Meilijson) 82j:60042 60F10 (62L99)
 - (with Chow, Y. S.) The performance of a sequential procedure for the estimation of the mean. Ann. Statist. 9 (1981), no. 1, 184-189. (Mayer Alvo) 82m:62187 62L12
- (with Chow, Y. S.; Teicher, H.; Wei, C. Z.) Iterated logarithm laws with rando subsequences. Z. Wahrsch. Verw. Gebiete 57 (1981), no. 2, 235-251. (Endre Csáki) 60F15 82k:60062
- Yu, Kun Rui Two results in metrical Diophantine approximation. Seminar on Number Theory, 1980–1981 (Talence, 1980–1981), Exp. No. 28, 8 pp., Univ. Bordeaux I, Talence, 1981. (See 82m:10006) 10K15 (10K50)
 - Hausdorff dimension and simultaneous rational approximation. J. London Math. Soc. (2) 24 (1981), no. 1, 79-84. (Ju. V. Mel'ničuk) 82k:10075 10K50
- Yu, M. Y. (with Bujarbarua, S.; Shukla, P. K.) Near-Alfvénic upper-hybrid envelosolitons. Phys. Lett. A 73 (1979), no. 2, 111-114. (K. K. Puri) 82e:76072 (with Shukla, P. K.; Spatschek, K. H.) Alfvén wave excitation of the magnetostatic
 - mode. Phys. Fluids 24 (1981), no. 10, 1799-1801. (Authors' summary) 82j:76101 76X05
- Yu, P. L. An appreciation of Professor Rufus Isaacs. J. Optim. Theory Appl. 27 (1979). no. 1, 1-6. (Editors) 82c:01057 01A70
- Yu, Shu Xiang On the existence of periodic solutions on two-manifolds. (Chinese) Acta Math. Sinica 23 (1980), no. 5, 712–719. (Takayuki Nôno) 82m:58045 58F22 (34C25) Yu, Wen Cl (with Li, Da Qian; Shen, Wei Xi) Second initial-boundary value problems for
- quasilinear hyperbolic-parabolic coupled systems. (Chinese. English summary) Chinese Ann. Math. 2 (1981), no. 1, 65-90. (Authors' summary) 82h:35073 35M05
 Yu, Yan Lin Generalization of Hopf's index sum formula. (Chinese) Acta Math. Sinica 24
- (1981), no. 4, 488-491. (From the text) 82m:57012 57R20 (57R25)
- Yu, Ying King (with Swetz, Frank) Mathematical olympiads in the People's Republic of China. Ed. Stud. Math. 10 (1979), no. 4, 435-442. (Stephen H. Y. Hung.) 82:00006
- Yu, Yong Xi The quasikernels in an n-preadditive category. (Chinese. English st Math. Res. Exposition 1981, , First Issue, 7-15. (From the summary) 82f:18012
- Yu, You Wen (with Wu, Hui Fang) The relativistic deuteron wave function. (Chinese English summary) Phys. Energi. Fort. Phys. Nuclear. 4 (1980), no. 1, 1-7. (Tuan W. Chen) 82h:81063 81D10 (81G35)
- Yu, Zhong Ming Stability of nonlinear stochastic difference equations. (Chinese. English summary) Nanjing Daxue Xuebao 1979, no. 3, 7-10. (Author's summary) 82j:60118 60H25 (39A10, 93E15)
 - (with Zhong, Hu Mian) On the invariant set and periodicity of the solution of a class of probability measure equations. (Chinese. English summary) Nanjing Daxue Xuebao 1979, no. 4, 1–11. (Authors' summary) 82h:60137 60J25 (60F05, 93E15)
 - The global asymptotic stability of solutions of the Itô random differential equation. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 3-4, 459-468. (Hui-Hsiung Kuo) 82h:60119 60H10 (93E15)
 - (with Hu, Xuan Da) Comparison theorem and stochastic differential equations, II. inese. English summary) Nanjing Daxue Xuebao 1980, Special Issue on Mathematics, 78-84. (Authors' summary) 82f:60136b 60H10 (60G17, 60G48) (with Hu, Xuan Da) Comparison theorem and stochastic differential equations. III.
 - oundedness of solutions of Itô equations. (Chinese. English summary) Nanjing Daxue Xuebao 1980, Special Issue on Mathematics, 85-91. (Authors' summary) 82f:60136c 60H10 (60G17)
 - (with Hu, Xuan Da) Comparison theorem and stochastic differential equations. I. (Chinese. English summary) Nanjing Daxue Xuebao 1980, no. 3, 1-12, 136. (Authors' summary) 82f:60136a 60H10 (60G17)
- Yu, Zu Rong (with Chen, Jin Quan; Gao, Mei Juan; Wang, Fan) A new approach to the representation theory of finite groups. III. Application of the eigenfunction method to point groups. (Chinese. English summary) Nanjing Daxue Xuehao 1979, no. 4, 37-48. (Editors) 82m:20010c 20C35 (81G50)
- (with Chen, Jin Quan; Wang, Fan; Gao, Mei Juan) A new method of calculation for molecular shell model. Sci. Sinica 23 (1980), no. 9, 1116-1127. (R. Mirman)
- 82b:81140 81G50 (20C35, 22E70) Yuan, Hsi Shih Subbundles of the tangent bundle of complex projective space. Bull. Inst. Math. Acad. Sinica 9 (1981), no. 1, 1-28. (Ralph L. Cohen) 82j:32056a (57R20)
 - Picard-Lefschetz transformation on homotopy groups. Chinese J. Math. 9 (1981), no. 1, 81-90. (Jože Vrabec) 82k:55016 55R10 (14D05)
- Yuan, Miao En (with Chen, Tian Quan) Hilbert-Enskog-Chapman expansion in the turbulent kinetic theory of gases. II. J. Statist. Phys. 25 (1981), no. 3, 515-567. (Author's summary of part I) 82h:82025b 82A40 (76P05)
- Yuan, Xiang Dong (with Li, Wen Lin) A summary of Hilbert's mathematical problems and their current status. (Chinese) Knowledge Practice Math. 1981, no. 3, 56-62. (Editors) 82k:00001 00A05 (01A60)

- Yuan, Xiang Wan The axiomatic method and its function. (Chinese. English summary) Nanjing Daxue Xuebao No. 2 (1980), 135-141. (Author's summary) 82d:00012 00A2:
 - (with Zhu, Wu Jia; Zheng, Yu Xin) Concerning sets and point-set spaces. (Chinese. English summary) Nanjing Daxue Xuebao 1980, no. 3, 129-135, 136. (Authors' summary) 82b:03025 03A05 (04A99)
- an, Zhao Ding (with Zhu, Chu Heng) The stability for numerical integration of a system of ordinary differential equations. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 1, 77-89. (From the text) 82;65060 65L20

 Yuasa, Toshio Differential equations in a locally convex space via the measure of
- nprecompactness. J. Math. Anal. Appl. 84 (1981), no. 2, 534-554. (Klaus Deimling) 34G20 (47H10)
- Yucas, Joseph (with Marshall, Murray) Linked quaternionic mappings and their associated Pacific J. Math. 95 (1981), no. 2, 411-425. (Ron Brown) 82m:10037 10C05 (10C01)
- Yue Chi Ming, Roger On von Neumann regular rings. V. Math. J. Okayama Univ. 22 (1980), no. 2, 151-160. (K. R. Goodearl) 82i:16017 16A30
 - On von Neumann regular rings. IV. (French sum mary) Riv. Mat. Univ. Parma (4) 6 (1980), 47-54 (1981). (K. R. Goodearl) 82i:16016 16A30
 - von Neumann regularity and weak p-injectivity. Yono. 1-2, 59-68. (G. Michler) 82i:16014 16A30 (16A34) Yokohama Math. J. 28 (1980).
- On biregular and regular rings. Comment. Math. Univ. Carolin. 22 (1981), no. 3, 595-606. (G. Michler) 82k:16015 16A30 (16A52)
 On regular rings and self-injective rings. Monatsh. Math. 91 (1981), no. 2, 153-166. (T. Albu) 82k:16016 16A30 (16A52)
- Yueh, Kang (with Levy, Leon S.) On labelled graph grammars. (German summary)

 Computing 20 (1978), no. 2, 109-125. (Authors' summary) 82h:68105 68F05 (05C20)
- (with Joshi, Aravind K.; Levy, Leon S.) Local constraints in programming languages. I. Syntax. Theoret. Comput. Sci. 12 (1980), no. 3, 265-290. (David B. Benson) 821:68080 68F05 (03D05, 68B15)
- Yueh, T. Y. Nonlinear waves in a self-gravitating medium. Stud. Appl. Math. 65 (1981),
- no. 1, 1-36. (D. ter Haar) 82h:85003 85A05 (35Q20)
 Yuel, A. K. Some results on fixed points. J. Sci. Res. 3 (1981), no. 2, 135-139. (Author's summary) 82j:54105 54H25
- Yuen, C. K. (with Beauchamp, K. G.) ★Data acquisition for signal analysis. George Allen & Unwin, London-Boston, Mass., 1980. xii + 257 pp. ISBN 0-04-621028-8 (Editors) 94A12 (68A05, 68B20, 94-02)
- Yuen, Henry C. (with Crawford, Donald R.; Lake, Bruce M.; Saffman, Philip G.) Effects of nonlinearity and spectral bandwidth on the dispersion relation and component phase speeds of surface gravity waves. Theoretical and applied mechanics (Proc. 15th Internat. Congr., Univ. Toronto, Toronto, Ont., 1980), pp. 319-344, North-Holland, Amsterdam, 1980. (See 82d:00008) 76B15
 - (with Saffman, Philip G.) A new type of three-dimensional deep-water wave of permanent form. J. Fluid Mech. 101 (1980), no. 4, 797-808. (Authors' summary) 76R15
 - (with Martin, David U.; Saffman, Philip G.) Stability of plane wave solutions of the two-space-dimensional nonlinear Schrödinger equation. Wave Motion 2 (1980), no. 3, 215-229. (Authors' summary) 824:76020 76B25 (35Q20)
 - (with Crawford, Donald R.; Lake, Bruce M.; Saffman, Philip G.) Stability of
- weakly nonlinear deep-water waves in two and three dimensions. J. Fluid Mech. 105 (1981), 177-191. (J. J. Mahony) 82i:76007 76B15
- (with McLean, J. W.; Ma, Y. C.; Martin, David U.; Saffman, Philip G.)
 Three-dimensional instability of finite-amplitude water waves. Phys. Rev. Lett. 46
 (1981), no. 13, 817–820. (Authors' summary) 82c:76017 76B15 (35Q20) (1981), no. 13, 817-820. (Authors' summary) 82c:76017
- en, K. W. (with Allaway, Wm. R.) Ring isomorphisms for the family of Eulerian differential operators. J. Math. Anal. Appl. 77 (1980), no. 1, 245-263. (Mourad E. H. Ismail) 824:05022 05A99
- Yui, Noriko (with Jensen, Christian U.) Polynomials with D_5 (resp. A_5) as Galois group. C. R. Math. Rep. Acad. Sci. Canada 2 (1980), no. 6, 297-302. (Authors' introduction) 12A55
- On the Jacobian variety of the Fermat curve. J. Algebra 65 (1980), no. 1, 1-35. (William C. Waterhouse) 82m:14016 14H45 (14G10, 14L05)
- Yukalov, V. I. A new method in the theory of phase transitions. Phys. Lett. A 81 (1981), no. 5, 249-251. (Author's summary) 82c:82029 82A25
- Yukawa, Hideki ★Scientific works. Iwanami Shoten, Tokyo, 1979. xxv+465 pp. (R. A. Minlos) 82b:81003 81-03 (00A69, 01A70, 01A75) See also Tanikawa, Yasutaka, 82m:01069
- (with Abdik, A.) On the Chebyshev approximation by $A + B^* \log(1 + CX)$. Yüksel, Ş. (Turkish summary) Comm. Fac. Sci. Univ. Ankara Sér. A, Math. 29 (1980), no. 1, 1-11. (Joseph M. Lambert) 82e:41036 41A50
- Yun, David Y. Y. (with Brent, Richard P.; Gustavson, Fred G.) Fast solution of Toeplitz systems of equations and computation of Pade approximants. J. Algorithms 1 (1980), no. 3, 259-295. (From the summary) 824:65033 65F05 (30E10)
- Yun, Kwan Koo (with Chenault, Larry) Some conditions leading to a unique and stable conference on Mathematical Modelling (St. Louis, Mo., 1979), Vol. 1, II, pp. 1225–1235. Univ. Missouri-Rolla, Rolla, Mo., 1980. (Hildegard Dierker) 82c:90019
- Yun, Tian Quan A fast algorithm for one-dimensional optimization problems of convex functions. (Chinese. English summary) J. Huachung Inst. Tech. 6 (1978), no. 4, vii, 83–94. (Author's summary) 82a:90126 90C25
- ibn Yūnus, 'Alī b. 'Abd al-Rahmān See King, David A., 82i:01009
- Yurov, S. S. See Jurov, S. S. Yushkevich, A. P. See Juškevič, A. P.
- Yusin, Boris V. See Jusin, B. V.
- Yusuf, S. M. (with Mushtaq, Qaiser) On locally associative LA-semigroups. J. Natur. Sci.
- Math. 19 (1979), no. 1, 57-62. (M. Friedberg) 82a:20081 20N05 Yutani, Hiroshi (with Isèki, Kiyoshi) On ordinal unions of BCK-algebras. Notes Kohe Univ. 8 (1980), no. 2, 307-308. (Editors) 82a:06022 06D99 (03G25) Characterizations of positive implicative BCK-algebras by ideals. Math. Sem. Notes Kobe Univ. 8 (1980), no. 2, 403-406. (Editors) 82a:06023 06D99 (03G25)

32. (From the text) 8.2240018 U0LP9 (U3G22)
 Yuter, S. (with Passy, Ury) Pseudoduality and saddle points. J. Optim. Theory Appl. 33 (1981), no. 3, 325–347. (Authors' summary) 82;09066 90C30
 Yurvinsky, Sergey Orthogonal pairings of Euclidean spaces. Michigan Math. J. 28 (1981), no. 2, 131–145. (Kee Yuen Lam) 82m:15033 15A69 (15A72, 32M99)

Yvon, J. P. Contrôle optimal et sous-optimal des systèmes distribués. Analysis and optimization of systems (Proc. Fourth Internat. Conf., Versailles, 1980), pp. 445–461, Lecture Notes in Control and Information Sci., 28, Springer, Berlin, 1980. (Gregory Knowles) 82e:49003 49-02 (49A22, 49D40)

- Z -

Zahezyk, J. (with Stettner, L.) Strong envelopes of stochastic processes and a penalty method. Stochastics 4 (1980/81), no. 4, 267-280. (F. B. Knight) 82e:60081 60G44 (60J35, 62L15)

(with Pritchard, A. J.) Stability and stabilizability of infinite-dimensi SIAM Rev. 23 (1981), no. 1, 25-52. (Authors' summary) 82f:93063 93D20

dy L. (with Garber, Daniel) On the emergence of probability. Arch. Hist. Exact Sci. 21 (1979/80), no. 1, 33-53. (P. Bockstaele) 82j:01033 01A45 (60-03)

Rates of convergence for conditional expectations. *Ann. Probab.* 8 (1980), no. 5, 928-941. (Richard S. Ellis) 824-60047 60F05 (82A05)

(with Malament, David B.) Why Gibbs phase averages work—the role of ergodic theory. Philos. Sci. 47 (1980), no. 3, 339-349. (Lawrence Sklar) 82f:82008 82A05 ello, L. E. (with Aleinikova, Z. M.) On the investigation of the second variation of

functionals along trajectories of discrete systems. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1960, no. 3, 33-36, 78. (K. B. Mansimov) 82k:49037 49B34 (with Vu Kuok Han') On the controllability of time-dependent systems with

aftereffect. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 2, 47–53, 140. (A. Halanay) 82£:93013 93B05 (34K05)

Zabežailo, M. I. (with Finn, V. K.; Anšakov, O. M.; Grigolija, R. Š.) Many-valued logics as fragments of formalized semantics. (Russian). Semiotics and information science, No. 15 (Russian), pp. 27-60, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Mascow, 1980. (V. V. Rybakov) 82;:03027 03B50 bin, V. L. (with Korneičuk, V. L.; Tarasenko, V. P.; Šcerbina, A. A.) Structural method

of fast solution of systems of algebraic equations with a tridiagonal matrix. Actomat. i Vyčisl. Tehn. (Riga) 1979, no. 6, 73–80, 93 (Russian); translated as Automat. Control Comput. Sci. 13 (1979), no. 6, 64–70. (Authors' summary) 821e65025 65F05 noitzky, J. G. (with Kalos, M. H.) Solution of the four-nucleon Schrödinger equation.

ur Phys. A 356 (1981), no. 1, 114-128. (Authors' summary) 82b:81137 (22E70, 35A30, 35P25)

olockii, N. V. Some relations for Nevanlinna characteristics of a meromorphic function of zero kind. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 6, 805-810, 861. (N. V. Rao) 30D35 82m:30030

Zahreiko, P. P. On the homotopy theory of periodic vector fields. (Russian) Geometric ds in problems of algebra and analysis, No. 2 (Russian), pp. 116-120, 162, Jaroslav. 55M25 (58C30) Gos. Univ., Yaroslavl', 1980. (Ja. A. Izrailevič) 82h:55004

(with Appel', Ju.) Condensing operators in the theory of implicit functions. (Russian) Qualitative and approximate methods for the investigation of operator equations (Russian), pp. 3–14, 165, Jaroslav. Gos. Univ., Yaroslavl', 1980. (M. Craioveanu) 82j:58012 58C15 (47H10, 65J15)

See also Qualitative and approximate methods for the investigation of operator nations, 82£00006 and Šilov, G. E., 82j:26010

din, A. V. (with Godunov, S. K.; Ivanov, M. Ja.; Kraiko, A. N.; Prokopov, G. P.) ★Résolution numérique des problèmes multidimensionnels de la dynamique des gaz. (French) [Numerical solution of multidimensional problems of gas dynamics] Transl from the Russian by Valeri Platonov. "Mir", Moscow, 1979. 414 pp. (Editors) 82c:76003 76-02 (65P05, 76Nxx)

(with Volevič, L. R.; Voskresenskii, G. P.; Kolmogorov, A. N.; Oleinik, O. A.; Tihomirov, V. M.) Konstantin Ivanovič Babenko (on the occasion of his 60th birthday). (Russian) Uspehi Mat. Nauk 35 (1980), no. 2(212), 231-239. (Editors) 82g:01078

din, Ju. M. See Mathem atical modeling in psychology, 82f:92052

Zabrodine, A. See Zabrodin, A. V.
Zabrodsky, A. Some relations in the mod 3 cohomology of H-spaces. Israel J. Math. 33 (1979), no. 1, 59-72. (Clarence Wilkerson) 82a:57040 57T25 (55P45, 55S20)

rodzki, E. (with Piskorek, Adam) Über die instationären hydrodynamischen Potentiale Z. Angew. Math. Mech. 60 (1980), no. 7, T267-T269. (Michael Wiegner) 82i:35147 35O10 (76D10)

usky, Norman J. Computat onal synergetics and mathematical innovation. J. Con Phys. 43 (1981), no. 2, 195-249. (Alwyn C. Scott) 82m:00029 00A69 (34-04, 35-04, 58-04, 65-04, 76-04)

(with Overman, Edward A., II) Translation, interaction and scattering of Euler equation V-states via contour dynamics. Transactions of the Twenty-seventh Conference of Army Mathematicians (West Point, N.Y., 1981), pp. 667-685, ARO Rep. 82, 1, U. S. Army Res. Office, Research Triangle Park, N.C., 1982. (See 82k:00010)

caria, F. (with Marmo, G.; Saletan, E. J.; Simoni, A.) Liouville dynamics and Poisson brackets. J. Math. Phys. 22 (1981), no. 4, 835-842 (F. C. G. Sudarshan) 82e:58031 58F05 (70G99)

caria, R. (with Benati, M.; Gaglio, S.; Morasso, P.; Tagliasco, V.) Anthropomorphic robotics. I. Representing mechanical complexity. Biol. Cybernet. 38 (1980), no. 3, 125-140. (M. Junusov) 82f:92004a 92A05 (70B99)

(with Benati, M.; Gaglio, S.; Morasso, P.; Tagliasco, V.) Anthropomorphic robotics. II. Analysis of manipulator dynamics and the output motor impedance. *Biol. Cybernet.* 38 (1980), no. 3, 141–150. (M. Junusov) 82f:92004b 92A05 (70B99)

Zacepin, S. V. (with Sazonov, V. N.) On statistics of the ensemble of oscillators under excitation. I. Classical nonlinear oscillators excited by a weak external force. Chem. Phys. 52 (1980), no. 3, 305-311. (Authors' summary) 82b:82019 82A05 (35B40, Zacharias, K. (with Gajewski, H.) On a system of diffusion-reaction equations. (German and Russian summaries) Z. Angew. Math. Mech. 60 (1980), no. 9, 357-370. (Jesüs Hernández) 82k:35062 35K60 (80A30)

Zacharski, J. J. (with McLaughlin, H. W.) Segmented approximation. Approximation theory. III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 647–654, Academic Press, New York, 1980. (From the text) 82e:65016 65D10

Zachary, Woodford W. Asymptotic completeness in classical three-body scattering.

Mathematical methods and applications of scattering theory (Proc. Conf., Catholic Univ., Washington, D.C., 1979), pp. 182-189, Lecture Notes in Phys., 130, Springer, Berlin, 1980. (See 82h:81117) 81F10

See also Mathematical methods and applications of scattering theory, 82h:81117 noglou, E. C. Manifolds of nonanalyticity of solutions of certain linear PDEs. See also Mi Trans. Amer. Math. Soc. 266 (1981), no. 2, 573-582. (Alexander A. Pankov) 82i:35009 35A07 (35H05)

Zachos, Cosmas K. (with Curtright, Thomas L.) Nonlocal currents for supersymmetric linear models. Phys. Rev. D (3) 21 (1980), no. 2, 411-417. (M. I. Monastyrskii) 82681061 81E99

Zacks, Shelemyahu *Parametric statistical inference. Basic theory and modern approaches. International Series in Nonlinear Mathematics: Theory, Methods and Applications, 4. Pergamon Press, Oxford-New York, 1981. xvi + 387 pp ISBN 0-08-026468-9 (Reinhard Michel) 82k:62001 62-01 (62F99)

(with Eichhorn, B. H.) Bayes sequential search of an optimal dosage: linear regression with both parameters unknown. Comm. Statist. A—Theory Methods 10 (1981), no. 10, 931-953. (Madanlal T. Wasan) 82k:62154 62L05 (62J05, 92A07)

(with Barzily, Z.) Bayes procedures for detecting a shift in the probability of success in a series of Bernoulli trials. J. Statist. Plann. Inference 5 (1981), no. 2, 107-119. (Authors' summary) 82h:62136 62L15

Zacuto, Abraham See Swerdlow, Noel M., 82e:01028
Żadaeva, N. G. Convergence of the grid method in the solution of nonlinear nonstationary problems. (Russian) Differencial nye Uravnenija 16 (1980), no. 9, 1710-1713, 1727. (E. G. D'jakonov) 82f:65103 65N10

The grid method for solving nonlinear problems of Stefan type. (Russian. English summary) Dokl. Akad. Nauk BSSR 24 (1980), no. 12, 1070-1072, 1147. (Author's summary) 82b:65090 65M10 (73E99)

Ian, V. G. On two classes of methods for solving nonlinear programming problems. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 3, 531-534. (J. Abrham) 82e:90096

(with Golikov, A. I.) Iteration methods for solving nonlinear programming problems using modified Lagrangian functions. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 4, 874-888, 1084, (L. V. Vasil'ev) 82e:90086 90C30

tagi-Zade, A. T. See Tagi-Zade, A. T. abdulla-Zade, F. G. See Abdulla-Zade, F. G. abdulla-Zade, H. F. See Abdulla-Zade, H. F. baba-Zade, M. A. See Baba-Zade, M. A. kasim-Zade, O. M. See Kasim-Zade, O. M. gusein-Zade, O. M. See Gusein-Zade, S. M. abdulla-Zadeh, F. H. See Abdulla-Zadeh, F. H.

Zadeh, Lotfi A. A fuzzy-algorithmic approach to the definition of complex or imprecise concepts. *Internat. J. Man-Mach. Stud.* 8 (1976), no. 3, 249–291. (From the summary) 82k-68021 68C99 (03B52, 03E72, 92A25, 94A15)

Fuzzy sets and information granularity. Advances in fuzzy set theory and applications, pp. 3-18, North-Holland, Amsterdam, 1979. (From the introduction) 82a:94136 94D05 (03E72, 94A15)

See also Dubois, Didier; et al., 82::03074 and Bezdek, James C., 82j:68090 bijan-Zadeh, M. H. See Bijan-Zadeh, M. H.

erei, N. N. Approximation by Fourier sums of classes of periodic functions of several variables deter ined by polyharmonic operators. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 2, 212-219, 285. (H. Triebel) 82a:42006 42A10

Simultaneous approximation of periodic functions and their derivatives by de la Vallée-Poussin sums. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1981, no. 24, 32 pp. (Publisher's description) 82m:42005 42A10 (10G99, 10H26, 41A28)

Zaderei, P. V. Estimate of the exact upper bound of Fourier coefficients of a function of two variables of class H. (Russian) Questions of the theory of the approxima functions (Russian), pp. 80-87, 196, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (S. Aljančić) 82g:42013 42B05 Aljančić) 82g:42013

Bounds and quasi-interior points of complex sets in a locally convex space. (Russian) Qualitative and approximate methods for the investigation of operator equations, No. 4 (Russian), pp. 102–108, Jaroslav. Gos. Univ., Yaroslav!, 1979. (S. Kutateladze) 82j:52005 52A07 (46A05)

lojan, M. A. (with Poladjan, F. M.) The problem of nonlinear creep of a curved bar under torsion. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 71 (1980), no. 3, 165-173. (L. Jentsch) 82e:73057 73K05 (73F15)

On a class of solutions of a plane dynamic problem of the theory of plasticity. (Russian) Dokl. Akad. Nauk SSSR 260 (1981), no. 1, 47-50. 82m:73031 (35020)

rožnyĭ, V. N. (with Bagrov, V. G.; Gitman, D. M.; Lavrov, P. M.; Šapovalov, V. N.) New exact solutions of the Dirac equation. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 4, 10-16. (Authors' summary) 82c:81009 81C05

isky, Pedro E. On the implementation of a method for the estimation of global errors. Codes for boundary-value problems in ordinary differential equations (Proc. Conf., Univ. Houston, Houston, Tex., 1978), pp. 287–293, Lecture Notes in Comput. Sci., 76, Springer, Berlin, 1979. (See **82b:65074**) 65G99

(with Lafferriere, G.) On an iterative improvement of the approximate solution of some ordinary differential equations. Comput. Math. Appl. 6 (1980), no. 1, Special Issue, 147-154. (L. Fox) 82b:65078 65L99 (34A50)

Zaera, F. (with Rusinek, Isak) Monte Carlo simulation for inhomogeneous chemical kinetics: application to the Belousov-Zhabotinskii reaction. J. Comput. Chem. 2 (1981), no. 4, 402-409. (Authors' summary) 82j:92038 92A09 (80A30)

Zafranskaja, L. A. (with Burd, V. S.) Analysis of a model of immune response. (Russian) Studies in stability and the theory of oscillations (Russian), pp. 63-71, Jaroslav. Gos. Univ., Yaroslavl', 1979. (B. F. Dibrov) 82k:92021 92A09 (34K15, 58F14)

nd Rigid elements in GCD domains. J. Natur. Sci. Math. 17 (1977), no. 2, 7-14. (Robert Gilmer) **82a:13005** 13F15 Unique representation domains. *J. Natur. Sci. Math.* **18** (1978), no. 2, 19-29. (T. W.

Hungerford) 82c:13025 13G05

alvi Zagaglia, Norma See Salvi Zagaglia, Norma

Zagainova, R. V. On the estimate of error in calculating special solutions of the fundamental equations of gas dynamics. (Russian) Approximate solution of some problems for differential and integral equations of applied character (Russian), pp. 7–11, 45, Preprint 80, 17, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (See 82g:65004) 65D20

Zagare, Frank C. (with Brams, Steven J.) Double deception: two against one in three-person games. Theory and Decision 13 (1981), no. 1, 81–90. (Authors' summary)

S24:90146 90135 (90A08, 90D12)

Zage, Wayne M. The geometry of binocular visual space. Math. Mag. 53 (1980), no. 5, 289-294. (John Cantwell) 824:92037 92A27 (51M10)

Zager, E. See Nair, G. Gopalakrishnan, 82h:49004

Zager, E. See Nair, G. Gopalakrishnan, 82h:49004

Zager, Don (with Gross, Benedict H.) On the critical values of Hecke L-series. Abelian forestions and traces and state of the College field Paleste, Political (1970)

functions and transcendental numbers (Colloq., École Polytech., Palaiseau, 1979) (French). Mém. Soc. Math. France (N.S.) 1980/81, no. 2, 49-54. (Kenneth Kramer) 14G10 (14K15)

(with Libgober, Anatoly; Wood, John W.) Congruences modulo powers of 2 for the signature of complete intersections. Quart. J. Math. Oxford Ser. (2) 31 (1980), no. 122, 209–218. (R. Mandelbaum) 82j:57009 57N15 (14M10) 209-218. (R. Mandelbaum) 82j:57009

★Zetafunktionen und quadratische Körper. (German) [Zeta functions and quadratic fields) Eine Einführung in die höhere Zahlentheorie. (An introduction to higher number theory] Hochschultext. [University Text] Springer-Verlag, Berlin-New York, 1981.

viii+144 pp. ISBN 3-540-10603-0 (Matti Jutila) 82m:10002 10-01

Zagoruiko, N. G. Definition of the concept of regularity. (Russian) Vyčisl. Sistemy No. 79 npir. Predskazanie i Raspoznavanie Obrazov (1979), 3-6, 123. (Editors) 82b:03024

Zagrebnov, V. A. (with Priezžev, V. B.) Gauge symmetry and phase transitions in the random spin systems. (Russian. English summary) Acta Phys. Polon. A 57 (1980), no. 5. 661-666. (M. Bundaru) 82e:81046 81E99 (81G05, 82A25)

(with Priezžev, V. B.) On phase transitions in spin systems with frustration. (Russian. English summary) Teoret. Mat. Fiz. 44 (1980), no. 2, 217-223. (V. Z. Enol'skil) 82A67 (82A25, 82A42)

Singular potentials of interaction in quantum statistical mechanics. (Russian) Trudy 82A15 (47A40) Moskov. Mat. Obšč. 41 (1980), 101-120. (S. V. Temko) 82f:82017

Zagrodziński, J. Some properties of multidimensional theta-function and SGE. Lett. Nuovo Cimento (2) 30 (1981), no. 9, 266-268. (P. A. Kučment) 82g:14043 14K25 (35O20. 58F07)

Zaguskin, V. L. A new variant of the quasimatrix sweep method. (Russian) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk. 1980, no. 2, 10-13, 108. (F. M. Pascal) 82d:65069 65N20

Zagustina, E. A. (with Kalaba, Robert) New representation and method of solving Fredholm integral equations. Prikl. Mat. Meh. 42 (1978), no. 2, 372-377 (Russian); sslated as J. Appl. Math. Mech. 42 (1978), no. 2, 390-395 (1979). (I. Fenyő) 82h:45002

(with Kalaba, Robert) The Cauchy system for nonlinear problems with two boundary conditions. (Russian) Differencial'nye Uravnenija 17 (1981), no. 3, 562-565, 575. (Józef Kalinowski) 82f:34010 34A34 (34B10)

Zahar'ev, B. N. See Chadan, K.; et al., 82c:81121

Zahariev, Andrei Necessary conditions for well-posedness of the Cauchy problem for pluriparabolic operators. (Bulgarian. Russian and English summaries) Plovdiv. Univ Naučn. Trud. 15 (1977), no. 1, 189-198 (1979). (Author's summary) 82i:35099 (with Zlatev, Stojan) A generalization of the Cauchy problem for nonlinear

integro-differential equations in a Banach space. (Bulgarian. Russian and English summaries) Plovdiv. Univ. Naučn. Trud. 15 (1977), no. 1, 199-205 (1979). (Authors' summary) 82h:45018 45N05

(with Balnov, D. D.; Filev, S. G.) On a class of nonlinear integro-differential (With Bathov, D. D., Filey, S. G., Otta Chao, A. (1998). (With Bathov, D. D., Filey, S. G., Otta Chao, A. (1998). (With Bathov, D. D., Filey, S. G., Otta Chao, A. (1998). (With Bathov, D. D., Filey, S. G., Otta Chao, A. (1998). (With Bathov, D. D., Filey, S. G., Otta Chao, A. (1998). (With Bathov, D. D., Filey, S. G., Otta Chao, A. (1998). (With Bathov, D. D., Filey, S. G., Otta Chao, A. (1998). (With Bathov, D. D., Filey, S. G., Otta Chao, A. (1998). (With Bathov, D. D., Filey, S. G., Otta Chao, A. (1998). (With Bathov, D. D., Chao,

(with Bainov, D. D.) Oscillating properties of the solutions of a class of neutral type functional-differential equations. Bull. Austral. Math. Soc. 22 (1980), no. 3, 365–372. (Curtis C. Travis) 82a:34090 34K15

(with Bainov, D. D.) A note on Bellman-Gronwall's inequality. J. Math. Anal. Appl. 80 (1981), no. 1, 147-149. (B. G. Pachpatte) 82h:26023 26D15

Zahariev, V. I. (with Spiridonov, V. G.) The effect of an external horizontal flow on the development of convection. (Russian) C. R. Acad. Bulgare Sci. 33 (1980), no. 2, 187-190. (J. F. Heyda) 82c:76054 76E15

Zaharin, O. M. Accumulation of profit in a system described by a strongly regenerative process. (Russian) Ukrain. Mat. Z. 32 (1980), no. 6, 805-807. (O. K. Zakusilo) 82f:60197

Models for the operation of strongly regenerative systems with gain and loss. Point processes and queuing problems (Colloq., Keszthely, 1978), pp. 391-411, Colloq. Math. Soc János Bolyai, 24, North-Holland, Amsterdam, 1981. (D. R. Grey) 82h:60174 60K15

(with Gurvic, L. N.) Consolidation of semigroup systems and their invariants. (Russian) Kibernet. i Vyčisl. Tehn. No. 51 (1981), 43-50, 111. (A. B. Buche) 82m:47031 47D07 (60J35)

The process of profit accumulation in a discrete system with strongly regenerative states. (Russian) Ukrain. Mat. Z. 33 (1981), no. 2, 172-178. (F. Beichelt) 82f:60193

Zahar'jan, S. S. Method of reduction of dimension in the investigation of multiply nected automatic control systems. (Russian. Armenian summary) Izv. Akad. Nauk Armjan. SSR Ser. Tehn. Nauk 33 (1980), no. 4, 43-50, 64. (Author's summary) 93B15

Zaharjan, V. S. (with Avetisjan, A. E.; Akopjan, S. A.; Arakeljan, N. U.; Nersisjan, A. B.; Sarkisjan, I. S.; Hačatrjan, I. O.) Mhitar Mkrtičevič Džrbašjan (on his sixtieth birthday). (Russian) Izv. Akad. Nauk Armjan. SSR Ser. Mat. 13 (1978), no. 5-6, 360-375. (R. P. Boas, Jr.) 82c:01044 01A70

Boundary properties of the Green type potential. (Russian) Metric questions of the cory of functions (Russian), pp. 36-37, 158, "Naukova Dumka", Kiev, 1980. (J. Vesely)

(with Džrbašjan, Mk. M.) On the coefficients of expansion of meromorphic functions in generalized Maclaurin series. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 4, 789-793. (C. Tanaka) 82c:30044 30D30 (30B50)

Zahar'jaščev, M. V. (with Popov, S. V.) On the power of countermodels in intuitionistic calculus. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 45, 28 pp. (Bernd Dahn) 82m:03022 03B45 (03B55)

arjuta, V. P. Isomorphism of spaces of analytic functions. (Russian) Dokl. Akad. Na SSSR 255 (1980), no. 1, 11-14. (J. Siciak) 82j:46032 46E10 (32E10, 46A45, 46M35) (with Kadampatta, S. N.) Existence of continuable bases in spaces of functions that are analytic on compacta. (Russian) Mat. Zametki 27 (1980), no. 5, 701-713, 829. (V. P. Havin) 82a:46028 46E10 (30B60)

Zaharov, A. A. Some properties of solutions of the Riccati equation with almost periodic coefficients. (Russian) Studies in stability and the theory of oscillations (Russian), pp. 75-78, 145, Jaroslav. Gos. Univ., Yaroslavl', 1980. (M. K. Grammatikopoulos) 82e:34056 34C27 (34C11)

Zaharov, A. V. (with Singatullin, R. S.) Infinitesimal bicollineation in pseudo-Riemans spaces \overline{V}_4 and V_4 , and approximate mapping of world lines. (Russian) Studies in the cometry of imbedded manifolds and projective geometry (Russian), pp. 91-97, Leningrad. Gos. Ped. Inst., Leningrad, 1979. (Andrzej Trautman) 82h:83012 83C10 (53B30)

Zaharov, D. A. (with Degtev, A. N.) *Перечислимые множества. (Russian) [Recursively merable sets] Novosibirsk. Gos. Univ., Novosibirsk, 1979. 92 pp. (G. Asser) 824:03069 03D25

Zaharov, E. V. (with Eremin, Ju. A.; Nesmejanova, N. I.) A method of fundamental solutions in diffraction problems of electromagnetic waves on bodies of revolution. (Russian) Vyčisl. Metody i Programmirovanie No. 32 (1980), 28-44. (Piero Bassanini) 82j:78006 78A45 (35J99)

narov, Ju. N. (with Okuncov, V. V.) Scheme with "nonlinear viscosity" for solution of a stationary system of Navier-Stokes equations. (Russian) Numerical analysis (Russian), pp. 37-54, 134-135, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Teoret. i Prikl. Meh., Novosibirsk, 1978. (L. Berg) 82x:65097 65P05 (76D05)

Zaharov, V. E. (with Sabat, A. B.) Integration of the nonlinear equations of mathematical physics by the method of the inverse scattering problem. II. (Russian) Funkcional. Anal. i Priložen. 13 (1979), no. 3, 13-22. (L. A. Takhtajan (Tahtadžjan)) 82m:35137 35Q20 (58F07, 81C05)

The inverse scattering method. Solitons, pp. 243-285, Topics Current Phys., 17, Springer, Berlin, 1980. (See 82m:35001) 35Q20 (35R30, 58F07)

(with Manakov, S. V.) Three-dimensional model of relativistic-invariant field theory, integrable by the inverse scattering transform. Lett. Math. Phys. 5 (1981), no. 3, 247-253. (P. G. L. Leach) 82i:81054 81F15 (35Q20, 58F07, 58G35) See also Soliton theory, 82k:81002

Zaharov, V. I. (with Vainštein, A. I.; Novikov, V. A.; Šifman, M. A.) Asymptotic freedom in quantum mechanics. Jadernaja Fiz. 32 (1980), no. 6, 1622-1635 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 6, 840-847 (1981). (Authors' summary) 82m:81016 81C05 (81G05)

Zaharov, V. K. (with Koldunov, A. V.) Sequential absolute and its characterization. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 2, 280-284. (G. D. Dimov) 54B99 (54C99)

(with Veksler, A. I.; Koldunov, A. V.) Spaces of continuous extended functions (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 6, 1301-1305. (A. I. Krivoručko) 82d:54014 54C40 (46E05)

The construction of all locally compact extensions. Topo

221-228. (J. van der Slot) 82h:54015 54C20 (46E99, 54C40, 54D35, 54D45)
Zaharov, V. V. (with Petrosjan, L. A.) A game-theoretic approach to the problem of protection of the environment. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 1, 26-32, 119-120. (Authors' summary) 82h:92051 92A17 (90D45)

On the question of applying game theory to the problem of protection of the environment. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1981, vyp. 1, 111-113, 122. (Author's summary) 82h:92052 92A17 (90D45) arov, Valerii K. See Zaharov, V. K.

rova, A. V. (with Černavskii, A. V.) G. A. Golicyn's model. (Russian) Geometric methods in problems of algebra and analysis, No. 2 (Russian), pp. 155-156, 163, Jaroslav.

Gos. Univ., Yaroslavl', 1980. (Authors' summary) 82j:58028 58C28 (90A05) Gos. Univ., Yaroslavl', 1980. (Authors' summary) 82j:58028

arova, E. N. See Kasch, Friedrich, 82m:16001

Zaharova, M. N. See Approximate solution of son narova, N. N. See Approximate solution of some problems for universitial and integral equations of applied character, 82g:65004 harova, N. V. Uniformly discrete systems with optimal L-triangulation. (Russian) Mat.

Zametki 27 (1980), no. 4, 497-506, 668. (R. A. Rankin) 82b:52014 52A25 (10E25) Centerings of eight-dimensional lattices that preserve a frame of successive minima. (Russian) Geometry of positive quadratic forms. Trudy Mat. Inst. Steklov. 152 (1980), 97-123, 237. (R. A. Rankin) 82k:10033 10E20 (06C10, 10E25)

Zaheer, Neyamat (with Khan, Aijaz Ahmad) Cross-ratio theorems on generalized polars of abstract homogeneous polynomials. Ann. Mat. Pura Appl. (4) 126 (1980), 363-377 (1981). (M. Marden) 82h:30007 30C10

lov, A. (with Haïrullaev, M. M.) Little-known pages of Ibn Sīnā's heritage (correspondence and epistles of Ibn Sinā). (Russian) Voprosy Filos. 1980, no. 7, 76-83. (E. S. Kennedy) 82c:01012 01A30

irov, M. The method of integrating multipliers in the theory of general quasiconformal mappings. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 9, 9-10. (P. Caraman) 30C60 (35N10)

Zahle, M. Ergodic properties of general Palm measures. *Math. Nachr.* 95 (1980), 93–106. (Robert Kertz) 82f:28024 28D99 (60G55)

Zahn, W. (with Hecht, K. T.; Reske, E. J.; Seligman, Thomas H.) Spectroscopic amplitudes for complex cluster systems. Nuclear Phys. A 356 (1981), no. 1, 146–222. (Authors' summary) 82b:81135 81G30 (35P25)

nd, Jacques Machines séquentielles. (French) [Sequential machines] Second edition. Traité d'Électricité [Treatise on Electricity], XI. Georgi Publishing Co., St.-Saphorin, 1980. x+265 pp. ISBN 2-604-00013-X (L. Dornhoff) 82k:68025 68D05 (68-01)

Zaitento, V. A. (with Klin, M. H.; Faradžev, I. A.) Certain problems connected with the representation of permutation groups in the memory of a computer. (Russian)

Computations in algebra, number theory and combinatorics (Russian), pp. 21–32, 85, Akad.

Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (V. D. Mazurov) 82g:20012

20B35 (05C25)

Positive polarizations and abelian ideals in Lie algebras. (Russian) Mat. Sb. (N.S.) 112(154) (1980), no. 2(6), 242-255. (H. de Vries) 82j:22016

Zaicev, A. Ju. On the approximation of distributions of sums of independent, not identically distributed random variables with accompanying laws. (Russian) Dokl. Akad.

Nauk SSSR 252 (1980), no. 2, 289-290. (G. I. Ivčenko) 82æ60036 60F05

The estimation of proximity of distributions of sequential sums of independent identically distributed random vectors. (Russian. English summary) Problems of the theory of probability distributions, VI. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 97 (1980), 83-87, 228, 238. (R. J. Tomkins) 82b:60024 (60G50)

Some properties of n-fold convolutions of distributions. (Russian. English summ st. i Primenen. 26 (1981), no. 1, 152-156. (B. Jesiak) 82c:60030 60E07 (60F05)

(corv.) L. Extensions of abelian groups. (Russian). Constructive description of groups with properties prescribed on their subgroups (Russian), pp. 16–40, 143, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (Author's summary) 82g:20082 20K99

Groups of operators of finite rank and their application. (Russian) Sixth All-Union n on Group Theory (Čerkassy, 1978) (Russian), pp. 22–37, 219, "Naukova Kiev. 1980. (A. I. Moskalenko) 82v.20083 20K99

Dumka", Kiev, 1980. (A. I. Moskalenko) 82g:20083 20K99
 Products of abelian groups. (Russian) Algebra i Logika 19 (1980), no. 2, 150–172, 250. (V. N. Remeslennikov) 82g:20063 20F16 (20F22)

cev, I. D. (with Vainer, V. G.; Gubnickii, S. B.) Algorithms for solution of various modifications of the "problem of crossing the road". (Russian) Mathematical methods of cybernetics (Russian), pp. 60-65, 91, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (Authors' introduction) 82h:92055 92A20 (90C35, 94C15)

Zaicev, Ju. N. (with Tolmačev, V. V.) Dissipative equations of two-fluid hydrodynamics of superfluid helium. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 4, 815-818. (J. F. Heyda) 82i:81172 81J05 (76Y05)

cev, M. V. Schreier varieties of Lie algebras. (Russian) Mat. Zametki 28 (1980), no. 1, 119-126, 170. (J. Wiegold) 82b:17022 17B99 (17B05)

cev, V. A. (with Pečinkin, A. V.) Optimal control of servicing in a multichannel system. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 6, 57-63, 219 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 6, 36-42 (1980). (O. J. Boxma) 82d:90061 90B22

On the existence of sharp waves for a first-order system. (Russian) Some questions of litative theory of differential equations and theory of the control of motion, pp. 69-71, 164, Mordov. Gos. Univ., Saransk, 1980. (See 82m:34004) 35L40

Zaicev, V. I. Projective spectra and extensions of topological spaces. (Russian) Uspehi Mat. Nauk 36 (1981), no. 3(219), 197-202, 256. (Å. Casazár) 82i:54026 54B35 (54D18)

Zaiceva, A. M. (with Agranov, G. A.; Korennaja, L. N.; Sobolev, V. S.) Distribution of energy in the plane of a transformant. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1980, no. 3, 3-7, 77. (Authors' summary) 82a:94008

denberg, M. G. On the theorems of Brody and Green on conditions for complete hyperbolicity of complex manifolds. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 4, 77-78. (Alexander A. Pankov) 824:32017 32H20

Notes on abstract almost-periodicity. Riv. Mat. Univ. Parma (4) 5 (1979), part 2, 837-845 (1980). (N. Pacchiarotti) 82e:34068 34G20

2, 857-843 (1980). (N. Faccmarotti) 822-94068 344520 Some remarks concerning regularity of solutions for abstract differential equations. Rend. Sem. Mat. Univ. Padova 62 (1980), 47-64. (N. Pacchiarotti) 82f:34076 34G10 On asymptotic series of symbols and of general pseudodifferential operators. Rend Sem. Mat. Univ. Padova 63 (1980), 231-246. (Ju. V. Egorov) 82d:35110 35S03

A partial differential equation with almost-periodic right-hand side. Rev. Ro Math. Pures Appl. 25 (1980), no. 8, 1279-1287. (Sadakazu Aizawa) 82d:35019

Zaikov, R. P. Nonlocal conserved currents in supersymmetric generalized nonlinear sigma models. (Russian. English summary) Teoret. Mat. Fiz. 48 (1981), no. 1, 34-43. (Author's summary) 82i:81122 81E99 (81G20)

jubaev, A. Z. A generalization of interpolation codes with simple nodes. (Russian) Theory of coding and complexity of calculations (Russian), pp. 111-127, 221, "Nauka Kazah. SSR, Alma-Ata, 1980. (K. Seitz) 82a:94083 94B60

ne, Maria Carmelina F. Envelopes of Silva-holomorphy. Functional analysis, holomorphy, and approximation theory (Proc. Sem., Univ. Fed. Rio de Janeiro, Rio de Janeiro, 1978), pp. 581-614, Lecture Notes in Math., 843, Springer, Berlin, 1981. (Ph. Noverraz) 82f:46056 46G20 (32D10)

Zaini, S. Zahid Ali A note on quasimonotone series. (Turkish sun nary) Comm. Fac. Sci. Univ. Ankara Sér. A, Math. 28 (1979), no. 4, 23-26 (1980). (M. S. Rangachari) 82i:40002 40A05

(with Ahmad, Z. U.) Integrability theorems for trigonometric series. Math. Acad. Sinica 9 (1981), no. 2, 193-199. (Colin C. Graham) 82h:42011 42A24 (42A16)

erz (with Dobija, Mieczysław; Wasik, Bogusław) Construction and application of one-dimensional empirical distribution functions of continuous random variables. (Polish. English and Russian summaries) Przegląd Statyst. 25 (1978), no. 4, 565-576 (1979). (M. Hušková) 824:62087

Zajac, Michal Hyperinvariant subspace lattice of some C₀-contractions. (Russian st Math. Slovaca 31 (1981), no. 4, 397-404. (Mitsuru Uchiyama) 82k:47018

Zajac, Rudolf Albert Einstein and twentieth century physics. (Czech) Pokroky Mat. Fyz. Astronom. 24 (1979), no. 2, 61-77. (Editors) 82h:01068 01A70

Zajączkowski, Wojciech Riemann invariants interaction in MHD, k-waves. Demonstratio Math. 13 (1980), no. 2, 317-333. (E. G. Broadbent) 82b:76070 76W05 (35L67)

Zajiček, Luděk A note on norm-attaining functionals. (Czech summary) With a loose Russian summary. Casopis Pest. Mat. 106 (1981), no. 2, 168-169, 210. (V. Zizler)

On the symmetry of Dini derivates of arbitrary functions. Comm nent. Math. Unio. Carolin. 22 (1981), no. 1, 195-209. (A. M. Bruckner) 82c:26009

On approximate Dini derivates and one-sided approximate derivatives of arbitrary Comment, Math. Univ. Carolin. 22 (1981), no. 3, 549-560. (A. M. Bruckner) 26A27 (26A24)

Zajta, Aurel J. A proof of Jensen's theorem by forward induction. Nordisk Mat. Tidskr. 25/26 (1978), no. 3-4, 173-174. (Editors) 82a:26018a 26D20 See also Magnus, Arne, 82a:26018b

Band representations and symmetry types of bands in solids. Phys. Rev. B (3) 23 (1981), no. 6, 2824–2835. (Author's summary) 82b:20017 20C35 (81C40)
Zak, Ju. O. One class of multiextremal problems, and methods of solving them. Automat. i

Vyčisl. Tehn. (Riga) 1979, no. 5, 41-47, 93 (Russian); translated as Automat. Control Comput. Sci. 13 (1979), no. 5, 40-46. (Author's summary) 82m:90143

Computational schemes for sequential optimization algorithms. Automat. i Vyčisl. Tehn. (Riga) 1980, no. 2, 46-55, 97 (Russian); translated as Automat. Control Comput. Sci. 14 (1980), no. 2, 41-49. (Author's summary) 82m:90144 90C30 (65K05)

(with Belikov, S. A.) On a class of optimal control problems with constraints on the phase coordinates. Aviomatika 1980, no. 1, 46-56, 95 (Russian); translated as Soviet Automat. Control 13 (1980), no. 1, 37-46 (1981). (C. Marchal) 82e:49037 49B36

Zak, Stanisław H. (with Olbrot, Andrzej W.) Controllability and observability problems for linear functional-differential systems. Functional differential systems and related topics (Proc. First Internat. Conf., Blażejewko, 1979), pp. 244-255, Higher College Engrg., Zielona Góra, 1980. (See 81j:34005) 93B05 (34K35)

(with Olbrot, Andrzej W.) Sufficient and necessary conditions for spectral controllability and observability of linear retarded systems. Functional differential systems and related topics (Proc. First Internat. Conf., Blażejewko, 1979), pp. 267-273, Highe College Engrg., Zielona Góra, 1980. (Arthur J. Krener) 82c:49030 49E15 (34K35. 93B07)

On the controllability of linear constant delay-differential systems. Four Engrg. 5 (1980), no. 4, 215-228. (Sahjendra N. Singh) 82e:93015 93B05 (34K35)

Zak, T. (with Byczkowski, T.) Asymptotic properties of semigroups of measures on vector spaces. Ann. Probab. 9 (1981), no. 2, 211-220. (Evarist Gine) 82d:60013

, V. L. On a problem of evading many pursuers. *Prikl. Mat. Meh.* **43** (1979), *no.* 3, 456–465 (*Russian*); *translated as J. Appl. Math. Mech.* **43** (1979), *no.* 3, 492–501 (1980). (Author's summary) **82m:90187** 90D26 (49A45) (Author's summary) 82m:90187

See Zak, Ju. O.

AUTHOR INDEX

Zakai, Moshe (with Merzbach, Ely) Predictable and dual predictable projections of two-parameter stochastic processes. Z. Wahrsch. Verw. Gebiete \$3 (1980), no. 3, 263-269. (J. Walsh) 82b:60053 60G48 (60H05)

Some remarks on integration with respect to weak martingales. Two-index random processes (Paris, 1980), pp. 149-161, Lecture Notes in Math., 863, Springer, Berlin, 1981.

(David Nualart Rodón) 82k:60125 60H05 (60G44) Some classes of two-parameter martingales. Ann. Probab. 9 (1981), no. 2, 255-265. (Ju. S. Mišura) 82f:60109 60G44 (60H05, 60J65)

(with Bobrovsky, Ben-Zion) On lower bounds for the nonlinear filtering problem. IEEE Trans. Inform. Theory 27 (1981), no. 1, 131-132. (Authors' summary) 82a:94004 94A05

Zakharov, V. E. See Zaharov, V. E.

Zakharov, V. I. See Zaharov, V. I.

Žakin, A. I. Convective stability of a binary conducting mixture in a magnetic field. (Russian) Vestnik Har'kov. Gos. Univ. No. 174, vyp. 43 (1978), 84-89, 105. (D. ter Haar)

(with Tarapov, I. E.) Electrohydrodynamical instability of a weakly conducting fluid between two cylindrical electrodes with unipolar injection. Magnit. Gidrodinamika No. 4 (1979), 53-57 (Russian); translated as Magnetohydrodynamics 15 (1979), no. 4, 402-406 (1980). (From the introduction) 82d:76043 76E25 (76W05)

The effect of interphase tangential forces on the creation of a flow of a weakly conducting fluid. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1981, no. 4, 69-76, 174. (Author's summary) 82k:76078 76W05

Zakirov, S. Choice of a statistical quality control plan with two levels. (Russian) Limit theorems, random processes and their applications (Russian), pp. 96-105, 232, "Fan", Tashkent, 1979. (K. Sarkadi) 82e:62142 62N10

owski, Wojciech The nonlinear DFk-processes. Demonstratio Math. 14 (1981), no. 1, 271-277. (Robert M. Baer) 82f:65131 65005

(with Stoklosa, Janusz) Computations of (a, K)-machines. Theoret. Comput. Sci. 14 (1981), no. 3, 247-265. (Authors' summary) 82m:68105 68D20 (68C99)

Zakradze, M. V. (with Aleksidze, M. A.) Investigation of forces at the seismic center. (Russian, Georgian and English summaries) Soobšč, Akad, Nauk Gruzin, SSR 99 (1980). no. 1, 81-84. (Authors' summary) 82a:86002 86A15

A case of the action of forces in a seismic center. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 100 (1980), no. 1, 85-88. (Author's

summary) 82g-86007 86A15

Zakrevskaja, L. N. Finite groups with a strictly dense system of & subnormal subgroups (Russian. English summary) Dokl. Akad. Nauk BSSR 25 (1981), no. 11, 967-970, 1051. (Author's summary) 82k:20046 20D10 (20D35)

Zakrevskii, A. D. Some combinatorial problems of artificial intelligence. (Russian) Semiotics and information science, No. 15 (Russian), pp. 3-16, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (See 82a:68007) 68G05

Zakrževskii, A. E. Programmed angular motion of a load-carrying body with elastic elements in a central force field. Prikl. Meh. 16 (1980), no. 6, 114-121 (Russian); translated as Soviet Appl. Mech. 16 (1980), no. 6, 549-555 (1981). (N. D. Sengupta) 70E15 (70E20)

82b:70003 70E15 (70E20)
Zakrzewski, Stanisław Finite systems of observables in quantum field theory. Rep. Math. Phys. 17 (1980), no. 1, 63–87. (R. L. Ingraham) 82j:810S1 81E99 (70G35)
A M. General classical solutions in the CPⁿ⁻¹ model.

Nuclear Phys. B 174 (1980), no. 2-3, 397-406. (J. S. Joel) 82f:81041 81E10 (58E20) (with Din, A. M.) Interpretation and further properties of general classical CPⁿ⁻¹ solutions. Nuclear Phys. B 182 (1981), no. 1-2, 151-157. (Authors' summary) 82f:81042 81E10 (53C05, 58G10)

(with Din, A. M.) Fermion solutions in the supersymmetric CP**-1 model. Phys. Lett. B 101 (1981), no. 3, 166-168. (Authors' summary) 82h:81066 81E10 (58G10)

Zakrzhevskii, A. E. See Zakrževskii, A. E.

Zaks, Abraham Half-factorial-domains. Israel J. Math. 37 (1980), no. 4, 281-302. (J. Zelmanowitz) 82b:13009 13F15

Zaks, S. (with Perl, Yehoshua) Deficient generalized Fibonacci maximum path graphs. Discrete Math. 34 (1981), no. 2, 153–164. (M. C. Golumbic) 82h:05027 05C20 (05C35, 05C38)

et-din Zakzouk, Ezz See El-Din Zakzouk, Ezz Zakman, M. Analysis of queuing systems operating at discrete times. Point processes and queuing problems (Colloq., Keszthely, 1978), pp. 413–426, Colloq. Math. Soc. János Bolyai, 24, North-Holland, Amsterdam, 1981. (U. Narayan Bhat) 82:60171 60K25

Zaleski, S. (with Pomeau, Y.) Wavelength selection in one-dimensional cellular stru (French summary) J. Physique 42 (1981), no. 4, 515-528. (Authors' summary) 82h:76017 76B35 (35B32, 58E07, 76B15, 92A09)

Zalesnyi, V. B. (with Marčuk, G. I.; Kočergin, V. P.; Sarkisjan, A. S.; Bubnov, M. A.; Klimok, V. I.; Kordzadze, A. A.; Kuzin, V. I.; Protasov, A. V.; Suhorukov, V. A.; Cvetova, E. A.; Ščerbakov, A. V.) ** Математические модели циркуляции в океане. (Russian) [Mathematical models of circulation in the ocean] "Nauka" Sibirsk. Otdel.,

Novosibirsk, 1980. 288 pp. (Jiří Nedoma) 82e:86002 86A05 (76V05)
(with Marčuk, G. I.; Dymnikov, V. P.; Lykosov, V. N.; Bobyleva, I. M.; Galin, V. Ja.; Perov, V. L.) A mathematical model of the general circulation of the atmosphere and ocean. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 3, 577-581. (From the

text) 82f:86001 86A05 (86A35)

Zalesskii, A. E. (with Sereżkin, V. N.) Finite linear groups generated by reflections. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 6, 1279-1307, 38. (V. D. Mazurov) 82i:20060 20H15

See also Humphreys, James E., 82c:20080

Zalewski, Z. On the theory of the solution of the Dirichlet problem in a domain with a boundary of Ljapunov type by the finite difference method. (Russian) Azerbaĭdžan. Go Univ. Učen. Zap. 1979, no. 2, 23-31. (Włodzimierz Proskurowski) 82e:65101 Zalgaller, V. A. (with Burago, Ju. D.) *Геометрические неравенства. (Russian)

[Geometric inequalities] "Nauka" Leningrad. Otdel., Leningrad, 1980. 288 pp. (W. J.

52A40 (53C99) Firey) 82d:52009

Zalik, R. A. The fundamentality of sequences of translates. Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 927-932, Academic Press, New York, 1980. (R. H. Cox) 82d:42009 42A65 (41A30)

Erratum: "Extension of periodic Tchebycheff systems" [J. Math. Anal. Appl. 56 (1976), no. 2, 373-378; MR 54 #8099]. J. Math. Anal. Appl. 82 (1981), no. 2, 587.

(Editors) 82i:41023 41A30

Zălinescu, Constantin A generalization of the Farkas lemma and applications to convex programming. J. Math. Anal. Appl. 66 (1978), no. 3, 651-678. (From the introduction) 90C25 (46G99)

On an abstract control problem. Numer. Funct. Anal. Optim. 2 (1980), no. 6, 531-542 (1981). (Jean-Paul Penot) 82d:49015 49A51 (90C25)

Zaliznjak, S. N. (with Pidlipenko, Ju. K.) Application of linear methods to the solution of boundary value problems for the Helmholtz equation. (Russian) Questions of the theo of the approximation of functions (Russian), pp. 88–100, 196, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (Authors' summary) 82h:35021 35J05

Zalta, Ed (with McMichael, Alan) An alternative theory of nonexistent objects. Logic 9 (1980), no. 3, 298-313. (John R. Chidgey) 82c:03008 03A05 (03B45)

nalov, Z. Ž. (with Sadimetov, H. M.) Coefficients of optimal quadrature formulas. Boundary value problems for equations of mathematical physics (Russian), pp. 159-165, 170, "Fan", Tashkent, 1980. (Yury Girshovich) 82f:41037 41A55

Zaman, Asad Estimators without moments: the case of the reciprocal of a normal mean. J. Econometrics 15 (1981), no. 2, 289-298. (D. E. A. Giles) 82i:62157 62P20

nani, N. G. Dynamic programming and numerical solution of linear two-point boundary value problems. *Math. Japon.* 26 (1981), no. 4, 485–493. (Author's summary) 82k:65044 65L10 (65K10, 65N30)

nsky, Marc Approximation et analyse harmonique. (English summary) Linear spaces and approximation (Proc. Conf., Math. Res. Inst., Oberwolfach, 1977), pp. 265-288, Internat. Schriftenreihe Numer. Math., 40, Birkhäuser, Basel, 1978. (Author's summary) 41A65 (42B10)

Approximation et analyse harmonique. (English summary) C. R. Acad. Sci. Paris Sér. A-B 291 (1980), no. 1, A11-A14. (Author's summary) 82a:41036 41A65

tze, L. G. Relations between dimensions of free bases of free topological groups (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 97 (1980), no. 3, 569-572. (M. I. Kabenjuk) 824:54058 54H99 (22A99)

On relations between dimensional and cardinal functions of spaces imbedded in spaces of a special type. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 100 (1980), no. 3, 557-560. (R. Engelking) 82f:54060 54F45 (54A25)

Zambelli, Vittoria Quasinormal sensitive and S-quasinormal sensitive finite groups. (Italian. English summary) Istit. Lombardo Accad. Sci. Lett. Rend. A 112 (1978), no. 2, 349-361 (1979). (Federico Menegazzo) 82c:20075 20F26

mbrini, J.-Cl. Covariant Lagrangian of Onsager and Machlup without discretization. Phys. A 102 (1980), no. 3, 496-511. (Editors) 82g:82027 82A35 (58D30)

ne, Alan (with Chen, Robert) On fair coin-tossing games. J. Multivariate Anal. 9 (1979), no. 1, 150-156. (E.-A. Weiss, Jr.) 82a:60060 60G40 (60K05)

(with Chen, Robert) Fibonacci numbers and stopping times. Fibonacci Quart. 19 (1981), no. 2, 127-130. (S. P. Mohanty) 82f:10016 10A99
ne, William R. (with Becker, Joseph A.) Homomorphisms into analytic rings.

Math. 101 (1979), no. 5, 1103-1122. (Bruno Kramm) 82k:32042 32E25 (46J15) (with Becker, Joseph A.) Applications of functional analysis to the solution of powers equations. Math. Ann. 243 (1979), no. 1, 37-54. (Bruno Kramm) 82k:32029 series equations 32B05 (13J05, 46J15)

nes, G. Feedback and optimal sensitivity: model reference transformations, multiplicative seminorm s, and approximate inverses. IEEE Trans. Automat. Control 26

(1981), no. 2, 301-320. (Author's summary) 824:93017 93B35 mfirescu, Oristina M. (with Bermond, J.-C.; Simões-Pereira, J. M. S.) On non-Hamiltonian homogeneously traceable digraphs. Math. Japon. 24 (1979/80), no. 4, 423-426. (Authors' summary) 824:05063 05C20 (05C38, 05C45) Local and global unilateral connectedness in digraphs. Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory and Computing (Florida Atlantic Univ., Boca Raton, Fla., 1980), Vol. II. Congr. Numer. 29 (1980), 909–915. (Bill Jackson) 82f:05050 05C20 (05C40)

Zamfirescu, Tudor On continuous families of curves. VII. (Italian. English summary) Rend. Sem. Mat. Univ. Politec. Torino 36 (1977/78), 183-190 (1979). (B. B. Phadke) 82i:52021

52A37

Generalized contractions and fixed points in metric spaces. (Italian summary) Rend. Sem. Mat. Univ. Politec. Torino 36 (1977/78), 191-204 (1979). (Author's summary) 54H25

Nonexistence of curvature in most points of most convex surfaces. Math. Ann. 252 (1980), no. 3, 217-219. (S. B. Klimentov) 82e:53096 53C45

The curvature of most convex surfaces vanishes almost everywhere. Math. Z. 174

(1980), no. 2, 135-139. (S. B. Klimentov) 82e:53097 53C45 On continuous families of curves. VI. Geom. Dedicata 10 (1981), no. 1-4, 205-217.

(B. B. Phadke) 82i:52020 52A37

Most convex mirrors are magic. Topology 21 (1982), no. 1, 65-69. (K. J. Falconer) 82k:52009 52A10

nir, Shmuel (with Mertens, Jean-François) Incomplete information games with transcendental values. Math. Oper. Res. 6 (1981), no. 2, 313-318. (Authors' summary) 82k:90134 90D05

njatin, V. N. (with Šiškin, A. B.) Čebyšev centers and s-normal spaces. (Russian) Mat. Zametki 29 (1981), no. 5, 659-672, 797. (G. Godini) 82m:46022 54C30)

nolodčíkov, Aleksander B. "Fishing-net" diagrams as a completely integrable system Phys. Lett. B 97 (1980), no. 1, 63-66. (Author's summary) 82b:81031 81C30 (35Q2) 81C30 (35O20.

(with Fateev, V. A.) A model factorized S-matrix and an integrable spin-1

Heisenberg chain. Jadernaja Fiz. 32 (1980), no. 2, 581-590 (Russian); translated as Soviet J. Nuclear Phys. 32 (1980), no. 2, 298-303 (1981). (Authors' summary) 82g:81089 81E99 (81F15, 82A68)

Tetrahedra equations and integrable systems in three-dimensional space. Ž. Eksper. Teoret. Fiz. 79 (1980), no. 2, 641-664 (Russian); translated as Soviet Phys. JETP 52 (1980), no. 2, 325-336 (1981). (Author's summary) 82e:81047 81E99 (81F15, 82A67) Tetrahedron equations and the relativistic S-matrix of straight-strings in

Comm. Math. Phys. 79 (1981), no. 4, 489-505. (G. R. Allcock) 2+1-dimensions.

82k:81081 81F15 (32A45)
norano, N. A. (with Matzner, Richard A.) Imaginary-frequency interior modes of black
holes. Proc. Roy. Soc. London Ser. A 373 (1980), no. 1753, 223–233. (Andrew King) 824:83021 83C20 (83C25)

norzaev, A. M. (with Palistrant, A. F.) Geometric classification of P-symmetries.
(Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 4, 856–859. (K. Burian) 82g:51019 51F15 (82A60)

See also All-Union Symposium: Theory of Symmetry and its Generalization 82p:51020

orzaeva, E. A. Super-crystallographic P-symmetries. (Russian) Bul. Akad. Štiince RSS Moldoven. 1979, no. 3, 22-27, 93. (E. Hertel) 82c:51015 51F15 (20H15)

npieri, Giuseppe (with Valent, Tullio) The differentiability of an operator connected with a class of quasilinear differential systems. (Italian. English summary) Rend. Sem. Mat. Univ. Padova 57 (1977), 311-322 (1978). (J. Daneš) 82f:35053 35F20 (47F05)

An extension of the theorem on surjections between Fréchet spaces. Some of its applications. (Italian) Rend. Sem. Mat. Univ. Padova 61 (1979), 145-153 (1980). (Maria Mascarello Rodino) 82m:35018b 35E10 (46A30, 47A99)

Systems of the type (Pu=f, Qu=g) that are not globally solvable. (Italian. English nmary) Rend. Sem. Mat. Univ. Padova 61 (1979), 325-329 (1980). (Maria Mascarello 35E10 (46A30) Rodino) 82m:35018c

A sufficient condition for existence of real analytic solutions of P.D.E. with constant coefficients, in open sets of R². Rend. Sem. Mat. Univ. Padova 63 (1980), 83–87. (Maria Mascarello Rodino) 82m:35019a 35E10

A link between C[∞] and analytic solvability for P.D.E. with constant coefficients Rend. Sem. Mat. Univ. Padova 63 (1980), 145-150. (Maria Mascarello Rodino) 35E10 82m:35019b

nardo, Paolo On pw+2-projective p-groups. Com nt. Math. Univ. St. Paul. 29 (1980), no. 1, 45-53. (Roger H. Hunter) 824:20051 20K10

Zanbyrbaev, B. S. See Qualitative theory of differential equations, 82f:34003

ecka-Perl, Urszula (with Jakubowicz, Antoni; Lizak, Jadwiga; Szczepanek, Wojciech) Application of a certain Diophantine equation to the construction of algebraical scalar concomitants of a given tensor field. Fasc. Math. No. 11 (1979), 213-216. (J. K. Beem) 82h:53021 53A45

dere, M. K. (with Sostak, A. P.) *Topologijas elementi. I. (Latvian) [Elements of topology. I] With a Russian summary. Latvijas Valsts Univ., Riga, 1977. 68 pp. (Editors) 54-01

dron, Oscar (with Castagnino, Mario; Foussats, Adriana; Laurá, Roberto) The quantum equivalence principle and the particle model in curved space-time. (Italian and Russian summaries) Nuoco Cimento A (11) 60 (1980), no. 2, 138–156. (Beverly K. Berger) 82/83060 83/509 (81E99)

83C99 (81E99) (with Foussats, Adriana; Laurá, Roberto) Massive spin-1 field in expanding universes and the quantum equivalence principle. J. Math. Phys. 22 (1981), no. 2, 247-270 (P. I. Ingraham) 87/43096 81F05 (81M05)

357-370. (R. L. Ingraham) 82f:83096 83F05 (81M05)

931-370. (R. L. Ingraham) 821:83096 83F05 (81M05)
(with Ceccatto, H.; Foussats, Adriana; Giacomini, H.) Quantum field theory in curved space-time. Massive and massless vector fields. Phys. Rev. D (3) 24 (1981), no. 10, 2576-2585. (Authors' summary) 821:81063 81E20 (83C47) noella, Angelo Testing hypotheses for mixed functional and regression linear models. (Italian. English and French summaries) Statistica (Bologna) 39 (1979), no. 2, 241-268. (Adolfo Gill) 82a:62098 62105 (62F05)

Zanfir, Stefan On the solution of elasticity for dipolar bodies. (Romanian. English mary) An. Univ. Craiova Mat. Fiz.-Chim. 7 (1979), 41-49. (Author's summ 73007 73B25 (73S99)

Zang, Israel (with Avriel, M.) Generalized arcwise-connected functions and characterizations of local-global minimum properties. J. Optim. Theory Appl. 32 (1980),

no. 4, 407–425. (Authors' summary) 82m:99132 90C30
A smoothing-out technique for min-max optimization. Math. Programming 1 (1980), no. 1, 61–77. (K. Schittkowski) 82c:90085 90C30 (65K05) (with Schaible, Siegfried) On the convexifiability of pseudoconvex C²-functions

Math. Programming 19 (1980), no. 3, 289-299. (Jean-Paul Penot) 82a:90124 (26B25, 58C15)

(with Handler, Gabriel Y.) A dual algorithm for the constrained shortest path problem. Networks 10 (1980), no. 4, 293-309. (Authors' summary) 82b:90049 (with Tishler, Asher) A maximum likelihood method for piecewise regression models with a continuous dependent variable. J. Roy. Statist. Soc. Ser. C 30 (1981), no. 2, 116-124. (Authors' summary) 82i:62099 62J05 (62F10)

Discontinuous optimization by smoothing. Math. Oper. Res. 6 (1981), no. 1, 140–152. (Author's summary) 82h:90088 90C30

gwill, Willard I. (with Garcia, C. B.) Global continuation methods for finding all solutions to polynomial systems of equations in n variables. Extremal methods are systems analysis (Internat. Sympos., Univ. Texas, Austin, Tex., 1977), pp. 481-497, Lecture Notes in Econom. and Math. Systems, 174, Springer, Berlin, 1980. (Eugenc Allgower) 82a:65035 65H10 (55M20)

(with Garcia, C. B.) The flex simplicial algorithm. Numerical solution of highly nonlinear problems (Sympos. Fixed Point Algorithms and Complementarity Problems, Univ. Southampton, Southampton, 1979), pp. 71-91, North-Holland, Amsterdam, 1980. (T. Y. Southampton, South Li) 82g:65029 6 65H10 (55M20)

iolo, Carlo (with Melkanoff, Michel A.) On the design of relational database schemata. ACM Trans. Database Systems 6 (1981), no. 1, 1–47. (Authors' summary) 82b:68019 68B15 (68H05)

nlav, T. Some estimates of the approximation of second derivatives by means of cubic interpolation splines. (Russian) Vyčisl. Sistemy No. 81 Metody Splain-Funkcii (1979), 65D25 (41A15, 65D07)

12-20, 101. (A. A. Fonarev) 82;65011 65D25 (41A15, 65D07) nchi-Zannettacci, Marie-Pierre See Franchi-Zannettacci, Marie-Pierre

netti, Luca (with Colasurdo, Guido) Unsteady compressible flow: a computational method consistent with the physical phenomena. AIAA J. 19 (1981), no. 7, 852-856. (Authors' summary) 821:76026 76N99 (65P05, 76A60, 76G99)

(Authors' summary) 82:76026 76N99 (65P05, 76A60, 76G99)

Zannetti, M. (with Ruggiero, P.) Critical phenomena at T=0 and stochastic quantization. Phys. Rev. Lett. 47 (1981), no. 18, 1231-1234. (Authors' summary) 82i:82022

ias, T. (with Israel, Werner) Local thermodynamics and stress tensor of the Hawking Phys. Lett. A 86 (1981), no. 2, 82-84. (M. J. Perry) 82j:83033 radiation.

ier, U. (with Perelli, A.) On a theorem of Pólya. (Italian. English summary) Boll. Un. Mat. Ital. A (5) 18 (1981), no. 2, 305-307. (A. Edrei) 82i:30042 30D15 (10A20.

olin, Fabio (with Invernizzi, Sergio) An existence theorem of periodic solutions of functional-differential equations. (Italian summary) Boll. Un. Mat. Ital. A (5) 16 (1979), no. 2, 344-348. (Authors' summary) 82a:34084 34K15

Convergences basis in commutative groups. Proceedings of the Meeting on General Topology (Univ. Trieste, Trieste, 1978), p. 163, Univ. degli Studi Trieste, Trieste, 1981. 54A20 (See 82f:54001)

Zanon, D. (with Girardello, L.; Montaldi, E.) Local dynamic charges from asymptotic nsions of partition functions. Phys. Lett. A 71 (1979), no. 1, 21-25. (From the text) 82b:35137 35Q20 (58F07, 81C05)

ti, Mario (with Domotor, Zoltan; Graves, Henson) Probability kinematics. Synthese 44 (1980), no. 3, 421-442. (Authors' summary) 82a:94035 94A17 (60A05)

novello, Renato On certain formulas for the Struve and Weber functions of integral order. (Italian) Rend. Sem. Mat. Univ. Padova 63 (1980), 89-93. (A. de Castro Brzezicki) 82i:33012

On a definite integral of the product of Bessel and Struve functions. (Italian. English nary) Rend. Sem. Mat. Univ. Padova 64 (1981), 187-192. (M. E. Muldoon) 33A40 (33A35)

latnii, V. I. Existence conditions for the density of the Lagrangian function for a given fourth-order differential equation. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 11, 43-45. (Vadim Komkov) 82m:49003

Zaplitna, A. T. Second-order differential equations with retarded argument in a Banach space. (Russian) Qualitative investigations of functional differential equations (Russian), pp. 50-55, 183, "Naukova Dumka", Kiev, 1980. (D. Bainov) 82g:34111 34K30

dec, A. V. (with Petrov, V. V.; Ageev, V. M.; Kort'ev, A. V.; Kostjukov, V. M.; Medvedev, S. B.; Poljakov, I. N.) Information theory of complex systems function under conditions of incomplete information. (Russian) Engineering cybernetics, Vol. 13 (Russian), pp. 121-151, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (Authors' summary) 82f:90074 90C15 (92A20)

Zappa, Paolo Remarks on the Bochner-Martinelli kernels. (Italian. English summary) Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Form.

(M. Hervé) 82g:32006 32A25 (32C35)

Zapparov, F. I. (with Garifullin, F. A.; Mingaleev, N. Z.; Norden, P. A.) Cellular convection in a viscoelastic fluid. (Russian) Ž. Prikl. Meh. i Tehn. Fiz. 1981, no. 1, 76E15 (76R99)

76E15 (76R99)

Zaprjanov, Zaprjan Dimitrov (with Matakiev, V.) An exact solution of the problem of unsteady fully-developed viscous flow in slightly curved porous tube. (Polish and Russian aries) Arch. Mech. (Arch. Mech. Stos.) 32 (1980), no. 4, 461-474. (From the introduction) 82g:76041 76S05 (35C05, 76D99)

Zapuskalova, T. A. An inhomogeneous Riemann boundary value problem on a spiral-shaped contour. (Russian) Trudy Sem. Kraev. Zadačam No. 16 (1979), 64-70, 242.

(Zbigniew Binderman) 82d:30048 30E25
antonello, Sergio E. The sheaf of outer functions in the polydisc. Pacific J. Math. 76

(1978), no. 1, 267-281. (Author's summary) 82b:32012 32C35 (32E30)

The sheaf of HP-functions in product domains. Pacific J. Math. 93 (1981), no. 2,

479-493. (P. S. Chee) 82k:32026 32A35 (32C35, 46315)

Zarati, Said (with Boudriga, Nouredine) Points quadruples d'immersions de variétés de sion trois en codimension un. (English summary) C. R. Acad. Sci. Paris Sér. I Math. 292 (1981), no. 12, 591-593. (Authors' summary) 82e:57016 57R42

ecki, Dariusz Analysis of λ-sensitivity and its application to simulation analysis of

large-scale dynamical systems. (Polish. Russian and English sum naries) Arch. Aut

Telemech. 25 (1980), no. 3, 335-334. (Author's summary) 82e93016 93B35

Zare, K. Properties of the moment of inertia in the problem of three bodies. Celestial Mech. 24 (1981), no. 4, 345-354. (Author's introduction) 82h:70009 70F07 (58F40)

A. T. Synthesis of control of a pendulum. Izv. Akad. Nauk SSSR Meh. Tverd. Tela 16 (1981), no. 1, 60-68 (Russian); translated as Mech. Solids 16 (1981), no. 1, 52-59. (From the introduction) 82i:70036 70Q05 (93C15)

emba, Stanisław Krystyn Gleichverteilung, gute Gitterpunkte und Integration durch Monte-Carlo Methoden. Eleventh Styrian Mathematical Symposium (Graz, 1979). Ber. Math.-Statist. Sekt. Forsch. Graz No. 124-132 (1979), Ber. No. 124, 13 pp. (D. C. Handscomb) 82d:65007 65C05 (10K05, 65D32)

Zaret, David A limited conventionalist critique of Newtonian space-time. Philos. Sci. 47 (1980), no. 3, 474-494. (Author's summary) 82b:83065 83D05

Zarhi, R. (with Pnueli, Amir) Realizing an equational specification. Automata, languages and programming (Akko, 1981), pp. 459-478, Lecture Notes in Comput. Sci., 115, Springer, Berlin, 1981. (See 82i:68003) 68B05

ov, A. V. (with Cihačev, A. S.) Compression of a high-current relativistic electron eam with neutralized charge. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 4, 3-10,

169. (Authors' summary) 82d:76093 76W05 Zarinov, V. V. Analytic representations of a class of analytic functionals that contains Fourier hyperfunctions. (Russian) Mat. Sb. (N.S.) 108(150) (1979), no. 1, 62-77, 143.

(M. Dostal) 82k:46064 46F15 (32A45, 81E05)
On an exact sequence of modules and the Bogoljubov "edge of the wedge" theorem. (Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 1, 19-22. (C. Bănică) 82f:32012 32A45 (32D15, 46F15)

Fourier-ultrahyperfunctions. (Russian) Izv. Akad. Nauk SSSR Ser. Mat. 44 (1980), no. 3, 533-570, 719. (M. Dostal) 82k:46062 46F15 (32A45, 81E05)

asymptotics of Fourier hyperfunctions. (Russian. English st On qua Mat. Fiz. 43 (1980), no. 1, 32-38. (M. Dostal) 82k:46063 46F15 (32A45, 81E05)

Zaripov, R. G. On the statistical mechanics of classical systems. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 6, 6-11. (Author's summary) 82b:82021 82A05

Zariski, Oscar Abstract of the paper: "Foundations of a general theory of equisingularity on r-dimensional algebroid and algebraic varieties, of embedding dimension r+1" [Amer. J. Math. 101 (1979), no. 2, 453-514; MR 81m:14005]. Symposia Mathematica, Vol. XXIV (Sympos., INDAM, Rome, 1979), pp. 215-223, Academic Press, London, 1981. (Editors) 82g:14018 14E15 (14B05)

See also Contributions to algebraic geometry, 82g:14003

Žarkih, V. A. (with Višnevskii, V. M.) A priority system with group servicing. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 2, 96-106, 221 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 2, 66-75 (1980), (E. A. Danielian) 82i:60178a 60K25 (with Višnevskii, V. M.) On a priority system with group servicing. II. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 6, 100-109, 221 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 6, 74-82 (1980). (E. A. Danieljan) 82j:60178b 60K25

Zarnadze, D. N. Representations of strict (LF)-spaces. (Russian) Trudy Vyčisl. Centra Akad. Nauk Gruzin. SSR 20 (1980), no. 1, Vyčisl. Mat. Programmirovanie, 39-53. (F.

Smithies) 82g:46008 46A12

Zarrop, M. B. (with Rustem, B.) A Newton-type method for the optimization and control of nonlinear econometric models. J. Econom. Dynamics Control 1 (1979), no. 3, 283-300. (Authors' summary) 82d:65055 65K10 (90A19)

Optimal input design for the identification of linear multivariable systems with disjoint parametrization. Internat. J. Control 34 (1981), no. 2, 315–331. (S. M. Pandit) 82m:93031 93B30 (62K05)

Sequential generation of *D*-optimal input designs for linear dynamic systems. *J. Optim. Theory Appl.* 35 (1981), no. 2, 277-291. (Author's summary) 82m:93085

(with Rustem, B.) A quasi-Newton algorithm for the control of large nonlinear econometric models. Large Scale Systems 2 (1981), no. 2, 105–111. (Authors' summary) 82g:90071 90C20 (90A14)

, V. Ja. (with Dabagjan, A. V.) A game-theoretic auction scheme with redistribution of limited resources. (Russian) Methods for optimization, identification and allocation of resources in complex systems (Russian), pp. 3–10, 46, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. (See 82c:90002) 90A30 (90D45)

Zarubin, M. M. Imbedding of spaces $W_{p,l}^{(l)}(R)$, given certain assumptions with respect to domains of existence of a weight norm of lower-order gradients. (Russian) Theory of cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 195-199, 255, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Author's summary) 82m:46035 46E35

Zaruc'kii, V. O. (with Amiro, 1. Ja.) ★Теория ребристых оболочек. (Russian) [Theory of ribbed shells] Методы Расчета Оболочек [Methods for Calculating Shells], 2. "Naukova 73Lxx (73-02, 73K15, Dumka", Kiev, 1980. 368 pp. (D. P. Rašković) 82f:73037b 73L15)

Zarzer, E. A. On the method of extrapolation in the case of several discretization sarameters. Numer. Funct. Anal. Optim. 3 (1981), no. 1, 69-93. (Author's summary) 821:65069 65J15

Zas'ko, Ju. N. Generalized Hermite polynomials in the form of a limit cyclic function. (Russian) Questions of the theory of the approximation of functions (Russian pp. 100-106, 197, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. (D. P. Gupta) 82h:33017 33A65

Integral representation of functional sequences determined by generating functions (Russian) Vyčisl. Prikl. Mat. (Kiev) No. 42 (1980), 103-109, 166. (I. M. Sheffer)

Generalized Čebyšev polynomials. (Russian. English summary) Vyčisl. Prikl. Mat.

(Kiev) 1980, no. 41, 132-138, 160. (Paul Nevai) 82e:33018 33A70 (42C05)
Zaslavskii, A. Ja. Sublinear operators and semigroups. (Russian) Application of functional alysis to approximation theory (Russian), pp. 22-31, 157, Kalinin. Gos. Univ., Kalinin, 1980. (S. Kutateladze) 82i:47057 47B99 (46G99, 47D05)

Critical points of Lipschitz functions on smooth manifolds. (Russian) Sibirsk. Mat. Ž. 22 (1981), no. 1, 87-93, 229. (Christian Fenske) 82e:58031

Zaslavskii, B. G. Chaos in a population. (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 3, 533-536. (Mark Levi) 82;:58094 58F15 (92A15)

- Zaslavskii, G. M. The simplest case of a strange attractor. Phys. Lett. A 69 (1978/79), no. 3, 145-147. (M. I. Brin) 82g:58062 58F13
 - Statistics of energy spectra. Uspehi Fiz. Nauk 129 (1979), no. 2, 211-238 (Russia translated as Soviet Phys. Uspekhi 22 (1979), no. 10, 788-803 (1980). (J. S. Joel) 82i:82015 82A05 (58F30, 58G15, 81C20)
 - Berman, G. P.) On stochastic behaviour of multilevel dynamic quantum systems. Nonlinear and turbulent processes in physics (Proc. Internat. Workshop, Kiev, 1979). Phys. D 2 (1981), no. 1, 25-29. (See 82c:82002) 83C99 (58F13)
 - (with Abdullaev, S. S.) Nonlinear dynamics of rays in inhomogeneous media. Ž. Eksper. Teoret. Fiz. 80 (1981), no. 2, 524-536 (Russian); translated as Soviet Phys. JETP 53 (1981), no. 2, 265-270. (Authors' summary) 82m:78020 78A50 (58F40)
- lavsky, Thomas The geometry of root systems and signed graphs. Amer. Math. Monthly 88 (1981), no. 2, 88-105. (Thomas A. Dowling) 82g:05012 05A15 (05B25, 05C15, 17B20, 32B20)
 - Complementary matching vectors and the uniform matching extension property. European J. Combin. 2 (1981), no. 1, 91-103. (David P. Sumner) 82j:05090a
- Correction to: "Complementary matching vectors and the uniform matching extension property". European J. Combin. 2 (1981), no. 3, 305. (David P. Sumner) 82j:05090b 05C70
- (with McMorris, F. R.) The number of cladistic characters. Math. Biosci. 54 (1981),
- no. 1-2, 3-10. (David J. Strauss) 82j:92008 92A05 (05C05)
 ssenhaus, Hans (with Patera, J.; Winternitz, P.) On the maximal abelian subgroups of the linear classical algebraic groups. C. R. Math. Rep. Acad. Sci. Canada 2 (1980), no. 5, 231–236. (From the text) 82a:20051 20G15
 - On the sphere packing problem. Proceedings of the Conference on

 - Kristallographische Gruppen (Univ. Bielefeld, Bielefeld, 1979), Part I. Match No. 9 (1980), 127-135. (Istvan Hortobágyi) 82j:52023 52A45 (54H15) (with Cantor, David G.) A new algorithm for factoring polynomials over finite fields. Math. Comp. 36 (1981), no. 154, 587-592. (Maurice Mignotte) 82e:12020 12C05 (12-04)
- Zatini, Elsa (with Barattero, Rosalba) Relations between the type of a point on an algebraic variety and the type of its tangent cone. J. Algebra 66 (1980), no. 2, 386-399. (José M. 14E15 (14M10) Aroca) 82f:14013
- Zatsepin, S. V. See Zacepin, S. V.
 Žaurov, Ju. V. A limit theorem for a parabolic equation with a random coefficient. (Russian) Behavior of systems in random media (Russian), pp. 18-25, 92-93, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (Author's summary) 82f:35191 (35K10, 60H10)
 - A limit theorem for equations of elliptic type with a random coefficient. (Russian) Theory of random processes, No. 8 (Russian), pp. 42-46, 124, "Naukova Dumka", Kiev, 1980. (Z. Schuss) 82a:35098 35R60 (60H15)
- Zavada, A. P. A means of specifying a set of root trees. (Russian) Questions of the computational complexity of algorithms (Russian), pp. 14-19, 46, Preprint 79, 14, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (G. N. Kopylov) 82j:05052
 - An algorithm for generating random trees. (Russian) Questions of the computational complexity of algorithms (Russian), pp. 20–22, 47, Preprint 79, 14, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. (G. N. Kopylov) 82;68071 68E10 (05C05, 60C05)
- Zavadskaja, L. A. Application of an analytical-statistical method to the study of a highly reliable system with standby. (Russian) Methods in operations research and reliability theory in systems of analysis (Russian), pp. 19-25, 98-99, Akad. Nauk Ukrain. SSR, Inst. rnet., Kiev, 1979. (Z. Khalil) 82b:62134 62N05
- Zavadskii, A. G. (with Bondarenko, V. M.; Nazarova, L. A.) Representations of tame partially ordered sets. (Russian) Representations and quadratic forms (Russian) pp. 75-106, 155, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1979. (Sheila Brenner) 82m:16027 16A64 (15A21)
- Zavališčin, S. T. (with Šarin, V. I.) A construction of multiplication of generalized functions, and its application to singular differential equations. (Russian) Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR No. 31 Obobščen. Funkcii i Vektor.
- Mery (1979), 20-32, 91. (Authors' summary) 82f:46050 46F10 (34A25)

 Zavalov, N. N. (with Anosova, Ž. P.) Close triple approaches in the three-body problem.

 (Russian. English summary) Leningrad. Gos. Univ. Učen. Zap. No. 402 Ser. Mat. Nauk Vyp. 58 Trudy Astronom. Obser. 36 (1981), 109-123, 245. (Authors' summary) 82i:70010 70F07 (70F15)
- Zavalykut, G. D. Periodic solutions of a differential equation with a polynomial right-hand side. (Russian) Ukrain. Mat. Z. 33 (1981), no. 1, 60-63. (O. Vejvoda) 82c:34048 34C25
- Zav'jalov, B. I. (with Vladimirov, V. S.) Tauberian theorems in quantum field theory. (Russian) Current problems in mathematics, Vol. 15 (Russian), pp. 95-130, 228, Akad Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (B. Geyer) 81E05 (32A07, 46F12, 81F20)
- Zavnerčik, V. E. On the stability of autonomous systems in the presence of several resonances. Prikl. Mat. Meh. 43 (1979), no. 2, 229-234 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 2, 247-253 (1980). (Ján Ohriska) 82h:70026 70K20
 - On instability in the presence of several resonances. Prikl. Mat. Meh. 43 (1979), no 6, 970-974 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 6, 1049-1053 (1981). (Author's summary) 82m:34051 34D20 (70K20)
- Zavolženskii, M. V. Hydro- and thermodynamics of atmospheric tornadoes and oceanic waterspouts. (Russian) Ž. Prikl. Meh. i Tehn. Fiz. 1980, no. 4, 121–132, 172. (Author's summary) 82e:86007 86A35 (86A10)
 - (with Terskov, A. H.) The effect of small perturbations of the position of an elliptic cylinder on the dynamics of its behavior in the flow of a viscous incompressible fluid. (Russian) Gidromeh. (Kiev) No. 44 (1981), 20-28, 121. (Authors' summary) 82k:76031
- Zayed, Ahmed I. On the singularities of Gegenbauer (ultraspherical) exp. Amer. Math. Soc. 262 (1980), no. 2, 487-503. (K. M. Saksena) 82c:33016
- Hyperfunctions as boundary values of generalized axially symmetric potentials Illinois J. Math. 25 (1981), no. 2, 306-317. (J. Král) 82f:31002 31A35 (35C15, 46F15) Zavtsev, V. A. See Zaicev, V. A.

- Zazašvili, Š. P. (with Bašeleišvili, M. O.; Giorgalvili, L. G.) Effective solution of some contact boundary problems of statics for composite isotropic bodies. (Russian. Georgian and English summaries) Trudy Tbiliss. Univ. 204 (1978), 47-64, 131. (V. T. Golovchan) 82a:73011 73C40 (73T05)
- Solution of first boundary value problem of statics of the plane moment theory of elasticity for a concentric circular ring. (Russian. Georgian and English summaries) Some problems of the theory of elasticity (Russian), pp. 56-71, Tbilis. Gas. Univ., Inst. Prikl. Mat., Tbilisi, 1980. (Author's summary) 82c:73007 73B25

 Žbanov, Ju. K. Exact solutions of the equations of motion of a gyro horizon compass. Izv.
- Akad. Nauk SSSR Meh. Tverd. Tela 15 (1980), no. 2, 11-18 (Russian); translated as
- Mech. Solids 15 (1980), no. 2, 1-7. (Ja. V. Tatarinov) 82h:70004 70E05

 Zbierski, P. (with Marck, W.) On the number of models of the Kelley-Morse theory of classes. Fund. Math. 109 (1980), no. 3, 169-173. (A. Lévy) 82h:03069 03E70)
- Zbyrko, M. D. (with Kuznecov, V. N.; Turbin, A. F.) Semi-Markov model for analyzing reliability of system with restorable protection. Aviomat. i Telemeh. 1980, no. 6, 175-185 (Russian. English summary); translated as Automat. Remote Control 41 (1980), no. 6, part 2, 879-887. (J. Chandramohan) 82k:60183 60K15
- nkiewicz, Zbigniew On the Green function for the diffusion equation and for rectangular parallelepiped. Fasc. Math. No. 12 (1980), 65-68. (Antonino Maugeri) 82j:35079
- Zdanok, A. I. Random inspection algorithms in an environment of noise. (Russian) my Slučařn. Poiska No. 8 Voprosy Strukturnov Adaptacii (1980), 149-161, 333-334. 65C05 (90C30) (I. Văduva) 82d:65008
 - (I. vaduva) Sacrosome 65-05 (80-30)

 Invariant finitely additive measures and limit behavior of Markov processes with discrete time. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 3, 11-13, 92. (Author's summary) 82g:60092 60J10 (60F99)
- Zdanok, T. A. Measurable solutions of a random operator equation and its adjoint. (Russian) Theory of random processes, No. 7 (Russian), pp. 13-22, 130, "Naukova Dumka", Kiev., 1979. (Gheorghe Bocsan) 82b:60078 60H25
- Random linear operators with a finite-dimensional kernel. (Russian) Theory of random processes, No. 8 (Russian), pp. 50-59, 125, "Naukova Dumka", Kiev, 1980. (Gheorghe Bocsan) 82b:60079 60H25
- On the invertibility of a random linear operator. (Russian. English summary) Topological spaces and their mappings, pp. 34-44, 176, 182, Latv. Gos. Univ., Riga, 1981.

 (A. T. Bharucha-Reid) 82k:60139 60H25
- Zdanov, V. I. (with Stelen', V. M.) Equations of the motion of a black hole in the quasistationary approximation. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 11, 21-26. (Authors' summary) 82e:83011 83C10 (83C25)
- Analytic properties of solutions of Teukolsky's equation. (Russian) Izv. Vysš. Učebn.
- Zaved. Fizika 1981, no. 7, 47-51. (R. F. Biljalov) 82k:83007 83C10 (83C15) anov, V. M. (with Jušmanov, P. N.) Heat diffusion and transfer in a multicomponent completely ionized plasma. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 4, 24-35, 169. (Authors' summary) 82d:76102 76X05 (82A45)
- anov, V. P. On the disturbance of Maxwellian distribution of velocity in bimolecular reactions. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 3, 592-594. (From the text) 80A30 (92A09, 92A40)
- Zderkiewicz, J. (with Bogucki, Z.) Sur une sous-classe de fonctions étoilées dont les valeurs recouvrent un cercle fixé. Ann. Polon. Math. 38 (1980), no. 3, 245-253. (D. A. Brannan)
 - (with Bogucki, Z.) Sur un problème de Jenkins pour les fonctions convexes. Polon. Math. 38 (1980), no. 3, 255-258. (Evelyn M. Silvia) \$2p:30020 30C45 (30C55)
- orenko, Ju. N. (with Gavriljuk, I. P.; Makarov, V. L.; Elenin, G. G.; Šan'ko, T. M.; Zmitrenko, N. V.) Two algorithms for numerical solution of problems of quasilinear heat conduction and their comparison. (Russian. English summary) Vyčisl. Prikl. Mat. (Kiev) 1980, no. 41, 92–105, 159. (Murli M. Gupta) 82a:65095 65P05 (65M05)
- Zdrahal, Z. (with Bratko, I.; Shapiro, A.) Recognition of complex patterns using cells arrays. Comput. J. 24 (1981), no. 3, 263-270. (Authors' summary) 82m:68133
- Zdrzalka, Stanisław (with Nowicki, Eugeniusz) Optimal control of a complex of independent operations. Internat. J. Systems Sci. 12 (1981), no. 1, 77-93. (Vincențiu Dumitru) 82i:49063 49A10
- Zeamer, R. Warwick On the endomorphism near-ring of a free group. Proc. Edinburgh Math. Soc. (2) 23 (1980), no. 1, 103-121. (Jaroslav Libicher) 82f:16042 16A76
- rowski, J. (with Kuchowicz, B.) The presence of torsion enables a metric to allow a gravitational field. Phys. Lett. A 67 (1978), no. 1, 16-18. (Larry L. Smalley) 82c:83065
- cca, Antonio The superposition of the states and the logic approach to quantum mechanics. Internat. J. Theoret. Phys. 20 (1981), no. 3, 191-230. (S. Gudder) \$2e:81003 81B10 (03G12, 46L60)
- Zecca, P. (with Tiberio Bianchini, Rosa Maria) Local controllability for autonomous nonlinear systems. J. Optim. Theory Appl. 31 (1980), no. 1, 69-83. (Authors' summary) 82f:49043 49E20 (93B05)
- Zecchin, Giuliano (with Ceschia, Mario) Asymptotic amplitude from a two-parameter strongly nonlinear oscillator. IEEE Trans. Circuits and Systems 28 (1981), no. 5, 448-455. (Authors' summary) 824:94051 94C05 (58F21)
 (with Ceschia, Mario) Asymptotic amplitudes from a three-parameter oscillator.
 - IEEE Trans. Circuits and Systems 28 (1981), no. 5, 456-459. (Authors' summary) 82e:58083 58F21 (34C05)
- Žedanov, A. S. (with Granovskii, Ja. I.; Dimaško, Ju. A.) Parametric instability of linear systems in quantum theory. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1980, no. 2, 111-121. (Ĭ. Ju. Krivs'kii) 82e:81052 81C99
- Zee, A. Maximal local symmetry. Phys. Lett. B 99 (1981), no. 2, 110-112. (Author's summary) 82g:81110 81G20
- Zeeman, E. C. Population dynamics from game theory. Global theory of dynamical systems (Proc. Internat. Conf., Northwestern Univ., Evanston, Ill., 1979), pp. 471-497, Lecture Notes in Math., 819, Springer, Berlin, 1980. (Peter D. Taylor) 82e:58076 (90D25, 92A15)
 - (with Smith, J. O.: Harrison, P. J.) The analysis of some discontinuous decision processes. European J. Oper. Res. 7 (1981), no. 1, 30-43. (E. Vilkas) 82f:90011

See Krylov, N. S., 82e:82 101

nan, Ju. L. hougsekul, Paulop Laplace functional approach to point processes occurring in a nodel. Ann. Probab. 9 (1981), no. 6, 1034–1040. (P. Jagers) 82k:60115 60G55 (60F17, 60K05, 90B20)

Almost total information convergence of order α for a sequence of point processes IEEE Trans. Inform. Theory 27 (1981), no. 3, 381-383. (Tamer Başar) 82k:94011 94A17 (60G55)

with Jespers, E.; van Oystaeyen, F.) Control subgroups and localization of group rings. Comm. Algebra 9 (1981), no. 12, 1263–1284. (Donald S. Passman) 16A27 821-16021

eb, Ezra (with Walach, Eugene) On multivariable half-plane analyticity and positive realness. IEEE Trans. Circuits and Systems 28 (1981), no. 9, 927-930. (W. H. J. Fuchs) 30C15 (94C05)

hard (with Falkner, Gudrum; Kowol, Bernhard; Heise, Werner) On the ence of cyclic optimal codes. (German summary) Atti Sem. Mat. Fis. Univ. Modena

28 (1979), no. 2, 326-341 (1980). (L. R. Vermani) 82d:94041 94B05 (94B15) nder, Eduard (with Amann, Herbert) Nontrivial solutions for a class of nonreso cations to nonlinear differential equations. Ann. Scuola Norm. Sup. problems and applie Pisa Cl. Sci. (4) 7 (1980), no. 4, 539-603. (Simeon Reich) 82b:47077 47H15 (34G20, 35P99, 58F05, 58F07)

(with Amann, Herbert) Periodic solutions of asymptotically linear Hamilton Manuscripta Math. 32 (1980), no. 1-2, 149-189. (Richard Cushman) 82::59026 58F05 (34C25, 49A40, 58E05)

der-Reitinger, Jeannette See Reid, Constance, 82f:01135 wirth, Benjamin The credible distribution function is an a ible Bayes rule. Scand. Actuar. J. 1978, no. 3, 121-127. (Author's summary) 82k:62014 62C15

A note on the asymptotic optimality of the empirical Bayes distribution function. m. Statist. 9 (1981), no. 1, 221-224. (J. R. Blum) 82c:62013

Zeid, Ibrahim (with Padovan, Joseph) On the transient solution of nondeterministic systems. J. Franklin Inst. 306 (1979), no. 5, 497-511. (Authors' summary) 82i:93065

er, G. (with Biess, G.; Erfurth, H.) *Optimale Prozesse und Systeme. (German) [Optimal processes and systems] Mathematik für Ingenieure, Naturwissenschaftler, Ökonomen und sonstige Anwendungsorientierte Berufe [Mathematics for Engineers, Natural Scientists, Economists and other Application-Oriented Occupations], 16. Verlag Harri Deutsch, Thun, 1980. 108 pp. ISBN 3-87144-432-4 (Editors) 82k:49001 (93-01)

an, A. I. Some properties of solutions of differential equations with an unbounded operator in a Banach space. (Russian) Differencial'nye Uraonenija (Ryazan) No. 13 (1979), 46-50. (Author's summary) 82e:34063 34G10
Stability of the direct Kolmogorov system with Markov perturbations of the operator

of a system. (Russian) Differencial nye Uraonenija (Ryazan) No. 13 (1979), 51-54. (Author's summary) 82e:34064 34G10 (90B22)

Zeigler, Bernard P. (with Bard, Jonathan L. B.; Ghozlan, Aline; Goldbeter, Albert; Hardt, Shoshana; Levitzki, Alexander; Liron, Nadav; Odell, Garrett M.; Parnas, Hanna; Perelson, Alan S.; Rapp, P. E.; Rubinow, Sol I.; Segel, Lee A.; Tolkovsky, Aviva M.; Wehrhahn, Christian; Yagil, Gad) *Mathematical models in molecular and cellular iology. Cambridge University Press, Cambridge-New York, 1980. x+757 pp.

ISBN 0-521-22925-1 (John J. Tyson) 82c:92001 92-01 (92A09)

Zeilberger, Doron Partial difference equations in $m_1 > m_2 > ... > m_n > 0$ and their applications to combinatorics. Discrete Math. 31 (1980), no. 1, 65-77. (David M.

essoud) 82a:05009 05A15 (39A10) Enumeration of words by their number of mistakes. Discrete Math. 34 (1981), no. 1.

89–91. (Author's summary) **824:05016** 0SA15 (0SA05)
All binomial identities are verifiable. *Proc. Nat. Acad. Sci. U.S.A.* **78** (1981), *no.* 7, part 1, 4000. (Author's summary) 82k:05010 05A10

Zeile, K. A generalization of Feynman's variational principle for real path integrals. Phys. Lett. A 67 (1978), no. 5-6, 322-324. (Author's summary) 82b:81037 81C35

Zeinalov, I. S. An ill-posed problem for a parabolic system. (Russian. Azerbaijani and English summaries) Akad. Nauk Azerbaidžan. SSR Dokl. 36 (1980), no. 3, 3-5. (A. A. 35K50 (35R25)

Application of the contour integral method to the study of ill-posed problems for second-order parabolic systems. (Russian) Differencial nye Uravnenija 16 (1980), no. 6, 1091-1096, 1148-1149. (V. S. Rabinovič) 82a:35055 35K50 (35R25)

alova, T. Ju. Stability of a nonlinear elastic rod made of polymeric material. (Russian. Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 6, 33-36. (Author's summary) 82g:73037 73K20 (73H99) Buckling of a nonlinear viscoelastic rod of a rectangular section. (Russia

Azerbaijani and English summaries) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 2 (1981), no. 1, 54-58. (Author's summary) 82g:73028 73H10

Zeitler, Herbert Quadratische Mengen in endlichen projektiven Räumen. Bayreuth. Math. Schr. No. 6 (1980), 33–207. (Francis Buckenhout) 82b:05041 05B25 (51B05)
Emanuel Sperner und die Schulmathematik. Praxis Math. 23 (1981), no. 8, 237–243. (Albert C. Lewis) 82j:01075 01A70

Zeitler, Horst Die Amalgamierungseigenschaft und reine Ringe. Arch. Math. Logik Grundlag. 21 (1981), no. 1-2, 83-100. (U. Felgner) 82j:03036 03C50 (03C60 03C50 (03C60, 03C65,

Zeitlin, G. J. See Ceitlin, G. E.

Zeitlin, Joel Nesting behavior of osculating circles and the Fresnel integrals. Math. Mag. 54 (1981), no. 2, 76-78. (R. C. Buck) 82g:53006 53A04

Minimization of maximum absolute deviation in integers. Discrete Appl.

Math. 3 (1981), no. 3, 203-220. (Author's summary) 82j:90028 90B05
Integer resource allocations with the objective function separable into pairs of variables. European J. Oper. Res. 8 (1981), no. 2, 152-158. (Author's summary) 90B05 (90B25, 90C10) 82h:90043

Integer allocation problems of min-max type with quasiconvex separable functions Oper. Res. 29 (1981), no. 1, 207-211. (Author's summary) 82c:90061 90C10 (90B05)

khabie-Zeitoune, E. See Khabie-Zeitoune, E. Zelazko, Wiesław A characterization of LC-nonremovable ideals in commutative Banach

algebras. Pacific J. Math. 87 (1980), no. 1, 241-248. (G. R. Allan) 82g:46095 See also Biography: Stark, Marceli, 82g:01080
Zel'dovič, Ja. B. (with Barenblatt, G. I.; Librovič, V. B.; Mahviladze, G. M.)

*Mатематическая теория горения и взрыва. (Russian) [Mathematical theory of combustion and explosion] "Nauka", Moscow, 1980. 479 pp. (errata insert). (Frederick 80A25 (80-02)

(with Pilipeckii, N. F.; Sudarkin, A. N.; Škunov, V. V.) Wave front reversal by a surface. (Russian) Dokl. Akad. Nauk SSSR 252 (1980), no. 1, 92-95. (From the text) 78A55

(with Malomed, B. A.) Topological invariants and strings in distributed active dynamical systems. (Russian) Dokl. Akad. Nauk SSSR 254 (1980), no. 1, 92-94. (O. K. 80A25 (70K99, 81E99)

A. Einstein and modern science. (Russian) Vestnik Akad. Nauk SSSR 1980, no. 7, 40-46. (Editors) 82f-0156 01A70 (83B05)

(with Dolgov, A. D.) Cosmology and elementary particles. Rev. Modern Phys. 53 (1981), no. 1, 1–41. (Authors' summary) 82b:85010 85A40 (83F05)

(with Griščuk, L. P.) Gravitational instability in a multicomponent fluid. Astronom. Ž. 58 (1981), no. 3, 472-481 (Russian); translated as Soviet Astronom. 25 (1981), no. 3,

267-272 (1982). (Authors' summary) 82m:76030 76E20 (85A05)
See also Barenblatt, G. I., 82c:76001b and Schmutzer, Ernst, 82i:83001
Zelekson, L. A. (with Stepanov, N. S.) Reflection of signals from the boundary between a moving and a stationary medium. Izv. Vysš. Učebn. Zaved. Radiofizika 23 (1980), no. 9, 1046-1053 (Russian); translated as Radiophys. and Quantum Electronics 23 (1980), no. 9, 695-700 (1981). (Authors' summary) 82h:78022 78A45

Zelenjak, T. I. (with Dezin, A. A.; Maslennikova, V. N.) Some mathematical problems in hydrodynamics (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 21–31, 247, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Stefan Balint) 35Q20 (76D99, 76E99)

Zeleva, Stojana D. Representation of semihomogeneously partially ordered groups by defining inequalities (Russian) PLISKA Stud. Math. Bulgar. 2 (1981), 54–60. (J. Jakubik) 82m:06020 06F15

Zelevinskii, A. V. A generalization of the Littlewood-Richardson rule and the Robinson-Schensted-Knuth correspondence. J. Algebra 69 (1981), no. 1, 82–94. (Michael H. Peel) 82j:20028 20C30 (05A17)

Zeleznik, Frank J. Thermodynamics. II. The extended thermodynamic system. Phys. 22 (1981), no. 1, 161-178. (Author's summary) 82i:80002 80A10 (80A15)

Zeleznikow, John (with Hannah, John; Richardson, J. S.) Completely semisimple ring semigroups. J. Austral. Math. Soc. Ser. A 30 (1980/81), no. 2, 150-156. (K. S. S. Nambooripad) 82c:20114 20M25 (16A48, 20M12)

The natural partial order on semirings. Algebra, Carbondale 1980 (Proc. Conf., Southern Illinois Univ., Carbondale, Ill., 1980), pp. 255–261, Lecture Notes in Math., 848, Springer, Berlin, 1981. (Editors) 82e:06015 06F05 (06F25, 16A78)

w, M. P. Three-dimensional Ising model with four-particle interactions. Phys. A 107 (1981), no. 3, 464-470. (Author's summary) 82i:82073 82A68 Interdependent planar Ising lattices. *Phys. Lett. A* 82 (1981), *no.* 3, 137–139. thor's summary) 82b:82095 82A67 (Author's summary) 82b:82095

Želihovskii, A. A. A method of projections of e-quasigradient. (Russian) Operations research (models, systems, solutions), No. 7 (Russian), pp. 48–55, 1, Akad. Nauk SSSR, Vyčisl. Centr, Moscow, 1979. (J. Abrham) 82a:90127 90C25 (49D07)

Zelinka, Bohdan Bases of classes of trees closed under subdivisions. (Russian sum Math. Slovaca 30 (1980), no. 1, 61-64. (László Lovász) 82c:05044 05C05 (05C99) Intersection number of a graph. (Czech summary) With a loose Russian summary.

Časopis Pest. Mat. 106 (1981), no. 3, 223-225, 316. (Zevi Miller) 82m:05060 Some remarks on domatic numbers of graphs. (Czech summary) With a loose Russian summary. Časopis Pēst. Mat. 106 (1981), no. 4, 373-375, 436. (J. Sheehan) 82m:05065 05C40 (05C99)

Graphs of semigroups. (Czech summary) With a loose Russian summary Pēst. Mat. 106 (1981), no. 4, 407-408, 437. (Hugo S. Sun) 82k:05063 05C25 (20M15) Graph representations of finite abelian groups. With a loose Russian summary Czechoslovak Math. J. 31(106) (1981), no. 1, 83-86. (J. K. Doyle) 82m:05055 (20K01)

On domatic numbers of graphs. (Russian summary) Math. Slovaca 31 (1981), no. 1, 91–95. (L. W. Beineke) 82g:05083 05C99

(with Tomasta, Pavel) Decomposition of a complete equipartite graph into omorphic subgraphs. (Russian summary) Math. Slovaca 31 (1981), no. 2, 165-169. (H.

Joseph Straight) 82e:05110 05C70 (05B30) Cyclically simple tournaments. Publ. Math. Debrecen 28 (1981), no. 1-2, 99-102. (J. W. Moon) 82::05041 05C20 (05C38)

Zelins'kii, Ju. B. Various generalizations of the concept of convexity. (Russian) Metric questions of the theory of functions (Russian), pp. 38-42, 158, "Naukova Dumka", Kiev, 1980. (V. P. Soltan) 82c:52002 52A01

Zelinskii, V. A. Necessary conditions for the existence of a schedule for some class of models in scheduling theory. (Russian) Automated systems for control of enterprises (Russian), pp. 35-38, 101, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. (Author's summary) 82m:90095 90B35

Zelisko, V. R. Matrix polynomial expansion into the product of linear factors. (Russian) Ukrain. Mat. Ž. 32 (1980), no. 6, 807-810. (Andrzej W. Olbrot) 82g:15008

Zeljabin, V. N. A theorem on the splitting of the radical for alternative algebras over a Hensel ring. (Russian) Algebra i Logika 19 (1980), no. 1, 81-90, 133. (Harry F. Smith) 17D05 (16A21)

Zeller, K. (with Scherer, R.) Gestufte Approximation in zwei Variablen. (English summary) Numerical methods of approximation theory, Vol. 5 (Conf., Math. Res. Inst., Oberwolfach, 1979), pp. 282–288, Internat. Ser. Numer. Math., 52, Birkhäuser, Basel, 1980. (Werner

Haussmann) 826-41046 41A63 (41A50, 65D05)

(with Jakimovski, Amnon; Meyer-König, W.) Power series methods of summability: positivity and gap perfectness. Trans. Amer. Math. Soc. 266 (1981), no. 1, 309–317. (E. Jürimäe) 82g:40011 40H05 (40G10)

Zellner, Arnold Jeffreys-Bayes posterior odds ratio and the Akaike information criterion for discriminating between models. Econom. Lett. 1 (1978), no. 4, 337-342. (Author's summary) 82c:62008 62A15 (62J05)

★Байесовские методы в эконометрии. (Russian) [An introduction to Bayesian inference in econometrics] Translated from the English and with a preface by G. G.

Pirogov and Ju. P. Fedorovskii. Математико-Статистические Методы за Рубежом [Foreign Publications in Mathematical-Statistical Methods] "Statistika", Moscow, 1980. 440 pp. (Editors) 82c:62150 62P20 (62F15)

(with Palm, Franz) Rejoinder: "Large sample estimation and testing procedures for dynamic equation systems" [J. Econometrics 12 (1980), no. 3, 251-283; MR 81g:62156]. J. Econometrics 17 (1981), no. 1, 131-138. (Authors' summary) 82m:62245b rics and statistics, 82d:62170 and McDe

John Malcolm; et al., \$2m:62245a

(manov, E. I. Absolute zero-divisors in Jordan pairs and Lie algebras. (Russian) Mat.

Sb. (N.S.) 112(154) (1980), no. 4(8), 611-629. (Harry F. Smith) 820:17010 17B30

manowitz, Julius M. (with Camillo, Victor P.) Dimension modules. Pacific J. Math. 91 (1980), no. 2, 249-261. (L. Fuchs) 82h:16019 16A53

Weakly primitive rings. Comm. Algebra 9 (1981), no. 1, 23-45. (Timon Anderson)

82i:16034 16A48 (16A52)

provic, V. A. (with Sedov, L. I.) On the variational method of derivation of equations of state for a material medium and a gravitational field. Prikl. Mat. Meh. 42 (1978), no. 771-780 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 5, 827-838 (1979). (Authors' summary) 82e:83024 83C55 (49H05, 53B50)
 On spinor representations of pseudo-orthogonal groups. (Russian) Dokl. Akad.

Nauk SSSR 254 (1980), no. 2, 275-278. (Eugene Gutkin) 82a:22014 22E43 (81C40)

Relativistic models of magnetizable and polarizable media and the energy-momentum tensor of an electromagnetic field. (Russian. English sur Vestnik Moskov. Univ. Ser. I Mat. Meh. 1980, no. 3, 71-78, 109. (A. II. Klotz) 82g:78008 78A25 (49R99)

Želobenko, D. P. Harmonic analysis on reductive Lie groups. (Russian) Mathematical analysis, Vol. 17 (Russian), pp. 207–269, 272, Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. (J. Szmidt) 82e:22001 22-02 (22E30, 22E45, 43A80) Universal modules of class 0 over semisimple Lie algebras. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 3, 81-82. (A. U. Klimyk) 82j:17011

uhin, A. A. Generalization of the relativistic string model and the topological structure

of its classical solutions. Lett. Math. Phys. 5 (1981), no. 3, 213-217. (A. Comtet) 82i:81090 81G05 (53B50)

Želtuhin, V. S. An iteration method for solving the Dirichlet problem for a biharmonic equation in polar coordinates. (Russian) Computational methods and computer software, No. 2 (Russian), pp. 97-102, Kazan. Gos. Univ., Kazan, 1980. (See 82b:76001) 65N05 (31A25)

Želudevič, F. F. (with Bernik, V. I.) On integral polynomials that assume small values on a certain interval. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 3, 27-33, 140. (Ju. V. Mel'ničuk) 82k:10069 10K15 (10F30) Žemaitis, Antanas (with Bikelis, Algimantas) Asymptotic expansions for probabilities of

large deviation. (Russian. Lithuanian and English summaries) Primenen. Teor. Verojatnost. i Mat. Statist. No. 3 (1980), 9-39, 156. (Zdzisław Rychlik) 82f:60059 60F10 (62F20)

(with Bikelis, Algimantas) On the central limit theorem. (Russian. Lithuanian and English summaries) Primenen. Teor. Verojatnost. i Mat. Statist. No. 3 (1980), 149-155, 159. (Zdzisław Rychlik) 82e:60032 60F05

nek, Jaroslav A simple proof of the Stone-Weierstrass theorem. (Persian) Translated from the English by A. A. Jafarian. Bull. Iranian Math. Soc. 7, no. 2, 74-76 (1980). (Editors) 82c:46068 46J10 Generalisations of the spectral radius formula. Proc. Roy. Irish Acad. Sect. A 81

(1981), no. 1, 29-35. (E. R. Deal) 82k:47010 47A10 (47B10) ian, A. H. Equilibrium and stability in a periodic marketing ring. SIAM J. Algebraic

Discrete Methods 2 (1981), no. 3, 275-288. (Author's summary) 82h:90023

Zemel, Eitan A linear multiple choice knapsack problem. Oper. Res. 28 (1980), no. 6, 1412–1423. (Author's summary) 821:90082 90C10

Measuring the quality of approximate solutions to zero-one programming problems. Math. Oper. Res. 6 (1981), no. 3, 319–332. (Author's summary) 821:90076 90C09 (with Megiddo, N.; Tamir, A.; Chandrasekaran, R.) An $O(n \log^2 n)$ algorithm for the kth longest path in a tree with applications to location problems. SIAM J. Comput.

10 (1981), no. 2, 328-337. (Authors' summary) 82j:68063 68E10 (68C25, 90B05) nljakov, A. S. Construction of Ljapunov vector-valued functions for complex systems with the application of graph theory. (Russian) Vector-valued Ljapunov functions and their construction (Russian), pp. 257-269, 288, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (Author's summary) 821:93059 93D05

nljakov, S. D. (with Petrov, B. N.; Rutkovskii, V. Ju.) ★Адаптивное

координатно-параметрическое управление пестационарными объектами. (Russian) [Adaptive coordinate-parametric control of nonstationary objects] "Nauka", Mascow, 1980. 244 pp. (Publisher's description) 82i:93046 93C40

injanoi, N. S. (with Danieljan, E. A.) A class of limit distributions of joint stationary distribution of waiting times for some M_τ/G_τ/1/∞ systems in heavy traffic. (Russian. Armenian summary) Akad. Nauk Armjan. SSR Dokl. 70 (1980), no. 1, 3–10. (W. Szczotka) 82a:60137 60K25

Zemyan, Stephen M. A minimal outer area problem in conformal mapping. J. Analyse Math. 39 (1981), 11-23. (Jacob Burbea) 82i:30022 30C45 (30C55)

Zeng, Guang Tong A simple method of sequential circuit synthesis. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 15, 679-682. Kexue Tongbao (English) 25 (1980), no. 11, 889-894. (Thomas Inukai) 82f:94024 94C05 (68D15)

Zeng, Qing Cun (with Ji, Zhong Zhen) Some problems of nonlinear computational

instability. (Chinese. English summary) Acta Mech. Sinica (Beijing) 1981, no. 3,

209-217. (From the summary) 82m:65084 65M10 (86A10)

Zeng, Xian Wu (with Qin, Yuan Xun) Qualitative investigation of the differential equation of the Brusselator in biochemistry. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 8, 337-339. Kexue Tongbao (English) 25 (1980), no. 4, 273-276. (A. A. Reinfelds) 82h:34038 34C05 (58F14, 92A09)

Zenišek, Alexander Nonhomogeneous boundary conditions and curved triangular finite elements. (Czech summary) With a loose Russian summary. Apl. Mat. 26 (1981), no. 2, 121-141. (M. Zlamal) 82g:65057 65N30

Discrete forms of Friedrichs' inequalities in the finite element method. (French nary) RAIRO Anal. Numér. 15 (1981), no. 3, 265-286. (Author's sum

65N30 (35B99)

Zenkin, A. A. A generalization of a theorem of G. Pall. (Russian) Compa number theory and combinatorics (Russian), pp. 40-46, 86, Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. (D. H. Lehmer) 82i:10017 10A99 (10-04)

(with Zuravlev, Ju. I.; Zenkin, A. I.; Isaev, I. V.; Kol'cov, P. P.; Kočetkov, D. V.; Rjazanov, V. V.) Problems of pattern recognition and classification with standard construction. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 5, 1294-1309, 1359.

68G10 (Authors' summary) 82c:68059

Zenkin, A. I. (with Zuravlev, Ju. I.; Zenkin, A. A.; Isaev, I. V.; Kol'cov, P. P.; Kočetkov, D. V.; Rjazanov, V. V.) Problems of pattern recognition and classification with standard construction. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 5, 1294-1309, 1359. (Authors' summary) 88c-80039

Zenkor, V. I. Finite groups with given centralizer of a central involution. (Russian) Algebra

i Logika 19 (1980), no. 5, 566-581, 617. (N. D. Podufalov) 82k:20031

sekerž-Zen'kovič, S. Ja. See Sekerž-Zen'kovič, S. Ja.

Zenor, Phillip (with Chaber, Józef) On perfect subparacompactness and a metrization theorem for Moore spaces. Proceedings of the 1977 Topology Conference (Louisiana State Univ., Baton Rouge, La., 1977), II. Topology Proc. 2 (1977), no. 2, 401-407 (1978). (From the text) 82i:54040 54D15 (54D30, 54E35)

(with Kozlowski, George) A differentiable, perfectly normal, nonmetrizable manifold. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio. 1979). Topology Proc. 4 (1979), no. 2, 453-461 (1980). (J. E. Keesling) 82c:58003 58A05 (57N99)

Hereditary m-separability and the hereditary m-Lindelöf property in product spaces and function spaces. Fund. Math. 106 (1980), no. 3, 175-180. (S. Gene Crossley) 82a:54039 54D30 (54B10, 54C35, 54D20)

See also Proceedings: Topology Conference, 82f:54002 Žensykbaev, A. A. Monosplines and best quadrature formulas for some classes of nonperiodic functions. (Russian. English summary) Anal. Math. 5 (1979), no. 4, 301–331. (Gheorghe Coman) 82e:41044 41A55

Spline-interpolation and the best approximation by trigonometric polynomials. (Russian) Mat. Zametki 26 (1979), no. 3, 355-366, 492. (Author's summary) 82b:41014 41A15 (42A10)

Optimal methods for reconstructing an integral. (Russian) Theory of cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978) (Russian), 104-107, 252, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (See 82d:65003) 65D32 (41A55)

(with Velikin, V. L.; Motornyĭ, V. P.; Nikol'skiĭ, S. M.; Ruban, V. I.) Nikolaĭ Pavlovič Korneičuk (on the occasion of his sixtieth birthday). (Russian) Uspehi Mat. Nauk 36 (1981), no. 2(218), 209-213. (Editors) 82e:01105 01A70

Zentgraf, Reinhard (with Nowak, Horst) Literatur zur robusten Statistik. Robust methods (25th Biometric Colloq., Bad Nauheim, 1979) (German), pp. 87-120, Med. Inform. Statist., 20, Springer, Berlin, 1980. (See 82i:62003) 62F35

See also Robust methods, 82i:62003 Zepp, Gérard (with Fabre, Georges; Wick, Alain) Propagation d'une onde

électromagnétique à la surface d'un conducteur ou d'un supraconducteur de section circulaire. (English summary) Canad. J. Phys. 39 (1981), no. 7, 902-913. (Authors' summary) 82h:78011 78A40

Zeragija, D. P. Bifurcation of solutions of a system of nonlinear differential equations. (Russian) Trudy Vyčisl. Centra Akad. Nauk Gruzin. SSR 20 (1980), no. 1, Vyčisl. Mat. Programmirovanie, 21-29. (Z. Kączkowski) 82h:73045 73H05 (73K05)

On branching of solutions to the problem of stability of rods experiencing joint action of compression and torsion. (Russian) *Dokt. Akad. Nauk SSSR* 257 (1981), no. 2, 327–330. (J. Murzewski) 82k:73038 73H05 (34A34, 58E07)

Zeragija, P. K. A method for the approximate solution of a fundamental boundary value problem of a nonlinear differential equation of parabolic type. (Russian. Georgian and English summaries) Trudy Tbiliss. Univ. 214 (1980), 58-65, 230-231. (Author's mary) 82j:35087 35K55 (65N99)

Zerbe, Gary O. Letter to the editor: "Comparison of intraclass correlation coefficients with the ratio of two independent F-statistics" [Comm. Statist. A—Theory Methods 9 (1980), no. 15, 1641-1655; MR 81h:62033] by the author and D. E. Goldgar. Comm. Statist. A

—Theory Methods 10 (1981), no. 13, 1355-1356. (Editors) 82k:62108 62H20

Zerekidze, T. S. On the integrability of Hardy-Littlewood maximal functions. (Russian. Georgian and English summaries) Soobië. Akad. Nauk Gruzin. SSR 98 (1980), no. 2,

297-300. (W. R. Madych) 82d-42017 42B25 Uniform convergence of Fourier series. (Russian) Boundary properties of analytic functions, singular integral equations and some questions of harm Tbiliss. Mat. Inst. Razmadze Akad. Nauk Gruzin. SSR 65 (1980), 85-98. (A. Olevskii) 82a:42011 42A20 (42B05)

Zerling, David (CA) closures of analytic groups. Proc. Amer. Math. Soc. 82 (1981), no. 1, 22E05 133-138. (M. I. Kabenjuk) 82e:22017

Zermelo, E. See Rang, B.; et al., 82k:04001

Zermolenko, V. N. (with González Mastrapa, H.) On the limit cycle in the problem of maximal deviation of a second-order system. (Spanish) Investigación Oper. No. 28 (1979), 55-68. (Authors' summary) 82:c49030 49B10 (34C05)

Zerner, M. (with Sylvain, M.) Équations d'évolution quasi-linéaires du premier ordre: le cas lipschitzien. (Italian summary) [First-order quasilinear evolution equations: the Lipschitz se] Boll. Un. Mat. Ital. B (5) 18 (1981), no. 2, 495-516. (Wolf von Wahl) 82m:35072 35K22 (35F30)

Zervos, C. (with Ciolac, L.) Note on optimal synthesis of definitely diagnosable sequential automata. (Romanian summary) Bul. Inst. Politehn. București Ser. Electrotehn. 42 (1980), no. 2, 103-111. (Authors' summary) 82a:68097 68D15

Zervos, S. P. (with Krikelis, P. B.) In a lattice: generation of a topology via adherent

elements. Eleutheria 1978, 250-265. (Editors) 82m:06007 06B30 (54H12)

Zestkov, S. V. A constructive algorithm for solution of the Cauchy problem for first-order linear partial differential equations. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1980, no. 6, 49-51, 142. (N. A. Sidorov) 82g:58013

G. Noncompact symmetry groups in elementary particle physics. An. Univ. Timis Ser. Ştiinţ. Fiz.-Chim. 17 (1979), no. 1, 35-51. (Author's summary) 824:81159 Zet, G. Noncompact sym

rberg, J. Peter Hermetic geocentricity: John Dee's celestial egg. Isis 70 (1979),

no. 253, 385-393. (Editors) 822:01028 01A40

Zettl, A. (with Kwong, Man Kam) Remarks on best constants for norm inequalities among rers of an operator. J. Approx. Theory 26 (1979), no. 3, 249-258. (V. V. Peller) 47844 (26A24, 47A30, 47B38)

(with Kwong, Man Kam) Ramifications of Landau's inequality. Proc. Roy. Soc. Edinburgh Sect. A 86 (1980), no. 3-4, 175-212. (Z. Ditzian) 82e:26015 26D10 (46E30) (with Kwong, Man Kam) Norm inequalities of product form in weighted L^p spaces. Roy. Soc. Edinburgh Sect. A 89 (1981), no. 3-4, 293-307. (Richard Bagby) 26D10 82h:26012

wnin, A. A. (with Gluško, Ju. V.) Synthesis of an algorithm for the control of nonlinear nonstationary objects on the basis of the inverse problem of dynamics. (Russian) Dokl.

Akad. Nauk SSSR 256 (1981), no. 5, 1057-1061. (From the text) 82i:93014 93B05

our Kh. (with Guiraud, Jean-Pierre) Rotational compressible inviscid flow with rolled vortex sheets. An analytical algorithm for the computation of the core.

J. Fluid Mech. 101 (1980), no. 2, 393-401. (Authors' summary) 82e:76049 76N9 (76C99)

(with Guiraud, Jean-Pierre) Évolution d'ondes acoustiques dans une enceinte et concept d'incompressibilité. Publ. U.E.R. Math. Pures Appl. IRMA 2 (1980), no. 4, exp. no. 4, 36 pp. (Authors' summary) 82j:76072 76Q05

tions de Navier-Stokes et l'atmosphère. I. Initiation. Publ. U.E.R. Math. Pures Appl. IRMA 3 (1981), no. 1, viii + 93 pp. (Author's summary) 82h:86006 86A10 (35Q10, 76V05, 86A35)

Zezza, P. L. (with Cecchi, M.; Marini, M.) A compactness theorem for integral operators and applications. Functional differential equations and bifurcation (Proc. Conf., Inst. Ciènc. Mat. São Carlos, Univ. São Paulo, São Carlos, 1979), pp. 119–125, Lecture Notes uh., 799, Springer, Berlin, 1980. (Norman Dancer) 82b:47084 47H99 (34B15) (with Cecchi, M.; Marini, M.) Boundary value problems for nonlinear differential

equations on noncompact intervals. Nonlinear differential equations (Proc. Internat. Conf., Trento, 1980), pp. 85-96, Academic Press, New York, 1981. (A. S. Vatsala)

enti, V. S. (with Gjuntner, A. F.) On the classical system of differential equations of equilibrium of shells. (Russian) Differential and integral equations. Boundary value problems (Russian), pp. 65-74, Tbilis. Gos. Univ., Tbilisi, 1979. (L. P. Lebedev) 82i:73045 73L99 (73K15)

Zhabin, V. I. See Žabin, V. I. Zhakin, A. I. See Žakin, A. I.

Zhan, Shu Hao (with Huang, Wen Qi) A quasiphysical method of solving packing problems. Acta Math. Appl. Sinica 2 (1979), no. 2, 176–180. (From the introduction)

52-04 (73P99)

ng, Bing Gen Oscillation and nonoscillation for second-order functional-differential ations. (Chinese. English summary) Chinese Ann. Math. 2 (1981), no. 1, 25-32. (J. S. equations. (Chinese. E. W. Wong) 82f:34096 34K15

, Chun Yuan (with Sun, Ji Guang; Qing, Cheng Rui) Calculation of the current ceded to maintain an equilibrium field in a toroidal plasma. (Chinese. English summary) ang, Ch Acta Phys. Sinica 29 (1980), no. 9, 1110-1120. (From the summary) 82e:76078 76W05 (45B05, 82A45)

ng, Cun Quan The longest paths and cycles in bipartite oriented graphs. (Chinese English summary) J. Math. Res. Exposition 1981, no. 1, First Issue, 35-38. (Author's summary) 82i:05051 05C38 (05C20)

matrix. (Chinese. English summary) Numer. Math. J. Chinese Univ. 3 (1981), no. 1, 27–36. (Authors' summary) 82k:15009 15A18 (65F15)

ng, Fu Ji Two theorems on elimination of nodes and edges in a Coates graph. (Chinese. English summary) Kexue Tongbao 24 (1979), no. 21, 966-968. (Fan R. K. Chung) 82b:05069 05C20

ng, Gong Qing (with Jiang, Li Shang) The free boundary problem of the stationary ater cone. (Chinese. English summary) Beijing Daxue Xuebao No. 1 (1978), 1-25. (C. V. 35R35 (35J25, 76S05) Pao) 82b:35153

(with Jiang, Li Shang) Free boundary problems of the steady water cone in the well of a petroleum reservoir. (Chinese) Kexue Tongbao 23 (1978), no. 11, 647-650, 669.

(Editors) 82g:35044 35185 (76S05)

Remarks on free boundary problems for the flux equations in plasma physics. nm. Partial Differential Equations 5 (1980), no. 7, 741-751. (T. Kahan) 82b:76072 76X05 (35P30, 35R35)

Solutions of asymptotically linear operator equations via Morse theory. Comm. Pure Appl. Math. 34 (1981), no. 5, 693-712. (Norman Dancer) 82m:58015 58E05 (47H15) Variational methods for nondifferentiable functionals and their applications to partial differential equations. J. Math. Anal. Appl. 80 (1981), no. 1, 102-129. (Carlo Sbordone) 82h:35025 35J20 (49A40, 58C20)

Zhang, Guan Quan (with Zhu, You Lan; Chen, Bing Mu; Zhang, Zuo Min; Zhong, Xi Chang; Qin, Bo Liang) Difference schemes for initial-boundary value problems of hyperbolic systems and examples of application. Sci. Sinica 1979, Special Issue II on Math., 261-280. (Robert Pearson) 82:65070 65N05 (65N10) ng, Guang Hou On entire functions extremal for Denjoy's conjecture. Sci. Sinica 24

(1981), no. 7, 885-898. (D. Drasin) 82k:30030 30D20

ng, Hai Quan Comment on: "A new definition of spinor norm" [Acta Math. Sinica 16 (1966), 411-424; translated as Chinese Math.—Acta 8 (1966), 433-447; MR 34 #4370] by Y. H. Wang. (Chinese) Acta Math. Sinica 21 (1978), no. 4, 375-384. (Author's introduction) 82h:10036 10C30 (20G15)

mg, Jia Ju Distributions of the eigenvalues of conjugate diagonal dominant matrice (Chinese) Acta Math. Sinica 23 (1980), no. 4, 544-546. (From the text) 82i:65025 65F15 (15A18)

ng, Jin Hao Coefficient problems of holomorphic mappings on Reinhardt domains. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 6, 245-248. Kexue Tongbao (English) 25 (1980), no. 2, 103-107. (P. Agranovič) 82b:32042 32H99 (32A07)

ing. Jin Yan Qualitative analysis of a phase locked loop with tangent characteristic and equency modulation input. (Chinese. English summary) Beijing Daxue Xuebao No. 4 (1978), 10-19. (Author's summary) 82c:34049 34C25

(with Wang, Mu Qiu; Wang, Lian) Equation of a phase locked loop with tangent discriminator and frequency modulation input and its generalization. Sci. Sinica 23 (1980), no. 5, 554-565. (V. M. Popov) 82a:93043 93D05 (34C25)

Zhang, Li Ning Super Killing equation and supersymmetry transformation. (Chinese. English summary) Acta Phys. Sinica 30 (1981), no. 1, 28-34. (Author's summary)
 821:83094 83E99 (53C99)

(with Zou, Zhen Long) Possible space-time manifolds and kinematic group (Chinese. English summary) Acta Phys. Sinica 30 (1981), no. 1, 35-45. (Authors' ary) 82f:83042 83C40 (53C50)

Zhang, Qi Re ng, Qi Ren Exact solutions of the Dirac equation in pseudoscalar plane waves. Phys. Lett. B 104 (1981), no. 5, 347-348. (Author's summary) 82i:81160 81G35 (81C05) ing, Qing Yu Maximal regular subalgebras of semisimple real Lie algebras. (Chinese)

Acta Math. Sinica 23 (1980), no. 1, 146-151. (C. Tsai) 821:17015 17B20 (17B05) Zhang, Si Ying On the quantitative and qualitative differential games. (Chinese. English summary) Acta Automat. Sinica 6 (1980), no. 2, 121-130. (Y. C. Ho) 82m:90176

ing, Wen Bin (with Chen, Jun Ya) A theorem on monotonicity with respect to the parameter for a family of distribution functions. (Chinese) Knowledge Practice Math. 1981, no. 2, 39-44. (Smiley W. Cheng) 82m:62036 62E10

ng, Xiang Sun An improved Rosen-Polak method. (Chinese) Acta Math. Appl. Sinica 2

(1979), no. 3, 257-267. 82k:90105 90C30
Discussion on Polak's algorithm of nonlinear programming. (Chinese) Acta Math. Appl. Sinica 4 (1981), no. 1, 1-13. (Kang Hoh Phua) 82k:90106

Zhang, Xue Ming Pseudopotential method and soliton solutions of the Korteweg-de Vries equation, the sine-Gordon equation and the nonlinear Schrödinger equation on nonclassical variational field. (Chinese. English summary) Acta Math. Sci. 1 (1981), no. 1, 59-66. (Author's introduction) 82j:35137 35Q20 (58A20)

ing, Yao Ting Generalized correlation coefficients and their applications. I. (Chinese) Wuhan Daxue Xuebao 1977, no. 3, 1-5. (S.-S. Perng) 82i:62090a 62H20

Generalized correlation coefficients and their applications. II. (Chinese) Wuha Daxue Xuebao 1977, no. 3, 6-12. (S.-S. Perng) 82i:62090b 62H20

(with Liu, Chuan Liang) The limiting distribution of the sample coefficient of variation and its applications. (Chinese. English summary) Wuhan Daxue Xuebao 1980, no. 3, 1-8. (Authors' summary) 82i:62033 62E20

What could be realized from P. L. Hsu's model. (Chinese. English summary) J. Math. Res. Exposition 1981, no. 1, First Issue, 83-87. (Winston T. Lin) 82g:62053

Zhang, Yin Nan On a necessary and sufficient condition for the existence of quasi-invariant measures. (Chinese, English summary) Chinese Ann. Math. 2 (1981), no. 2, 217-224. (Author's summary) 82g:60015 60B12 (28C10, 46B20)

Zhang, Yong Xiao (with Xu, Guang Shan; Wang, Yuan) A number-theoretic method for nerical integration in high dimensions. (Chinese) Acta Math. Appl. Sinica 1 (1978), no. 2, 106-114. (Editors) 82i:65018 65D32 (10K05)

ng, Zhao Zhi Computing methods for searching for optimum or near-optimum (n, 1, m)convolutional codes. (Chinese) Acta Math. Appl. Sinica 3 (1980), no. 1, 82-97. (From the introduction) 82k:94019 94B10

Zhang, Zhi Fen (with Ding, Tong Ren; Huang, Wen Zao) Answers to some questions on topological dynamical systems posed by Nemytskii. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 16, 721-724. Kexue Tongbao (English) 25 (1980), no. 11, 58F25 (34C35, 54H20) 895-899. (G. R. Sell) 82h:58043

Theorem of existence of exactly n limit cycles in $|\ddot{x}| \le (n+1)\pi$ for the differential equation $\dot{x} + \mu \sin \ddot{x} + x = 0$. Sci. Sinica 23 (1980), no. 12, 1502–1510. (James M. D'Archangelo) 82k:34036 34C05 (58F21)

ang, Zuo Min (with Zhu, You Lan; Chen, Bing Mu; Zhong, Xi Chang; Qin, Bo Liang; Zhang, Guan Quan) Difference schemes for initial-boundary value problems of hyperbolic systems and examples of application. Sci. Sinica 1979, Special Issue II on Math., 261–280. (Robert Pearson) 82:65070 65N05 (65N10)

Zhao, De Zi (with Liu, Lin) Solar and lunar perturbation of the orbit of an artificial satellite. (Chinese. English summary) Nanjing Daxue Xuebao No. 1 (1979), 55-66. (Authors' summary) 82h:70029 70M05 (70F15)

Zhao, Feng Zhi A method for solving large scale and sparse linear programming problem (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 2, 180-183. (Author's summary) 82i:90048 90C06

Zhao, Jin Xi Huang's method for the solution of consistent systems of linear equations and its generalization. (Chinese. English summary) Numer. Math. J. Chinese Univ. 3 (1981), no. 1, 8–17. (Author's summary) 82e:65035 65F10

Zhao, Jun Feng (with Yin, Hong Sheng; Wang, Chong Hu) On λ-separated subsets of unit spheres of normed linear spaces. (Chinese. English summary) Nanjing Daxue Xuebao 1980, Special Issue on Mathematics, 123-129. (Bor-Luh Lin) 82g:46042

Zhao, Su Xia Comment on: "Stability of Lurie-type functional equations" [J. Differential Equations 26 (1977), no. 2, 191-199; MR 57 #3565] by A. Somolinos. J. Differential Equations 39 (1981), no. 2, 257-258. (From the text) 82c:34091 34K20

Zhao, Zhong Xin A note on the theory of abstract Wiener space. (Chinese) Acta Math. Sinica 23 (1980), no. 1, 98–101. (Tack-Wang Lee) 82f:28019 28C20 (60B99)

Quasilinear transformation in abstract Wiener spaces. Sci. Sinica 24 (1981), no. 1, 1-12. (S. A. Čobanjan) 82g:60011 60B11 (28C20, 46G12, 60G99)

Zharkikh, V. A. See Žarkih, V. A. Zhavnerchik, V. E. See Žavnerčik, V. È. Zhbanov, Yu. K. See Žbanov, Ju. K. Zhelifonov, M. P. See Želifonov, M. P. Zhelnorovich, V. A. See Želnorovič, V. A.

Zheltukhin, A. A. See Želtuhin, A. A. Zhen, Xian Wu See Zeng, Xian Wu

ing, Quan Lin (with Sun, Jia Chang) On arc and bi-arc curve approximation. (Chinese. English summary) Math. Numer. Sinica 3 (1981), no. 2, 97-112. (Authors' summary) 82k:65008 65D15

Zheng, Wei An On the existence of maximum likelihood estimators. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 2, 317-324. (Author's summary) 82i:62051

(with He, Sheng Wu) On local times and trajectories of the continuous local martingales. (Chinese. English summary) Chinese Ann. Math. 1 (1980), no. 3-4, 505-510. (Authors' summary) 82f:60110 60G44 (60J55)

Zheng, Wei Xing The generalized Walsh transform and an extremum problem. (Chinese.

- English summary) Acta Math. Sinica 22 (1979), no. 3, 362–374. (Author's summary) 82m:42020 42C10 (44A99)
- Zheng, Yu Kun On the problem of the energy of a gravitational field. (Chinese: English summary) Acta Phys. Sinica 30 (1981), no. 1, 46-56. (Author's summary) 82e:83029 83C99
- Zheng, Yu Xin (with Zhu, Wu Jia; Yuan, Xiang Wan) Concerning sets and point-set spaces. (Chinese: English summary) Nanjing Daxue Xuebao 1980, no. 3, 129–135, 136. (Authors' summary) 82b:03025 03A05 (04A99) ermolenko, V. N. See Žermolenko, V. N.

Zhileikin, I. M. See Žileikin, Ja. M.

1982

Zhilin, V. A. See Žilin, V. A. Zhilinskas, A. G. See Žilinskas, Antar

Zhirabok, A. N. See Žirabok, A. N.

- Zhong, Hu Mian (with Yu, Zhong Ming) On the invariant set and periodicity of the solution of a class of probability measure equations. (Chinese. English summary)

 Nanjing Daxue Xuebao 1979, no. 4, 1-11. (Authors' summary) 82h:60137 60J25
- mg, Jia Qing Coxeter-Killing transformations of simple Lie algebras. (Chinese. English summary) Acta Math. Sinica 22 (1979), no. 3, 291–302. (Author's summary) 82b:17008

The trace formula of the Weyl group representations of the symmetric group. (Chinese) Acta Math. Sinica 23 (1980), no. 6, 836–850. (From the introduction) 20C30

(with Lu, Qi Keng) The realization of affine home Math. Sinica 24 (1981), no. 1, 116-142. (B. Wong) 82k:32071 32M10

Zhong, Tong De Transformation formulae of the multiple singular integrals with Bochner-Martinelli kernel. (Chinese) Acta Math. Sinica 23 (1980), no. 4, 554-565. (P. S. Chee) 82a:32007 32A25

Zhong, Xi Chang (with Zhu, You Lan; Chen, Bing Mu; Zhang, Zuo Min; Qin, Bo Liang; Zhang, Guan Quan) Difference schemes for initial-boundary value problems of hyperbolic systems and examples of application. Sci. Sinica 1979, Special Issue II on Math., 261-280. (Robert Pearson) 82j:65070 65N05 (65N10)

Zhou, Bo Xun The tensor products and categories of left ring modules. (Chinese. English mmary) Nanjing Daxue Xuebao No. 1 (1979), 1-20. (From the summary) 82j:16045

On the second eigenvalue of positive matrices. (Chinese. English summary) Nanjing Daxue Xuebao 1980, Special Issue on Mathematics, 108-114. (Author's summary) 82c:15013 15A18

On the tensor product of left modules and their homological dimensions. (Chinese. English summary) J. Math. Res. Exposition 1981, no. 1, First Issue, 17-24. (From the 16A60

Zhou, Guang Zhao (with Su, Zhao Bing) On the Goldstone mode in the stationary state of a nonequilibrium dissipative system. (Chinese. English summary) Acta Phys. Sinica 29 (1980), no. 5, 618-634. (Tuan W. Chen) 82h:81165 81K05 (81D20, 82A35)

Two new schematic rules for rate laws of enzyme-catalysed reactions. J. Theoret. Biol. 89 (1981), no. 4, 581-592. (Author's summary) 82j:92039 (80A30)

Zhou, Huan Wen On the problems of bending of elastic plates. (Chinese. English summary) Acta Math. Sci. 1 (1981), no. 2, 207-217. (Author's summary) 82k:73047

Zhou, Shun Xing The absolute stability of a finite differencing scheme for the solution of parabolic partial differential equations of 2 or 3 dimensions. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 1, 90-99. (Author's summary) 82j:65066

Zhou, Tian Xiao The finite element methods with trial functions not fulfilling essential boundary conditions. (Chinese, English summary) Math. Numer. Sinica 2 (1980), no. 1. 50-62. (Author's summary) 82j:65086 65N30

Zhou, Xian Jian (with Dongfang, Xiao; Huang, Tao; Ma, Zhong Qi; Xue, Pi You; Huang, Nian Ning) Classical static and static spherically symmetric solutions of SU(N) gauge theory with external extended source. Sci. Sinica 24 (1981), no. 4, 466-475. (Authors'

summary) 82m:81050 81E10 (53C05)

Zhou, Xing Wei A problem in I₂. (Chinese. English summary) Kexue Tongbao 24 (1979). no. 20, 918-922. (Author's summary) 82m:40005 40A99

Zhou, Xue Guang On the homotopy type of the product of CW con Math. Sinica 24 (1981), no. 1, 95-98. (From the introduction) 82e:55015

Zhou, Yu Mei (with Cai, Shi Dong) Parametric instabilities with well-separated frequencies in magnetized plasma. (Chinese. English summary) Acta Phys. Sinica 29 (1980), no. 7, in magnetized passana. (characteristics) 166-926. (Tai Ping Liu) **82d:76103** 76X05 (76E25, 82A45) (with Shen, Jie Wu; Qing, Cheng Rui) A new method for solving the free-boundary

magnetic surface equation without conducting shells. (Chinese. English summary) Acta Phys. Sinica 29 (1980), no. 8, 1058-1062. (Authors' summary) 82h:76044 (65P05, 76A60, 82A45)

Zhou, Yuan Quan The prior distribution without prior knowledge. (Chinese) Acta Math. Sinica 23 (1980), no. 3, 359–371. (Jack C. Lee) 82e:62006 62A15

Zhou, Yun Shi (with Xu, Li Zhi) On the asymptotic expansion of $f(x, \{Nx\})dx$ and its

application. (Chinese) Acta Math. Appl. Sinica 3 (1980), no. 3, 204-209. (Roderick 41A60

Zhou, Zhen Long See Zou, Zhen Long

Zhou, Zi Dong (with Di, Xin Wu; Du, Xing Yuan) Theoretical analysis of atmospheric waves in equatorial zone. Sci. Sinica 23 (1980), no. 6, 754-765. (Authors' summary) 82g:86018 86A35

Zhu, Chu Heng (with Yuan, Zhao Ding) The stability for numerical integration of a system of ordinary differential equations. (Chinese. English summary) Math. Numer. Sinica 2 (1980), no. 1, 77–89. (From the text) 82;65060 65L20

Zhu, Ci You The preconditioning method for solving ill-posed linear equations. (Chinese. English summary) Numer. Math. J. Chinese Univ. 3 (1981), no. 2, 97–106. (Author's summary) 82m:65035 65F35

Zhu, Dong Pei Representation matching and the gauge invariant energy-momentum tensor.
J. Math. Phys. 22 (1981), no. 2, 400-402. (Author's summary) 82d:81116 81E99 (49C15, 81C40)

Noether symmetry of the single-particle system. J. Phys. A 14 (1981), no. 10, 2807-2816. (Author's summary) 82i:70003 70D99 (70H99, 81C40)

Zhu, Gong Qin (with He, Tian Xiao) A method of calculation for the n-point sectional Padé approximant. (Chinese. English summary) Math. Numer. Sinica 3 (1981), no. 2, 179-182.

(Authors' summary) 82k:65009

Zhu, Lie (with Feng, Ke Qin; Wu, Li Sheng) Affine classification of Boolean functions and the construction of 3-(λ,k,2") designs. (Chinese) Acta Math. Appl. Sinica 1977, no. 3, 46-55. (Derbian F. Hsu) 82d:94071a 94C10 (05B05, 62K10)

(with Wu, Li Sheng) Affine classification of Boolean functions and the construction of 3-(\(\lambda, k, 2^n\) designs. II. (Chinese) Acta Math. Appl. Sinica 2 (1979), no. 4, 344-349. (Derbian F. Hsu) 82d:94071b 94C10 (05B05, 62K10)

Construction of Howell designs with subdesigns. Ars Combin. 11 (1981), 235-238.

(D. P. Roselle) 82k:05038 05B30 Affinely totally variant subsets of $V_3(GF(3))$. Discrete Math. 34 (1981), no. 1, 95–99. (Severino V. Gervacio) 82e:05104 05C65

Zhu, Mei Fang (with Deng, Nai Yang) A discussion of the theoretical basis of Powell's method. (Chinese) Kexue Tongbao 24 (1979), no. 10, 433-437. (Editors) 82h:65045

Zhu, Qi Ding A superconvergence result for the finite element method. (Chinese. English summary) Numer. Math. J. Chinese Univ. 3 (1981), no. 1, 50-55. (Author's summary)

Zhu, Ru Zeng Linear stability theory of transverse motion of charged particles in a strong-focusing accelerator. (Chinese. English summary) Acta Mech. Sinica (Beijing) 1980, no. 4, 379-385. (Author's summary) 82g:78012 78A35 (70J25)

Zhu, Wu Jia (with Yuan, Xiang Wan; Zheng, Yu Xin) Concerning sets and point-set spaces. (Chinese. English summary) Nanjing Daxue Xuebao 1980, no. 3, 129-135, 136. (Authors' summary) 82b:03025 03A05 (04A99)

Zhu, Yong Jin (with Liu, Zhen Hong; Ma, Zhong Fan; Cai, Mao Cheng) Minimum spanning trees with degree constraints. (Chinese) Acta Math. Appl. Sinica 3 (1980), no. 1, 1-12. (Fan R. K. Chung) 82a:05045 05C05 (68E10, 90B10) (with Wang, Jian Fang) Generating k-ary trees in lexicographic order. Sci. Sinica 23 (1980), no. 1, 210, 2135. (Applies: "Applies:

(1980), no. 10, 1219-1225. (Authors' summary) 82a:68134 68E10 (05C05)

Zhu, You Lan (with Chen, Bing Mu; Zhang, Zuo Min; Zhong, Xi Chang; Qin, Bo Liang; Zhang, Guan Quan) Difference schemes for initial-boundary value problems of hyperbolic systems and examples of application. Sci. Sinica 1979, Special Issue II on Math., 261-280. (Robert Pearson) 82j:65070 65N05 (65N10)

Zhu, Yuan Zhao (with Wu, Xue Mou) Pansystem analysis of dynamic yinyang logic and fuzziness. I. (Chinese. English summary) J. Huazhong Inst. Tech. 1980, no. 2, Special Issue on Fuzzy Math, ii, 39-41. (Authors' summary) 82d:03037

Zhu, Zheng You The principle of superposition and the method of invariant imbedding for linear two-point boundary value problems. I. (Chinese. English summary) Numer. Math. J. Chinese Univ. 3 (1981), no. 2, 137-143. (Author's summary) 82m:65074

Zhu, Zi Qiang (with Xu, Li Zhi) A survey of certain iteration methods with global convergence. (Chinese. English summary) Numer. Math. J. Chinese Univ. 1 (1979), no. 2, 131-142. (Authors' summary) 82h:65039 65H05

ang, Qi Tai On the distribution of the values of meromorphic functions. A translation of Kexue Tongbao (Chinese) 25 (1980), no. 18, 817-819. Kexue Tongbao (English) 25 (1980), no. 8, 625-630. (S. M. Shah) 82g:30055 30D35 80), no. 8, 625-630. (S. M. Shah) **82g:30055** 30D35 On Pólya peaks. Sci. Sinica **23** (1980), no. 2, 141-152. (D. K. Dutta) **82c:26012**

26A99

Zhuravlev, S. G. See Žuravlev, S. G.

ravlev, V. F. See Zuravlev, V. F. Zia, R. K. P. (with Wu, F. Y.) Critical point of a triangular Potts model with two- and three-site interactions. J. Phys. A 14 (1981), no. 3, 721-727. (Authors' summary) 82A25 (82A67)

(with Amit, Daniel J.; Ma, Shang Keng) The O(n)-symmetric model between two and four dimensions. Nuclear Phys. B 180 (1981), no. 1, FS 2, 157-169. (Authors' summary) 82a:81029 81E99 (81G20)

The variety of singularities in models of first order phase transitions. Z. Phys. B 41

(1981), no. 2, 129–138. (A. Corciovei) 82h:82020 82A25 (32C40, 58E05)

Ziai, Hosein Modal propositions in Islamic philosophy. (Persian) Bull. Iranian Math. Soc. 7, no. 1, 58-74 (1979). (A. R. Amir-Moéz) 82h:03002 03-03 (01A30, 03B45)

Ziber, A. V. (with Ibragimov, N. H.; Sabat, A. B.) Liouville-type equations. (Russian) Dokl. Akad. Nauk SSSR 249 (1979), no. 1, 26-29. (H. Kil'p) 82h:58058 58H15 (35A30, 35Q20)

Complete description of the Lie-Bäcklund algebra for equations of generation of the second harmonic. (Russian) Dinamika Splošn. Sredy: No. 44 Dinamika Neodnorodn. Židkosti (1980), 3-14, 174. (J. Chrastina) 82m:58060 58H15 (35A30)

Zibolen, E. Asymptotic solutions of a boundary value problem with degenerate limit spectrum. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 412 (1979), 53-56, 156. (Vojislav Marić) 82b:34074 34E05 (34B10)

Zidarov, D. P. Determination of the earth's figure by solving the inverse astrogeological problem-uniqueness. C. R. Acad. Bulgare Sci. 33 (1980), no. 6, 777-780. (Author's summary) 82g:86010 86A20 (53C65, 86A30)

Some uniqueness conditions for the solution of the inverse gravimetric problem R. Acad. Bulgare Sci. 33 (1980), no. 7, 909-912. (Author's introduction) 824:86010 86A20 (35R30)

Zidek, James V. (with van der Merwe, A.) Multivariate regression analysis and canonical variates. (French summary) Canad. J. Statist. 8 (1980), no. 1, 27-39. (Edward M. Carter) 62J07 (62H20)

(with Steele, J. Michael) Optimal strategies for second guessers. J. Amer. Statist.

Assoc. 75 (1980), no. 371, 596-601. (James Berger) 82a:62022 62C99 (with Olkin, Ingram; Petkau, A. John) A comparison of n estimators for the binomial distribution. J. Amer. Statist. Assoc. 76 (1981), no. 375, 637-642. (Authors' 62F10 summary) 82i:62050

(with Weerahandi, S.) Multi-Bayesian statistical decision theory. J. Roy. Statist. Soc. Ser. A 144 (1981), no. 1, 85-93. (D. V. Lindley) 82f:62017 62C05 (90A07) See also Jaynes, Edwin T., (See 82d:62170)

Ziegler, B. Prozessorzuteilung unter strengen Zeitbedingungen. (English summary Computing 23 (1979), no. 1, 31-41. (Author's summary) 82g:68036 68C15

Ziegler, H. (with Bromba, M. U. A.) Explicit formula for filter function of maximally flat nonrecursive digital filters. Electron. Lett. 16 (1980), no. 24, 905-906. (Authors' summary) 82a:94015 94A12

Discussion and modification of the Fandel-method solving linear vector maximum

- problems. (German summary) Z. Oper. Res. Ser. A-B 25 (1981), no. 5, 159-166. (Author's summary) 82k:99113 90C31
 gler, Klaus Divergencies in a vector model with hyperbolic symmetry on a chain. Z. Phys. B 43 (1981), no. 3, 275-280. (Author's summary) 82k:82029 82A42
 gler, M. R. (with Karunakaran, V.) The radius of starlikeness for a class of regular functions defined by an integral. Pacific J. Math. 91 (1980), no. 1, 145-151. (K. S. Padmanabhan) 82g:30029 30C45
- gler, Martin Algebraisch abgeschlossene Gruppen. (English summary) Word problems, II (Conf. on Decision Problems in Algebra, Oxford, 1976), pp. 449–576, Stud. Logic Foundations Math., 95, North-Holland, Amsterdam, 1980. (M. Yasuhara) 82b:20004 20A15 (03C20, 03C60, 03D30)
 - (with Prestel, Alexander) Nonaxiomatizable classes of V-topological fields. J. Reine Angew. Math. 316 (1980), 211–214. (John Rosenthal) 82b:03073 03C85 (12J99,
- Ziegler, Zvi (with Amir, D.) Characterizations of relative Chebyshev centers.
- Approximation theory, III (Proc. Conf., Univ. Texas, Austin, Tex., 1980), pp. 157-162, Academic Press, New York, 1980. (C. Franchetti) 82c:41018 41A28 (41A65)
- (with Amir, D.) Relative Chebyshev centers in normed linear spaces. I. J. Approx. cory 29 (1980), no. 3, 235-252. (Bl. Sendov) 82c:41030 41A65 (46B20) (with Amir, D.) Construction of elements of the relative Chebyshev center.
- Approximation theory and applications (Proc. Workshop, Technion—Israel Inst. Tech., Haifa, 1980), pp. 1–11, Academic Press, New York, 1981. (C. Franchetti) 82h:41026 41A28 (41A65)
- See also Approximation theory and applications, 82e:41001

 Ziebe, Martin (with Gregorius, Hans-Rolf) Deviations of genotypic structures from Hardy-Weinberg proportions under random mating and differential selection between the sexes. Genetics 98 (1981), no. 1, 215-230. (Authors' summary) 82m:92056 92A10 Population trajectories for single locus additive fecundity selection and related selection models. J. Math. Biol. 11 (1981), no. 1, 33-43. (Susan Wilson) 82k:92048 92A10
- Zieliński, A. P. On curvilinear distributions expressed by double Fourier series. (German summary) Z. Angew. Math. Phys. 31 (1980), no. 6, 717-729. (P. M. Gupta) 82m:73067a 73L99 (42B05, 46F10)
 - Errata: "On curvilinear distributions expressed by double Fourier series". Z. Angew. th. Phys. 32 (1981), no. 3, 357. (Editors) 82m:73067b 73L99 (42B05, 46F10)
- Zieliński, Krzysztof (with Gościński, Andrzej) A technique and a system structure for on-line activation moments determination for steady-state optimization. Internat. J. Systems Sci. 12 (1981), no. 3, 263-276. (Richard M. Lewis) 82f-93004 93A13 (49E25,
- Zieliński, Ryszard Global stochastic approximation: a review of results and some open problems. Numerical techniques for stochastic systems (Conf., Gargnano, 1979), pp. 379–386, North-Holland, Amsterdam, 1980. (V. Fabian) 82c:62115 62L20 See also Ventcel', A. D., 82c:60004
- Zielke, Roland (with Haverkamp, Richard) On the embedding problem for Čebyšev systems. J. Approx. Theory 30 (1980), no. 2, 155-156. (Authors' summary) 82b:41023 41A50
- lonka, Wojciech Axiomatizability of Ajdukiewicz-Lambek calculus by means of ncellation schemes. Z. Math. Logik Grundlag. Math. 27 (1981), no. 3, 215–224. dasdair Urquhart) 82h:68107 68F05 (03B65, 03B99) (Alasdair Urquhart) 82h:68107
- mian, Bogdan (with Szmydt, Zofia) Special solutions of the equations $P\tilde{u}=0$, Pu=8 for invariant linear differential operators with polynomial coefficients. J. Differential Equations 39 (1981), no. 2, 226–256. (C. Avramescu) 82:35038 35C05 (35D99) rukiewicz, O. C. (with Wood, W. L.; Bossak, M.) An alpha modification of Newmark's
- method. Internat. J. Numer. Methods Engrg. 15 (1980), no. 10, 1562-1566. (Authors'
- (with Bettencourt, J. M.; Cantin, G.) Consistent use of finite elements in time and the performance of various recurrence schemes for the heat diffusion equation. Internat. J. Numer. Methods Engrg. 17 (1981), no. 6, 931-938. (V. Girault) 82m:65099
- Zierep, Jürgen See Recent develop 82c:76004 nts in theoretical and experi
- mg, H. (with Vogt, Elmar; Coldewey, Hans-Dieter) *Surfaces and planar discontinuous groups. Translated from the German by John Stillwell. Lecture Notes in
 - Mathematics, 835. Springer-Verlag, Berlin-New York, 1980. x+334 pp.

 ISBN 3-540-10024-5 (David Singerman) 82h:57002 57Mxx (20Fxx, 30F35)

 (with Osborne, Richard P.) Primitives in the free group on two generators. Invent. Math. 63 (1981), no. 1, 17-24. (D. E. Cohen) 82i:20042 20F05
 - Decompositions of discrete groups of motions of the plane. (Russian) *Uspehi Mat.* **36** (1981), no. 1(217), 173-192. (A. D. Mednyh) **82k:20079** 20H10 (20H15, 57M05)
- Ziff, Robert M. Model Boltzmann equations. Phys. Rev. A (3) 23 (1981), no. 2, 916–923. (Carlo Cercignani) 82h:82047 82A40 (76P05)
 - (with Merajver, Sofia D.; Stell, G.) Approach to equilibrium of a Boltzmann-equation solution. Phys. Rev. Lett. 47 (1981), no. 21, 1493-1496. (Authors'
- nary) 82j:82046 82A40 Žigalko, Ju. P. Fundamental solutions in the theory of thin shells of revolution. (Russian) Issled. Teor. Plastin i Oboloček No. 13 (1978), 152-159. (From the introduction)
- 35J55 (73L20) 82g:35036 ova, L. V. See Organization of research in the history of science and tech 82a:01052
- Ziggelaar, August The sine law of refraction derived from the principle of Fermat-prior to Fermat? The theses of Wilhelm Boelmans S. J. in 1634. Special issue dedicated to Olaf Pedersen on his sixtieth birthday. Centaurus 24 (1980), 246-262. (D. J. Struik) 82e:01047 01A45 (78-03)
- Ziglin, S. L. Branching of solutions and the nonexistence of an additional first integral in the problem of an asymmetric heavy rigid body in motion relative to a fixed point. sian) Dokl. Akad. Nauk SSSR 251 (1980), no. 4, 786-790. (Gh. Silaş) 82c:70005 70E15 (58E07, 58F05)
 - On periodic almost doubly asymptotic solutions of the bounded circular three-body problem. Prikl. Mat. Meh. 44 (1980), no. 2, 358-360 (Russian); translated as J. Appl. Math. Mech. 44 (1980), no. 2, 250-251 (1981). (Author's summary) 82m:70008
 - Bifurcation of solutions and nonexistence of integrals in Hamiltonian systems

- (Russian) Dokl. Akad. Nauk SSSR 257 (1981), no. 1, 26-29. (Mark Levi) 82j:58051 58F05 (34C35, 70F99, 81F10)
- Zigulev, V. N. (with Sidorenko, N. V.; Tumin, A. M.) Generation of waves of instability in a boundary layer by external turbulence. (Russian) Z. Prikl. Meh. i Tehn. Fiz. 1980, no. 6, 43-49, 138. (Authors' summary) 82h:76024 76E99 (76F99)

 Ziino, G. On the possibility of a three-temporal Lorentz transformation. Phys. Lett. A 70
- (1979), no. 2, 87-88. (Author's summary) 82a:83005a 83A05 (51B20)
- See also Ray, Dipankar, 82a:83005b

 Zijlstra, Mynt Renewal replacement policies for one-unit systems. European J. Oper. Res. 8

 (1981), no. 3, 289–293. (Author's summary) 82m:90084 90B25
- Zikides, M. (with Contopoulos, G.) Periodic orbits and ergodic components of a resonant dynamical system. Astronom. and Astrophys. 90 (1980), no. 1-2, 198-203. (V. Szebehely) 824:58052 58F14 (34C25, 58F05, 70K05)
- Žikov, V. V. (with Kozlov, S. M.; Olešnik, O. A.; Ha T'en Ngoan) Averaging and G-convergence of differential operators. (Russian) Uspehi Mat. Nauk 34 (1979), no. 5(209), 65–133, 256. (L. Cattabriga) 821:35032 35B99 (35Jxx, 47F05)
- Zil'ber, B. I. Totally categorical theories: structural properties and the nonfinite axiomatizability. Model theory of algebra and arithmetic (Proc. Conf., Karpacz, 1979), pp. 381-410, Lecture Notes in Math., 834, Springer, Berlin, 1980. (Bruno Poizat) 03C45 (03C35)
 - Solution of the problem of finite axiomatizability for theories that are categorical in all infinite powers. (Russian) Theory of models and its applications (Russian), pp. 47-60, Kazah, Gos. Univ., Alma-Ata, 1980. (P. Štěpánek) 82g:03051 03C35 (03B10, 03C13)
- Strongly minimal countably categorical theories. (Russian) Sibirsk. Mat. Z. 21 (1980), no. 2, 98-112, 237. (O. V. Belegradek) 82e:03043 03C35 (03C60, 05B99)
 ZiPberg, A. L. (with Matveev, S. V.) Relations in the homeotopy group of a handlebody and the ribbon braid group. (Russian) Mat. Zametki 29 (1981), no. 4, 567-575, 634. (102e Vrabec) 82k:57004 57N10 (20F36)
- Zil'bergleit, A. S. (with Kopilevič, Ju. I.) On properties of waves associated with quadratic operator pencils. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 3, 565-570. (Heinz Langer) 82h:47017 47A70 (47F05, 76B15, 78A50)
 Zil bergleit, L. V. G-similar solutions of second-order nonlinear differential equations.
- (Russian) Uspehi Mat. Nauk 36 (1981), no. 1(217), 207-208. (J. Daneš) 82j:58113 58G35
- Zilcha, Itzhak (with Levhari, David; Mirman, Leonard J.) Capital accumulation under necrtainty. Internat. Econom. Rev. 21 (1980), no. 3, 661–671. (Bojan Popović) 90A05 (90C50) 82c:90004
 - Consumption-loan type models: the Samuelson case. Econom. Lett. 7 (1981), no. 3, –205. (Author's summary) 82k:90039 90A14 201-205. (Author's summ
 - (with Mitra, Tapan) On optimal economic growth with changing technology and tastes: characterization and stability results. Internat. Econom. Rev. 22 (1981), no. 1, 221-238. (From the introduction) 82k:90041 90A16
- (with Okuno, Masahiro) A proof of the existence of competitive equilibrium in a generation-overlapping exchange economy with money. Internat. Econom. Rev. 22 (1981), no. 1, 239-252. (From the introduction) 82f:90023
- Žileikin, Ja. M. (with Környei, I.) On error estimation for approximate integration on the man, Ja. M. (with Kornyet, 1, Or lettor estimation to approximate integration on the class D_g. ^{2,6}(4, 8). Numerical methods (Third Colloq., Kezthely, 1977), pp. 625–631, Colloq. Math. Soc. János Bolyai, 22, North-Holland, Amsterdam, 1980. (D. B. Hunter) 82f:65023 65D30
- (with Környei, I.) An upper estimate of the error of the approximate computation of the Fourier transform on the classes $D_s^{\alpha,\beta,\gamma}(A,B)$. (Russian. English summary) *Problems* of numerical analysis and systems programming (Russian), pp. 5–18, 91, Comp. Center Universities, Budapest, 1980. (L. Berg) 82a:65102 65T05 (65D30)

 Žilin, V. A. (with Kalašnikov, V. V.) Stability estimates of regenerating processes and their
- application to priority service systems. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1979, no. 4, 94-101, 220 (Russian); translated as Engrg. Cybernetics 17 (1979), no. 4, 82-89 (1980).
 - (Peter Purdue) 82260130 60K05 (60K25)
 Estimates of the continuity and accuracy of approximation of priority queueing systems. Izo. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 3, 202–203, 224 (Russian); translated as Engrg. Cybernetics 18 (1980), no. 3, 137–139 (1981). (Author's summary) 82k:60206 60K25
- Žilinskas, Antanas (with Senkienė, Elvyra) Estimation of Wiener stochastic field parameter from observations at random dependent points. Kibernetika (Kiev) 1979, no. 6, 107-109 (Russian); translated as Cybernetics 15 (1979), no. 6, 893-896 (1980). (I. M. Stancu-Minasian) 82e:62149 62M10
 - Two algorithms for one-dimensional multimodal minimization. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 12 (1981), no. 1, 53-63. (Author's summary) 82c:90069 90C15
- Ziller, W. (with Ballmann, W.; Thorbergsson, G.) Closed geodesics and the fundamental group. Duke Math. J. 48 (1981), no. 3, 585-588. (Y. Mutô) 82j:58041 58E10 (58D17)
- Zimin, I. N. (with Propoi, A. I.) *Dynamic linear programming models of energy, resource, and economic-development systems. With a foreword by Wolf Häfele. RR-81, 14. International Institute for Applied Systems Analysis, Laxenburg, 1981. vi+61 pp. ISBN 3-7045-0010-0 (From the introduction) 82k:90043 90A16 (90A30, 90C39) uner, Robert J. Strong rigidity for ergodic actions of semisimple Lie groups. Ann. of
- Math. (2) 112 (1980), no. 3, 511-529. (S. G. Dani) 82i:22011 22D99 (22E40, 28D15)
- mmer, William J. (with Pathak, Pramod K.; Williams, Raymond E.) Nonparametric estimation of an acceleration parameter. Comm. Statist. A—Theory Methods 8 (1979), no. 4, 367–383. (Z. Govindarajulu) 82h:62070 62G05 (62N05)
- nmerman, Robert L. (with Farboosh, Hamid) Interior C-metric. Phys. Rev. D (3) 23 (1981), no. 2, 299-304. (Authors' summary) 82a:83007 83C15
- n, A. (with Cohen, Marshall M.; Metzler, W.) What does a basis of F(a,b)look like? Math. Ann. 257 (1981), no. 4, 435-445. (D. E. Cohen) 82m:20028
- nn, Bruno Über Abbildungsklassen von Henkelkörpern. Arch. Math. (Basel) 33 (1979/80), no. 4, 379-382. (C. Earle) 82k:57002 57M99 (30F40)
 - Über Gruppen von Homöomorphismen Seifertscher Faserräume und flacher
- Mannigfaltigkeiten. (English summary) Manuscripta Math. 30 (1979/80), no. 4, 361-373. (Duane Randall) 82c:57024 57S17
- nn, Karel (with Juhnke, Friedrich) Lineare Gleichungs- und Ungleichungssysteme auf extremalen Algebren. Wiss. Z. Tech. Hochsch. Magdeburg 23

(1979), no. 1, 103-106. (Authors' summary) 82m:90160

Solution of some optimization problems on the extremal algebra. Studies on ematical programming (Papers, Third Conf. Math. Programming, Matrafüred, 1975), pp. 179-185, Math. Methods Oper. Res., 1, Akad. Kiadó, Budapest, 1980. (H. Voigt) 90C48

Convexity in semimodules. (Czech summary) Ekonom.-Mat. Obzor 17 (1981), no. 2, 199-213. (Eric Degreef) 82k:52008 52A01 (06F25)

mermann, Klaus F. (with Kawasaki, Seiichi) Measuring relationships in the log-linear probability model by some compact measures of association. (German, French and maries) Statist. Hefte (N.F.) 22 (1981), no. 2, 82-109. (Susan D. Horn) 82h:62088 62H17 (62H20)

n, R. E. (with Lorenz, Dieter) A note on a second-order differential equation with infinitely many solutions. Lett. Nuovo Cimento (2) 31 (1981), no. 17, 603-606. (Hans Stephani) 82k:83009 83C15 (34A05, 58F05, 83F05)

mermann, Uwe Duality principles and the algebraic transportation problem.

Numerische Methoden bei graphentheoretischen und kombinatorischen Problemen, Band 2 (Tagung, Math. Forschungsinst., Oberwolfach, 1978), pp. 234-255, Internat. Ser. Numer. (10gung, main. 1935) Math., 46, 81, 1979. (Author's summary) 82h:90071 90C08
(with Derigs, Ulrich) An augmenting path method for solving linear bottleneck

transportation problems. Computing 22 (1979), no. 1, 1-15. (Authors' summary) 90C08

mermann, Wolfhart The renormalization group of the model of A^4 -coupling in the abstract quantum field theory. Comm. Math. Phys. 76 (1980), no. 1, 39-64. (Raymond Streater) 82g:81068 81E15

nmermann-Huisgen, Birge Decomposability of direct products of modules. J. Algebra 56 (1979), no. 1, 119–128. (From the text) 82;16038 16A50

The sum-product splitting property and injective direct sums of modules over von Neumann regular rings. Proc. Amer. Math. Soc. 83 (1981), no. 2, 251–254. (David Handelman) 82k:16031 16A52 (16A30) Handelman) 82k:16031 16A52 (16A30)

Zinčenko, N. M. Upper and lower functions of random fields with independent increments (Russian) Theory of random processes, No. 7 (Russian), pp. 23-26, 130, "Naukova Dumka", Kiev, 1979. (R. Morkvenas) 82d:60150 60160 (60G30)
Zinčenko, Ž. F. (with Babeško, V. A.) On the theory of directional seismic antennas.

(Russian) Dokl. Akad. Nauk SSSR 251 (1980), no. 6, 1350-1353. (M. Mişicu) 82b:86005 86A15 (35B25, 86A20)

Zinger, A. A. (with Januškevičius, R.) A theorem of characterization by identical distribution of statistics and its stability. (Russian) Problems of stability of stochastic models (Proc. Fourth All-Union Sem., Palanga, 1979) (Russian), pp. 32-46, 123, "Vsesojuz. Nauč.-Issled. Inst. Sistem. Issled.", Moscow, 1980. (L. B. Klebanov) 82i:62029

Variance estimation in partially systematic sampling. J. Amer. Statist. Assoc. 75 (1980), no. 369, 206-211. (Jon Stene) 82i:62026 62D05

Concentrated firing in many-versus-many duels. Naval Res. Logist. Quart. 27 (1980),

no. 4, 681-695. (Author's summary) 82c:90117 90D40 (90D45)

Zink, Ernst-Wilhelm (with Koch, Helmut) ★Zur Korrespondenz von Darstellungen der Galoisgruppen und der zentralen Divisionsalgebren über lokalen Körpern (der zahme Fall). (German) [On the correspondence of representations of Galois groups and the central division algebras over local fields (the tame case)] With English and Russian summaries. Report 1979, 3. Akademie der Wissenschaften der DDR, Institut für Mathematik, Berlin, 1979. 71 pp. (J. Tunnell) 82h:12013 12A67 (22E50)

Weil-Darstellungen und lokale Galoistheorie. Math. Nachr. 92 (1979), 265-288. (L.

Corwin) 82g:12016 12B20 (20C25, 22D12)

Zink, Thomas (with Fitzner, Heinz-Jörg; Kleinert, Werner; Kurke, Herbert; Pfister, Gerhard; Roczen, Marko) Modulprobleme in der algebraischen Geometrie. III. Beiträge zur Algebra und Geometrie, 7. Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg M 11 (1978), 91-144. (Contents) 82k:14011

Über die Klassifikation der Instantonenbündel über S4 nach W. G. Drinfeld und J. I. Manin. Proceedings of the Summer School on Yang-Mills Equations (Kagel, 1979), pp. 194-205, Seminarberichte, 25, Humboldt Univ., Berlin, 1980. (See 82j:53062) 14F05

Zinn, Joel (with Mandrekar, V.) Central limit problem for symmetric case: convergence to non-Gaussian laws. Studia Math. 67 (1980), no. 3, 279-296. (Jerzy Szulga) 82f:60026

(with de Araujo, Aloisio; Giné, Evarist; Mandrekar, V.) On the accompanying laws theorem in Banach spaces. Ann. Probab. 9 (1981), no. 2, 202-210. (Peter Z. Daffer) 60B12 (46B20)

(with LePage, Raoul; Woodroofe, Michael) Convergence to a stable distribution via order statistics. Ann. Probab. 9 (1981), no. 4, 624-632. (D. A. Darling) 82k:660049

(with Goodman, V.; Kuelbs, J.) Some results on the LIL in Banach space with applications to weighted empirical processes. Ann. Probab. 9 (1981), no. 5, 713-752. (Gilles Pisier) 82m:60011 60B12 (60B11)

n-Justin, J. Expansion around instantons in qu um mechanics. J. Math. Phys. 22

(1981), no. 3, 511-520. (Author's summary) 82:81034 81C99 (35C20)
nober, A. S. I. (with Huntley, E.) Applications of numerical double Laplace transform algorithms to the solution of linear partial differential equations. (German summary) nputing 21 (1978/79), no. 3, 245-258. (Authors' summary) 82e:65121 65N99 (65R10)

(with Huntley, E.) An error analysis for the solution of linear time-dependent partial differential equations by the Laplace transform and finite difference approxima Advances in computer methods for partial differential equations, III (Proc. Third IMACS Internat. Sympos., Lehigh Univ., Bethlehem, Pa., 1979), pp. 85-92, IMACS, New Brunswick, N.J., 1979. (F. M. Pascal) 82f:65104 65N15

Self-adaptive near-optimal control of distributed parameter systems. System analysis and simulation, 1980 (Proc. Internat. Sympos., Berlin, 1980), pp. 173-177, Math Research, 5, Akademie-Verlag, Berlin, 1980. (Author's summary) 82a:93031 93C20

(with Huntley, E.) The numerical solution of linear time-dependent partial differential equations by the Laplace transform and finite difference approximations. J. Comput. Appl. Math. 6 (1980), no. 4, 253–258. (Ian Gladwell) 821:65093 65M99 Self-adaptive near-optimal control of diffusion equations. Proc. IEE-D 127 (1980),

no. 6, 290-295. (H. O. Fattorini) 82h:49022 49D25 (93C20)

Zinov'ev, B. M. (with Aleksandrov, A. Ja; Kuršin, L. M.) One numerical method of solving problems of elasticity with allowance for singularities of the stressed state near corner points and lines. Izv. Akad. Nauk SSSR Meh. Tverd. Tela 15 (1980), no. 3, 39-49 (Russian); translated as Mech. Solids 15 (1980), no. 3, 37-46. (Authors' summary) 82h:73014 73C45

Zinov'ev, B. S. The Bergman kernel with weight in multicircular domains. (Russian) Sou problems of multidimensional complex analysis (Russian), pp. 231-236, 273, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Fiz., Krasnoyarsk, 1980. (I. P. Ramadanov) 82k:32056

An algebraic method of convolution of series of several complex variables and some integral formulas. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 7, 21-29. (A. D. Mednyh) 82c:32004 32A25 (40C10)

Zinov'ev, Ju. M. Duality in abelian gauge theories on a lattice. (Russian. English summary) Teoret. Mat. Fiz. 43 (1980), no. 3, 309–322. (Author's summary) 82c:81120 81E99

Zinov'ev, V. A. (with Dumer, I. I.; Zjablov, V. V.) Cascading decoding with respect to minimal generalized distance. (Russian. English summary) With a loose English translation. Problems Control Inform. Theory/Problemy Upraclen. Teor. Inform. 10 (1981), no. 1, 3-19. (Authors' summary) 82f;94011 94A24

Zinžer, N. I. On the problem of stability of a membrane in a supersonic gas flow. (Russian) Trudy Moskov. Orden. Lenin. Energet. Inst. No. 459 (1980), 95-101, 135. (Author's summary) 82e:73041 73J05 (76E99)

Zinzius, E. Minimaxschätzer für den Mittelwert θ einer normalverteilten Zufallsgröße mit bekannter Varianz bei vorgegebener oberer und unterer Schranke für θ . (English summary) [Minimax estimators for the mean θ of a normally distributed random variable with known variance in the case of given upper and lower bounds for θ] Math. Operationsforsch. Statist. Ser. Statist. 12 (1981), no. 4, 551-557. (Author's summary) 62C20

Zionts, Stanley Integer linear programming with multiple objectives. Formal method policy formulation, pp. 158-167, Interdisciplinary Systems Res., 49, Birkhäuser, Basel, 1978. (See 82k:90009) 90C31 (90C10)

A multiple criteria method for choosing among discrete alternatives. European J. Oper. Res. 7 (1981), no. 2, 143-147. (Author's summary) 82f:90013 90A05

Zipkin, Paul H. Simple ranking methods for allocation of one resource. Management Sci. 26 (1980), no. 1, 34-43. (A. Aganbegjan) 82e:90038 90B05

Zirabok, A. N. (with Danilov, V. V.; Filippov, F. V.) An identifying experiment with an automaton in the presence of an increasing number of states. Izv. Akad. Nauk SSSR Tehn. Kibernet. 1980, no. 2, 96-101, 221 (Russian); translated as Engrg. Cybernetics 18 94C10 (68D50) (1980), no. 2, 86-90 (1981). (Authors' summary) 82d:94070

Zisis, V. (with Jannussis, A. D.; Filippakis, P.; Filippakis, Th.; Vlachos, K.) Quantization of mass coordinate-dependent Hamiltonian. Lett. Nuovo Cimento (2) 31 (1981), no. 8,

298-302. (F. R. Halpern) 82h:81020 81C05

Zislin, G. M. (with Vugal'ter, S. A.) The discrete spectrum of many-particle quantum systems which have no stable subsystems. II. (Russian) Funkcional. Anal. i Priložen. 14 (1980), no. 3, 69–70. (A. V. Buhvalov) 824:81027 81C10 (35P05)

Zisook, Albert B. (with Kadanoff, Leo P.) Correlation functions on the critical line of the two-dimensional planar model: logarithms and corrections to scaling. Nuclear Phys. B 180 (1981), no. 1, FS 2, 61-76. (Authors' summary) 82a:82017 82A25

Universal effects of dissipation in two-dimensional mappings. Phys. Rev. A (3) 24 (1981), no. 3, 1640-1642. (Author's summary) 82i:58054 58F15 (58F14, 58F20, 76W05, 82A05)

(with Huberman, B. A.) Power spectra of strange attractors. Phys. Rev. Lett. 46

(1981), no. 10, 626-628. (Authors' summary) 82a:58037 58F13 (76F99)

Žitarašu, N. V. Asymptotic representation and necessary and sufficient conditions for stabilization of the solutions of model parabolic boundary value problems. (Russian) Partial differential equations (Proc. Conf., Novosibirsk, 1978) (Russian), pp. 120-121, 251, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (V. Ďurikovič) 82i:35088 35K35 (35B40) (with Eidel'man, S. D.) Asymptotic representation and necessary and sufficient conditions for stabilization of the solutions of model parabolic boundary value problems (Russian) Boundary value problems for nonstationary equations. Mat. Issled. No. 58 35K35 (35C20) (1980), 26-47, 142. (Enrico Obrecht) 82a:35054

See also Computational methods of mechanics, 82k:73001

Zitron, N. R. Errata: "A critical condition for the cost density in the circular city model" [J. Optim. Theory Appl. 24 (1978), no. 3, 507-512; MR 58 #20354]. J. Optim. Theory Appl. 33 (1981), no. 3, 433-434. (From the text) 82f:90035

Zittartz, J. Phase transitions of "extended" Ising models on a square lattice. Z. Phys. B 41 (1981), no. 1, 65-74. (Author's summary) 82c:82044 82A25 (82A67) Phase transitions of the symmetric Ashkin-Teller model near the decoupling limit. Z.

Phys. B 41 (1981), no. 1, 75-83. (Author's summary) 82c:82045 82A25

(with Wolf, D.) On the one-dimensional spin-1-chain and its related fermion models. Z. Phys. B 43 (1981), no. 2, 173-183. (Authors' summary) 82h:82048

Živkova, Ž. T. Construction of proper shadows of surfaces of revolution under an arbitrary parallel lighting. (Bulgarian. Russian and French summaries) Godišnik Visš. Učehn. Zaved. Priložna Mat. 13 (1977), no. 3, 185-196 (1978). (K. Burian) 82f:51019a

A method for finding the proper shadows of some nonrotational surfaces under an arbitrary parallel lighting. (Bulgarian. Russian and French summaries) Godišnik Visš. Učebn. Zaved. Priložna Mat. 13 (1977), no. 4, 231-240 (1978). (K. Burian) 821:51019b

Životjagin, A. F. Effect of a homogeneous chemical reaction on the concentration distribution in the diffusion trail of a droplet. (Russian. English summary) Vestn Moskov. Univ. Ser. I Mat. Meh. 1980, no. 6, 73-78, 118. (Author's summary) 82c:76094 76R99 (80A20)

Ziablov, V. V. (with Dumer, I. I.; Zinov'ev, V. A.) Cascading decoding with respect to minimal generalized distance. (Russian. English summary) With a loose English translation. Problems Control Inform. Theory / Problems Upravien. Teor. Inform. 10 (1981), no. 1, 3-19. (Authors' summary) 82i:94011 94A24

Zjapkov, N. P. A problem on the imbedding of fields. (Bulgarian. French su Godišnik Visš. Ped. Inst. Šumen Prirod.-Mat. Fak. 4 (1979), 17-26 (1980). (Author's 12F10 mmary) 82g:12023 Zjukov, M. E. A limit theorem for random walks with jumps bounded on one side

sian) Ukrain. Mat. Z. 31 (1979), no. 6, 746-750, 768. (D. A. Darling) 82d:60127 60J15 (60F05)

(with Ežov, I. I.) Distributions of functionals of processes with independent increments and jumps that are bounded below. (Russian) Akad. Nauk Ukrain. SSR Inst. Mat. Preprint 1980, no. 13, 3-37. (Ditley Monrad) 82j:60138 60J30 (60F17)

- n, M. V. (with Vasilenko, V. A.) Processing of experimental data with an application of averagings that preserve polynomial, trigonometric or exponential functions. (Russian)
 Theory of cubature formulas and numerical mathematics (Proc. Conf., Novosibirsk, 1978)
 (Russian), pp. 56–58, 250, "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. (See 824:65003) 65D10
- mal, Miloš Superconvergence of gradients in the finite element method. (Russian)
 Variational-difference methods in mathematical physics (Proc. All-Union Conf., Variational-difference methods in mathematical physics (Proc. All-Union Conf., Neossibirsk, 1977) (Russian), pp. 15–22, Akad. Nauk SSSR Sibirsk. Otdel., Vyčisl. Centr., Neossibirsk, 1978. (Russell C. Thompson) 82e-65116 65N30

 Zlatanov, Georgi Some invariant characterizations of two-dimensional Weyl and Riemann spaces. (Bulgarian. Russian and English summaries) Ploodiv. Univ. Naučn. Trud. 15 (1977), no. 1, 63–70 (1979). (Vladislav Goldberg) 82j-53000 53C25 (53A60)

 Zlatev, Minčo P. (with Tafeva, Bistra E.) The functional linearization method. Realized

ibilities. (Bulgarian. Russian and English summaries) Problemi Tehn. Kibernet. 11 (1981), 80-97. (Authors' summary) 82d:49027 49D25

Zlatev, Stojan (with Zahariev, Andrei) A generalization of the Cauchy problem for nonlinear integro-differential equations in a Banach space. (Bulgarian Russian and English summaries) Ploudio. Unio. Naučn. Trud. 15 (1977), no. 1, 199–205 (1979). (Authors' summary) 82h:45018 45N05

ter, Zahari On some pivotal strategies in Gaussian elimination by sparse technique SIAM J. Numer. Anal. 17 (1980), no. 1, 18-30. (Niels Munksgaard) 82f:65031 Zero-stability properties of the three-ordinate variable stepsize variable formula methods. Numer. Math. 37 (1981), no. 2, 157–166. (N. S. Fal'ko) 82i:65052 65L20 Modified diagonally implicit Runge-Kutta methods. SIAM J. Sci. Statist. Comput. 2 (1981), no. 3, 321-334. (Author's summary) 82m:65070 65L05

toustov, V. A. (with Sazonov, V. V.; Saryčev, V. A.) Forced periodic oscillations of the simple pendulum. Prikl. Mat. Meh. 43 (1979), no. 2, 250-261 (Russian); translated as J. Appl. Math. Mech. 43 (1979), no. 2, 270-281 (1980). (Hiroshi Onose) 82h:34048

34C15 (70E25)

(with Galaktionova, O. O.) 2#-periodic solutions of the Duffing equation. (Russian. English summary) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 128, 26 pp. (Authors' summary) 82h:34054 34C25

(with Galaktionova, O. O.) 2m-periodic solutions of the Duffing equation for small values of the amplitude of the driving force. (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1980, no. 33, 24 pp. (V. G. Zadorožnii) 82g:34050 34C25 (58F14)

- Zlepko, P. P. Application of the method of averaging functional corrections to the approximate construction of an implicit function. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 5, 3-6, 92. (G. W. Hedstrom) 82a:47061 47H17 (58C15, 65J15)
- sec. S. Feasible direction methods in the absence of Slater's condition. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Optim. 9 (1978), no. 2, 185–196. (Jean-Pierre Crouzeix) 82a:90128 90C25

(with Ben-Israel, A.; Ben-Tal, Aharon) Optimality conditions in convex programming. Survey of mathematical programming (Proc. Ninth Internat. Math. Programming Sympos., Budapest, 1976), Vol. 1, pp. 153–169, North-Holland, Amsterdam, 1979. (N. N. Astal'ev) 82c:90071 90C25

(with Craven, B. D.) Complete characterization of optimality for convex

programming in Banach spaces. Applicable Anal. 11 (1980/81), no. 1, 61–78. (Alexander M. Rubinov) 82b:90089 90C25 (90C48) (with Ben-Tal, Aharon; Kerzner, L.) Optimality conditions for convex semi-infinite

programming problems. Naval Res. Logist. Quart. 27 (1980), no. 3, 413-435. (Authors' nary) 82i:90088 90C25

(with Jacobson, D. H.) Minimizing an arbitrary function subject to convex constraints. Utilitas Math. 17 (1980), 239–257. (L. V. Vasil'ev) 82e:90097

- Zhuktenko, V. I. A nonstationary problem of queueing theory. (Russian. English summary Issled. Operacii i ASU No. 16 (1980), 126–131, 143. (E. V. Bulinskaja) 82g:60129 60K25
- n, A. I. (with Voinovič, P. A.; Popov, F. D.; Fursenko, A. A.) Nur flows of a gas with discontinuities of complex configurations. (Russian) Z. Vyčisl. Mat. Mat. Fiz. 19 (1979), no. 6, 1608–1614, 1632. (Authors' summary) 82h:76033 76N9

(with Fursenko, A. A.) A monotone difference scheme for direct calculation (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 4, 1021-1031, 1086. (N. N. Janenko) 76N99

- ievskaja, G. I. (with Pjarnpuu, A. A.; Šematovič, V. I.) Application of Monte Carlo methods to the study of the states of a gas mixture with internal degrees of freedom. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 2, 511-516, 528. (I. N. Molčanov)
- itrenko, N. V. (with Gavriljuk, I. P.; Makarov, V. L.; Elenin, G. G.; Zdorenko, Ju. N.; Šan'ko, T. M.) Two algorithms for numerical solution of problems of quasilinear heat conduction and their comparison. (Russian. English summary) Vyčisl. Prikl. Mat. (Kiev) 1980, no. 41, 92-105, 159. (Murli M. Gupta) 82a:65095 65P05 (65M05)
- Zmorovič, V. A. (with Nikolaeva, R. V.) Integral transformation with logarithmic kernels in some classes of univalent functions. (Russian) Mathematical analysis and probability theory (Russian), pp. 66-70, 211, "Naukova Dumka", Kiev, 1978. (Authors' summary) 30C45 (44A15)

(with Gudz', L. A.) On a method of the theory of extremal problems. (Russian. English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1981, no. 8, 20-22, 96. (Z. Lewandowski) 82m:30021 30C45 (30C75) See also Mitropol'skii, Ju. A.; et al., 82f:01123

- ud', E. M. An invariant of quadratic forms over a Galois field of characteristic 2. (Russian) Vestnik Har'kov Gos. Univ. No. 177, vyp. 44 (1979), 77–86, 97. (Paul Ponomarev) 82h:10032
- m Completeness for a family of normal distributions. Mathematical tics, pp. 355-357, Banach Center Publ., 6, PWN, Warsaw, 1980. (Steven Arnold) 62H05

- approach. Probab. Math. Statist. 1 (1980), no. 1, 1-13. (B. Raja Rao) 82a:62101 62J10 (62F10)
- Zna. Sefan (with Katriñák, Tibor) Fifteen answers by Academician Stefan Schwarz. (Slovak) Pokroky Mat. Fyz. Astronom. 24 (1979), no. 5, 245-253. (Editors) 82a:01036 01A70

Decomposition of complete graphs into factors of diameter two. (Russian summary Math. Slovaca 30 (1980), no. 4, 373-378. (Maria Ferro) 82c:05077 05C70 (05C35)

- enskii, S. V. Analogue of Leont'ev's theorem for Euler operators and the Vostrecov formula for a strongly star-shaped domain $D \subset \mathbb{C}^n$. (Russian) Some problems of multidimensional complex analysis (Russian), pp. 33–42, 262–263, Akad. Nauk SSSR Sibirsk. Oidel., Inst. Fiz., Krasnoyarsk, 1980. (N. I. Skiba) 82m:23004 32A30 (30E20) pill, M. Soliton-shaped potentials and the generalized power-series method. Lett. Math. Phys. 5 (1981), no. 3, 169–175. (Author's summary) 82h:81027 81C05 (35C05)
- Symmetrically anharmonic oscillators. Phys. Rev. D (3) 24 (1981), no. 4, 903-911. Author's summary) 82h:81035 81C12

Zó, Felipe On functions satisfying a local Lipschitz condition of order α. Studia Math. 68

- (1980), no. 2, 107–116. (Patrice Assouad) 82h:26009 26A16

 Zobin, N. M. (with Zobina, V. G.) Interpolation in spaces with given symmetries. Finite dimension. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 4, 20-28. (Jöran Bergh) 82m:46076 46M35
- Zobina, V. G. (with Zobin, N. M.) Interpolation in spaces with given symmetries. Finite dimension. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1981, no. 4, 20–28. (Jöran
- Bergh) 82m:46076 46M35

 Zochowski, Antoni A certain method of multivariable diagonal controller design. (Polish maries) Control Cybernet. 9 (1980), no. 3, 109-119 (1981). (Author's summary) 82m:93032 93B30
- Zogova, T. B. Focal three-web of a two-parameter family of two-dimensional planes in Ps. (Russian) Geometry of imbedded manifolds (Russian), pp. 40–46, Moskov. Gos. Ped. Inst., Mascow, 1978. (Vladislav Goldberg) 82a:53010 53A20 (53A60)

On a class of two-parameter families of two-dimensional planes in P₃ with a hexagonal focal web. (Russian) Geometry of imbedded manifolds (Russian), pp. 44-50, Moskov. Gos. Ped. Inst., Moscow, 1979. (Hans Sachs) 82f:53026 53A20)

- Zograf, P. G. (with Venkov, A. B.) Analogues of Artin factorization formulas in the spectral theory of automorphic functions associated with induced representations of Fuchsian groups. (Russian) Dokl. Akad. Nauk SSSR 259 (1981), no. 3, 523-526. (J. Tunnell) 82k:10030 10D40
- **Example 20** A characterization of the groups ${}^2D_4(q)$, $q=2^n$. Bull. Iranian Math. Soc. 7, no. 1, 29–55 (1979). (Gerard M. Enright) **82j:20041** 20D05
- Zolezzi, T. Well-posed optimization problems for integral functionals. J. Optim. Theory Appl. 31 (1980), no. 3, 417-430. (Rolf Klötzler) 82i:49018 49B36
- Anticipative method for solution of Sturm-Liouville problems for ordinary differential equations. (Serbo-Croatian. Russian summary) Mat. Vesnik 2(15)(30) (1978), no. 1, 49-54. (Author's summary) 82a:65061 65L10
- Zolotarev, A. A. Development of ship waves. Prikl. Mat. Meh. 42 (1978), no. 4, 640-649 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 4, 679-690 (1979). (Author's summary) 82g:76013 76B20 (41A60)
- Zolotarev, Ju. G. (with Efimov, A. V.; Terpigoreva, V. М.) *Математический анализ (специальные разделы). Часть II. (Russian) [Mathematical analysis (special sections). Part II] Применение некоторых методов математического и функционального анализа. [Applications of some methods of mathematical and functional analysis] "Vysš. Škola", Moscow, 1980. 296 pp. (F. Smithies) 82h:00001b 00-01 (26-01, 46-01, 49-01, 65-01)
- Zolotarev, V. A. Structure and triangular models of systems of a class of commuting operators. (Russian) Vestnik Har'kov. Gos. Univ. No. 174, vyp. 43 (1978), 69-76, 105. (P. A. Kučment) 82d:47015 47A45 (47A65)
- Zolotarev, V. M. General problems of the stability of mathematical models. (French summary) Proceedings of the 41st Session of the International Statistical Institute (New Delhi, 1977), Vol. 2. With discussion. Bull. Inst. Internat. Statist. 47 (1977), 382-401, 402-403. (Author's summary) 82f:60016 60B10 (60C05, 60F05, 60K25)

Statistical estimates of the parameters of stable laws. Mathematical statistics, pp. 359-376, Banach Center Publ., 6, PWN, Warsaw, 1980. (Divakar Sharma) 82k:62062 62F10 (60E07)

The problem of stability of a class of problems of characterization of distributions and a lemma of Ju. R. Gabovič. (Russian) Problems of stability of stochastic models (Proc. Fourth All-Union Sem., Palanga, 1979) (Russian), pp. 46-51, 123, "Vsesojuz. Nauč.-Issled. Inst. Sistem. Issled.", Moscow, 1980. (J. Galambos) 82f:60049 60E07 (60B11, 62E10)

Integral transformations of distributions and estimates of parameters of multidimensional spherically symmetric stable laws. Contributions to probability pp. 283–305, Academic Press, New York, 1981. (V. K. Rohatgi) 82m:62069 62F10

See also Problems of stability of stochastic models, 82c:60005 and Syn Pannonian, Mathematical Statistics, 82f:62005

- otarevskii, V. A. (with Seičuk, V. N.) The collocation method of solving singular integral equations defined on a Ljapunov contour of integration. (Russian) Dokl. Akad. Nauk SSSR 258 (1981), no. 1, 20-23. (V. D. Didenko) 82m:45023 45L05 (65R20)
 - (with Njaga, V. I.) Approximate solution of a singular integral equation with shift. (Russian) Linear operators and integral equations. Mat. Issled. No. 61 (1981), 17-28,
- 155. (V. D. Didenko) 82m:45024 45L05 (45E05)
 Zolotova, N. V. Recursive schemes. (Russian) The theory of nonregular curves in various geometric spaces (Russian), pp. 31–43, Kazah. Gos. Univ., Alma-Ata, 1979. (See 81c:00007)
- 81c:00067) 68C40 (03D10, 68D30)

 Zoltners, Andris A. (with Sinha, Prabhakant) The multiple-choice knapsack problem. Oper. Res. 27 (1979), no. 3, 503-515. (Authors' summary) 82i:90080 90C10
- logórski, Bronisław (with Dyba, Roman) Quasi-exact solution of the problem of acoustic Gaussian intensive noise spectrum evolution. (Russian summary) Bull. Acad. Polon. Sci. Sér. Sci. Tech. 27 (1979), no. 7, 639-645. (David P. Vasholz) 82c:76088
- Svili, I. A. (with Kac, M. L.) The collocation method in the plane problem of

elasticity theory. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 98 (1980), no. 1, 57-60. (Authors' summary) 82b:73012 73C35

Zoppoli, R. (with Casalino, G.; Davoli, F.) Instantaneous exchange of imperfect messages within a delayed sharing information structure. Large Scale Systems 1 (1980), no. 3,

215-221. (Authors' summary) 82e-93127 93E20

Zorat, Alessandro (with Horowitz, Ellis) The binary tree as an interconnection network: applications to multiprocessor systems and VLSI. IEEE Trans. Comput. 30 (1981), no. 4, 247-253. (Authors' summary) 82b-68022 68B20 (68E99)

Zordan, Clara (with Caviglia, Giacomo) Integrability conditions for the relative velocity gradient in relativistic continuum mechanics. (Italian summary) Boll. Un. Mat. Ital. A (5) 17 (1980), no. 3, 482-489. (Gérard A. Maugin) 82a:83032 83C55 (73C10, 76Y05)

Zorii, N. V. Estimates of capacities and energies in capacitor reconstruction. (Russian) Ukrain. Mat. Z. 32 (1980), no. 6, 811-813. (N. I. Skiba) 82e:30029 30C85 (31A15,

78A30)

Zorik, L. V. On small solutions of nonlinear functional equations. (Russian) Functional alysis, No. 15, pp. 72-76, Ul' janovsk. Gos. Ped. Inst., Ul' yanovsk, 1980. (A. Smajdor) анаузы, ко. 39910 39810 Зона 39 км. Температивное решение задач математического Zorkal'cev, V. I. (with Dikin, I. I.) ★Итеративное решение задач математического

программирования. (Russian) [Iterative solution of mathematical programming problems] Autoputmus metoga buytpennux tovex. [Algorithms for the method of interior points] "Nauka" Sibirsk. Oidel., Novosibirsk, 1980. 144 pp. (C. Ilioi) 82a:90135 90C30 (65K05)

el-Zorkany, H. I. See El-Zorkany, H. I.

Zorzitto, Frank A. (with Fixman, Uri) Direct summands of systems of continuous linear Dissertationes Math. (Rozprawy Mat.) 161 (1979), 47 pp. (S. Kurepa) transformations. 82f:46076 46M99 (47A05)

Zöschinger, Helmut Komplemente für zyklische Moduln über Dedekindringen. Arch. Math. (Basel) 32 (1979), no. 2, 143-148. (T. S. Shores) 82c:13012 Projektive Moduln mit endlich erzeugtem Radikalfaktormodul. Math. Ann. 255

(1981), no. 2, 199-206. (Søren Jøndrup) 82e:16013 16A50 Zotikov, S. V. Approximation of continuous and monotone functions by their Fourier-Haar integrals. (Russian) Application of functional analysis to approximation theory (Russian), 32-35, 157, Kalinin. Gos. Univ., Kalinin, 1980. (S. Aljančić) 82c:41022

(42A38) Zotov, N. S. Computer calculation of a vector transfer function and a matrix of

 Volume 1. Computer calculation of a vector transfer function and a matrix of transformation to canonical form. (Russian) Voprosy Teor. Sistem Actomat. Upravlenija No. 5 (1980), 81-86, 156. (Author's summary) 82ke93022 93B25
 Zou, Zhen Long (with Zhang, Li Ning) Possible space-time manifolds and kinematic groups. (Chinese, English summary) Acta Phys. Sinica 30 (1981), no. 1, 35-45. (Authors' ary) 82f:83042 83C40 (53C50)

Zowe, J. (with Kurcyusz, Stanisław) Regularity and stability for the mathematical programming problem in Banach spaces. Appl. Math. Optim. 5 (1979), no. 1, 49-62.

(Jean-Paul Penot) 82a-90153 90C30 (46.30)

Žraževs'ka, G. M. Rigidity of certain classes of surfaces with respect to special contin bendings. (Ukrainian. English and Russian summaries) Vīsnik Kiīv. Univ. Ser. Mat. Meh. No. 22 (1980), 26–30, 148. (A. V. Pogorelov) 82m:53065 53C45 (35J65)

Zsidó, László (with Ciorănescu, Ioana) ω-ultradistributions in the abstract Cauchy problem.

An. Stim. Unio. "41. I. Cuza" Iaji Sect. I a Mat. (N.S.) 25 (1979), suppl., 79–94. (Michael Langenbruch) 82c:47042 47D05 (34G10, 46F10)

On spectral subspaces associated to locally compact abelian groups of operators Adv. in Math. 36 (1980), no. 3, 213-276. (Ioana Cioránescu) 82g:46107

rev, D. N. Contemporary methods of the statistical theory of nonequilibrium processes. (Russian) Current problems in mathematics, Vol. 15 (Russian), pp. 131-226, 228 (loose errata), Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. (V. P. Kalašnikov) 82d:82045 82A35 (60K25)

Theory of turbulent transport based on nonequilibrium statistical thermodynamics. (Russian. English summary) Teoret. Mat. Fiz. 46 (1981), no. 1, 71-85. (V. P. Kalašnikov) 82A35 (76F99)

Zubarev, S. V. On an analogue of Kelly's condition for systems of hyperbolic equations. (Russian) Ukrain. Mat. Ž. 33 (1981), no. 1, 3-8. (K. B. Mansimov) 82m:49010

Zubatenko, V. S. (with Himič, A. N.; Čistjakova, T. V.) Structure and organization of a package for the solution of systems of linear algebraic equations. (Russian) Some numerical methods, pp. 25-32, 40, Preprint 80, 40, Akad. Nauk Ukrain. SSR, Inst. Кіbernet., Кіеv, 1980. (See 82:65002) 65-04 Zubenko, V. V. (with Kuzenko, V. F.; Škil'njak, S. S.) ★Синтаксические дефина

проблема переориентации. (Russian) [Syntactical definitions and the problem of reorientation] Препринт 80 [Preprint 80], 3. Akad. Nauk Ukrain. SSR, Inst. Kibernet.,

Kieo, 1980. 45 pp. (Authors' summary) 82g/s8081 68F99 (03D05)

Zuber, Jean Bernard (with Itzykson, Claude) ★Quantum field theory. International Series in Pure and Applied Physics. McGraw-Hill International Book Co., New York, 1980. xxii+705 pp. ISBN 0-07-032071-3 (V. E. Korepin) 82b/s81002 81-02 (81C30, 81Exx, 81Gxx, 81L05)

(with Drouffe, J. M.) Roughening transition in lattice gauge theories in arbitrary dimension. I. The Z2 case. Nuclear Phys. B 180 (1981), no. 2, FS 2, 253-263. (Authors nmary) 82d:81098a 81E99 (82A25)

(with Drouffe, J. M.) Roughening transition in lattice gauge theories in arbitrary dimension. II. The groups Z₁, U(1), SU(2), SU(3). Nuclear Phys. B 180 (1981), no. 2, FS 2, 264–274. (Authors' summary) 82481998b 81E99 (82A25)
Zubkov, A. M. (with Sevast'janov, B. A.; Čistjakov, V. P.) ★C6op

nepostriocreй. (Russian) [A collection of problems in probability theory] "Nauka". Mascow, 1980. 224 pp. (Editors) 82с:60003 60-01

Zubov, I. V. Unbounded equilibrium motions in control systems. (Russian) Mathem methods of optimization and structuring of systems (Russian), pp. 47-54, 167, Kalinin. Gos. Univ., Kalinin, 1980. (Author's summary) 82e:34037 34C11 (78A35)

Unbounded equilibrium solutions of quasilinear systems. (Russian. English summary) Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1980, vyp. 3, 24–29, 128. (R. F. Datko) 82f:34060 34D20

Nov, L. M. A semi-inverse method in quasistatic problems of nonlinear thermoelasticity. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 3, 556-559. (V. T. Golovchan) 731105

Zubov, S. V. A method for solving boundary value problems. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1980, no. 5, 61-63, 87-88. (B. L. Sehter) 82a:34018 Asymptotic properties of the solutions of systems of ordinary differential equations with holomorphic right-hand sides. (Russian) Mat. Fiz. No. 27 (1980), 7-13, 120. (D. Izjumova) 82i:34059 34D20

Zubov, V. I. Stability of solutions of systems of partial differential equations. (Russian) Control of dynamical systems (Russian), pp. 96–99, 314–315, Leningrad. Univ., Leningrad, 1978. (N. N. Janenko) 82m:35010 35B35

(with Suleiman, S. S.) Equations of state for strongly anharmonic crystals with a complex lattice. (Russian) Izv. Vysš. Učebn. Zaved. Fizika 1979, no. 11, 40-44. (Authors' ary) 82g:82051 82A60

магу образова устойчивости процессов управления. (Russian) [Problem of stability ontrol processes] "Sudostroenie", Leningrad, 1980. 254 pp. (A. Göpfert) 82b:93028 93D05 (00A69, 34D20, 35B35)

★ Теория уравнений управляемого движения. (Russian) [Theory of equations of a motion] Leningrad. Univ., Leningrad, 1980. 288 pp. (Valeriu Prepeliță) 34-01 (34D20, 34H05, 39A10, 93C15)

The problem of the existence of an electromagnetic field causing given motions of charged particles. (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 235–252, 317–318, Leningrad. Univ., Leningrad, 1980. (N. V. Mickevič) 82b:78011 78A35 (34A10, 34A55, 35L80)

Optimal damping of rotational motion. Prikl. Meh. 16 (1980), no. 5, 113-121

(Russian); translated as Soviet Appl. Mech. 16 (1980), no. 5, 450-456. (From the text) 82h:70005 70E15 (70Q05)

Zubov, V. M. On the question of the inversion of a Fredholm operator with nonequivalent substitution of variables. (Russian. English summary) Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk 1981, no. 3, 55-57, 141. (Author's summary) 82f:47020 (47A05, 47A53)

or, A. V. Classification of simply connected, six-dimensional manifolds. (Russian) Dokl. Akad. Nauk SSSR 255 (1980), no. 6, 1312-1315. (P. S. Landweber) 82a:57019 57Q25 (57R 99)

Zucchelli, G. P. (with Marigliano Ramaglia, V.) Application of a variational principle for calculating S-matrix poles. Phys. Lett. A 67 (1978), no. 1, 9-12. (Authors' summary) 82b:81103 81F05 (49H05)

lini Zucco, Andreana See Gand ni Zucco, Andreana

Žučin, A. V. Local Noether crossed group rings. (Russian) Mat. Zametki 28 (1980), no. 5, 655–664, 801. (G. Karpilovsky) 82d:16023 16A53 (13H99)

Zucker, Jefferey See de Bakker, Jaco, 82g:68016

(with Pednault, E. P. D.; Muresan, L. V.) On the independence ass underlying subjective Bayesian updating. Artificial Intelligence 16 (1981), no. 2, 213-222. (Authors' summary) 82h:68126 68G20 (62F15, 62H30, 92A25)

(National Statistics) Statistics of the Control of

J. Appl. Probab. 17 (1980), no. 3, 646-653. (M. H. A. Davis) 82k:90072

Optimal stopping in terminating one-sided processes with unbounded reward functions. (German summary) Z. Oper. Res. Ser. A-B 24 (1980), no. 5, 145-153. (Jacques Azėma) 82e:60073 60G40 (60K20, 62L15, 90B25)

(with Tapiero, Charles S.) Optimum excess-loss reinsurance: a dynamic framework. Stochastic Process, Appl. 12 (1982), no. 1, 85-96. (Authors' summary) 82i:62151

Zuckerman, Gregg (with Knapp, A. W.) Multiplicity one fails for p-adic unitary principal series. Hiroshima Math. J. 10 (1980), no. 2, 295-309. (Joe Repka) 82a:22020 22E50 (20H20)

Zuev, Ju. A. A covering problem: local approach and a branch and bound type method. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 19 (1979), no. 6, 1566-1576, 1630. (András Frank) 05B40 (05-04)

A method for raising the reliability of classification in the pres classifiers, based on the principle of monotonicity. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 1, 157-167, 255. (F. Pecka) 821:62113 62H30

Zuev, N. M. (with Zurbenko, I. G.) Mixing of random processes. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1980, no. 3, 29–33, 78. (A. I. Ponomarenko) 82d:60070 60G12 (60G10)

Estimation of covariance of random variables satisfying the Cramér condition and mixing in the sense of Ibragimov. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1981, no. 2, 42-44, 78. (H. J. Godwin) 82k:60039 60E15

Zueva, R. A. An analogue of the Dirichlet problem for a multidimensional quasilinear equation of mixed-composite type. (Russian) Application of the methods of functional analysis to problems of mathematical physics and numerical analysis (Russian), pp. 48-52, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1979. (Editors) 82g:35682

fan Zui Hai See Fan Zui Hai

van Zuijlen, M. C. A. (with Ruymgaart, F. H.) On convergence of the remainder term in linear combinations of functions of order statistics in the non-i.i.d. case. Sankhyā Ser. A 40 (1978), no. 4, 369-387. (Jon A. Wellner) 82a:60040 60F15 (62G30)

ngo Zui Kan See Ngo Zui Kan Zuily, Claude Unicité du problème de Cauchy pour une classe d'opérateurs différentiels. Comm. Partial Differential Equations 6 (1981), no. 2, 153-196. (Jorge Hounie) 82h:35018 35G10 (35A07)

uen Zui Tien See Hguen Zui Tien uen Zui Tien See Nguen Zui Tien uicka-Żuk, I. See Janicka-Żuk, I.

Žak, P. F. Asymptotic properties of the method of steepest descent in eigenvalue problems. (Russian) Z. Vyčisi. Mat. i Mat. Fiz. 21 (1981), no. 2, 271-285, 523. (B. T. Poljak) 65F15 (49D10)

Žuk, V. I. (with Ryžov, O. S.) Free interaction and stability of the boundary layer in an incompressible fluid. (Russian) Dokl. Akad. Nauk SSSR 253 (1980), no. 6, 1326-1329.
 (A. S. Silbergleit) 82c:76051 76E05

Žaikov, V. P. Investigation of periodic modes in nonlinear systems. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 2, 302-305. (K. R. Schneider) 82f:34032 34C05 (58F21)

Žukova, N. I. (with Šapiro, Ja. L.) Global structure of reducible Riemannian manifolds. (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 10, 60-62. (Valentin Boju) 82e:53068 53C20 (53C05)

akovin, V. E. See Theoretical cybernetics, 82f:90004
akovskii, V. I. (with Vaisbord, E. M.) ★ Въедение в лифференциальные игры
нескольких лиш в их приложенна. (Russian) [Introduction to differential n-person
games and their applications] "Sovet. Radio", Moscow, 1980. 304 pp. (J. M. Skowroński)
82f:90116 90D25 (93D05)

skii, V. N. Differential-difference noncooperative games. (Rus solutions, stability and informedness in game theory (Russian), pp. 39-64, 110-111, Kalinin. Gos. Univ., Kalinin, 1979. (O. Hájek) 82c:90108 90D25 rych-Žukowski, Andrzej See Gawrych-Žukowski, Andrzej

helmer, W. (with Hackl, J.; Wacker, Hj.) An efficient step size control for continuation methods. BIT 20 (1980), no. 4, 475-485. (Authors' summary) 82b:65837 65H05 manov, E. Z. Solution of some operator equations. (Russian) Dokl. Akad. Nauk UzSSR 1980, no. 8, 10-13. (Ju. V. Trubnikov) 82e:47016 47A50

natov, S. S. The absolute stability of a programmed manifold in the simplest critical case. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1981, no. 3, 66-70, 93. (L. rvani) 82i:34060 34D25 (34D20)

mino, Bruno Supersymmetry: a way to the unitary field theory. Einstein Symposion, Berlin (1979), pp. 114–127, Lecture Notes in Phys., 100, Springer, Berlin, 1979. (Editors) 82k:81095 81G20 (83E50)
(with Ferrara, S.; Savoy, C. A.) General massive multiplets in extended supersymmetry. Phys. Lett. B 100 (1981), no. 5, 393–398. (Authors' summary) 82f:81085

nofen, G. (with Blumen, A.) Energy transfer as a random walk on regular lattices. J. Chem. Phys. 75 (1981), no. 2, 892–907. (B. Derrida) 82h:82049 82A70 (60J15, 82–04)

The projective geometry of the Weyl spinor. Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 66 (1979), no. 1, 22-27. (N. V. Mickevič) 82h:53035 53B21 (51N15 83C20)

(with Debney, G. C.; Wilkes, J. M.) A spin-coefficient approach to type N fields with twist. Tensor (N.S.) 35 (1981), no. 3, 267-275. (Garry Ludwig) 82m:83013 83C20 (53B50, 83C15)

de, P. (with Tao, K. M.) On Levy's identification, its generalization and applications. Internat. J. Systems Sci. 12 (1981), no. 11, 1317-1334. (Authors' summary) 82m:93029

hoang din' Zung See Hoang Din' Zung le t'i Zung See Le T'i Zung to an' Zung See To An' Zung

vo an' Zung See Vo An' Zung

ik, B. M. (with Bengus, L. E.) Bilocal gauge fields. (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1980, no. 3, 77-79, 100. (Authors' summary) 82e:81101 (22E70, 81G05)

Zuraev, Ju. (with Badalbaev, I. S.) Properties of an estimate for the eigenvalue of the matrix of expectations of a multitype branching processes beginning with a large number of particles. (Russian) Limit theorems, random processes and their applications (Russian), pp. 35-46, 230, "Fan", Tashkent, 1979. (Walter Warmuth) 82a:60122 60J80 (62M05)

Žuravlev, G. E. See Mathematical modeling in psychology, 821:92052 Žuravlev, Ju. I. (with Zenkin, A. A.; Zenkin, A. I.; Isaev, I. V.; Kol'cov, P. P.; Kočetkov, D. V.; Rjazanov, V. V.) Problems of pattern recognition and classification with standard construction. (Russian) Z. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 5, 1294-1309, 1359. nary) 82c:68059 68G10

See also Liapunov, A. A., 82401042
Žuravlev, S. G. Construction of conditionally periodic solutions of the restricted, sional, circular three-body problem in resonance cases. I. Elimination of short-period terms. Astronom. Z. 57 (1980), no. 4, 841-850 (Russian); translated as Soviet Astronom. 24 (1980), no. 4, 483-487 (1981). (From the introduction) 82c:70014

(with Anikovskii, V. V.) Expansion of the perturbing function of a satellite restricted four-body problem. Celestial Mech. 24 (1981), no. 3, 237-254. (Authors' summary) 70M05 (70F15)

ravlev, V. F. Equations of motion of mechanical systems with ideal one-sided links Prikl. Mat. Meh. 42 (1978), no. 5, 781-788 (Russian); translated as J. Appl. Math. Mech. 42 (1978), no. 5, 839-847 (1979). (Author's summary) 82g:70006 70B15 (34A25 70B15 (34A25.

rbenko, I. G. (with Vorob'ev, L. S.) Bounds for the power of $C(\alpha)$ -tests and their applications. (Russian. English summary) Teor. Verojatnost. i Primenen. 24 (1979), no. 2, 252–266. (Authors' summary) 82h:62040 62F05

Optimal properties of some spectral density statistics. (Russian. Lithuanian and English summaries) Litovsk. Mat. Sb. 20 (1980), no. 1, 39-50, 216-217. (M. A.

Mirzahmedov) 82e:62155 62M15

On a limit theorem for statistics of spectral density with a time shift. (Russian) Ukrain. Mat. Z. 32 (1980), no. 4, 463-476. (M. M. Leonenko) 82b:60025 (60G10, 62G05)

(with Zuev, N. M.) Mixing of random processes. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1980, no. 3, 29-33, 78. (A. I. Ponomarenko) 82d:60070
See also Brillinger, David R., 82d:62138

Žurbenko, L. N. (with Avhadiev, R. G.) Inverse boundary value problems in polar coordinates with singular points on the boundaries. (Russian) Trudy Sem. Kraev. Zadačam No. 16 (1979), 3-14, 240. (V. Micić) 824:30039 30E25

(with Aksent'ev, L. A.) Questions of well-posedness in inverse boundary value ems. (Russian) Trudy Sem. Kraev. Zadačam No. 16 (1979), 15-28, 240. (V. Mićić) 824-30040 30E25

Zurek, W. H. Pointer basis of quantum apparatus: into what mixture does the wave packet collapse? Phys. Rev. D (3) 24 (1981), no. 6, 1516-1525. (Lawrence Sklar) 82i:81010 81B05

Zurek-Etgens, Maria La définition et le prolongement de la solution de l'équation de translation. Demonstratio Math. 12 (1979), no. 4, 889-902. (I. Petrescu) 82c:08004 08A99 (04A05)

anbaer, S. N. Asymptotic stability with respect to the first approximation of solutions of a countable system of differential equations when the growth of right-hand sides depends on time t. (Russian) Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1980, no. 5, 66-68, 88. 34D05 (34A30) meanu) 82c:34058

se, Konrad Die Rolle der ETH bei der Computerentwicklung. (English summary) Z. Angew. Math. Phys. 30 (1979), no. 2, 399-403. (A. D. Booth) 82d:01023

de Zutter, D. Fourier analysis of the signal scattered by three-dimensional objects in translational motion. I, II. Appl. Sci. Res. 36 (1980), no. 4, 241-256, 257-269. (Author's summary) 82h:78022 78A45

Žužoma, E. V. A topological classification of foliations described by one-dimensional Pfaffian forms on an n-dimensional torus. (Russian) Differencial'nye Uravnenija 17 (1981), no. 8, 1385-1393, 1530-1531. (L. Reizins) 82j:58005 58A17

Singular Reeb foliations on an n-dimensional torus. (Russian) Mat. Za (1981), no. 1, 123-128, 155. (Author's summary) **82k:57020** 57R30 (58F18) **20vsky, M.** (with Priel, Z.; Mason, S. G.) Effects of rotary Brownian motion in

rheological transients of suspensions of spheroids. J. Rheol. 24 (1980), no. 6, 705-717. (G. Paria) 821:76004 76A10 (76F99, 76T05)

Zvērēv, S. M. Integro-differential equation of scattering and radiation of acoustic waves by elastic shells. (Ukrainian. Russian summary) Studies in the qualitative theory of differential equations and its applications (Ukrainian), pp. 13–14, 71, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. (Author's summary) 82g:76035 76Q05 (73L05)

The method of metaharmonic potentials in hydroelasticity problems. (Russian.

English summary) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1980, no. 11, 46-49. (M. O.

Baseieisvili) 82e:73033 73D25 (31A20, 73J06)
adadze, T. Ja. (with Bicadze, L. P.) The solution of basic boundary value problems of the statics of the transversal-isotropic half-space. (Russian. Georgian and English summaries) Soobšč. Akad. Nauk Gruzin. SSR 98 (1980), no. 3, 553-556. (Authors' summary) 82c:73014 73C35

Zvjagin, I. P. Quantum-statistical theory of transport by localized carriers in disordered semiconductors. *Phys. Status Solidi* (*B*) **101** (1980), *no.* 1, 10–41. (From the introduction) **82d:82061** 82A42 (82A55, 82A70)

Classification of Backlund transforms of second-order partial differential ations. (Russian) Mat. Zametki 29 (1981), no. 6, 829-842, 955. (J. Chrastina) 82i:58003 58A15 (35A30)

Zvjagin, V. F. (with Nemoločnov, O. F.; Kukuškin, B. A.) Methods of identifying and utilizing regular properties of logic circuits in test synthesis. Avtomat. i Vyčisl. Tehn. (Riga) 1981, no. 1, 59-63, 99 (Russian); translated as Automat. Control Comput. Sci. 15 (1981), no. 1, 48-52. (Authors' summary) 82m:94067 94C15

Zvyagin, I. P. See Zvjagin, I. P. Zvyagin, V. F. See Zvjagin, V. F.

Zwanzig, Robert Problems in nonlinear transport theory. Systems far from equilibrium (Conf., Sitges/Barcelona, 1980), pp. 198–225, Lecture Notes in Phys., 132, Springer, Berlin, 1980. (See 82g:82004) 82A70

Zwanzig, S. The choice of approximative models in nonlinear regression. (German and Russian summaries) Math. Operationsforsch. Statist. Ser. Statist. 11 (1980), no. 1, 23-47. (Author's summary) 82k:62121 62J02 (62F12) (Author's summary) 82k:62121

Zwanzig, Z. (with Ivanov, O. V.) An asymptotic expansion for the distribution of the least-square estimator of a vector parameter of a nonlinear regression. (Russian) Dokl. Akad. Nauk SSSR 256 (1981), no. 4, 784-787. (A. Ja. Dorogovcev) 82c:62091 62J05

nziger, Daniel Covariant quantization of gauge fields without Gribov ambiguity. Nuclear Phys. B 192 (1981), no. 1, 259-269. (Author's summary) 82k:81062 81F10 (53C05, 58D30)

Zwas, Gideon (with Isaacson, Eugene) Mountain winds revisited. SIAM J. Numer. Anal. 18 (1981), no. 2, 277–288. (Authors' summary) 82d:76024 76C15 (86A35)

Zweben, Stuart H. (with Baker, Albert L.) A comparison of measures on control flow complexity. IEEE Trans. Software Engrg. 6 (1980), no. 6, 506-512. (From the introduction) 82c:68008 68B10 (90B10)

Zweckbronner, Gerhard Rechenmeister, Ingenieur und Bürger zu Ulm-Johann Faulhaber (1580-1635) in seiner Zeit. Technikgeschichte 47 (1980), no. 2, 114-132. (M. Folkerts)

82h:01026 01A45

Zweifel, P. F. Twenty years of transport theory. Transport Theory Statist. Phys. 7 (1978), no. 4, 173–190 (1979). (Editors) 82e:82026 82A70 (01A05)

(with Arthur, M. D.) Anisotropic plasma boundary value problem for longitudinal es. New frontiers in transport theory (Tucson, Ariz., 1979). Ann. Nuclear Energy 7 (1980), no. 4-5, 219-225. (Authors' summary) 82:82074 82A70 (76W05) (with Burnap, C.; Brysk, H.) Dirac Hamiltonian for strong Coulomb fields. (Italian

and Russian summaries) Nuovo Cimento B (11) 64 (1981), no. 2, 407-419. (Authors' summary) 82m:81018 81C10

van Zwet, W. R. The van Dantzig prize. (Dutch) Statist. Neerlandica 34 (1980), no. 3, 135-139. (Editors) 82i:01157 01A70 (with Bickel, P. J.; Čibisov, D. M.) On efficiency of first and second order. (French mary) Internat. Statist. Rev. 49 (1981), no. 2, 169-175. (M. G. Akritas) 82m:62071

Zwicker, William S. (with Di Prisco, Carlos A.) Flipping properties and supercardinals. Fund. Math. 109 (1980), no. 1, 31-36. (F. R. Drake) 82c:03072 Zwiebach, Barton (with Sagnotti, Augusto) Electromagnetic waves in a Bianchi type-I

universe. Phys. Rev. D (3) 24 (1981), no. 2, 305-319. (Authors' summary) 82f:83053 83C50 (53B50)

Zybin, L. M. (with Smirnov, G. A.) Approximation of continuous vector-valued functions. (Russian) Application of functional analysis to approximation theory (Russian), pp. 36-44, 158, Kalinin. Gos. Univ., Kalinin, 1980. (Hans-Jürgen Albrand) 82e:41041 41A50 (41A52)

Zybina, L. D. Groupoids with ordering in which groupoid ideals coincide with order ideals. (Russian) Modern algebra (Russian), pp. 23-30, Leningrad. Gos. Ped. Inst., Leningrad, 1980. (Jaroslav Ježek) 82b:06022 06F99 (06F05)

Życzkowski, M. (with Świsterski, W.) Optimal structural design of flexible beams with respect to creep rupture time. Structural control (Proc. Internat. IUTAM Sympos., Univ. Waterloo, Waterloo, Ont., 1979), pp. 795-810, North-Holland, Amsterdam, 1980. (See 82g:93003) 73K40 (73K05)

nt, Jan Notes on decidability and finite approximability of sentential logics. Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic 10 (1981), no. 1, 38-41. (Editors) 03B99 (03B25)

Zygmunt, Władysław (with Skupień, Zdzisław) On vertices and edges in maximum path-factors of a tree. Fund. Math. 109 (1980), no. 2, 89-101. (Linda Lesniak-Foster)

82h:05018 05C05 (05C38, 05C70)

Żytkow, Anna N. (with Thorne, Kip S.; Flammang, Richard A.) Stationary spherical accretion into black holes. I. Equations of structure. Monthly Notices Roy. Astron. Soc. 194 (1981), no. 2, 475-484. (Andrew King) 824:85006 85A15 (83C99)

KEY INDEX

A look at graph theory ★Regards sur la théorie des graphes. (French) [A look at graph theory] Proceedings of a Colloquium held at Cerisy, June 12-18, 1980. Edited by P. Hansen [Pierre Hansen] and D. de Werra. Presses Polytechniques Rom 1980. xi+316 pp. (Editors) 82d:05054 05Cxx (65-02)

iental numbers *Fonctions abéliennes et nombres lian functions and transcen

transcendants. (French) [Abelian functions and transcendental numbers] Papers from the Colloquium held at the École Polytechnique, Palaiseau, May 23–26, 1979. Edited by D. Bertrand and M. Waldschmidt. Mem. Soc. Math. France (N.S.) 1980/81, no. 2. Gauthier-Fillars, Paris. 1980, pp. 1–119. (Editors) 282:10047 10F35 Gauthier-Villars, Paris, 1980. pp. 1-119. (Editors) 82c:10047 10F35

Abstract Cauchy problems and functional differential equations *Abstract Cauchy problems property and functional differential equations. Proceedings of the Workshop on Functional Differential Equations and Nonlinear Semigroups held in Leibnitz, June 25–30, 1979. Edited by F. Kappel and W. Schappacher. Research Notes in Mathematics, 48. Pitman (Advanced Publishing Program), Boston, Mass.-London, 1981. vii + 238 pp. ISBN 0-273-08494-1 (Editors) 824:34001 34-06 (34Kxx)

Conference of the Lithuanian Mathematical Society Abstracts from the 19th Conference of the Lithuanian Mathematical Society (Kaunas, June 16-17, 1978). (Russian) Litovsk. Mat. Sb. 19 (1979), no. 3, 103-199. (Editors) 82j:00008 00A10

demy of Sciences of the Ukrainian SSR ★Ucropas Asageman Hays Украинской CCP. (Russian) [History of the Academy of Sciences of the Ukrainian SSR] Edited by B. E. Paton. "Naukova Dumka", Kiev, 1979. 836 pp. (Editors) 82h:01072 01A74

oustic, electromagnetic and elastic wave scattering—focus on the T-matrix approach ★Acoustic, electromagnetic and elastic wave scattering—focus on the T-matrix approach. Proceedings of the International Symposium held at Ohio State University, Columbus, Ohio, June 25-27, 1979. Edited by Vijay K. Varadan and Vasundara V. Varadan. Pergamon Press, Oxford-New York, 1980. xii+693 pp. ISBN 0-08-025096-3 (Editors) 82h:78002 78-06 (73-06, 76-06, 78-45)

Conference on Acoustic Propagation | Hold in Marseille, October 21–24, 1980. Rev. CETHEDEC Cahier 1980, no. 1. Centre d'Études Théoriques de la Détection et des Communications, Paris, 1980, pp. 1–370. (Editors) 824:76082 76Q05

Adaptive control systems Agarmsunae cucreans y uppanesus (Russian) [Adaptive control systems] Edited by V. I. Ivanenko. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. 82 pp. (Editors) 82a:93003 93-06

aber theory *Journées de Théorie Additive des Nombres. (French) [Conference on Additive Number Theory] Held at Bordeaux, March 14-16, 1977. Université de Bordeaux I, U.E.R. de Mathématiques et d'Informatique, Laboratoire de Théorie des Nombres, Talence, 1978. v+160 pp. (Editors) 82d:10004 101xx ances in communications *Second International Conference on Information Sciences and Systems. Vol. I. Advances in communications. Papers from INFO II held at the

University of Patras, Patras, July 9-14, 1979. Edited by Demetrios G. Lainiotis and Nicolaos S. Tzannes. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xiv + 524 pp. ISBN 90-277-1140-2 (Editors) 82d-94002 94-06 vances in computer methods for partial differential equations. II. Proceedings of the Second IMACS International Symposium on Computer Methods for Patrial differential equations.

International Symposium on Computer Methods for Partial Differential Equations held at Lehigh University, Bethlehem, Pa., June 22-24, 1977. Edited by R. Vichnevetsky. International Association for Mathematics and Computers in Simulation (IMACS), New Brunswick, N.J., 1977. vii + 392 pp. (Editors) 82a:65004 65-06 *Advances in computer methods for partial differential equations. III. Proceedings

of the Third IMACS International Symposium on Computer Methods for Partial Differential Equations held at Lehigh University, Bethlehem, Pa., June 20-22, 1979. Edited by R. Vichnevetsky and R. S. Stepleman. International Association for Mathematics and Computers in Simulation (IMACS), New Brunswick, N.J., 1979. vii + 442 pp. (Editors) 82a:65005
*Advances in computers. Vol. 20. Edited by Marshall C. Yovits.

Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xi + 283 pp. ISBN 0-12-012120-4 (Editors) 82i:68002 68-06

Advances in control Second International Conference on Information Sciences and Systems. Vol. II. Advances in control. Papers from INFO II held at the University of Patras, Patras, July 9-14, 1979. Edited by Demetrios G. Lainiotis and Nicolaos S. Tzannes. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xvi + 591 pp

12annes. D. Reidel Photisning Co., Dordrech-Boston, Mass., 1980. xvi + 591 pp.
158N 90-277-1129-1 (Editors) 824:93002 93-06
nances in data base theory ★Advances in data base theory. Vol. I. Proceedings of the
Workshop on Formal Bases for Data Bases held in Toulouse, December 12-14, 1979.
Edited by Hervé Gallaire, Jack Minker and Jean-Marie Nicolas. Plenum Press, New don, 1981. viii + 432 pp. ISBN 0-306-40629-2 (Editors) 82ac68040 (68-06)

Advances in information systems science *Advances in information systems science. Vol. 8. Edited by Julius T. Tou. Plenum Press, New York-London, 1981. xvi+332 pp. ISBN 0-306-40714-0 (Editors) 82k:68001 68-06

vances in twistor theory *Advances in twistor theory. Edited by L. P. Hughston and Richard Samuel Ward. Research Notes in Mathematics, 37. Pitman (Advanced Publishing Program), San Francisco, Calif.-London, 1979. vii + 335 pp. ISBN 0-8224-8448-X (G. M. Henkin) 82e:83002 83-06 (32Lxx, 53C55, 81D25, 81E99)

тепки) адельного в 35-ио (зд.с.к., 530-35, 811/25, 81299) готофуламісь об rarefied gases жароциналика разреженных газов. Вып. 10. (Russian) [Aerodynamics of rarefied gases. No. 10] Молекулириая газоциналика. [Molecular gas dynamics] Edited by R. G. Barancev. Leningrad. Univ., Leningrad, 1980. 239 pp. (Editors) 82b:76046 76P05 (76Nxx)

Symposium held at Ahmedabad, January 29-February 3, 1979. Edited by A. R. Prasanna, J. V. Narlikar and C. V. Vishveshwara. A Halsted Press Book. John Wiley &

ons, Inc., New York, 1980. xiv + 326 pp. (1 plate). ISBN 0-470-27007-1 (Editors) 824-83005 83-06 (81-06, 85-06)

Aix-en-Provence *Differential geometrical methods in mathematical physics. Proceedings of the International Colloquium of the CNRS held in Aix-en-Provence, September 3-7, 1979, and a conference held in Salamanca, September 10-14, 1979. Edited by P. L. García, A. Pérez-Rendón and J. M. Souriau. Lecture Notes in Mathematics, 836. Springer-Verlag, Berlin-New York, 1980. xii + 533 pp. ISBN 3-540-10275-2 (Editors) 81-06 (83-06)

Akko *Automata, languages and programming. Papers from the Eighth International Colloquium held in Akko, July 13–17, 1981. Edited by Shimon Even and Oded Kariv. Lecture Notes in Computer Science, 115. Springer-Verlag, Berlin-New York, 1981. viii + 552 pp. ISBN 3-540-10843-2 (Editors) 82i:68003 68-06

xandria, Va. *Environmetrics 81: selected papers. Papers from a Conference held in Alexandria, Va., April 8-10, 1981. SIAM-SIMS Conference Series, 8. Society for Industrial and Applied Mathematics (SIAM), Philadelphia, Pa., 1981. vii + 259 pp.
ISBN 0-89871-178-9 (Editors) 822.62004 62-06 (90-06, 92A17)

Algebra ★Исследования по геометрям и адгебре. (Russian) [Studies in geometry and algebra] Edited by V. D. Fedorov. Kirgiz. Gos. Univ., Frunze, 1978. 147 pp. (Editors)

82b:53004 53-06

жXV Вессовхива Алгебравческая Конференция. Часть Первая. (Russian) [Fifteenth All-Union Algebra Conference. Part I] Грунпы. [Groups] Held in Krasnoyarsk, July 3-6, 1979. Abstracts of papers. Edited by B. K. Durakov. Krasnojarsk. Gos. Univ., Krasnoyarsk, 1979. 201 pp. (Editors) 82h:20001a 20-06

★XV Всесовхная Антебранческая Конференция. Часть Вторая. (Russian) [Fifteenth All-Union Algebra Conference. Part II] Кольца. Адтебранческие системы. [Rings. Algebraic systems] Held in Krasnoyarsk, July 3-6, 1979. Abstracts of papers. Edited by B. K. Durakov. Krasnojarsk. Gos. Univ., Krasnoyarsk, 1979. 183 pp. (Editors) 08-06 (16-06)

★Геометрические методы в задачах адгебры и анализа. Выл. 2. (Russian)
[Geometric methods in problems of algebra and analysis. No. 2] Edited by A. V.
Černavskii. Jaroslav. Gos. Univ., Yaroslav!', 1980. 164 pp. (Editors) 82d:90004 58-06

★Вычисления в алгебре, теорин чисел и комбинаторике. (Russian)
[Computations in algebra, number theory and combinatorics] Edited by L. A. Kalužnin and N. M. Glazunov. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. 88 pp. (Editors) 82d:20006 20-06 (05-06, 10-06)

★Les arbres en algèbre et en programmation. (French) [Trees in algebra and programming] Proceedings of the Fifth Lille Colloquium held in Lille, February 21-23, 1980. Université de Lille I, U.E.R., I.E.E.A., Lille, 1980. iv + 268 pp. (Editors) 82=68004 68-06

★Algebra, Carbondale 1980. Lie algebras, group theory, and partially ordered algebraic structures. Proceedings of the Southern Illinois Algebra Conference held at Southern Illinois University, Carbondale, Ill., April 18-19, 1980. Edited by Ralph K. Amayo. Lecture Notes in Mathematics, 848. Springer-Verlag, Berlin-New York, 1981. vi + 298 pp. ISBN 3-540-10573-5 (Editors) 82d:20004 20-06 (06-06, 17-06)

★CAAP '81. Proceedings of the Sixth Colloquium on Trees in Algebra and Programming held in Genoa, March 5-7, 1981. Edited by Egidio Astesiano and Corrado

Bohm. Lecture Notes in Computer Science, 112. Springer-Verlag, Berlin-New York, 1981. vi+364 pp. ISBN 3-540-10828-9 (Editors) 827:68002 68-06 (68B05, 68E10) ebra, theory of numbers and their applications. A translation of Trudy Mat. Inst. Steklov. 148 (1978). Proc. Steklov Inst. Math. 1980, no. 4. (1981). American Mathematical Society, Providence, R.I., 1981. pp. i-vii and 1-283. (Editors) 82i:00010 00A10

ebra. Topology. Geometry ★Aлгебра. Топология. Геометрия. Том. 18. (Russian)
[Algebra. Topology. Geometry. Vol. 18] Edited by R. V. Gamkrelidze. Итоги Науки и Teximin. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. 214 pp. (Editors) 82d:00002 00А ★Алгебра. Топология. Геометрия. Том 19. (Russian) [Algebra. Topology. 00A10

Geometry. Vol. 19] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. 276 pp. (Editors) 82k:00007 00A10

Algebraic and geometric methods in linear systems theory

Algebraic and geometric methods in linear systems theory

Algebraic and geometric methods in linear systems theory. Papers presented at the AMS-NASA-NATO Summer Seminar held at Harvard University, Cambridge, Mass., June 1979. Edited by Christopher I. Byrnes and Clyde F. Martin. Lectures in Applied Mathematics, 18. American Mathematical Society, Providence, R. I., 1980. viii + 327 pp. ISBN 0-8218-1118-5 (Editors) 82a:93004 93-06

Research Institute) held at Humboldt State University, Arcata, Calif., July 29-August 16, 1974. Edited by Robin Hartshorne. Corrected reprint of the 1975 original. Proceedings of Symposia in Pure Mathematics, XXIX. American Mathematical Society, Providence, R. I., xiv + 642 pp. ISBN 0-8218-1429-X (Editors) 82c:14003 14-06

*Contributions to algebraic geometry. In honor of Oscar Zariski. Edited by Michael Artin and David Mumford. Reprint of Amer. J. Math. 101 (1979), no. 1-2. Johns Hopkins University Press, Baltimore, Md., 1979. vii +514 pp. ISBN 0-8018-2307-2

(Editors) 82g:14003 14-06

★Journées de Géométrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry,
Angers 1979. Variétés de petite dimension. [Small dimension varieties] Papers presented at the Conference held in Angers, July 2-7, 1979. Edited by Arnaud Beauville. Sijthoff & Noordhoff, Alphen aan den Rijn—Germantown, Md., 1980. xii + 323 pp. ISBN 90-286-0500-2 (Editors) 82a:14003 14-06

*Applications of commutative rings to algebraic geometry. Proceedings of a

Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 26–27, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 400 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i–ii and 1–98. (Editors) 824:13001 13–06 (14–06)

★Recent topics in algebraic geometry. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, October 6–8, 1980. Sürikaisekikenkyüsho Kökyüroku No. 409 (1980). Kyoto University, Research te for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-152. (Editors) 82d:14001

★Symposia Mathematica. Vol. XXIV. International Symposium on Algebraic Geometry held at the Istituto Nazionale di Alta Matematica Francesco Severi (INDAM), Rome, April 9-14, 1979. In the centenary of the birth of Francesco Severi (Arabanic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1981. xv+356 pp. (1plate). (Editors) 82e:14005 14-06

★Algebraic geometry. Proceedings of the Midwest Algebraic Geometry Conferen held at the University of Illinois at Chicago Circle, Chicago, Ill., May 2-3, 1980. Edited by Anatoly Libgober and Philip Wagreich. Lecture Notes in Mathematics, 862. Springer-Verlag, Berlin-New York, 1981. ii + 281 pp. ISBN 3-540-10833-5 (Editors) 82m:14001 14-06

*Lie algebras, algebraic groups and related topics. (Japanese)

Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 29-June 2, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 394 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-259. (Editors) 82≈17001 17-06 (16-06, 20Gxx)

bebraic K-theory *Algebraic K-theory, Evanston 1980. Proceedings of the Conference held at Northwestern University, Evanston, Ill., March 24–27, 1980. Edited by Eric M. Friedlander and Michael R. Stein. Lecture Notes in Mathematics, 854. Springer-Verlag, rlin-New York, 1981. ii+517 pp. ISBN 3-540-10698-7 (Editors) 82e:18001 (12-06, 14-06, 18F25)

chraic methods in graph theory *Algebraic methods in graph theory. Vol. I, II. Papers from the Conference held in Szeged, August 24-31, 1978. Edited by L. Lovász and Vera T. Sós. Colloquia Mathematica Societatis János Bolyai, 25. North-Holland Publishing Co. Amsterdum-New York, 1981. 847 pp. ISBN 0-444-85442-8 (Editors) 82k:05002 05-0

*Classification of algebraic varieties (toward the 1980s). (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 29-31, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 392 (1980). Kyoto University, Research Institute for Mathema atical Sciences, Kyoto, 1980.

pp. i-ii and 1-73. (Editors) **82a:14002** 14-06 (32-06)

ebras: ★Кольца, алгебры, молули. (Russian) [Rings, algebras, modules] Edited by V.

A. Andrunakievič. Mat. Issled. No. 62 (1981). "Štiinca", Kishinev, 1981. pp. 1-152. (Editors) 82d:16001 16-06

orithmic models in computerization of research ★Алгоритмические модели в автоматизации исследований. (Russian) [Algorithmic models in computerization of research] Edited by V. M. Ponomarev. "Nauka", Moscow, 1980. 255 pp. (loose errata). (Editors) 82h:68002 68-06

в *Вопросы анализа вычислительной сложности алгоритмов. (Russian) [Questions of the computational complexity of algorithms] Edited by V. A. Iščuk. Препринт 79 [Preprint 79], 14. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. 48 pp. (Editors) 82d:68036 68C25 (68-06)

s for calculation of the optimal mode of electrical circuits and system

★Алгоритмы расчета оптимального режима электрических сетей и систем. (Russian) [Algorithms for calculation of the optimal mode of electrical circuits and systems] Edited by G. V. Čalyi and N. A. Ohrimenko. "Štiinca", Kishinev, 1979. 96 pp. 90C50

ithms and software for applied statistical analysis *Anropura обеспечение прикладного статистического анализа. (Russian) [Algorithms and software for applied statistical analysis] Edited by T. V. Rjabuškin. Učen. Zap. Statist. uka", Moscow, 1980. pp. 1-421. (Editors) 82d:62004

All-Union Colloquium:

Probability Theory and Mathe atical Statistics *XV Всесоюзная

Школа-Коллоквиум по Теории Вероитностей и Математической Статистике. (Russian) [Fifteenth All-Union School-Colloquium on Probability Theory and Mathematical Statistics] Held in Bakuriani, February 16–23, 1981. Abstracts. Edited by N. L. Lazrieva and T. L. Šervašidze. "Mecniereba", Tbilisi, 1981. 95 pp. (Editors) 82i:60001 60-06 (62-06)

All-Union Conference

Algebra ★XV Всесоюзная Алгебранческая Конференция. Часть Первая. (Russian) [Fifteenth All-Union Algebra Conference. Part I] Группы. [Groups] Held in Krasnoyarsk, July 3-6, 1979. Abstracts of papers. Edited by B. K. Durakov. ojarsk. Gos. Univ., Krasnoyarsk, 1979. 201 pp. (Editors) 82h:20001a

★XV Всесовоная Алтебранческая Конференция. Часть Вторая. (Russian) [Fifteenth All-Union Algebra Conference. Part II] Кольца. Алтебранческие спистемы. [Rings. Algebraic systems] Held in Krasnoyarsk, July 3–6, 1979. Abstracts of papers. Edited by B. K. Durakov. Krasnojarsk. Gos. Univ., Krasnoyarsk, 1979. 183 pp. (Editors) 82h:20001b 08−06 (16−06) thematical Logic ★Пятая Всесоюзная Конференция по Математической

Joruxe. (Russian) [Fifth All-Union Conference on Mathematical Logic] Held at Novosibirsk, November 27–29, 1979. Abstracts of papers. Dedicated to Academician A. I. Mal'cev on the occasion of his seventieth birthday. Akad. Nauk SSSR Sibirsk. Oddel., Inst. Mat., Novosibirsk, 1979. 173 pp. 82a-20302. 30–66
alitative Theory of Differential Equations ★V Всесоюзная Конференция по

Качественной Теории Дифференциальных Урависний. (Russian) [Fifth All-Union Conference on Qualitative Theory of Differential Equations] Abstracts. Edited by K. S. Sibirskii. "Stiinca", Kishinev, 1979. 204 pp. (Editors) 82d:34002 34-06 (35-06, 58-06)

Union Seminar:
Problems of Stability of Stochastic Models

* Проблемы устойчивости

стохастических моделей. (Russian) [Problems of stability of stochastic models] Proceedings of the Fourth All-Union Seminar held in Palanga, April 1979. Edited by V. M. Zolotarev and V. V. Kalašnikov. Vsesojuz. Nauč.-Issled. Inst. Sistem. Issled., Mascow, 1980. 124 pp. (loose errata). (Editors) 82c:60005 60-06

All-Union Sympo

up Theory ★VI Всесованый Свыпознум по Теории Групп. (Russian) [Sixth All-Union Symposium on Group Theory] Held in Čerkassy, September 19–21, 1978. Edited by S. N. Černikov [S. M. Černikov]. "Naukova Dumka", Kiev, 1980. 224 pp. (Editors) 82d:20005 20-06

★Коуровская тетрадь: нерешенные задачи теорин групп. (Russian) [Kourovka notebook: unsolved problems in group theory] Seventh edition. Including problems from the Seventh All-Union Symposi held at Shushenskoe, 1980. Edited by V. D. Mazurov, Ju. I. Merzljakov and V. A. Curkin. Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1980.

V. A. Cutkin. Akad. Natur Sasak Sionisk. Other., Inst. Nat., Novosionisk, 1980. 115 pp. (Editor's review (Ju.I.M.)) 821:20005 20-06 eory of Symmetry and its Generalizations ★Вессованый Симпозиум по Теория Сиометрии и ее Обобщениям. (Russian) [All-Union Symposium on the Theory of Symmetry and its Generalizations] Тезисы докладов. [Abstracts of papers]. Edited A. M. Zamorzaev. Kišinev. Gos. Univ., Kishinev, 1980. 132 pp.

51F15 (20-06, 51M99)

Alxebra See Bueso Montero, J. L., 82a:18011; Gonzalez Dorrego, M. R., 82b:18008; Jara Martinez, P., 82e:18020; Rodríguez Fernández, C., 82f:18017 and Torrecillas Jover, B., 82e:16026

refrean mathematical heritage: algebra and applied mathematics *American mathematical heritage: algebra and applied mathematics. Papers from the Third American ematical Heritage Symposium on the History of Algebra held at the University of Texas, El Paso, Tex., November 15, 1975 and from the Fourth American Mathematical Heritage Symposium on the History of Applied Mathematics held at the University of Texas, Arlington, Tex., October 2, 1976. Edited by J. Dalton Tarwater, John T. White, Carl Hall and Marion E. Moore. Mathematics Series, 13. Texas Tech University, Department of Mathematics, Lubbock, Tex., 1981. iii+127 pp. (Editors) 82k:01002

erican Mathematical Society Translations, Ser. 2 *American Mathematical Society Translations. Ser. 2, Vol. 112. Nine papers on Hilbert's 16th problem. A translation of Gor'kov. Gos. Univ. Učen. Zap. No. 87 (1969). Translated from the Russian by M. A. Dostal and M. D. Tretkoff. American Mathematical Society Translations, Series 2, 112. American Mathematical Society, Providence, R.I., 1978. iv + 172 pp. ISBN 0-8218-3062-7 (Editors) 82a:00009 00A10 (14G30)

*American Mathematical Society Translations, Ser. 2, Vol. 116. Three papers on dynamical systems. A partial translation of Ninth Mathematical Summer School (Kaciveli, 1971) (Russian), "Naukova Dumka", Kiev, 1976. Edited by J. Szücs. American Mathematical Society, Providence, R.I., 1981. v+169 pp. ISBN 0-8218-3066-X (Editors) 00A10 (58Fxx, 70F15, 70K50)

Ames, Iowa Directions in time series. Proceedings of the IMS Special Topics Meeting on Time Series Analysis held at Iowa State University, Ames, Iowa, May 1-3, 1978. Edited by David R. Brillinger and George C. Tiao. Institute of Mathematical Statistics, Hayward,

Calif., 1980. iv + 302 pp. (Editors) 82f:62174 62M10

Amiens ★3e Colloque sur les Catégories. Partie I. [Third Colloquium on Categories. Part I] Dedicated to Charles Ehresmann. Held in Amiens, July 7-12, 1980. Edited by Andrée Charles Ehresmann. Cahiers Topologie Géom. Différentielle 21 (1980), no. 4,343-438. Université d'Amiens, U.E.R. de Mathématiques, Amiens, 1980. pp. 343-446. (Editors)

★3e Colloque sur les Catégories. Partie II. (French) [Third Colloquium on Categories. Part II) Dedicated to Charles Ehresmann. Held in Amiens, July 7-12, 1980. Edited by Andrée Charles Ehresmann. Cahiers Topologie Géom. Différentielle 22 (1981), no. 1,1-112. Université d'Amiens, U.E.R. de Mathématiques, Amiens, 1981. pp. 1-111. (Editors) 82b:18001b 18-06

sterdam *Colloquium: Numerical Solution of Partial Differential Equations. Held in Delft, Nijmegen and Amsterdam during 1980. Edited by J. G. Verwer. MC Syllabus, 44.

Mathematisch Centrum, Amsterdam, 1980. iv+194 pp. ISBN 90-6196-205-6 (Editors) 82a:65006 65-06 (65Mxx)

*Pattern recognition in practice. Proceedings of an International Workshop held in Amsterdam, May 21-23, 1980. Edited by Edzard S. Gelsema and Laveen N. Kanal. North-Holland Publishing Co., Amsterdam-New York, 1980. xii + 552 pp. ISBN 0-444-86115-7 (Editors) 824:68053 68G10

★Studies on Christiaan Huygens. Invited papers from the Symposium on the Life and Work of Christiaan Huygens held in Amsterdam, August 22-25, 1979. Edited by H. J. M. Bos, M. J. S. Rudwick, H. A. M. Snelders and R. P. W. Visser. C. V. Swets & Zeitlinger, Lisse, 1980. v+321 pp. (30 plates). ISBN 90-265-0333-4 (P. Bockstaele) 01A45 (70-03, 78-03, 85-03, 86-03)

★Formal methods in the study of language. Part 1. Proceedings of the Third Amsterdam Colloquium held in Amsterdam, March 25–28, 1980. Edited by Jeroen A. G. Groenendijk, Theo M. V. Janssen and Martin B. J. Stokhof. Mathematical Centre Tracts, 135. Mathematisch Centrum, Amsterdam, 1981. v+322 pp. ISBN 90-6196-211-0 (Editors) 82k:03031a 03B65 (03-06, 68F99)

*Formal methods in the study of language. Part 2. Proceedings of the Third Amsterdam Colloquium held in Amsterdam, March 25-28, 1980. Edited by Jeroen A. G. Groenendijk, Theo M. V. Janssen and Martin B. J. Stokhof. Mathematical Centre Tracts, 136. Mathematisch Centrum, Amsterdam, 1981. pp. i-iii and 323-599 ISBN 90-6196-213-7 (Editors) 82k:03031b 03B65 (03-06, 68F99)

heim, Calif. ★1980 National Computer Conference. Proceedings of the AFIPS Conference held in Anaheim, Calif., May 19-22, 1980. Edited by Don Medley. AFIPS Conference Proceedings, 49. AFIPS Press, Arlington, Va., 1980. xii+919 pp. (Editors)

82f:68004 68-06 (94-06)

Analyse et contrôle de systèmes

★Analyse et contrôle de systèmes. (English) [Analysis and control of systems] Papers from the Seminar organized by the Institut de Recherche d'Informatique et d'Automatique (IRIA) held at Rocquencourt, February-October 1979. Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. 121 pp. ISBN 2-7261-0237-9 (Editors) 82f:60004 60-06 (49-06)

Analyse de données et informatique ★Analyse de données et informatique. [Data analysis and computer science] Proceedings of the Conference held at Fontainebleau, March 19–30, 1979. Edited by M. Amirchahy and D. Néel. Institut National de Recherche en

ntique (INRIA), Rocquencourt, 1980. ix + 310 pp. tors) 82h:62096 62H30 (92-06)

1790 Analyse harmonique Analyse harmonique (French) [Harmonic analysis] Groupe de travail sur les espaces de Banach invariants par translation. [Study group on translation invariant Banach spaces] Publications Mathématiques d'Orsay 81 [Mathematical Publications of Orsay 81], 8. Université de Paris-Sud, Département de Mathématique, Orsay, 1981. 132 pp. (not consecutively paged). (Editors) 82k:43001 43-06 (46-06) lyse sur les variétés ★Analyse sur les variétés. (French) [Analysis on manifolds] Papers

lyse sur les variétés from a Conference held at the University of Metz, Metz, May 28-30, 1979. Astérisque, 80. Société Mathématique de France, Paris, 1980. 96 pp. (Editors) 82e:58001

alysis *Teomerpurecene meroma в задачах алтебры и апализа. Вып. 2. (Russian) [Geometric methods in problems of algebra and analysis. No. 2] Edited by A. V. Černavskii. Jaroslav. Gos. Univ., Yaroslav!', 1980. 164 pp. (Editors) 82d:00004 58-06

★General topology and modern analysis. Proceedings of the Conference held at the University of California, Riverside, Calif., May 28-31, 1980. In honor of the retirement of Professor F. Burton Jones. Edited by L. F. McAuley and M. M. Rao. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xv+514 pp. ISBN 0-12-481820-X (Editors) 82e:54001 54-06

alysis and control of systems *Analyse et contrôle de systèmes. (English) [Analysis and control of systems] Papers from the Seminar organized by the Institut de Recherche d'Informatique et d'Automatique (IRIA) held at Rocquencourt, February-October 1979. Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. 121 pp. ISBN 2-7261-0237-9 (Editors) 82t:60004 60-06 (49-06)

folds *Analyse sur les variétés. (French) [Analysis on manifolds] Papers from a Conference held at the University of Metz, Metz, May 28-30, 1979. Astérise 80. Société Mathématique de France, Paris, 1980. 96 pp. (Editors) 82e:58001

alysis and optimization of systems *Analysis and optimization of systems. Proceedings of the Fourth International Conference held in Versailles, December 16-19, 1980. Edited by A. Bensoussan and J.-L. Lions, Lecture Notes in Control and Information Sciences. 28. Springer-Verlag, Berlin-New York, 1980. xiv + 999 pp. ISBN 3-540-10472-0 (Editors) 49-06 (90-06, 93-06)

820:49012 49-06 (90-06, 53-06)

Analysis of variance ★Analysis of variance. Edited by P. R. Krishnaiah. Handbook of Statistics, 1. North-Holland Publishing Co., Amsterdam-New York, 1980. xvii+1002 pp. ISBN 0-444-85335-9 (S. John) 821:62102 62H15

Statistics, 1. Notine Frontain Publishing Co., Amsterdame February, 1960. Nut+1002 pp. 1SBN 0-444-85335-9 (S. John) 8216-62102 62H15

Analysis of variance with unbalanced data ★Special issue on analysis of variance with unbalanced data. Edited by R. R. Hocking and F. M. Speed. Comm. Statist. A—Theory Methods 9 (1980), no. 2. Marcel Dekker, Inc., New York-Basel, 1980. pp. 117-241. (Editors) 82d:62122 62J10

Analytic functions * Теория аналитических функций и гармонический анализ. (Russian) [Theory of analytic functions and harmonic analysis] Edited by B. V. Hvedelidze. Trudy Tbiliss. Mat. Inst. Razmadze Akad. Nauk Gruzin. SSR 66 (1980). "Mecniereba", Tbilisi, 1980. pp. 1-117. (Editors) 82d:00009 30-06 (00A10)

Analytic methods for investigating nonlinear oscillations * Аналитические методы муне methods for investigating nonlinear oscillations — Alazantraveckue методы исследования нелинейных колебаний. (Russian) [Analytic methods for investigating nonlinear oscillations] Edited by Ju. A. Mitropol'skii. Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1980. 188 pp. (Editors) 82e:34002 34-06 alytic number theory ★Théorie analytique des nombres. (French) [Analytic number

Hebery] Proceedings of the Mathematical Symposium held in Tokyo, November 30, 1980. Edited by Tikao Tatuzawa and Jean-Loup Mauclaire. Monographies Scientifiques de la Maison Franco-Japonaise [Scientific Monographs of the Maison Franco-Japonaise], 3. Maison Franco-Japonaise, Tokyo, 1981. i+151 pp. (Editors) 82h:10004

Analytic number theory and the theory of functions ** Аналитическая теория чисел и теория функций. 4. (Russian) [Analytic number theory and the theory of functions. 4] Edited by G. V. Kuz'mina and O. M. Fomenko. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 112 (1981). "Nauka" Leningrad. Otdel., Leningrad, 1981. pp. 1-204. (Editors) 82m:10005 10-06 (30-06)

Analytic sets **Analytic sets. Lectures delivered at a Conference held at University

College, University of London, London, July 16-29, 1978. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1980. x+499 pp. ISBN 0-12-593150-6 (Douglas Cenzer) 82m:03063 03E15 (03D55, 04A15, 54H05, 60G40, 90D13)

alytic varieties *Various problems on analytic varieties. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 4-7, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 387 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-131. (Editors) 82b:32001 32-06

(Editors) 820:2001 32-06
gers *Journées de Géométrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry,
Angers 1979. Variétés de petite dimension. [Small dimension varieties] Papers presented at the Conference held in Angers, July 2-7, 1979. Edited by Arnaud Beauville. Sijthoff & Noordhoff, Alphen aan den Rijn—Germantown, Md., 1980. xii + 323 pp ISBN 90-286-0500-2 (Editors) 82a:14003 14-06

Academy of Sciences of the Ukrainian SSR On the sixtieth anniversary of the Academ of Sciences of the Ukrainian Soviet Socialist Republic. (Russian) Ukrain. Mat. Z. 31 (1979), no. 1, 3-5. (Editors) 82e:01116 01A74

Birth of Bydžovský, Bohumil See Drábek, Karel, 82g:01048
Birth of Carslaw, Horatio Scott See Jaeger, J. C., 82g:01056
Birth of Dydyrko, V. K. Vladimir Kondraťevič Dydyrko (on the hundredth anniversary of his birth). (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1978, no. 3, 77. (Editors) 82f:01159 01A70

Birth of Einstein, Albert *General relativity and gravitation. Vol. 2. One hundred years after the birth of Albert Einstein. Edited by A. Held. Plenum Press, New York-London, 1980. xviii + 540 pp. ISBN 0-306-40266-1 (Editors) 82d:83004 83-06

See also Grigor'jan, A. T., 82f:01106
Birth of Faulhaber, Johannes See Hawlitschek, Kurt, 82h:01052

Birth of Fejér, Léopold See Fenyô, István, 82k-01032
Birth of Ibn Sînā, Abū 'Alī al-Ḥuṣayn ibn 'Abdallāh * (Special issue on the millennium of the birth of Ibn Sinā). (Russian) Edited by R. B. Baratov. Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk 1980, no. 3(77). "Doniš".

reary: (continued)

Dushanbe, 1980. pp. 1-104. (Editors) 82b:01010

*A69 Ams H6m Cama. (Russian) [Abū 'Afi Ibn Sinā] K 1000-детяво со двя рожденяя. [On the 1000th anniversary of his birth] Edited by M. B. Baratov, P. G. Bulgakov and U. I. Karimov. "Fan", Tashkent, 1980. 248 pp. (E. S. Kennedy) 82k:01016

See also Sagadeev, A. V., 82f:01019

Birth of Krylov, N. M. See Mitropol'skii, Ju. A., 82f:01124

Birth of Lambert, Johann Heinrich See Laptev, B. L.; et al., 82e:01059

Birth of Leibenzon, L. S. See Sedov, L. L; et al., 82i:01062

Birth of Lichtenstein, Leon See Przeworska-Rolewicz, Danuta, 82m:01066

Birth of Mal'cev, A. I. See Halezov, E. A., 82f:01109

Birth of Mandel'Stam, L. I. ★Академик Л. И. Мандельнтам. (Russian) [Academician L. I. Mandel'Stam] К 100-летию со дви рождении. [On the 100th anniversary of his birth]. Edited by M. A. Leontovič, A. M. Prohorov and S. M. Rytov. "Nauka", w, 1979. 312 pp. (1 plate). (Table of contents) 82g:01085

Birth of Petrovskii, I. G. See Aleksandrov, P. S.; et al., 82c:01067

Birth of Poincaré, Henri See Mitropolskii, Ju. A., 82a:01042
Birth of Poisson, Siméon Denis See Grigorjan, A. T.; et al., 82m:01059
Birth of Riesz, Frigyes See Fenyő, István, 82k:01032
Birth of Romanovskii, V. I. Vsevolod Ivanovič Romanovskii (on the occasion of the 100th anniversary of his birth). (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat.

Nauk 1979, no. 6, 3-5 (1 plate). (Editors) 82f:91158 01A70

Birth of Severi, Francesco *Symposia Mathematica. Vol. XXIV. International Symposium on Algebraic Geometry held at the Istituto Nazionale di Alta Matematica Francesco Severi (INDAM), Rome, April 9-14, 1979. In the centenary of the birth of Francesco Severi. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1981. xv+356 pp. (1plate). (Editors) 82e:14005 14-06

Birth of Toeplitz, Otto See Gohberg, Israel, 82f:01102 Death of Abel, Niels Henrik See Ore, Oystein, 82h:01064

Death of Maxwell, James Clerk James Clerk Maxwell (1831-1879) (on the 100th anniversary of his death). (Bulgarian) With papers by Maxwell, Albert Einstein and M. Norton Wise. Translated by B. Penkov and D. Vačov. Fiz.-Mat. Spis. B"lgar. Akad. Nauk. 22(55) (1979), no. 4, 303-328 (1980). (Editors) 82f:01160 (01A75)

See also Polik, Josef. 82f:01129

Death of Young, Thomas See Arago, D. F., 82g:01038

Fibonacci Association *A collection of manuscripts related to the Fibonacci sequence. 18th anniversary volume of the Fibonacci Association. Edited by Verner E. Hoggatt, Jr. and Marjorie Bicknell-Johnson. Fibonacci Association. Edited by Verner E. Hoggatt, vi+229 pp. (Editors) 82i:10003 10-06

Wiskundig Genootschap *Two decades of mathematics in the Netherlands. 1920-1940.

A retrospection on the occasion of the bicentennial of the Wiskundig Genootschap.

Part I, II. Edited by E. M. J. Bertin, H. J. M. Bos and A. W. Grootendorst. atical Centre, Amsterdam, 1978. xxiv + 379 pp. (Editors) 82h:01040 01A60 (01-06)

mul review of fluid mechanics *Annual review of fluid mechanics. Vol. 13. Edited by Milton Van Dyke, J. V. Wehausen and John L. Lumley. Annual Reviews Inc., Palo Alto, Calif., 1981. iv + 530 pp. ISBN 0-8243-0713-5 (Editors) 821:76001 76-02 (49F10, 82A05, 85A05, 86-02, 92A09)

★Annual review of fluid mechanics. Vol. 14. Edited by Milton Van Dyke, J. V. Wehausen and John L. Lumley. Annual Reviews Inc., Palo Alto, Calif., 1982. iii + 456 pp. ISBN 0-8243-0714-3 (Editors) 82m:76001 76-06

Application of mathematical economics methods in national planning * Применен экономико-математических методов в народном хозяйстве. (Russian) [Application of mathematical economics methods in national planning] Edited by I. D. Stepanenko and

E. G. Lange. "Ilim", Frunze, 1980. 240 pp. (Editors) 82c:90001 Applications of commutative rings to algebraic geometry *Applications of commutative rings to algebraic geometry. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 26-27, 1980. Sürikaisekikenkyüsho Kõkyüroku No. 400 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-98. (Editors) 82d:13001 13-06

tions of information and control syste ns *Second International Conference on Information Sciences and Systems. Vol. III. Applications of information and control systems. Papers from INFO II held at the University of Patras, Patras, July 9-14, 1979. Edited by Demetrios G. Lainiotis and Nicolaos S. Tzannes. D. Reidel Publishi Dordrecht-Boston, Mass., 1980. xiv + 520 pp. ISBN 90-277-1143-7 (Editors) 824:93003 93-06 (94Axx)

lications of partial differential equations and numerical analysis *Applications of partial differential equations and numerical analysis. (Iapanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 12–14, 1981. Sürikaisekikenkyüsho Kõkyüroku No. 430 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-158. (Editors) 82g:35003 35-06 (65-06, 76-06)

(Editors) 842:39003 33-40 (60-40), (6-40)
piled analysis for partial differential equations in applied sciences *Applied analysis for
partial differential equations in applied sciences. [Japanese] Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 12-15, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 386 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-301.

(Editors) 824:35005 35-06 (73-06, 76-06)

Slied combinatorial theory and algorithms

Applied combinatorial theory and algorithms. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, December 8-9, 1980. Sürikaisekikenkyüsho Kökyűroku No. 427 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-iii and 1-192. (Editors) 82g:05001 05-06 (05Cxx, 68B15,

- athematics *Rassegna di matematica (Italian) [Mathematics review] Logica latica. Matematica applicata. Didattica della matematica. [Mathematical logic. Applied mathematics. Teaching of mathematics]. Edited by Marco Borga, Polo Freguglia and Dario Palladino. Casa Editrice Tilgher, Genoa, 1980. 100 pp. (Editors)
- теор prontems of theoretical and mathematical physics ★Прикладные задачи
 теорстической и математической физики. (Russian) [Applied problems of theoretical
 and mathematical physics] Edited by N. A. Avdonin [N. Avdonins]. Late. Ges. Univ.,
 Riga, 1980. 132 pp. (Editors) 824:65002 65—06
- hiled stochastic control in econometrics and management science *Applied stochastic control in econometrics and management science. Edited by Alain Bensoussan, Paul Kleindorfer and Charles S. Tapiero. Contributions to Economic Analysis, 130. North-Holland Publishing Co., Amsterdam-New York, 1980. xv+304 pp. ISBN 0-444-85408-8 (Editors) 82x:90001 90-06
- ISBN 0-444-85-40-8 (Editors) важжиний эм-но reciniting subtion of some problems for differential and integral equations of a character ★Приближению решение некоторых задач для дифференциаль интеградыных уравнений прикладного характера. (Russian) [Approximate solution of some problems for differential and integral equations of applied character] Edited by M.
- N. Zaharova. Hpenpuur 80 [Preprint 80], 17. Akad. Nauk Ukrain. SSR, Inst. Kibernet. Kiee, 1980. 48 pp. (Editors) 82gc5804 65-06 reoximation of functions by polynomials and splines. A translation of Trudy Mat. Inst. Steklov. 145 (1980). Proc. Steklov Inst. Math. 1981, no. 1. American Mathematical So. pp. i-vi and 1-270. (Editors) 82e:00009 00A10 (41-06) natical Society, Providence, R.I., 1981.
- pp. 1-will all 1-20 (callido) proximation theory. *Functional analysis, holomorphy and approximation theory.

 Proceedings of the Seminar held at the Universidade Federal do Rio de Janeiro, Rio de Janeiro, August 7-11, 1978. Edited by Silvio Machado. Lecture Notes in Mathematics, 843. Springer-Verlag, Berlin-New York, 1981. vi+636 pp. ISBN 3-540-10560-3 (Editors) 46-06 (32-06)
- reximation theory and applications Approximation theory and applications.

 Proceedings of a Workshop held at the Technion—Israel Institute of Technology, Haifa, May 5-June 25, 1980. Edited by Zvi Ziegler. Academic Press, Inc. [Harcourt Brace ovich, Publishers], New York-London, 1981. xi+358 pp. ISBN 0-12-780650-4
- (Editors) 82d:41001 41-06 (65-06)
 cata, Calif. ★Algebraic geometry, Arcata 1974. Proceedings of the Symposium in Pure Mathematics of the American Mathematical Society (Twenty-First Annual Sun Research Institute) held at Humboldt State University, Arcata, Calif., July 29-August 16, 1974. Edited by Robin Hartshorne. Corrected reprint of the 1975 original. Proceedings of Symposia in Pure Mathematics, XXIX. American Mathe ttical Society, Providence, R.I., 1979. xiv+642 pp. ISBN 0-8218-1429-X (Editors) 82c:14003 14-06

 Archimedes' balance ★Ο Ζυγοστου Αρχινηδουσ. (Greek) [Archimedes' balance] With a
- translation of the Arabic version of the original into Greek by Ali Nur. With an introduction in Greek by Evangelos S. Stamatis. With a translation of the introduction and the Greek version into English by Stamatis. Evangelos S. Stamatis, Athens, 1979. 8 pp. (J. L. Berggren) 82b:01004 01A20 (01A30)
- ie *Computer arithmetic. Edited by Earl E. Swartzlander, Jr. Benchmark Papers in Electrical Engineering and Computer Science, 21. Dowden, Hutchinson & Ross, Inc.. Stroudsburg, Pa., 1980. xiii+379 pp. ISBN 0-87933-350-2 (Editors) 82c:68003 68-06 68-06
- gton, Tex. *American mathematical heritage: algebra and applied mathematics. Papers from the Third American Mathematical Heritage Symposium on the History of Algebra held at the University of Texas, El Paso, Tex., November 15, 1975 and from the Fourth American Mathematical Heritage Symposium on the History of Applied Mathematics held at the University of Texas, Arlington, Tex., October 2, 1976. Edited by J. Dalton Tarwater, John T. White, Carl Hall and Marion E. Moore. Mathematics Series, 13. Texas Tech University, Department of Mathematics, Lubbock, Tex., 1981. iii+127 pp. (Editors) 82k:01002 01-06
- Artificial intelligence *Teoperuxo-игровые методы решения задач искусственного интеллекта и их приложение. (Russian) [Game-theoretic methods for solving problems of artificial intelligence and their applications] Edited by V. A. Koševaja. Препринт 80 [Preprint 80], 14. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 65 pp. (Editors) 68G20
 - ж Вопросы теория роботов и искусственного интеллекта. (Russian) [Problems on the theory of robots and artificial intelligence] Edited by V. I. Rybak and V. M. Krot. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 84 pp. (Editors) 82g:68091a
- meets contemporains de la science ★Aspects contemporains de la science. (French)
 [Contemporary aspects of science] Proceedings of a Colloquium held in Brussels, March
 2-3, 1979. Acad. Roy. Belg. Cl. Sci. Mém. Collect. 8° (2) 44 (1981), no. 1. Académie Royale de Belgique, Brussels, 1981. pp. 1-285. (Editors) 82k:00008
- ects of contemporary complex analysis. *Aspects of contemporary complex analysis.

 Proceedings of the NATO Advanced Study Institute held at the University of Durham, Aspects of contemp Durham, July 1-20, 1979. Edited by David A. Brannan and James G. Clu Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1980. xiii + 572 pp. ISBN 0-12-125950-1 (Editors) 82f:30001 30-06
- ects of effective algebra *Aspects of effective algebra. Proceedings of a Conference held at Monash University, Clayton, August 1-4, 1979. Edited by John N. Crossley. Upside Down A Book Co., Yarra Glen, Vic., 1981. x+290 pp. ISBN 0-949865-01-X (Editors) 82h:03003 03-06 (03Dxx)
- erisque ★Travaux de Thurston sur les surfaces. (French) [The works of Thurston on surfaces] Séminaire Orsay. With an English summary. Astérisque, 66-67. Société Mathématique de France, Paris, 1979. 284 pp. (William Harvey) 82m:57003 57M99 (32G15, 58F99)
 - Astérisque, 77. Société Mathér 2001 32-06 (42-06, 46-06) *Representation theorems for Hardy spaces. de France, Paris, 1980. i+151 pp. (Editors) 82a:32001
- See also Louveau, Alain, 82j:03062 stronomical" chapters of the Ethiopic Book on Enoch (72-82) The "astronomical" chapters on the Ethiopic Book of Enoch (72 to 82). Translated from the Ethiopic and with comments by Otto Neugebauer. With notes on the Aramaic fragments by Matthew Black. Mat.-Fys. Medd. Danske Vid. Selsk. 40, no. 10, 42 pp. (1981). (Summary) 01A15 (85-03)

- ds in system dynas nies *Асимитотические методы в да
- Russian) [Asymptotic methods in system dynamics] Edited by S. V. Eliseev. "Nauka" Slibirsk. Oldel., Novasibirsk, 1980. 193 pp. (Editors) 82k-76001 76-06 (76B20, 76Gxx) nehronous motors and their optimization **Acanaxpounting двягатели в их оптимизация. (Russian) [Asynchronous motors and their optimization] Edited by G. V. Čalyi and I. G.
- (Russan) [Asynchronous motors and their optimization]. Earlied by V. V. Calyl and F. G. Svirskaja, "Sininea", Kishineo, 1979. 91 pp. (Editors) 82g-93001 93-06 erbach Annual: 1980 best computer papers

 *The Auerbach Annual: 1980 best computer papers. Edited by Isaac L. Auerbach. North-Holland Publishing Co., New York-Amsterdam, 1980. xiii + 412 pp. ISBN 0-444-0447-5 (Editors) 82k:68002 68-06 tomata, languages and programming

 *Automata, languages and programming

 *Papers from the Eighth International Colloquium held in Akko, July 13-17, 1981. Edited by Shimon Even and Oded Kariv. Lecture Notes in Computer Science, 115. Springer-Verlag, Berlin-New York, 1981. viii+552 pp. ISBN 3-540-10843-2 (Editors) 82i:68003 68-06
- ated systems for control of enterprises * Автоматизированные системы управления едиринтиков. (Russian) [Automated systems for control of enterprises] Edited by V. E. Kravčenko. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. 103 pp. (Editors) 90B35
- omatic pattern recognition and perception by a computer

 **Classification automatique et perception par ordinateur. (French) [Automatic pattern recognition and perception by computer] Papers from the Seminar organized by the Institut de Recherche d'Informatique et d'Automatique (IRIA) held at Rocquencourt, October 1978-June 1979. Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. 345 pp. ISBN 2-7261-0238-7 (Editors) 82f:68001 68-06 (68G10)
- mation of the control of industrial plants *Автоматизация управления и объектами. (Russian) [Automation of the control of industrial plants] Edited by B. B. Timofeev and L. A. Grečina. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 105 pp. (Editors) 824:90069 90B35
- tion of scientific investigations *Antomatinaar иня научимх исследов (Russian) [Automation of scientific investigations] Edited by G. K. Krug. Trudy
- Moskov Orden. Lenin. Energet. Inst. No. 445 (1980). Moskov. Energet. Inst., Moscow, 1980. pp. 1–91. (Editors) 82d:62005 62–06

 tomorphic forms, representation theory and arithmetic ★Automorphic forms, representation theory and arithmetic. Papers presented at the International Colloquium held in Bombay, January 8–15, 1979. Tata Institute of Fundamental Research Studies in Mathematics, 10. Published for the Tata Institute of Fundamental Research, Bombay; by Springer-Verlag, Berlin-New York, 1981. iv + 355 pp. ISBN 3-540-10697-9 (Editors) 82i:10036 10D40 (10-06, 22E45, 22E55)
- Bad Honnef ★Graph-theoretic concepts in computer science. Proceedings of the Sixth International Workshop WG 80 held in Bad Honnef, June 15-18, 1980. Edited by Hartmut Noltemeier. Lecture Notes in Computer Science, 100. Springer-Verlag, Berlin-New York, 1981. x+403 pp. ISBN 3-540-10291-4 (Editors) 82g:68005
- Bad Nauheim *Robuste Verfahren. (German) [Robust methods] Twenty-fifth Biometric Colloquium of the German Region of the International Biometric Society held in Bad Nauheim, March 9, 1979. Edited by Horst Nowak and Reinhard Zentgraf. Medizinische Informatik und Statistik [Medical Information Science and Statistics], 20. Springer-Verlag, Berlin-New York, 1980. v+121 pp. (loose errata). ISBN 3-540-10234-5 (Helmut Rieder) 82i:62003
- 62-03 (62F35) Stuer *Polyoptimierung-theoretische Grundlagen und Anwendungen. (German) [Polyoptimization-theoretical foundations and applications] Lectures from the Seminar held at Bad Stuer, March 29-April 4, 1976. ZKI-Informationen 78 [ZKI Information 78], 2. Akademie der Wissenschaften der DDR, Zentralinstitut für Kybernetik und Informationsprozesse, Berlin, 1978. 136 pp. (Editors) 82d:90002
- Bad Tatzmannsdorf * The First Pannonian Symposium on Mathematical Statistics. Held at Bad Tatzmannsdorf, September 16-21, 1979. Edited by Pál Révész, Leopold Schmetterer and V. M. Zolotarev. Lecture Notes in Statistics, 8. Springer-Verlag, New York-Berlin,
- 1981. vi + 308 pp. ISBN 0-387-90583-9 (Editors) 82f-62005 62-02 (60-02)

 Bad Windsheim ★Geometry—von Staudt's point of view. Proceedings of the NATO

 Advanced Study Institute held at Bad Windsheim, July 21-August 1, 1980. Edited by Peter Plaumann and Karl Strambach. NATO Advanced Study Institute Series. Ser. C: Mathematical and Physical Sciences, 70. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xi+430 pp. ISBN 90-277-1283-2 (Editors) 82e:51005 51-06
- uriani ★XV Всесовознав Школа-Коллоквиум по Теории Вероятностей и Математической Статистике. (Russian) [Fifteenth All-Union School-Colloquium on Probability Theory and Mathematical Statistics Held in Bakuriani, February 16-23, 1981. Abstracts. Edited by N. L. Lazrieva and T. L. Šervašidze. "Mecniereba", Tbilisi, 1981. 95 pp. (Editors) 82i:60001 60-06 (62-06)
- 1361. 35 pp. (Editors) 821000011 60-00 (02-06) 137. Alta. *Particles and fields. Proceedings of the Banff Summer Institute held in Banff, Alta., August 25-September 3, 1977. Edited by David H. Boal and Abdul N. Banff, Alta. Kamal. Plenum Press, New York-London, 1978. viii + 462 pp. ISBN 0-306-31147-X (Editors) 82e:81002 81-06
- celona *Systems far from equilibrium. Papers from the Sitges Conference on Statistical Mechanics held in Sitges and Barcelona, June 1980. Edited by Luis Garrido. Lecture Notes in Physics, 132. Springer-Verlag, Berlin-New York, 1980. xv+403 pp.

 ISBN 3-540-10251-5 (Editors) 82g:82004

 82-06 (58-06, 76F99, 82A35, 82A70)

 Bayesian analysis in econometrics and statistics ★Bayesian analysis in econometrics and
- statistics. Essays in honor of Harold Jeffreys. Edited by Arnold Zellner. Studies in Bayesian Econometrics, 1. North-Holland Publishing Co., Amsterdam-New York, 1980. xi + 474 pp. ISBN 0-444-85270-0 (J. M. Bernardo) 82d:62170 62P20 (62A15)
- tics *Bayesian statistics. Proceedings of the First International Meeting held in Valencia, May 28-June 2, 1979. Edited by J. M. Bernardo, M. H. DeGroot, D. V. Lindley and A. F. M. Smith. University Press, Valencia, 1980. 647 pp. ISBN 84-370-0172-2 (Editors) 82k:62003 62-06 (62C10, 92A25)
- Bellaire, Mich. *Proceedings of the 1979 International Conference on Parallel Processing. Held at Bellaire, Mich., August 21-24, 1979. Edited by Oscar N. Garcia. *IEEE Compu Society*, New York, 1979. viii+326 pp. (Editors) 82h:68024 68B20 (68-06, 94-06) 68B20 (68-06, 94-06)
- Berkeley, Calif. ★Proceedings of the Tarski Symposium. Held at the University of California, Berkeley, Calif., June 23-30, 1971. Edited by Leon Henkin, John Addison, William Craig, C. C. Chang [Chen Chung Chang], Dana Scott and Robert Vaught. Corrected reprint of the 1974 original. Proceedings of Symposia in Pure Mathematics,

XXV. American Mathematical Society, Providence, R. I., 1979. xx+498 pp.
ISBN 0-8218-1425-7 (Editors) 82b:03006 03-06 (01A70)
*The Chern Symposium 1979. Proceedings of the International Symposium on Differential Geometry in honor of S. S. Chern held in Berkeley, Calif., June 1979. Edited by W. Y. Hsiang, S. Kobayashi [Shoshicki Kobayashi], I. M. Singer, A. Weinstein, J.

Wolf and H. H. Wu. Springer-Verlag, New York-Berlin, 1980. ii + 259 pp.

ISBN 0-387-90537-5 (Editors) 82c-58002 58-06

Berlin ★Global differential geometry and global analysis. Proceedings of the Colloquium held at the Technical University of Berlin, Berlin, November 21-24, 1979. Edited by Dirk Ferus, Wolfgang Kühnel, Ugo Simon and Bernd Wegner. Lecture Notes in Mathematics, 838. Springer-Verlag, Berlin-New York, 1981. xi+299 pp. ISBN 3-540-10285-X (Editors)

★Nonlinear analysis. Theory and applications. Proceedings of the Seventh International Summer School held in Berlin, August 27-31, 1979. Edited by Reinhard Kluge. Abhandlungen der Akademie der Wissenschaften der DDR, Abteilung Mathematik, Natu rwissenschaften und Technik, 1981 [Transactions of the Academy of Sciences of the DDR, Section for Mathematics, Sciences and Technology, 1981], 2.

Akademic-Verlag, Berlin, 1981. 439 pp. (Editors) 82k:49004 49−06

★Workshop on Extended Model Theory. Held in Berlin, November 1980. Edited by

Heinrich Herre. Report MATH 1981, 3. Akademie der Wissenschaften der DDR, Institut für Mathematik, Berlin, 1981. ii+160 pp. (Editors) 82m:03006 03-06

Bethlehem, Pa. *Advances in computer methods for partial differential equations. II.

Proceedings of the Second IMACS International Symposium on Computer Methods for Partial Differential Equations held at Lehigh University, Bethlehem, Pa., June 22-24, 1977. Edited by R. Vichnevetsky. International Association for Mathematics and Computers in Simi ation (IMACS), New Brunswick, N.J., 1977. vii+392 pp. (Editors)

★Advances in computer methods for partial differential equations. III. Proceedings of the Third IMACS International Symposium on Computer Methods for Partial Differential Equations held at Lehigh University, Bethlehem, Pa., June 20-22, 1979. Edited by R. Vichnevetsky and R. S. Stepleman. International Association for Mathematics and Computers in Simulation (IMACS), New Brunswick, N.J., 1979. vii + 442 pp. (Editors) 82a:65005 65-06

graphy:

Aleksandrov, P. S. See Aleksandrov, P. S., 82f:01179
Alexits, György G. Alexits (5 January 1899–14 October 1978). (Hungarian) Mat. Lapok 27 (1976/79), no. 3-4, 205–209. (Editors) 82f:01167 01A70

Aržanyh, I. S. See Džuraev, T. D.; et al., 82b:01042 Babenko, K. I. See Volevič, L. R.; et al., 82g:01078 Basmakova, I. G. See Aleksandrov, P. S.; et al., 82k:01029a Bellman, Richard See Leondes, Cornelius T., 82f:01119 Bergman, Stefan See Schiffer, Menahem M.; et al., 82c:01053

ernstein, Felix See Frewer, M., 82j:01065

Biermann, Kurt-Reinhard Bibliographie der Veröffentlichungen von Prof. Dr. Kurt-R. Biermann. [Bibliography of the publications of Prof. Dr. Kurt-R. Biermann] Mathematical perspectives, pp. 261–272, Academic Press, New York, 1981. (Editors) 82m:01072 01A70

Borel, Émile See Poliščuk, E. M., 82g:01067 Borúvka, Otakar See Neuman, František, 82f:01127 Brauer, Richard See Rohrbach, H., 82j:01071

Brun, Viggo See Scriba, Christoph J., 82i:01061a Charnes, Abraham Publications of A. Charnes. Extremal methods and systems analysis (Internat. Sympos., Univ. Texas, Austin, Tex., 1977), pp. 25-49, Lecture Notes in Econom. and Math. Systems, 174, Springer, Berlin, 1980. (Editors) 82b:01062 01A70

Chern, Shiing Shen See Chern, Shiing Shen, 82h:01074 Chittenden, E. W. See Aull, C. E., 82f:01059

Chowla, Sarvadaman See Ayoub, Raymond G., 82j:01063a Cooper, Leon See Cooper, Mary W., 82e:01084 van der Corput, Johannes Gualtherus Publication list: J. G.

nerus Publication list: J. G. van der Corput. Acta Arith. 36 (1980), no. 1, 91-99. (Editors) 82b:01063 01A70

Csaki, Frigyes Fr. Csaki: 1921–1977. Acta Tech. Acad. Sci. Hungar. 87 (1978), no. 3-4, 211–222 (1979). (Editors) 82h:01071 01A70

Curry, Haskell B. Bibliography of Haskell B. Curry. To H. B. Curry: essays on combinatory logic, lambda calculus and formalism, pp. xiii-xx, Academic Press, London, 1980. (Editors) 82f:01162 01A70 (03-03)

Curtiss, John Hamilton See Todd, John, 82f-0150
Datta, Bibhutibhusan See Gupta, Radha Charan, 82i-01053
Deligne, Pierre See Oda, Tadao, 82a:01044

aquin Basilio Dedicated to the memory of Joaquin Basilio Diaz. Applicable Anal. 10 (1980), no. 1, 1-4 (1 plate). (Editors) 821:01170
Dinghas, Alexander See Begehr, H., 821:01077
Dzjadyk, V. K. See Korničuk, M. P.; et al., 821:01060 01A70

rbašjan, M. M. See Avetisjan, A. E.; et al., 82c:01044 and Arakeljan, N. U.; et al., 82d:01025

Efimov, N. V. See Aleksandrov, A. D.; et al., 82g:01037b , Albert See Kuznecov, B. G., 82b:01055 Forder, Henry George See Swenson, R. E., 82f:01148 Fox, Charles See Srivastava, Hari M., 82f:01146 Frege, Gottlob See Asser, Günter; et al., 82j:01061 Fučik, Svatopluk See Mawhin, Jean; et al., 82f:01122 Gagaev, B. M. See Laptev, B. L.; et al., 82g:01061

ntai, Aurél Aurél Galántai. (Hungarian) Mat. Lapok 27 (1976), no. 1-2, 192 (1978).

(Editors) 82:e01107 01A70
Galiullin, A. S. See Erugin, N. P.; et al., 82:01049
Gihman, İ. İ. See Korojluk, V. S.; et al., 82:01049
Gokieli, L. P. See Čogošvili, G. S., 82:01046
Green, Melville S. * Perspectives in statistical physics. M. S. Green memorial volume.
Edited by H. J. Raveché. Studies in Statistical Mechanics, IX. North-Holland Publishing Co., Amsterdam-New York, 1981. xxviii+367 pp. ISBN 0-444-86026-6 (Editors) 82h:82001 82-06 (01-06) graphy: (continued)

Guiraum Martin, Alfonso Biographical notes on Professor Guiraum. (Spanish) Contributions in probability and mathematical statistics, teaching of mather analysis (Spanish), pp. i-iv, Grindley, Granada, 1979. (Editors) 82a:01048

analysis (Spanish), pp. 1-w, Orindley, Granada, 1979. (Edit Hahn, Hans. See Hahn, Hans. 82b:01073 Haplanov, M. G. See Vorovič, I. I.; et al., 82d:01032 Hardy, Godfrey Harold See Cartwright, Mary L., 82k:01030 Hiebert, Erwin N. See Stuewer, Roger H., 82g:01073 Hille, Einar See Dunford, Nelson, 82e:01087

Hoeffding, Wassily See Chakravarti, I. M., 82g:01045 Hordijk, Arie See van Zwet, W. R., 82f:01157 Horn, F. J. M. See Jackson, R., 82f:01115

Hornich, Hans See Hlawka, Edmund, 82a:01034 Horowitz, Shlomo See Foguel, Shaul R., 82f:01097 Hotelling, Harold See Smith, Walter L., 82d:01031

Hsii, Pao Lu See Anderson, T. W.; et al., 82h:01042 Hurewicz, Witold See Borsuk, Karol, 82f:01082 Isaacs, Rufus See Yu, P. L., 82c:01087

Janin, Louis See Nallet, C.; et al., 82d:01030 Jankowski, Andrzej See Rubinsztein, Ryszard, 82f:01137

Jouvet, Bernard List of selected scientific publications. Field theory, quantization and statistical physics, pp. xix-xxii, Math. Phys. Appl. Math., 6, Reidel, Dordrecht, 1981. (Editors) 82:01086 01A70

Kac, G. I. See Berezans'kii, Ju. M.; et al., 82d:01026

Kinohara, Akira See Izumi, H., 82b:01049

Kleene, Stephen C. The bibliography of Stephen C. Kleene. The Kleene Symposium (Proc. Sympos., Univ. Wisconsin, Madison, Wis., 1978), pp. xii-xvi, Stud. Logic Foundations Math., 101, North-Holland, Amsterdam, 1980. (Editors) 82i:01064

Korniičuk, M. P. See Velikin, V. L.; et al., 82e:01105 Kovalenko, A. D. See Sevčenko, Ju. M., 82b:01066 Krasnosef Skii, M. A. See Bogoljubov, N. N.; et al., 82t:01079 Kunugui, Kinjirò See Kondō, Motokichi, 82e:01093 and Kuramochi, Zenjiro,

82e:01094

Lancaster, H. O. See Moran, P. A. P., 82f:01125

Lichtenstein, Leon See Przeworska-Rolewicz, Danuta, 82f:01133 and 82m:01066 Lichtenstein, Leon See Przeworska-Rolewicz, Danuta, 82f:01133 and 82m:01066 Liepa, A. P. See Bärzdiņš, J.; et al., 82e:01082 Limik, Ju. V. See Linnik, Ju. V., 82j:01077a

Littlewood, John Edensor See Cartwright, Mary L., 82k:01030 Ljapunov, A. A. See Ljapunov, A. A., 82d:01042 Ljusternik, L. A. See Aleksandrov, P. S.; et al., 82g:01036

Lukacs, Eugene Eugene Lukacs: bibliography. Contributions to probability. pp. 307–311, Academic Press, New York, 1981. (Editors) 82g:01079

Machtey, Michael See Meyer, Albert R., 82m:01063

Makay, Árpád Árpád Makay. (Hungarian) Mat. Lapok 27 (1976), no. 1-2, 194-195

Massay, Arpad Massay, (rungaman) Mal. Lapok 27 ((1978), (Editors) 82æ01058 01A70

Mandelbrojt, Szolem See Mandelbrojt, Szolem, 82k:01041

Marczewski, Edward See Hartman, Stanisław; et al., 82h:01047

Margulis, G. A. See Ihara, Shin-ichiro, 82æ01032

Mertens, Franz See Dick, Auguste, 82i:01048

Mihailov, V. P. See Vladimirov, V. S.; et al., 82g-01077 Mikeladze, S. E. See Mikeladze, S. E., 82i:01072a Mishra, Ratan Shanker See Mishra, Pradeep, 82g-01064 Misik, Ladislav See Neubrunn, Tibor, 82h:01063

Monna, A. F. Liste chronologique des travaux de A. F. Monna. Symposium dedicated to A. F. Monna (French), pp. 75-82, Commun. Math. Inst. Rijksuniv. Utrecht, 12, Rijksuniv. Utrecht, Utrecht, 1980. (Editors) 82g:01042 01A70 Morse, Marston See Bott, Raoul, 82b:01037

Morton, Vernon Charles See Meyler, Dorothy S., 82e:01097

Mostowski, Andrzej See Krajewski, Stanisław; et al., 82h:01055

Musheliśvili, N. I. ★Harko Myckennumann (1891–1976). (Georgian) [Niko Musheliśvili (1891–1976)] Биобиблиография. [Biobibliography] Edited by \$ V. Dzidziguri. "Mecniereba", Tbilisi, 1980. 191 pp. (Publisher's description) 82h:01069 01A70 Neugebauer, Otto See Sachs, J.; et al., 82f:01138

ann, Bernhard See Gani, J.; et al., 82g:01050 Noether, Emmy See Dick, Auguste, 82c:01047 Nordström, Gunnar See Isaksson, Eva; et al., 82g:01055 Ogawa, Junjiro See Ikeda, Sadao, 82g:01054

Ovsjannikov, L. V. Lev Vasil'evič Ovsjannikov (on the occasion of his sixtieth birthday).

(Russian) Dinamika Splošn. Sredy No. 38 Nestacionar. Problemy Gidrodinamiki (1979), 5-10 (1 plate). (Editors) 82i:01065 01A70

Pagni, Mauro See Magenes, Enrico, 82a:01039 Peano, Giuseppe See Kennedy, Hubert C., 82b:01051 Picard, Claude François See Aggarwal, N. L.; et al., 82a:01027 Pogorelov, A. V. See Aleksandrov, A. D.; et al., 82h:01041 Résibois, Pierre See Prigogine, Ilya; et al., 82f:01132 Ribaucour, Albert See Rouxel, Bernard, 82f:01054

Rinow, Willi Schriftenverzeichnis von Willi Rinow. Colloquium in memoriam Prof. Willi Rinow. Mitt. Math. Ges. DDR No. 4 (1980), 18-19. (Editors) 82k:01038

sen, Edward Bibliography of Edward Rosen. Science and history, pp. 9-22, Studia Copernicana, XVI, Ossolineum, Wrocław, 1978. (See 82e:01003) marskii, A. A. See Tihonov, A. N.; et al., 82j:01074

Sanin, N. A. See Maslov, S. Ju.; et al., 82g:01063

Sansone, Giovanni See Conti, Roberto, 82b:01039
Santalò, Luis Antonio Dedication to Prof. Luis A. Santalò. (Spanish) Rev. Un. Mat. Argentina 29 (1979/80), no. 1-2, iii-xxi. (Editors) 82f:01165 01A70

Scheffé, Henry See Daniel, C.; et al., 82i:01047

Schubert, Hermann See Schubert, Hermann, 82c:01073
Schubert, Hermann See Schubert, Hermann, 82c:01073
Schubert, Hermann See Mišik, Ladislav, 82c:01055
Segre, Beniamino See Tallini, Giuseppe, 82f:01149
Seetsukor, A. A. See Erugin, N. P.; et al., 82g:01049
Seetsukor, A. A. See Erugin, N. P.; et al., 82g:01049
Seth, Bhoj Raj See Arya, Shashi Prabha, 82m:01052
Siller, N. N. See Tepljakov, G. M., 82e:01102
Skorohod, A. V. See Mitropol'skii, Ju. A.; et al., 82g:60049
Sobolev, S. L. S. L. Sobolev (on the occasion of his seventieth birthday), (Russian)
Theory of cubature formulas and the application of functional analysis to problems of mathematical physics (Russian), pp. 5-26 (1 plate), Trudy Sem. S. L. Soboleva, No. 1, 1978, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1978. (Editors)
82b:01066 01A70

01A70 82b:01066

82h:01066 01A70
Stefan, Peter See Brown, Ronald; et al., 82i:01083
Stefel, Eduard L. See Waldvogel, J.; et al., 82i:01063
Survorov, G. D. See Belinskii, P. P.; et al., 82g:01040
Švec, Marko See Šeda, Valter, 82h:01060 and Kurzweil, Jaroslav, 82h:01061
Sz.-Nagy, Béla See Langer, Heinz, 82e:01095
Szisz, Pál Pál Szisz (1901–1978). (Hungarian) Mat. Lapok 27 (1976), no. 1-2, 1-5 (1978). (Editors) 82e:01111 01A70

in, A. F. See Vlasov, V. F.; et al., 82f:01153

Toeplitz, Otto Bibliography of Otto Toeplitz. Integral Equations Operator Theory 4 (1981), no. 2, 298-302. (Editors) 82f:01103 01A70 Togliatti, Eugenio Giuseppe See Marchionna, Ermanno, 82f:01120 and Gallarati,

Dionisio, 82i:01050

rin, Paul List of works of Paul Turán. Acta Arith. 37 (1980), 21-34. (Roy W. Ryden) 82f:01090e 01A70 (05-03)

Turowicz, Andrzej See Górecki, Hemysk, et al., 82e:01089

Tutte, William T. Papers and books by W. T. Tutte. Graph theory and related topics (Proc. Conf., Univ. Waterloo, Waterloo, Ont., 1977), pp. xxix-xxxii, Academic Press, New York, 1979. (Editors) 82e:01108 01A70 (05-03, 05B35, 05Cxx)

Vagner, V. V. See Elimov, N. V.; et al., 82h:01047 Vančura, Zdeněk See Drábek, Karel, 82a:01029 Varicum, zaeriek. See Viranes, aure, odzivios Vogel, Kurt See Vogel, Kurt, 82j:01080 Waller, Derek Arthur See Biggs, Norman, 82m:01054 Wang, Hsien Chung See Boothby, William M.; et al., 82f:01081 Weinstein, Alexander See Weinstein, Alexander, 82i:01073 Yukawa, Hideki See Tanikawa, Yasutaka, 82m:01069

Zmorovič, V. A. See Mitropol'skii, Ju. A.; et al., 82f:01123 Aposyndesis See Grace, E. E., 82f:5053 Biographies of historians of science See Jayawardene, S. A.

graphies of historians of science See Jayawardene, S. A.; et al., 82c:01070 neergence spaces See Cochran, Allan C., 82d:54001 smology Cosmology: list of publications. Gen. Relativity Gravitation 9 (1978), no. 8, 721–756. (Editors) 82b:83001 83–03 (00A15) stance-minimizing relations of binary relations. See Monjardet, Bernard, (See

culty of Mai tics Institute of the Faculty of Natural Sciences and Mathe utily of Maintenance institute of the Faculty and collaborators of the Mathematics Institute of the Faculty of Natural Sciences and collaborators of the Mathematics Institute of the Faculty of Natural Sciences and Mathematics in Novi Sad. (Serbo-Croatian) Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. 9 (1979), 233-303 (1980). (Editors) 82d:01040 01A7

sian, I. M., 82i:90115 nal programmi ng See Stancu-Mir

ectional equations Works on functional equations. VI. Bibliography compiled by Sh. Haruki. Aequationes Math. 21 (1980), no. 2-3, 283-317. (From the text) 82e:39005 39Bxx (00A15)

n See Mills, T. M., 82d:41003

History of elementary mathematics See Tropfke, Johannes, 82k:00012
History of science and technology Current bibliography of the history of science and technology. No. 32 (July-Sept. 1978). (Polish) Kwart. Hist. Nauk. Tech. 24 (1979),

no. 2, suppl., 35 pp. (Editors) 82g:01003 01A05 (00A15) no. 2, suppl., 35 pp. (Editors) 84g01000 Current bibliography of the history of science and technology. No. 33 (Jan.–March 1979). (Polish) Kwart. Hist. Nauk. Tech. 24 (1979), no. 3, suppl., 13 pp.

(Editors) 82a:01055 01A75

(Editors) 82a:01055 01A75

See also Majewska-Tronowicz, Jadwiga; et al.,

Many-valued logic See Miyama, Tôru, 82b:03052

Mathematical aspects of social sciences See Sinha, D. K., 82m:92002

Mathematical literature See Müller, Felix, 82:01184

tical models in the social and life sciences See Olinick, Michael, 82m:00011

Multichannel queues See Ovuworie, Godwin C., 82b:60123

ociative algebra See Tomber, Marvin L.; et al., 82i:17001 and 82i:17002 ar systems identification See Billings, S. A., 82c:93008 both optimization Bibliography. Nonsmooth optimization (Proc. IIASA)

Workshop, Laxenburg, 1977), pp. 167–183, IIASA Proc. Ser., 3, Pergamon, Oxford, 1978. (Editors) 82c:00005 00A15 (90C25)

of science and technology during the years 1974-1976] Compiled by Jadwiga Majewska-Tronowicz, Krystyna Betkowska and Marianna Jedlińska. Edited by Wojciech Gasparski, Majewska-Tronowicz and Eugeniusz Olszewski. Zakład

wojecen Osspański, Majewska i Fonowicz and Eugeniusz Olszewski. Zakład Narodowy im. Ossolińskich—Wydawnictwo Polskiej Akademii Nauk (Ossolineum), Wrocław, 1978. 222 pp. (Editors) 82f:00009 00A15 (01A75) admirature and cubanture See Schipke, Siegfried, 82g:00004 eresentations of algebras Bibliography, 1969–1979: representations of algebras and related topics. Representation theory, I (Proc. Workshop, Carleton Univ., Ottawa, Ont., 1979), pp. 325-373, Lecture Notes in Math., 831, Springer, Berlin, 1980. (Editors) 82c:16031 16A64 (00A15, 17Bxx) ge regression See Hoert, Arthur E.; et al., 82d:62117 bust statistics See Nowak, Horst; et al., (See 82:62003)

graphy: (continued)

ers See Monjardet, Bernard; et al., 82e:00014 leory See Gray, John W., 82j:01060

Statistical tolerance regions See Jilek, Miloš, 82m:62082

Weather modification experiments See Hanson, Morgan A.; et al., 82e:90013 $\star SK_1$ von Schiefkörpern. (German) SK_1 of division algebras Seminar held at

Bielefeld and Göttingen, 1976. Edited by Peter Draxl and Martin Kneser. Lecture Notes in Mathematics, 778. Springer-Verlag, Berlin-New York, 1980. 124 pp. ISBN 3-540-09747-3 (Chr. U. Jensen) 82b:16014 16A39 (12A80)

★Quantum fields—algebras, processes. Proceedings of the Symposium "Bielefeld Encounters in Physics and Mathematics, II" held at the Universität Bielefeld, Bielefeld, December 1–9, 1978. Edited by Ludwig Streit. Springer-Verlag, Vienna, 1980. ix + 444 pp. ISBN 3-211-81607-0 (Editors) 82b:81006 81-06 (60-06, 82-06)

★Dynamics of synergetic systems. Proceedings of the International Symposium on Synergetics held at Bielefeld, September 24-29, 1979. Edited by Hermann Haken. Springer Series in Synergetics, 6. Springer-Verlag, Berlin-New York, 1980. viii+271 pp. ISBN 3-540-09918-2 (Editors) 82m:00030 00A69

#Proceedings of the Conference on Kristallographische Gruppen. Part II. Held at the University of Bielefeld, Bielefeld, September 2-16, 1979. Edited by A. W. M. Dress and N. Neubüser. Match No. 10 (1981). Max-Planck-Institut für Kohlenforschung, Institut für Strahlenchemie, Mülheim, 1981. pp. i-iii and 1-233. (Editors) 82e:20060 (82A60)

Bifurcation *Nonlinear differential equations. Invariance, stability, and bifurcation Proceedings of an International Conference held in Trento, May 25-30, 1980. Edited by Piero de Mottoni and Luigi Salvadori. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xi+357 pp. ISBN 0-12-508780-2 (Editors) 34-06

82d:34003 34-06
Biloxi, Miss. ★Game theory and its applications. Lecture notes prepared for the American Mathematical Society Short Course held in Biloxi, Miss., January 22-23, 1979. Edited by William F. Lucas. Proceedings of Symposia in Applied Mathematics, 24. American Mathematical Society, Providence, R.I., 1981. viii+125 pp. ISBN 0-8218-0025-6 (Editors) 82i:90079 90Dxx (90-06)

Biographical dictionary of American science See Elliott, Clark A., 82f:01089

Abel, Niels Henrik See Dianni, Jadwiga, 82h:01046 and Aubert, Karl Egil, 82j:01062 Airken, A. C. See Airken, A. C., 82e:01080 Alas, Mihailo Petrović See Bertolino, Milorad, 82f:01078

sandrov, P. S. See Aleksandrov, P. S., 82f:01071

Babenko, K. I. See Volevič, L. R.; et al., 82g:01078

Bartholinus, Erasmus See Cuvelier, Pierre, 82f:01180

akova, I. G. See Aleksan lrov, P. S.; et al., 82k:01029a

Behari, Ram See Singal, M. K., 82m:01067

Bellman, Richard See Leondes, Cornelius T., 82f:01119 rezin, I. S. I. S. Berezin. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat.

Kibernet. 1981, no. 1, 3-4. (Editors) 82h:01070 01A70

On the 60th birthday of Ivan Semenovič Berezin. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 1, 3-4. (Editors) 82c:01059 01A70

Bernstein, Felix See Frewer, M., 82j:01065
Bhatnagar, Prabhu L. See Sinha, S. R., 82a:01046
Biermann, Kurt-Reinhard See Dauben, Joseph W., 82h:01044

w, N. N. See Vladi rov, V. S.; et al., 82f:01152

Borel, Émile See Poliščuk, E. M., 82g:01067

Borúvka, Otakar See Neuman, František, 82f:01127 Bydžovský, Bohumil See Drábek, Karel, 82g:01048

Carslaw, Horatio Scott See Jaeger, J. C., 82g:01056

Charnes, Abraham See Kortanek, K. O., 82b:01053 Chittenden, E. W. See Aull, C. E., 82f:01059

Chowla, Sarvadaman See Ayoub, Raymond G., Chudý, Jaroslav See Matušů, Josef, 82a:01041 nd G., 82j:01063a

Courant, Richard See Reid, Constance, 82f:01135 Curry, Haskell B. A short biography of Haskell B. Curry. To H. B. Curry: essays on ory logic, lambda calculi

s and formalism, pp. vii-xi, Academic Press, London, communiory togic, tamous accusins and pormaism, pp. vir.-xi, Academic Press, London, 1980. (Editors) 82:01161 01A70 (03-03)

Datta, Bibhutibhusan See Gupta, Radha Charan, 82:01053

Ditkin, V. A. Vitalii Arsen'evič Ditkin (on the occasion bis 70th birthday). (Russian)

2. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 3, 547-549. (Editors) 82:e01061 01A70

Dydyrko, V. K. Vladimir Kondrat'evič Dydyrko (on the hundredth anniversary of his

82t-0105 OlA70
Dzjadyk, V. K. See Kormičuk, M. P.; et al., 82t:01044 and Arakeljan, N. U.; et al., 82t:01025

Efimov, N. V. See Aleksandrov, P. S., 82g:01037a and Aleksandrov, A. D.; et al., 82g:01037b

Einstein, Albert See Kuznecov, B. G., 82b:01055; Grigor'jan, A. T., 82f:01106; Ovčinnikov, N. F., 82g:01066 and Cassidy, David C., 82k:01031 Euler, Leonhard See Juškevič, A. P., 82m:01041

er, Johann See Zweckbronner, Gerhard, 82h:01026

Fejér, Léopold See Fenyő, István, 82k:01032

Forder, Henry George See Ardley, Gavin, 82f:01074

ob See Asser, Günter; et al., 82j:01061

Galilei, Galileo See Strnad, Janez, 82i:01016

Galiullin, A. S. See Erugin, N. P.; et al., 82:01049
Gauß, Carl Friedrich See X-ufmann-Bühler, Walter, 82;01066
Germain, Sophie See Bucciarelli, Louis L.; et al., 82m:01057

Gihman, I. I. See Koroljuk, V. S.; et al., 82d:01028 Gödel, Kurt See Christian, Curt, 82i:01046

nov, S. K. On the fiftieth birthday of S. K. Godunov, corresponding member of the Academy of Sciences of the USSR. (Russian) Sibirsk. Mat. Z. 21 (1980), no. 3, 3-5. (Editors) 82g:01081 01A70

 Gokieli, L. P. See Čogošvili, G. S., 82g:01046
 Görtler, Henry See Kirchgåssner, Klaus, 82e:01091
 Grigor'jan, A. T. Ašot Tigranovič Grigor'jan zum 70. Geburtstag, Translated by W. Purkert. NTM Schr. Geschichte Natur. Tech. Medizin 17 (1980), no. 2, 121-123. (Editors) 82f:01166 01A70

Guiraúm Martín, Alfonso Biographical notes on Professor Guiraúm. (Spanish)

Contributions in probability and mathematical statistics, teaching of mathem analysis (Spanish), pp. i-iv, Grindley, Granada, 1979, (Editors) 82a-01048

Hamilton, William Rowan See Hankins, Thomas L., 82h:01051

Helly, Eduard See Hochstadt, Harry, 82e-01090a

Hiebert, Erwin N. See Stuewer, Roger H., 82g:01073 Hilbert, David See Aleksandrov, P. S., 82f:01072

Hoeffding, Wassily See Chakravarti, I. M., 82g:01045

Hordijk, Arie See van Zwet, W. R., 82f:01157

older, A. S. See Stewart, G. W., 82g:01071

Hsü, Pao Lu See Anderson, T. W.; et al., 82h:01042a Hurewicz, Witold See Borsuk, Karol, 82f:01082 Huzurbazar, Vasant Shankar Professor V. S. Huzurbazar. Professor Huzurbazar felicitation volume. J. Indian Statist. Assoc. 17 (1979), iii-iv. (Editors) 82f:01163 01A70

Ibn Sinā, Abū 'Alī al-Husayn ibn 'Abdallāh ★ Абу Али Ибн Сина. (Russian) [Abū 'Alī Ibn Sinā] K 1000-летию со дня рождения. [On the 1000th anniversary of his birth] Edited by M. B. Baratov, P. G. Bulgakov and U. I. Karimov. "Fan", Tashkent, 1980. 248 pp. (E. S. Kennedy) 82k:01016 01A30

See also Ghorbani, A.; et al., 82f:01013

Ioffe, A. F. See Frenkel', V. Ja., 82m:01058

Isaacs, Rufus See Yu, P. L., 82c:01057 Jakubik, Ján See Kolibiar, Milan, 82e:01092

Jouvet, Bernard See Cerulus, F., 82f:01085

von Kármán, Theodore See Hall, R. Cargill, 82f:01110 Kepler, Johannes See Beer, Arthur; et al., 82e:01031

nohara, Akira See Izumi, H., 82b:01049

Kleene, Stephen C. A biographical sketch of Stephen C. Kleene. The Kleene Symposius (Proc. Sympos., Univ. Wisconsin, Madison, Wis., 1978), pp. vii-ix (1 plate), Stud. Logic Foundations Math., 101, North-Holland, Amsterdam, 1980. (Editors) 82b:01064

Klein, Felix See Tobies, Renate, 82m:01070

Kočina, P. Ja. See Aleksandrov, P. S.; et al., 82g:01035

Kořinek, Vladimir See Drbohlav, Karel, 82e:01086 Korniičuk, M. P. See Velikin, V. L.; et al., 82e:01105 Kovalenko, A. D. See Ševčenko, Ju. M., 82h:01066

Krasnosel'skii, M. A. See Bogoljubov, N. N.; et al., 82f:01079 Krylov, N. M. See Mitropol'skii, Ju. A., 82f:01124

Krylov, N. S. See Krylov, N. S., 82e:82001

Kunugui, Kinjirò See Kuramochi, Zenjiro, 82e:01094

Kuratowski, Kazimierz See Kuratowski, Kazimierz, 82b:01054 and Krasinkiewicz, J., 82k:01034

hbert, Johann Heinrich See Laptev, B. L.; et al., 82e:01059; Wolters, Gereon, 82h:01033 and Juškevič, A. P., 82m:01041

Landau, L. D. See Bessarab, M. Ja., 82c:01045 Laptev, B. L. See Višnevskii, V. V.; et al., 82h:01067

Lavrent'ev, M. A. Academician Mihail Alekseevič Lavrent'ev (on the occasion of his eightieth birthday). (Russian) Sibirsk. Mat. Z. 21 (1980), no. 5, 3-11. (Editors) 82e:01109 01A70

See also Marčuk, G. I., 82a:01040

Lehrer, Keith *Keith Lehrer. Edited by Radu J. Bogdan. Profiles, 2. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. x + 260 pp. ISBN 90-277-1173-9 (N. B. Cocchiarella) 82f:03008 03A05 (01A70, 90A99, 92A20)

eibenzon, L. S. See Sedov, L. I.; et al., 82i:01062

Lichtenstein, Leon See Beckert, Herbert, 82f:01076; Przeworska-Rolewicz, Danuta, 82f:01133 and 82m:01066

nnik, Ju. V. See Linnik, Ju. V., 82j:01077a

Ljusternik, L. A. See Aleksandrov, P. S.; et al., 82g:01036 Machtey, Michael See Meyer, Albert R., 82m:01063

Mal'cev, A. I. See Halezov, E. A., 82f:01109

Marinescu, Gheorghe L'académicien Gheorghe Marinescu lors de son 60e anniversaire.
Rev. Roumaine Math. Pures Appl. 25 (1980), no. 4, 493-494. (Editors) 82f:01164

Maxwell, James Clerk James Clerk Maxwell (1831-1879) (on the 100th anniversary of his death). (Bulgarian) With papers by Maxwell, Albert Einstein and M. Norton Wise. Translated by B. Penkov and D. Vačov. Fiz.-Mat. Spis. B"Igar. Akad. Nauk. 22(55) (1979), no. 4, 303-328 (1980). (Editors) 82f:01160 01A70 (01A75)

See also Politk, Josef, 82f:01129; Domb, C., 82g:01024; Jones, R. V., 82h:01058 and Karcev, V. P., 82i:01054

Mayer, Tobias See Forbes, Eric G., 82a:01032

Mertens, Franz See Dick, Auguste, 82:01048 Mihailov, V. P. See Vladimirov, V. S.; et al., 82g:01077 Mikeladze, Š. E. See Mikeladze, Š. E., 82i:01072a

Mishra, Ratan Shanker See Mishra, Pradeep, 82g:01064 Mišik, Ladislav See Neubrunn, Tibor, 82h:01063

Misik, Ladistav See Neubrunn, 1100r, 828210103 Mitrinović, Dragoslav S. See Popov, Blagoj S., 82f:01130 Monna, A. F. See Bertin, E. M. J.; et al., 82g:01041 Mostowski, Andrzej See Łoś, Jerzy, 82h:01053; Grzegorczyk, A.; et al., 82h:01054 and Krajewski, Stanisław; et al., 82h:01055 Musheliśvili, N. I. ★Huko Myckenumanam (1891–1976). (Georgian) [Niko Musheliśvili

(1891–1976)] Биобиблиография. (Biobibliography) Edited by S. V. Dzidziguri. "Mecniereba", Tbilisi, 1980. 191 pp. (Publisher's description) 82h:01069 01A70 See also Dzorbenatze, S. M., 82a:01036 and Speiser, David R., 82m:01033

Nicolescu, Miron See Nicolescu, Miron, 82f:01185

Noether, Emmy See Dick, Auguste, 82c:01047

Nordström, Gunnar See Isaksson, Eva; et al., 82g:01055 Novožilov, V. V. Valentin Valentinovič Novožilov. (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 5-6, Leningrad. Univ., Leningrad, 1980. (Editors) 82a:01049 01A70

Ogawa, Junjiro See Ikeda, Sadao, 82g:01054 Pasch, Moritz See Pasch, Moritz, 82b:01058

Peano, Giuseppe See Kennedy, Hubert C., 82h:01051 Petrovskii, I. G. See Aleksandrov, P. S.; et al., 82h:01041 Pogorelov, A. V. See Aleksandrov, A. D.; et al., 82h:01041

caré, Henri See Mitropol'skii, Ju. A., 82a:01042

Poisson, Siméon Denis See Grigor'jan, A. T.; et al., 82m:01059
Post, Emil See Gleiser, Molly, 82a:01033

borov, Ju. V. Academician Ju. V. Prohorov (on the occasion of his fiftieth birthday). (Russian) Vestnik Akad. Nauk SSSR 1980, no. 3, 142. (Editors) 82c:01060

Rektorys, Karel See Valešová, Marie, 82f:01151

Ribaucour, Albert See Rouxel, Bernard, 82f:01054
Riesz, Frigyes See Fenyő, István, 82k:01032
Romanovskii, V. I. Vsevolod Ivanovič Romanovskii (on the occasion of the 100th anniversary of his birth). (Russian) Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1979, no. 6, 3-5 (1 plate). (Editors) 82f:91158 01A70

v, V. V. V. Rusanov, corresponding member of the Academy of Sciences of the USSR (on the occasion of his sixtieth birthday). (Russian) Vestnik Akad. Nauk SSSR 1980, no. 3, 143-144. (Editors) 82c:01062 01A70

Samarskii, A. A. See Tihonov, A. N.; et al., 82j:01074 Šanin, N. A. See Maslov, S. Ju.; et al., 82g:01063

Santaló, Luis Antonio Dedication to Prof. Luis A. Santaló. (Spanish) Rev. Un. Mat. Argentina 29 (1979/80), no. 1-2, iii-xxi. (Editors) 82f:01165 01A70

Sarževskii, A. M. Aleksandr Mihailovič Sarževskii (on the occasion of his 50th birthday). (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1980, no. 3, 74. (Editors)

82g:01082 01A70 Schauder, Juliusz Paweł See Forster, Walter, 82h:01048 and Leray, Jean, 82k:01035

Schwan, Wilhelm See Kirsch, Arnold, 82f:01117

Sengupta, Prabodh Chandra See Gupta, Radha Charan, 82f:01108 Šestakov, A. A. See Erugin, N. P.; et al., 82g:01049

oj Raj See Arya, Shashi Prabha, 82m:01052

Stiller, N. N. See Tepljakov, G. M., 82e:01102 Stark, Marceli Marceli Stark (1908–1974). (Polish) With contributions by Kazimierz Kuratowski, Andrzej Turowicz, Mark Kac, Stanisław Hartman, Andrzej Schinzel,

Wiesław Żelazko, Jean-Pierre Kahane and Zbigniew Semadeni. Wiadom. Mat. (2) 21, no. 2, 101–113 (2 plates) (1979). (Editors) 82g:01080 01A70
Stečkin, S. B. Sergei Borisovič Stečkin (on the occasion of his sixtieth birthday).

(Russian) Mat. Zametki 28 (1980), no. 6, 807-808. (Editors) 82g:01083 Stepling, Josef See Kolomý, Rudolf, 82f:01118 Suvorov, G. D. Georgii Dmitrievič Suvorov (on the occasion of his 60th birthday).

(Russian) Ukrain. Mat. Ž. 31 (1979), no. 5, 532. (Editors) 82g:01084 See also Belinskii, P. P.; et al., 82g:01040 Švec, Marko See Kurzweil, Jaroslav, 82h:01061

Sz.-Nagy, Béla See Sz.-Nagy, Béla, 82b:01061

Teregulov, I. G. Il'tizar Gizatovič Teregulov (on the occasion of his fiftieth birthday). (Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 11, 3-4. (Editors) 01A70

omson, J. J. See Topper, David R., 82g:01028

Timan, A. F. See Vlasov, V. F.; et al., 82f:01153 Toeplitz, Otto See Behnke, Heinrich, 82g:01039a

Turowicz, Andrzej See Górecki, Henryk; et al., 82e:01089

Tutte, William T. See Smith, Cedric A. B., 82e:01101 Uhlenbeck, G. E. See Uhlenbeck, George E., 82e:01104 Vagner, V. V. See Efimov, N. V.; et al., 82h:01047

Vančura, Zdeněk See Drábek, Karel, 82a:01029

Vogel, Kurt See Vogel, Kurt, 82j:01080

njec, Konstantin P. See Andelić, Tato ir P.; et al., 82b:01033

Wallis, W. Allen See Grubbs, Frank E., 82i:01052

Weinstein, Alexander See Weinstein, Alexander, 82i:01073

Young, Thomas See Arago, D. F., 82g:01038 Yukawa, Hideki See Yukawa, Hideki, 82b:81003

Zmorovič, V. A. See Mitropol'skii, Ju. A.; et al., 82f:01123
Faculty of Mathematics Institute of the Faculty of Natural Sciences and Math Novi Sad Biographies and bibliographic data of the permanent faculty and collaborators of the Mathematics Institute of the Faculty of Natural Sciences and Mathematics in Novi Sad. (Serbo-Croatian) Univ. u Novom Sadu Zb. Rad 01A72

Prirod.-Mat. Fak. 9 (1979), 233-303 (1980). (Editors) 82d:01040 thematicians See Borodin, A. I.; et al., 82h:01043; Meschkowski, Herbert, 82h:01062 and Borodin, A. I., 82m:01056

Biological growth and spread *Biological growth and spread. Mathematical theories and applications. Proceedings of a Conference on Models of Biological Growth and Spread held in Heidelberg, July 16-21, 1979. Edited by Willi Jäger, Hermann Rost and Petre Tautu. Lecture Notes in Biomathematics, 38. Springer-Verlag, Berlin-New York, 1980.

xi+511 pp. ISBN 3-540-10257-4 (Editors) 82c-92004 92-06 (60180, 60185, 60K35)

Blology *Some mathematical questions in biology. Proceedings of the Thirteenth
Symposium on Mathematical Biology held in Houston, Tex., January 4, 1979. Edited by Simon A. Levin. Lectures on Mathematics in the Life Sciences, 12. Amer Mathematical Society, Providence, R.I., 1979. ix + 218 pp. ISBN 0-8218-1162-2 (Editors) 82i-92001 92-06

★Some mathematical questions in biology. Proceedings of the Fourteenth Symposium held in San Francisco, Calif., January 7, 1980. Edited by George F. Oster. Lectures on Mathematics in the Life Sciences, 13. American Mathematical Society,

Springer-Verlag, Berlin-New York, 1980. v + 121 pp. (loose errata). ISBN 3-540-10234-5 (Helmut Rieder) 82i:62003 62-03 (62F35)

e *Statistical analysis of the data in bioscience and mathematical models. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical nces, Kyoto University, Kyoto, February 27-28, 1980. Sürikaisekikenkyüsho Kôkyûroku No. 384 (1980). Kyoto University, Research Institute for Mathematica

Kokytroku No. 384 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. -i-i and 1-182. (Editors) 82e-62169 62P10 mingham, Ala. ★The Proceedings of the 1980 Topology Conference. Held at the University of Alabama, Birmingham, Ala., 1980. Edited by Włodzimierz Kuperberg, G. M. Reed and Phillip Zenor. Topology Proc. 5 (1980), (1981). Auburn University, Mathematics Department, Auburn, Ala., 1981. pp. 1-264. (Editors) 821:54002 54-06

★Spectral theory of differential operators. Proceedings of the Conference held at the University of Alabama, Birmingham, Ala., March 26-28, 1981. Edited by Ian W. Knowles and Roger T. Lewis. North-Holland Mathematics Studies, 55. North-Holland Publishing Co., Amsterdam-New York, 1981. xv+384 pp. ISBN 0-444-86277-3 (Editors) 821:34002 34-06 (47-06)

Babenko, K. I. See Volevič, L. R.; et al., 82g:01078
Bašmakova, I. G. See Aleksandrov, P. S.; et al., 82k:01029a and Demidov, S. S.; et al., 82k:010296

rezin, I. S. I. S. Berezin. (Russian) Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat.

Kibernet. 1981, no. 1, 3-4. (Editors) 82ke01070 01A70
On the 60th birthday of Ivan Semenovič Berezin. (Russian) Ž. Vyčisl. Mat. i
Mat. Fiz. 21 (1981), no. 1, 3-4. (Editors) 82ce01059 01A70

n, Kurt-Reinhard See Wussing, Hans, 82e:01106 and Dauben, Joseph W., 82h:01044

ov, N. N. See Vladin nirov, V. S.; et al., 82f:01152 Bogoljubov, N. N. See Viadimirov, v. S., et al., See Neuman, František, 82f-01127 Chudý, Jaroslav See Matušů, Josef, 82a-01041

rch, Alonzo In honor of Alonzo Church's 75th birthday with some remarks from the

History of logic of A. Dumitriu. Internat. Logic Rev. No. 17-18 (1978), 150-154.

(Editors) 82b-01065 01A70 (03-03)

Collatz, Lothar See Heinrich, Helmut, 82f-01112

Ditkin, V. A. Vitalii Arsen'evič Ditkin (on the occasion of his 70th birthday). (Russian)

Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 3, 547-549. (Editors) 82c:01061 01A70 rodnicyn, A. A. On the 70th birthday of Anatolii Alekseevič Dorodnicyn. (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 20 (1980), no. 6, 1363-1364. (Editors) 82d:01033 01470

Dzjadyk, V. K.

jadyk, V. K. See Korniičuk, M. P.; et al., 82h:01060 bašjan, M. M. See Avetisjan, A. E.; et al., 82c:01044 and Arakeljan, N. U.; et al., 82c:01025

Efimov, N. V. See Aleksandrov, P. S., 82g:01037a and Aleksandrov, A. D.; et al., 82g:01037b

Galiullin, A. S. See Erugin, N. P.; et al., 82i:01049 Gihman, I. I. See Koroljuk, V. S.; et al., 82d:01028

Godunov, S. K. On the fiftieth birthday of S. K. Godunov, corresponding member of the Academy of Sciences of the USSR. (Russian) Sibirsk. Mat. Z. 21 (1980), no. 3, 3-5. (Editors) 82g:01081 01A70

Görtler, Henry See Kirchgässner, Klaus. 82e:01091

Grigor'jan, A. T. Ašot Tigranovič Grigor'jan zum 70. Geburtstag. Translated by W. rkert. NTM Schr. Geschichte Natur. Tech. Medizin 17 (1980), no. 2, 121-123.

(Editors) 82f:01166 01A70 nurbazar, Vasant Shankar ★Professor Huzurbazar felicitation volume. Edited by S. R. Adke. J. Indian Statist. Assoc. 17 (1979). Indian Statistical Association, Poona, 1979. pp. i-iv and 1-209. (Editors) 82a:62008 62-06

John, Fritz See Stoker, J. J., 82g:01072 Kočina, P. Ja. See Aleksandrov, P. S.; et al., 82g:01035 Kořinek, Vladimir See Drbohlav, Karel, 82e:01086 Korniičuk, M. P. See Velikin, V. L.; et al., 82e:01105

Krasnose'skii, M. A. See Bogoljubov, N. N.; et al., 82f:01079 Laptev, B. L. See Višnevskii, V. V.; et al., 82h:01067

rent'ev, M. A. Academician Mihail Alekseevič Lavrent'ev (on the occasion of his eightieth birthday). (Russian) Sibirsk. Mat. Z. 21 (1980), no. 5, 3-11. (Editors) 01A70

See also Marčuk, G. I., 82a:01040

Ljusternik, L. A. See Aleksandrov, P. S.; et al., 82g:01036

Ма″сеv, A. I. ★Пятая Всесовзная Конференция по Математической Логике.

(Russian) [Fifth All-Union Conference on Mathematical Logic] Held at Novosibirsk, November 27-29, 1979. Abstracts of papers. Dedicated to Academician A. I. Mal'cev on the occasion of his seventieth birthday. Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1979. 173 pp. 82a:03002 03-06

Marinescu, Cheorghe L'académicien Gheorghe Marinescu lors de son 60e anniversaire.

Rev. Roumaine Math. Pures Appl. 25 (1980), no. 4, 493–494. (Editors) 82f:01164 01A70

See also Marcus, Solomon, 82f:01121

ima, Yozô ★Manifolds and Lie groups. Papers in honor of Yozô Matsushima. Including papers delivered at the Conference on Geometry held at the University of Notre Dame, Notre Dame, Ind., May 14-15, 1980. Edited by J. Hano, A. Morimoto, S. Murakami [Shingo Murakami], K. Okamoto and H. Ozeki. Progress in Mathematics, 14. Birkhäuser, Boston, Mass., 1981. xii + 459 pp. (1 plate).

ISBN 3-7643-3053-8 (Editors) 82m:53001 53-06

Meixner, J. See & Groot, S. R., 82f:01107

Mihailov, V. P. See Vladimirov, V. S.; et al., 82g:01077 Mišik, Ladislav See Neubrunn, Tibor, 82h:0106 ović, Dragoslav S. See Popov, Blagoj S., 82f:01130 Birthday: (continued)

Neugebauer, Otto See Sachs, J.; et al., 82f:01138 rd See Gani, J.; et al., 82g:01050

rožilov, V. V. Valentin Valentinovič Novožilov. (Russian) Studies in elasticity and plasticity, No. 13 (Russian), pp. 5-6, Leningrad. Univ., Leningrad, 1980. (Editors) 82a:01049 01A70

Orlicz, Władysław *Special issue dedicated to Władysław Orlicz on the occasion of his seventy-fifth birthday. Comment. Math. Special Issue 2 (1979). Paistwowe Wydawnictwo Naukowe (PWN), Warsaw, 1979. pp. i-vi and 1-347. (Editors) 00A10 (46-06)

Ovsjannikov, L. V. Lev Vasil'evič Ovsjannikov (on the occasion of his sixtieth birthday). (Russian) Dinamika Splošn. Sredy No. 38 Nestacionar. Problemy Gidrodinamiki (1979), 5-10 (1 plate). (Editors) 82i:01065 01A70

Parasjuk, O. S. See Bogoljubov, N. N.; et al., 82m:01055

Peschl, Ernst *{Vorträge aus dem Festkolloquium zum Anlasse des 70. Geburtstages von Ernst Peschl]. (German) [Lectures from the Colloquium on the Occasion of Ernst Peschl's 70th Birthday] Sonderband. [Special Issue] Bonner Mathematische Schriften [Bonn Mathematical Publications], 121. Universität Bonn, Mathematisches Institut, Bonn, 1980. ii + 79 pp. (Editors) 82d:30001 30-06

Proporeloy, A. V. See Aleksandroy, A. D.; et al., 82h:01041

Trohorov, Ju. V. Academician Ju. V. Prohorov (on the occasion of his fiftieth birthday).

(Russian) Vestnik Akad. Nauk SSSR 1980, no. 3, 142. (Editors) 82e:01060

, V. V. V. Rusanov, corresponding member of the Academy of Sciences of the USSR (on the occasion of his sixtieth birthday). (Russian) Vestnik Akad. Nauk SSSR 1980, no. 3, 143-144. (Editors) 82c:01062 01A70

rskii, A. A. See Tihonov, A. N.; et al., 82j:01074

Šanin, N. A. See Maslov, S. Ju.; et al., 82g:01063 Sarževskii, A. M. Aleksandr Mihailovič Sarževskii (on the occasion of his 50th

birthday). (Russian) Vestnik Beloruss. Gas. Univ. Ser. I 1980, no. 3, 74. (Editors) 82g:01082 01A70

Schwartz, Laurent *Mathematical analysis and applications. Part A. Essays dedicated to Laurent Schwartz on the occasion of his 65th birthday. Edited by Leopoldo Nachbin. Advances in Mathematics, Supplementary Studies, 7a. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xviii+416 pp. ISBN 0-12-512801-0 (Editors) 82i:00014a 00A10 (35-06, 46-06)

★Mathematical analysis and applications. Part B. Essays dedicated to Laurent Schwartz on the occasion of his 65th birthday. Edited by Leopoldo Nachbin. Advances in Mathematics, Supplementary Studies, 7b. Academic Press, Inc. [Harcourt Brace Jovanooich, Publishers], New York-London, 1981. pp. i-xiv and

417-791. ISBN 0-12-512802-9 (Editors) 82i:00014b 00A10 (35-06, 46-06)

Schwarz, Stefan See Katriñák, Tibor; et al., 82a:01036 Šestakov, A. A. See Erugin, N. P.; et al., 82g:01049

Sobolev, S. L. S. L. Sobolev (on the occasion of his seventieth birthday). (Russian) Theory of cubature formulas and the application of functional analysis to problems of mathematical physics (Russian), pp. 5-26 (1 plate), Trudy Sem. S. L. Soboleva, No. 1, 1978, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1978. (Editors) 01A70

82b:01066 01A70
Stekkin, S. B. Sergei Borisovič Stečkin (on the occasion of his sixtieth birthday).
(Russian) Mat. Zametki 28 (1980), no. 6, 807-808. (Editors) 82g:01083 01A70 orov, G. D. Georgii Dmitrievič Suvorov (on the occasion of his 60th birthday).

(Russian) Ukrain. Mat. Ž. 31 (1979), no. 5, 532. (Editors) 82g:01084 01A70 See also Belinskii, P. P.; et al., 82g:01040

Švec, Marko See Šeda, Valter, 82b:01060 and Kurzweil, Jaroslav, 82b:01061

Sz.-Nagy, Bela See Langer, Heinz, 82e:01095
Teregulov, I. G. Il'tizar Gizatovič Teregulov (on the occasion of his fiftieth birthday).
(Russian) Izv. Vysš. Učebn. Zaved. Matematika 1980, no. 11, 3-4. (Editors) 82c:01063 01A70

Timan, A. F. See Vlasov, V. F.; et al., 82f:01153 Vagner, V. V. See Efimov, N. V.; et al., 82f:01047 Vančura, Zdeněk See Drábek, Karel, 82a:01029 Vogel, Kurt See Vogel, Kurt, 82j:01080

Winkler, Wilhelm See Adam, Adolf, 82b:01032 Blażejewko *Probability theory on vector spaces. II. Proceedings of the Second International Conference held at Błażejewko, September 17-23, 1979. Edited by Aleksander Weron. Lecture Notes in Mathematics, 828. Springer-Verlag, Berlin-New York, 1980. xiii + 324 pp. ISBN 3-540-10253-1 (Editors) 824-60004 60-06 (46-06,

Boca Raton, Fla. *Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. I. Held at Florida Atlantic University, Boca Raton, Fla., March 3-7, 1980. Edited by F. O. Hadlock, F. Hoffman, R. C. Mullin, R. G. Stanton and G. H. J. Van Rees. Congr. Numer. 28 (1980). Utilitas Math. Publishing, Inc., Winnipeg, Man., 1980. pp. i-xi and 1-452. (Editors) 82b:05004a 05-06 (68-06, 68E10)

*Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. II. Held at Florida Atlantic University, Boca Raton, Fla., March 3-7, 1980. Edited by F. O. Hadlock, F. Hoffman, R. C. Mullin, R. G. Stanton and G. H. J. Van Rees. Congr. Numer. 29 (1980). Utilitas Mathematica Publishing, Inc.,

Winnipeg, Man., 1980. pp. i-vii and 453-936. (Editors) 82h:05004b 05-06 (68-06) otá ★Proceedings of the Einstein Centennial Symposium on Fundamental Physics. Held at the Universidad de los Andes, Bogotá, July 30-August 5, 1979. Edited by Steven M. Moore, A. M. Rodríguez-Vargas, A. Rueda and G. Violini. Universidad de los Andes, Bogotá, 1981. xiv + 667 pp. (Editors) 82h:81005 81-06 (83-06)

whay ★Automorphic forms, representation theory and arithmetic. Papers presented at the International Colloquium held in Bombay, January 8-15, 1979. Tata Institute of Fundamental Research Studies in Mathematics, 10. Published for the Tata Institute of Fundamental Research, Bombay; by Springer-Verlag, Berlin-New York, 1981, iv + 355 pp. 1SBN 3-540-10697-9 (Editors) 82i:10036 10D40 (10-06, 22E45, 22E55)

nn ★{Vorträge aus dem Festkolloquium zum Anlasse des 70. Geburtstages von Ernst

Peschl). (German) [Lectures from the Colloquium on the Occasion of Ernst Peschl's 70th Birthday] Sonderband. [Special Issue] Bonner Mathematische Schriften [Bonn Mathematical Publications], 121. Universität Bonn, Mathematisches Institut, Bonn, 1980. ii+79 pp. (Editors) 82d:30001 30−06 deaux ★Journées de Théorie Additive des Nombres. (French) [Conference on Additive

deaux *Journées de Théorie Additive des Nombres. (French) [Conference on Additive Number Theory] Held at Bordeaux, March 14-16, 1977. Université de Bordeaux I, U.E.R. de Mathématiques et d'Informatique, Laboratoire de Théorie des Nombres,

Talence, 1978. v+160 pp. (Editors) 82d:10004 10Jxx

Talence, 1978. V + 100 pp. (Eantors)

ston, Mass. ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part A. Mathematics. Held at the University of Massachusetts, Boston, Mass., August 4-9, 1980. Hadronic J. 4 (1980/81), no. 2. Hadronic Press, Inc., Nonantum, Mass., 1981.

pp. 183-607. (Editors) 821:81002a 81-06 (17-06)

★Proceedings of the Third Workshop on Lie-Admissible Formulations. Part B.
Theoretical physics. Held at the University of Massachusetts, Boston, Mass., August 4-9, 1980. Hadronic J. 4 (1980/81), no. 3. Hadronic Press, Inc., Nonantum, Mass., 1981.

pp. 608-1165. (Editors) 82f:81002b 81-06 (17-06)

*Proceedings of the Third Workshop on Lie-Admissible Formulations. Part C. Experimental physics and bibliography. Held at the University of Massachusetts, Boston, Mass., August 7-9, 1980. Hadronic J. 4 (1980/81), no. 4. Hadronic Press, Inc. Nonantum, Mass., 1981. pp. 1166-1625. (Editors) 82f:81002c 81-06 (17-06)

ulder, Colo. & Computer-assisted analysis and model simplification. Proceedings of the First Symposium held at the University of Colorado, Boulder, Colo., March 24–28, 1980. Edited by Harvey J. Greenberg and John S. Maybee. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xii +522 pp. ISBN 0-12-299680-1 (A. A. Mullin) 82g:00016 00A69 (05C99, 68B15, 68J10, 90-06, 92A20)

(A. A. Mulin) 822,00016 OJAAS (IOCS), 68813, 6810, 90-10, 92-22.0) undary element methods ★Developments in boundary element methods. 1. Edited by P. K. Banerjee and R. Butterfield. Developments Series. Applied Science Publishers, Ltd., Barking, 1979. xii+292 pp. ISBN 0-85334-845-6 (Editors) 821:65005 65-06 (65R20,

73-06, 78-06)

mdary value problems *Codes for boundary value problems in ordinary differential equations. Proceedings of a Working Conference held at the University of Houston, andary value pro ouston, Tex., May 14-17, 1978. Edited by B. Childs, M. Scott, J. W. Daniel, E. Denman and P. Nelson [Paul Nelson, Jr.]. Lecture Notes in Computer Science, 76. Springer-Verlag, Berlin-New York, 1979. vii + 388 pp. ISBN 3-540-09554-3 (Ian Gladwell) 65L10 (65-06)

82b:65074 65L10 (65-06)

★Singularities in boundary value problems. Proceedings of the NATO Advanced Study Institute held in Maratea, September 22-October 3, 1980. Edited by H. G. Garnir. NATO Advanced Study Institute Series. Ser. C: Mathematical and Physical Sciences, 65.

D. Reidel Publishing Co., Dordrecht-Baston, Mass., 1981. xvi+377 pp.
ISBN 90-277-1240-9 (Editors) 82i35005 35-06 (58-06)
undary value problems for equations of mathematical physics. ★Красвые задачи для
уравнений математической физики. (Russian) [Boundary value problems for equations
of mathematical physics] Edited by M. S. Salahitdinov. "Fan", Tashkent, 1980. 171 pp. (Editors) 824:35006 35-06

dary value problems of mathematical physics *Boundary value problems mathematical physics. X. A translation of Trudy Mat. Inst. Steklov. 147 (1980). Proc. pp. i-vi and 1-213. (Editors) 82i:00011 00A10 (35-06)

meday value problems of mathematical physics and related questions in the theory of functions *Краевые задачи математической физики и смежные вопросы теории функций. 13. (Russian) [Boundary value problems of mathematical physics and related questions in the theory of functions. 13] Edited by O. A. Ladyženskaja. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 110 (1981). "Nauka" Leningrad. Otdel., Leningrad, 1981. pp. 1–248. (Editors) 82m:35002 35–06

ary value problems for partial differential equations *Красвые задачи для пальных уравнений в частных производных. (Russian) [Boundary value problems for partial differential equations] Edited by K. S. Sibirskii. Mat. Issled. No. 63 (1981). "Štiinca", Kishinev, 1981. pp. 1–188. (Editors) 82d:35007 35–06 sov *Proceedings of the Sixth Conference on Probability Theory. Held in Braşov,

September 10-15, 1979. Edited by Bernard Bereanu, Şerban Grigorescu, Marius Iosifescu

and Tiberiu Postelnicu. Editura Academiei Republicii Socialiste România, Bucharest, 1981. 547 pp. (Editors) 82i:66002 60-06 (62-06) ★The Proceedings of the National Seminar on Finsler Spaces. Held at the University of Braşov, Braşov, February 1980. Edited by I. P. Popescu. Universitatea din

Timișoara, Societatie de Științe Matematice din R.S. România, Timișoara, 1981. 221 pp. (Editors) 82k:53002 53-06 (53C60)

wer group ★Groupe de Brauer. (French) [The Brauer group] Papers from a Seminar held at Les Plans-sur-Bex, March 16-22, 1980. Edited by Michel Kervaire and Manuel Ojanguren. Lecture Notes in Mathematics, 844. Springer-Verlag, Berlin-New York, 1981. +274 pp. ISBN 3-540-10562-X (Editors) 82c:14004

m + 2 in pp. 15BN 5-340-10362-X (Editors) BZc:14004 14-06 (16-06) nookhaven National Laboratory, N. Y. ★Nonlinear dynamics and the beam-beam interaction. Papers from the Symposium held at Brookhaven National Laboratory, N.Y., March 19-21, 1979. Edited by Melvin Month and John C. Herrera. AIP Conference Proceedings, 57. American Institute of Physics, New York, 1980. viii + 340 pp. ISBN 0-88318-156-8 (Editors) 82g:78001 78-06 (58F13, 78A35)

Brussels, and the University of Mons, Mons, June 2-5, 1980. Bull. Soc. Math. Belg. Sér. B 33 (1981), no. 1. Société Mathématique de Belgique, Brussels, 1981. pp. 1-169. (Editors)

03-06 (03Cxx)

★Aspects contemporains de la science. (French) [Contemporary aspects of science]
Proceedings of a Colloquium held in Brussels, March 2-3, 1979. Acad. Roy. Belg. Cl. Sci. Mêm. Collect. 8° (2) 44 (1981), no. 1. Académie Royale de Belgique, Brussels, 1981. pp. 1-285. (Editors) 82k:00008 00A10

tin GRG Cosmology: list of publications. Gen. Relativity Gravitation 9 (1978), no. 8,

letin GRG Cosmology: list of publications. Gen. Relativity Gravitation 9 (1978), no. 8, 721–756. (Editors) 82b:83001 83–03 (00A15) letin of the Institute of Astrophysics * Бъодаетель Института Астрофизики. Но. 69-70. (Russian) [Bulletin of the Institute of Astrophysics. No. 69-70] Edited by O. V. Dobrovol'skii. "Donis", Dushambe, 1980. 96 pp. (Editors) 82m:85001a 85–06 insess statistics * 1979 Proceedings of the Business and Economic Statistics Section, American Statistical Association. Papers presented at the Annual Meeting held in

Washington, D.C., August 13-16, 1979. American Statistical Association, Washington,

D.C., 1979. x+614 pp. (Editors) 82cc62004e 62-06 (90A19)

CAAP 81 ★CAAP '81. Proceedings of the Sixth Colloquium on Trees in Algebra and Programming held in Genoa, March 5-7, 1981. Edited by Egidio Astesiano and Corrado Böhm. Lecture Notes in Computer Science, 112. Springer-Verlag, Berlin-New York, 1981. vi+364 pp. ISBN 3-540-10828-9 (Editors) 821:68002 68-06 (68B05, 68E10)

in 130 pp. 13Bh 3-3-0-10220-2 (Editors) acrossor so-to (68Bt), 68E(0) feiers du Séminaire d'Histoire des Mathématiques *Cahiers du Séminaire d'Histoire des Mathématiques. 2. (French) [Proceedings of the Seminar on the History of Mathématics. Edited by René Taton and Pierre Dugac. Institus Henri Poincaré, Paris, 1981. 135 pp. (Editors) 82e:01001 01-06 (01A70)

Calendar of mathematicians See Borodin, A. I., 82m:01056

Cambridge *Quantum dynamics of molecules. The new experimental challenge to theorists. Proceedings of the NATO Advanced Study Institute held at the University of Cambridge, Cambridge, September 15-29, 1979. Edited by R. G. Woolley. NATO Advanced Study Institute Series, Ser. B: Physics, 57. Plenum Press, New York-London, 1980. xiv+557 pp. ISBN 0-306-40462-1 (Editors) 82d:81175 81G55 (81-06)

hbridge, Mass. *Algebraic and geometric methods in linear systems theory. Papers

Cambridge, Mass. presented at the AMS-NASA-NATO Summer Seminar held at Harvard University, Cambridge, Mass., June 1979. Edited by Christopher I. Byrnes and Clyde F. Martin. Lectures in Applied Mathematics, 18. American Mathematical Society, Providence, R.I., 1980. viii+327 pp. ISBN 0-8218-1118-5 (Editors) 82a:93004 93-06

★Geometrical methods for the theory of linear systems. Proceedings of a NATO Advanced Study Institute and AMS Summer Seminar in Applied Mathematics held at Harvard University, Cambridge, Mass., June 18-29, 1979. Edited by Christopher I. Byrnes and Clyde F. Martin. NATO Advanced Study Institute Series. Ser. C: Mathematical and Physical Sciences, 62. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. x+317 pp. ISBN 90-277-1154-2 (Editors) 82b:93003 93-06 (14-06,

★Nonlinear finite element analysis and ADINA. Proceedings of the Third ADINA Conference held at the Massachusetts Institute of Technology, Cambridge, Mass., June 10-12, 1981. Edited by K.-J. Bathe. Comput. & Structures 13 (1981), no. 5-6. Pergamon Press, Oxford-New York, 1981. pp. i-v and 575-779. (Editors) 82e:73002

Carbondale, III. ★Algebra, Carbondale 1980. Lie algebras, group theory, and partially ordered algebraic structures. Proceedings of the Southern Illinois Algebra Conference held at Southern Illinois University, Carbondale, Ill., April 18-19, 1980. Edited by Ralph K. Amayo. Lecture Notes in Mathematics, 848. Springer-Verlag, Berlin-New York, 1981. vi+298 pp. ISBN 3-540-10573-5 (Editors) 82d:20004 20-06 (06-06, 17-06)

Case studies in mathematical modelling **Case studies in mathematical modelling. Edited by D. J. G. James and J. J. McDonald. A Halsted Press Book. John Wiley & S. New York, 1981. xiv+214 pp. ISBN 0-470-27177-9 (Editors) 82k:60026 00A69

Categories *3e Colloque sur les Catégories. Partie I. [Third Colloquium on Categories. Part I] Dedicated to Charles Ehresmann. Held in Amiens, July 7-12, 1980. Edited by Andrée Charles Ehresmann. Cahiers Topologie Géom. Différentielle 21 (1980), no. 4,343-438. Université d'Amiens, U.E.R. de Mathématiques, Amiens, 1980. pp. 343-446. (Editors)

★3e Colloque sur les Catégories. Partie II. (French) [Third Colloquium on Categories. Part II] Dedicated to Charles Ehresmann. Held in Amiens, July 7–12, 1980. Edited by Andrée Charles Ehresmann. Cahiers Topologie Géom. Différentielle 22 (1981), no. 1,1-112. Université d'Amiens, U.E.R. de Mathématiques, Amiens, 1981. pp. 1-111. (Editors) 82b:18001b 18-06

Cerisy *Regards sur la théorie des graphes. (French) [A look at graph theory] Proceedings of a Colloquium held at Cerisy, June 12–18, 1980. Edited by P. Hansen [Pierre Hansen] and D. de Werra. Presses Polytechniques Romandes, Lausanne, 1980. xi + 316 pp. (Editors) 05Cxx (65-02)

Čerkassy ★VI Всесоюзный Симпозиум по Теорин Групп. (Russian) [Sixth All-Union Symposium on Group Theory] Held in Čerkassy, September 19-21, 1978. Edited by S. N. Černikov [S. M. Černikov]. "Naukova Dumka", Kiev., 1980. 224 pp. (Editors) 824:20005 20-06

stic systems and dynamical system theory phenomena in deterministic systems and dynamical system theory. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 14-17, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 413 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1–166. (Editors) 82h:58015 58Fxx (28Dxx, 54H20, 70Kxx)

Chapel Hill, N.C. ★Proceedings of the Conference on Integration, Topology, and Geometry in Linear Spaces. Held at the University of North Carolina, Chapel Hill, N.C., May 17-19, 1979. Edited by William H. Graves. Contemporary Mathematics, 2. American Mathematical Society, Providence, R.I., 1980. ix + 269 pp. ISBN 0-8218-5002-4 (Editors)

46-06

elwood Gate *Finite geometries and designs. Proceedings of the Second Isle of Thorns Conference held at Chelwood Gate, June 15-19, 1980. Edited by P. J. Cameron, J. W. P. Hirschfeld and D. R. Hughes. London Mathematical Society Lecture Note Series, 49. Cambridge University Press, Cambridge-New York, 1981. iii + 371 pp.

ISBN 0-521-28378-7 (Editors) 82g:05003 05-06 (05Bxx, 20B25, 51Exx)

cago, III. *Algebraic geometry. Proceedings of the Midwest Algebraic Geometry Conference held at the University of Illinois at Chicago Circle, Chicago, Ill., May 2-3, Edited by Anatoly Libgober and Philip Wagreich. Lecture Notes in Mathematics,
 Springer-Verlag, Berlin-New York, 1981. ii + 281 pp. ISBN 3-540-10833-5 (Editors)

Theory Applied to Renewable Resource Management and Ecology held at the University of Canterbury, Christchurch, January 7-11, 1980. Edited by Thomas L. Vincent and Janisław M. Skowrónski. Lecture Notes in Biomathematics, 40. Springer-Verlag, Berlin-New York, 1981. xii + 236 pp. 1SBN 3-540-10566-2 (Editors) 82k:90001 (92 - 06)

Circuits *Fourteenth Asilomar Conference on Circuits, Systems & Computers. Held in Pacific Grove, Calif., November 17-19, 1980. Edited by Donald E. Kirk. IEEE Computer Society, New York, 1981. viii+520 pp. (Editors) 824:93001 93-06

nt, Calif. *Differential equations and applications in ecology, epidemics, and population problems. Proceedings of the Conference held at Harvey Mudd College,

Claremont, Calif., January 10–11, 1981. Edited by Stavros N. Busenberg and Kenneth L. Cooke. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xv+359 pp. ISBN 0-12-148360-6 (Editors) 82m-92003 92–06 (34–06, 45–06) toolked mechanics and dynamical systems. *Classical mechanics and dynamical systems. *Papers from the NSF-CBMS Regional Conference on Recent Developments in Celestial Mechanics held at Tufts University, Medford, Mass., August 13–17, 1979. Edited by Robert L. Devaney and Zbigniew H. Nitecki. Lecture Notes in Pure and Applied Mathematics, 70. Marcel Dekker, Inc., New York, 1981. x+237 pp. ISBN 0-8247-1529-2 (Editors) 82k-50002 58–06 (70–06)
sosilication of algebraic varieties (toward the 1980s) *Classification of algebraic varieties (toward the 1980s). (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 29–31, 1980.
Sürikaisekikenkyüsho Kökyüroku No. 392 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1–73. (Editors) 82a:14002 14–06 (32–06)

(32-06)

sification and clustering *K.raccuфuxazunz n r.racrep. (Russian) [Classification and clustering] Proceedings of an Advanced Seminar held at the University of Wisconsin, Madison, Wis., May 3-5, 1976. Edited by John Van Ryzin. Translated from the English

by P. P. Kol'cov. "Mir", Moscow, 1980, 389 pp. (Editors) 824-62108 62H3(
sexhal-Zellerfeld Differential geometric methods in mathematical physics.

Proceedings of the International Conference held at the Technical University of Clausthal, Clausthal-Zellerfeld, July 1978. Edited by Heinz-Dietrich Doebner. Lecture Notes in Physics, 139. Springer-Verlag, Berlin-New York, 1981. vii + 329 pp. ISBN 3-540-10578-6 (Editors) 824:81004 81-06 (53-06)

ton ★Aspects of effective algebra. Proceedings of a Conference held at Monash University, Clayton, August 1-4, 1979. Edited by John N. Crossley. Upside Down A Book Co., Yarra Glen, Vic., 1981. x+290 pp. ISBN 0-949865-01-X (Editors) 82h:03003 03-06 (03Dxx)

-Napoca ★Proceedings of the Third Colloquium on Operations Research. Held in Clui-Napoca, October 20-21, 1978. Edited by Joan Marusciac and Wolfgang W. Breckner. Universitatea "Babeş-Bolyai", Facultatea de Matematica, Chij-Napoca, 1979. 302 pp. (Editors) 82e:90005 90-06

302 pp. (Editors) 82e:90005 90-06

**Proceedings of the Colloquium on Geometry and Topology. (Romanian) Held in Cluj-Napoca, September 22-24, 1978. Universitatea "Babeş-Bolyai", Facultatea de Matematica, Cluj-Napoca, 1979. 290 pp. (Editors) 82h:53003 53-06

Codes for boundary value problems in ordinary differential equations

**Codes for boundary value problems in ordinary differential equations. Proceedings of a Working Conference held at the University of Houston, Houston, Tex., May 14-17, 1978. Edited by B. Childs, M. Code I. W. Daniel E. Dempan and P. Nelson [Paul Nelson, Jr.]. Lecture Notes in M. Scott, J. W. Daniel, E. Denman and P. Nelson [Paul Nelson, Jr.]. Lecture Notes in Computer Science, 76. Springer-Verlag, Berlin-New York, 1979. vii + 388 pp. ISBN 3-540-09554-3 (Ian Gladwell) 82h:63074 65L10 (65-06)

Descartes, René Descartes. Philosophy, mathematics and physics. Edited by Stephen Gaukroger. Harvester Readings in the History of Science and Philosophy, 1. Harvester Press, Brighton; Barnes and Noble Books, Totowa, N.J., 1980, xi+329 pp. ISBN 0-85527-798-X (F. C. Kreiling) 82m:01035 01A45 (01-06, 03A05) ndel'Stam, L. I. ★Академик Л. И. Мандельштам. (Russian) [Academician L. I.

Mandel'stam] K 100-летию со дня рождения. [On the 100th anniversary of his birth]. Edited by M. A. Leontovič, A. M. Prohorov and S. M. Rytov. "Nauka", Massow, 1979. 312 pp. (1 plate). (Table of contents) 82g:01085 01A70 (01-06,

ts related to the Fibonacci sequence *A collection of manuscripts related to the Fibonacci sequence. 18th anniversary volume of the Fibonacci Association. Edited by Verner E. Hoggatt, Jr. and Marjorie Bicknell-Johnson. Fibonacci Association, Santa Clara, Calif., 1980. vi + 229 pp. (Editors) 82f:10003

thematics and mathematical education *Sūgaku, sūgaku kyōiku rombunshū. No. 1. [Collection of articles on mathematics and mathematical education. No. 1] Special collection to mark the retirement of Professor Toshio Umezawa. Saitama University, Faculty of Education, Department of Mathematics, Urawa, 1980. 117 pp. (Editors) 82:01002 01-06 (01A75, 30C45)

ective phenomena ★Third International Conference on Collective Phenomena. Held in Moscow, December 27-29, 1978. Edited by Joel L. Lebowitz, James S. Langer and William I. Glaberson. Annals of the New York Academy of Sciences, 337. New York Academy of Sciences, New York, 1980. iii + 223 pp. ISBN 0-89766-074-9 (Editors)

82;82002 82-06
lege Park, Md. ★Ergodic theory and dynamical systems. I. Proceedings of the Special
Year at the University of Maryland, College Park, Md., 1979-80. Edited by Anatole Katok. Progress in Mathe ematics, 10. Birkhäuser, Boston, Mass., 1981. xi + 333 pp. ISBN 3-7643-3036-8 (Editors) 82i:28001 28-06 (28Dxx)

oquia Mathematica Societatis János Bolyai *Point processes and queueing problems Papers from the Colloquium held in Keszthely, September 4-8, 1978. Edited by P. Bártfai and J. Tomkö. Colloquia Mathematica Societatis Janos Bolyai, 24. North-Holland Publishing Co., Amsterdam-New York, 1981. 426 pp. ISBN 0-444-85432-0 (Editors) 821-60006 60-06 (60G55, 60G60, 60J80, 60K25, 60K35)

*Algebraic methods in graph theory. Vol. I, II. Papers from the Conference held in Szeged, August 24–31, 1978. Edited by L. Lovász and Vera T. Sós. Colloquia Mathematica Societatis János Bolyai, 25. North-Holland Publishing Co., Amsterdar York, 1981. 847 pp. ISBN 0-444-85442-8 (Editors) 82k:05002 05-06 (05Cxx)

Peschi, Ernst *{Vorträge aus dem Festkolloquium zum Anlasse des 70. Geburtstages von Ernst Peschl). (German) [Lectures from the Colloquium on the Occasion of Ernst Peschl's 70th Birthday] Sonderband. [Special Issue] Bonner Mathematische Schriften [Bonn Mathematical Publications], 121. Universität Bonn, Mathematisches nn, 1980. ii + 79 pp. (Editors) 824:30001 30-06 Institut, Bo

ow, Willi ★Colloquium in memoriam Prof. Willi Rinow. (German) Held in Greifswald, February 28-29, 1980. Mitt. Math. Ges. DDR No. 4 (1980), 1-90. ttische Gesellschaft der DDR, Berlin, 1980. pp. 1-112. (Editors) 82e:01002 01-06 (01A70)

A Look at Graph Theory ★Regards sur la théorie des graphes. (French) [A look at graph theory] Proceedings of a Colloquium held at Cerisy, June 12–18, 1980. Edited

by P. Hansen [Pierre Hansen] and D. de Werra. Presses Polytechniques Roma Lausanne, 1980. xi+316 pp. (Editors) 824:6954 05Cxx (65-02) lian Functions and Transcendental Numbers. **Econolism

Han Functions and Transcendental Numbers A Fonctions abeliennes et nombres transcendants. (French) [Abelian functions and transcendental numbers] Papers from the Colloquium held at the Ecole Polytechnique, Palaiseau, May 23-26, 1979. Edited by D. Bertrand and M. Waldschmidt. Mém. Soc. Math. France (N.S.) 1980/81, no. 2. Gauthier-Villars, Paris, 1980. pp. 1-119. (Editors) 82c:10047

ra *Colloque d'Algèbre. (French) [Algebra Colloquium] Held at the Université de Rennes, Rennes, May 28-31, 1980. Université de Rennes, Rennes, 1980. v + 308 pp. (Editors) 82m:13001 13-06 (16-06)

13-06 (16-06) (Editors) Same 1991 13-to (10-6)

Sterdam, Formal Methods in the Study of Language *Formal methods in the study of language. Part 1. Proceedings of the Third Amsterdam Colloquium held in Amsterdam, March 25-28, 1980. Edited by Jeroen A. G. Groenendijk, Theo M. V. Janssen and Martin B. J. Stokhof. Mathematical Centre Tracts, 135. Mathematisch Centrum, Amsterdam, 1981. v+322 pp. ISBN 90-6196-211-0 (Editors) 82k:03031a 03B65 (03-06, 68F99)

★Formal methods in the study of language. Part 2. Proceedings of the Third Amsterdam Colloquium held in Amsterdam, March 25-28, 1980. Edited by Jeroen A. G. Groenendijk, Theo M. V. Janssen and Martin B. J. Stokhof. Mathematical Centre Tracts, 136. Mathematisch Centrum, Amsterdam, 1981. pp. i-iii and 323-599. ISBN 90-6196-213-7 (Editors) 82k:03031b 03B65 (03-06, 68F99)

omata, Languages and Programming *Automata, languages and programming.

Papers from the Eighth International Colloquium held in Akko, July 13-17, 1981. Edited by Shimon Even and Oded Kariv. Lecture Notes in Computer Science, 115. Springer-Verlag, Berlin-New York, 1981. viii + 552 pp. ISBN 3-540-10843-2 (Editors) 68-06

omorphic Forms, Representation Theory and Arithmetic *Automorphic forms, representation theory and arithmetic. Papers presented at the International Colloquium held in Bombay, January 8-15, 1979. Tata Institute of Fundamental Research Studies in Mathematics, 10. Published for the Tata Institute of Fundam Research, Bombay; by Springer-Verlag, Berlin-New York, 1981. iv +355 pp. ISBN 3-540-10697-9 (Editors) 82i:10036 10D40 (10-06, 22E45, 22E5) 10D40 (10-06, 22E45, 22E55)

etric *Robuste Verfahren. (German) [Robust methods] Twenty-fifth Biometric Colloquium of the German Region of the International Biometric Society held in Bad Nauheim, March 9, 1979. Edited by Horst Nowak and Reinhard Zentgraf. Medizinische Informatik und Statistik [Medical Information Science and Statistics], 20. Springer-Verlag, Berlin-New York, 1980. v + 121 pp. (loose errata). ISBN 3-540-10234-5 (Helmut Rieder) 82i:62003 62-03 (62F35)

Categories *3e Colloque sur les Catégories. Partie I. [Third Colloquium on Categories. Part I] Dedicated to Charles Ehresmann. Held in Amiens, July 7-12, 1980. Edited by Andrée Charles Ehresmann. Cahiers Topologie Géom. Différentielle 21 (1980), no. 4,343-438. Université d'Amiens, U.E.R. de Mathématiques, Amiens, 1980. pp. 343-446. (Editors) 82h:18001a 18-06

★3e Colloque sur les Catégories. Partie II. (French) [Third Colloquium on Categories. Part II] Dedicated to Charles Ehresmann. Held in Amiens, July 7-12, 1980. Edited by Andrée Charles Ehresmann. Cahiers Topologie Géom. Différentielle 22 (1981), no. 1,1-112. Université d'Amiens, U.E.R. de Mathématiques, Amiens, 1981. pp. 1-111. (Editors) 82b:18001b 18-06

CNRS, Differential Methods in Mathematical Physics Differential geometrical methods in mathematical physics. Proceedings of the International Colloquium of the CNRS held in Aix-en-Provence, September 3-7, 1979, and a conference held in Salamanca, September 10-14, 1979. Edited by P. L. García, A. Pérez-Rendón and J. M. Souriau. Lecture Notes in Mathematics, 836. Springer-Verlag, Berlin-New York, 1980. xii+533 pp. 1SBN 3-540-10275-2 (Editors) 82a:81003 81-06 (83-06)

Conceptual Implications of Quantum Physics ★Les implications conceptuelles de la

physique quantique. (French) [Conceptual implications of quantum physics] Proceedings of a Colloquium held in Paris, June 17-18, 1980. J. Physique 42 (1981), no. 3, suppl. Colloq. C-2. Les Éditions de Physique, Orsay, 1981. pp. 1-118. (Editors) 81Bxx (00A69, 81-06)

orary Aspects of Science *Aspects contemporains de la science. (French) [Contemporary aspects of science] Proceedings of a Colloquium held in Brussels, March 2-3, 1979. Acad. Roy. Belg. Cl. Sci. Mém. Collect. 8° (2) 44 (1981), no. 1. mie Royale de Belgique, Brussels, 1981. pp. 1-285. (Editors) 82k:0000 00A10

Database Organization
Colloquium Databankorganisatie. Deel 1. (Dutch) [Colloquium on Database Organization. Part 1] Edited by P. M. G. Apers. MC Syllabus, 46.1. Mathematisch Centrum, Amsterdam, 1981. ix+174 pp. (loose errata).

ISBN 90-6196-212-9 (Editors) 82m:68905a 68−06 (68B15, 68H05)

Colloquium Databankorganisatie. Deel 2. (Dutch) [Colloquium on Database

Organization. Part 2] Edited by P. M. G. Apers. MC Syllabus, 46.2. Math Centrum, Amsterdam, 1981. xii+237 pp. ISBN 90-6196-231-5 (Editors) 82m:68005b 68-06 (68B15, 68H05)

ning Concepts *Formalization of programming concepts. Proceedings of the International Colloquium held in Peñíscola, April 19-25, 1981. Edited by Josep Diaz and Isidro Ramos. Lecture Notes in Computer Science, 107. Springer-Verlag, Berlin-New York, 1981. vii + 478 pp. ISBN 3-540-10699-5 (Editors) 82f:68005 68-06 (68B05)

Functional Integration Theory and Applications ★Functional integration theory and applications. Proceedings of the Colloquium held at Louvain-la-Neuve, November 6–9, 1979. Edited by Jean-Pierre Antoine and Enrique Tirapegui. Plenum Press, New York-Landon, 1980. x+355 pp. ISBN 0-306-40573-3 (Editors) 82b:81005 81-06 (81C35)

★1. Geometrie-Kolloquium. (German) [First Geometry Colloquium] Held in Graz, September 25–26, 1980. Bericht [Report], 163–167. Forschungszentrum Graz, Mathematisch-Statistische Sektion, Graz, 1981. 82 pp. (not consecutively paged).

(Romanian) Held in Cluj-Napoca, September 22–24, 1978. Universitatea

a: (contin

1982

"Babez-Bolyai", Facultatea de Matematica, Cluj-Napoca, 1979. 290 pp. (Editors) 82h:53003 53-06 53-06

Global Differential Geometry and Global Analysis *Global differential ga global analysis. Proceedings of the Colloquium held at the Technical University of Berlin, Berlin, November 21-24, 1979. Edited by Dirk Ferus, Wolfgang Kühnel, Ugo Simon and Bernd Wegner. Lecture Notes in Mathematics, 838. Sp Berlin-New York, 1981. xi + 299 pp. ISBN 3-540-10285-X (Editors) 82i:53001 53-06

Group Theoretical Methods in Physics *Group theoretical methods in physics. Proceedings of the Eighth International Colloquium held at Kiryat Anavim, March 25-29, 1979. Edited by L. P. Horwitz and Y. Ne'eman. Annals of the Israel Physical Society, 3. Adam Hilger, Ltd., Bristol; Israel Physical Society, Haifa, 1980. xvi +417 pp. (errata insert). ISBN 0-85274-424-2 (Editors) 82h:81004 (20-06, 22-06)

Logic and Epistemology of Scientific Change The logic and epistemology of scientific change. Proceedings of a Colloquium held in Helsinki, December 12-14, 1977. Edited by Ilkka Niiniluoto and Raimo Tuomela. Acta Philos. Fenn. 30 (1978), no. 2-4 (1979). North-Holland Publishing Co., Amsterdam-New York, 1979. pp. 1-461. (Mario Bunge) 82i:00024 00A25 (03-06, 03A05)

stative Harmonic Analysis *Noncommutative harmonic analysis and Lie groups. Proceedings of the Colloquium on Noncommutative Harmonic Analysis held in Marseille, June 16-20, 1980. Edited by Jacques Carmona and Michèle Vergne. Lecture Notes in Mathematics, 880. Springer-Verlag, Berlin-New York, 1981. iv+553 pp. ISBN 3-540-10872-6 (Editors) 82m:22001 22-06 (43-06)
merical Solution of Partial Differential Equations Colloquium: Numerical Solution

of Partial Differential Equations. Held in Delft, Nijmegen and Amsterdam during 1980. Edited by J. G. Verwer. MC Syllabus, 44. Mathematisch Centrum, Amsterdam.
1980. iv+194 pp. ISBN 90-6196-205-6 (Editors) 82a:65006 65−06 (65Mxx)

Operations Research. ★Proceedings of the Third Colloquium on Operations Research.

Held in Cluj-Napoca, October 20-21, 1978. Edited by Ioan Marusciac and Wolfgang W. Breckner. Universitatea "Babes-Bolyai", Facultatea de Matematica, Chij-Napoca, 1979. 302 pp. (Editors) 82e:90005 90-06 osophy of Mathematical Knowledge *Zur Philosophic der mathematischen

Erkenntnis. (German) [On the philosophy of mathematical knowledge] Colloquium held at the University of Münster, Münster, 1978/79. Edited by Egon Börger, Donatella Barnocchi and Friedrich Kaulbach. Königshausen + Neumann, Würzburg, 1981. 159 pp. ISBN 3-88479-022-6 (Editors) 82e:00033 00A25 (03A05)

Point Processes and Queueing Problems ★Point processes and queueing problems.

Papers from the Colloquium held in Keszthely, September 4–8, 1978. Edited by P. Bártfai and J. Tomkó. Colloquia Mathematica Societatis János Bolyai, 24. North-Holland Publishing Co., Amsterdam-New York, 1981. 426 pp ISBN 0-444-85432-0 (Editors) 82f:60006 60-06 (60G55, 60G 60-06 (60G55, 60G60, 60J80, 60K25,

Representation of Knowledge and Reason in the Human Sciences *Représentation des connaissances et raisonnement dans les sciences de l'homme. (French) [Representation of knowledge and reason in the human sciences] Papers from the I.R.I.A.-L.I.S.H. Colloquium held at Saint Maximin, September 17-19, 1979. Edited by Mario Borillo. Institut National de Recherche en Informatique et en Auto (INRIA), Rocquencourt, 1980. iii+607 pp. ISBN 2-7261-0234-4 (Editors) 82d:03007

Trees in Algebra and Programming *Les arbres en algèbre et en programmation. (French) [Trees in algebra and programming] Proceedings of the Fifth Lille Colloquium held in Lille, February 21–23, 1980. Université de Lille I, U.E.R., I.E.E.A., Lille, 1980. iv + 268 pp. (Editors) 82e:68004

★CAAP '81. Proceedings of the Sixth Colloquium on Trees in Algebra and Programming held in Genoa, March 5-7, 1981. Edited by Egidio Astesiano and Corrado Böhm. Lecture Notes in Computer Science, 112. Springer-Verlag, Berlin-New York, 1981. vi + 364 pp. ISBN 3-540-10828-9 (Editors) 82f:68002 68-06 (68B05, 68E10)

Two-Index Random Processes *Processus aléatoires à deux indices. (French) [Two-index random processes] Papers from the E.N.S.T.-C.N.E.T. Colloquium held in Paris, June 30-July 1, 1980. Edited by Hayri Körezlioğlu, Gerald Mazziotto and Jacques Szpirglas. Lecture Notes in Mathematics, 863. Springer-Verlag, Berlin-New York, 1981. ii+274 pp. ISBN 3-540-10832-7 (Editors) 821:60004 60-06 (60Gxx) ogne ★V. Symposium on Operations Research. Part I. Held at the University of Cologne, Cologne, August 25-27, 1980. Edited by Rainer E. Burkard and Theodor

Ellinger. Methods of Operations Research, 40. Verlagsgruppe

Athenaum/Hain/Scriptor/Hanstein, Königstein/Ts.; Oelgeschlager, Gunn & Hain Publishers, Inc., Cambridge, Mass., 1981. 450 pp. ISBN 3-445-02110-4 (Editors)

★V. Symposium on Operations Research. Part II. Held at the University of Cologne, Cologne, August 25-27, 1980. Edited by Rainer E. Burkard and Theodor Ellinger. Methods of Operations Research, 41. Verlagsgruppe Athenaum/Hain/Scriptor/Hanstein, Königstein/Ts.; Oelgeschlager, Gunn & Hain Publishers, Inc., Cambridge, Mass., 1981. 402 pp. ISBN 3-445-02168-6 (Editors)

R2k:90002b 90-06

us, Ohio *Acoustic, electromagnetic and elastic wave scattering-focus on the T-matrix approach. Proceedings of the International Symposium held at Ohio State University, Columbus, Ohio, June 25-27, 1979. Edited by Vijay K. Varadan and Vasundara V. Varadan. Pergamon Press, Oxford-New York, 1980. xii + 693 pp. ISBN 0-08-025096-3 (Editors) 82h:78002 78-06 (73-06, 76-06, 78A45)

mbinatorial analysis *Перечислительные задачи комбинаторного ападиза. (Russian) [Enumeration problems of combinatorial analysis] Сборник переводов. [A collection of translations] Edited by G. P. Gavrilov. Библиотека "Кибернетического Сборника". [Library of the "Cybernetics Collection"]. "Mir", Moscow, 1979. 365 pp. (Đuro Kurepa) 82b:05018 05A15 (00A10)

★Проблемы комбинаторного анализа. (Russian) [Problems of combinatorial analysis] Articles translated from the English and from the French by A. M. Revjakin and B. S. Stečkin. Edited by K. A. Rybnikov. Математика: Новое в Зарубежной Науке [Mathematics: Recent Publications in Foreign Science], 19. "Mir", Moscow, 1980.

252 pp. (Editors) 82d:05005 05-06 (05A15, 05A17, 05B25, 05B35)

Combinatorial mathematics

Combinatorial mathematics VII. Proceedings of the Seventh Australian Conference held at the University of Newcastle, Newcastle, August 20-24, 1979. Edited by Robert W. Robinson, George W. Southern and Walter D. Wallis. Lecture Notes in Mathematics, 829. Springer-Verlag, Berlin-New York, 1980. x+256 pp. ISBN 3-540-10254-X (Editors) 82c:05004 05-06

★Combinatorial mathematics. VIII. Proceedings of the Eighth Australian Conference held at Deakin University, Geelong, August 25–29, 1980. Edited by Kevin L. McAvaney. Lecture Notes in Mathematics, 884. Springer-Verlag, Berlin-New York, 1981. xiv+359 pp. ISBN 3-540-10883-1 (Editors) 82k:05003 05–06

Combinatorial optimization

Combinatorial optimization Lectures presented at the Summer School held in Urbino, May 30-June 11, 1977. Edited by Nicos Christofides, Aristide Mingozzi, Paolo Toth and Claudio Sandi. A Wiley-Interscience Publication. John Wiley & Sons, Ltd., Chichester, 1979. x+425 pp. ISBN 0-471-99749-8 (L. E. Trotter, Jr.) 90C10 (05-06, 68E99, 90-06)

storial structures of configurations *Combinatorial structures of configuration (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 16-18, 1981. Sûrikaisekikenkyûsho Kôkyûroku No. 429 (1981). Kyoto University, Research Institute for Mathematical

Sciences, Kyoto, 1981. pp. i-ix and 1-122. (Editors) 82g:05002 abinatorial theory *Applied combinatorial theory and algorithms. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, December 8-9, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 427 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-iii and 1-192. (Editors) 82g:05001 05-06 (05Cxx, 68B15, 90-06)

nbinatories ★Graphs and combinatories. III. Proceedings of a Symposium held at the

Research Institute for Mathematical Sciences, Kyoto University, Kyoto, December 24-25, 1979. Sürikaisekikenkyüsho Kõkyüroku No. 397 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-248. (Editors)

82b:05003 05-06 (05Cxx)

★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. I. Held at Florida Atlantic University, Boca Raton, Fla., March 3-7, 1980. Edited by F. O. Hadlock, F. Hoffman, R. C. Mullin, R. G. Stanton and G. H. J. Van Rees. Congr. Numer. 28 (1980). Utilitas Mathematica Publishing, Inc., Winnipeg, Man., 1980. pp. i-xi and 1-452. (Editors) 82b:05004a 05-06 (68-06.

*Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. II. Held at Florida Atlantic University, Boca Raton, Fla., March 3-7, 1980. Edited by F. O. Hadlock, F. Hoffman, R. C. Mullin, R. G. Stanton and G. H. J. Van Rees. Congr. Numer. 29 (1980). Utilitas Mathematica Publishing, Inc., Winnipeg, Man., 1980. pp. i-vii and 453-936. (Editors) 82b:05004b 05-06 (68-06)

★Theory of experimental layouts and its applications. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto, July 14-16, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 404 (1980). Kyoto University, Research Institu Mathematical Sciences, Kyoto, 1980. pp. i-xii and 1-162. (Editors) 82d:05006 (05B05, 05B30, 05C99)

★Вычисления в алгебре, теории чисел и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] Edited by L. A. Kalužnin and N. M. Glazunov. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 88 pp. 20-06 (05-06, 10-06) (Editors) 824:20006

★Combinatorics Proceedings of the Eighth British Combinatorial Conference held at University College, Swansea, July 20–24, 1981. Edited by H. N. V. Temperley. London Mathematical Society Lecture Note Series, 52. Cambridge University Press, Cambridge-New York, 1981. iii + 190 pp. ISBN 0-521-28514-3 (Editors) 82i:05001 05-06

Combinatory principles in stochastic geometry ** Комбинаториме принциямы в стохастической геометрии. (Russian) [Combinatory principles in stochastic geometry] Edited by R. V. Ambarcumjan. Akad. Nauk Armjan. SSR, Erevan, 1980. 174 pp. (M. Zähle) 82k:60027 60D05 (60G55)

mmutative rings *Applications of commutative rings to algebraic geometry. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 26-27, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 400 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980.

pp. i—ii and i—98. (Editors) 82d:13001 13-06 (14-06)
прleх analysis ★Исследования по линейным операторам и теорим функций.
(Russian) [Investigations on linear operators and the theory of functions] 99 перешенных задач липейного и комплексного анализа. [99 unsolved problems in linear and complex analysis] Compiled and edited by N. K. Nikol'skii, V. P. Havin and S. V. Hruščev. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 81 (1978). Nauka", Leningrad. Otdel., Leningrad, 1978. pp. 1-296. (Editors) 82e:46002 (00A05, 30-02, 47-02)

★Aspects of contemporary complex analysis. Proceedings of the NATO Advanced Study Institute held at the University of Durham, Durham, July 1-20, 1979. Edited by David A. Brannan and James G. Clunie. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1980. xiii + 572 pp. ISBN 0-12-125950-1

(Editors) 82f:30001 30-06

mplex analysis of singularities ★Complex analysis of singularities. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, September 10-12, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 415 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-225.

(Editors) 82g:14002 14-06 (32-06, 58C27)

pplex analysis and spectral theory ★Complex analysis and spectral theory. Papers from the Seminar held in Leningrad, 1979/1980. Edited by V. P. Havin and N. K. Nikol'skii. Lecture Notes in Mathematics, 864. Springer-Verlag, Berlin-New York, 1981. vi + 480 pp.

ISBN 3-540-10695-2 (Editors) 82m:46001 46-06 (30-06, 47-06)

Complex control systems ★Сложиме системы управления. (Russian) [Complex control systems] Edited by A. I. Kuhtenko [O. I. Kuhtenko] and D. V. Lebedev. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. 96 pp. (Editors) 82a:93005 93-06 (58-06) ★Сложные системы управления. (Russian) [Complex control systems] Edited by

- O. I. Kuhtenko and D. V. Lebedev. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980.
- 100 pp. (Editors) \$2e:93002 93-06

 фек mechanical systems *Koneбания, прочность и устойчивость сложных
 механических систем. (Russian) [Oscillations, durability and stability of compl nical systems] Edited by V. A. Lazarjan. "Naukova Dumka", Kiev, 1979. 163 pp. (Editors) 82e:93029a 93-06
- врем умения ж Некоторые методы оптивизации, идентификации и распределен ресурсов в сложных системах. (Russian) [Some methods for optimization, identification of superior or superior or and allocation of resources in complex systems] Edited by A. V. Dabagjan, E. G. Goloskokov and L. V. Šipulina. Preprint 80-9. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 48 pp. (Editors) 82c:90002 90-06
- lex variable methods for linear multivariable feedback systems **Complex variable nethods for linear multivariable feedback systems. A collection of reprints from the International Journal of Control. Edited by A. G. J. MacFarlane. Taylor & Francis, Ltd., ndon, 1980. v+368 pp. ISBN 0-85066-197-8 (Editors) 82e:93064
- poputational aspects in applied program packages

 Вычислительные acness на пакетам прикладных программ. (Russian) [Computational aspects in applied program packages]
 Edited by I. V. Sergienko and N. I. Tukalevskaja. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev. 1980. 68 pp. (Editors) 821:90057 90Схх
 притаtional complexities

 Studies on computational complexities and related topics. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical
- ences, Kyoto University, Kyoto, February 5-7, 1980. Sûrikaisekikenkyûsho Kökyűroku No. 381 (1980). Kyoto University, Research Institute for Math Sciences, Kyoto, 1980. pp. i-iv and 1-275. (Editors) 82h:68072 68C2: 68C25 (03D15, 68-06,
- прилатional methods and computer software
 Вычислительные методы и
 математическое обеспечение ЭВМ. Вып. 2. (Russian) [Computational methods and
 computer software. No. 2] Edited by A. N. Čekalin and E. V. Ermolin. Kazan. Gos. Univ., Kazan, 1980. 159 pp. (Editors) 82h:76001 76-06
- tational methods of mech nies *Вычислитльные методы механики. (Russian) [Computational methods of mechanics] Edited by N. V. Žitarašu. Mat. Issled. No. 64 (1981). "Štiinca", Kishinev, 1981. pp. 1-200. (Editors) 82k:73001 73-06
- reputational techniques for ordinary differential equations **Computational techniques for ordinary differential equations. Based on the Proceedings of the Conference held at the University of Manchester, Manchester, December 18-20, 1978. Edited by I. Gladwell and D. K. Sayers. The Institute of Mathematics and its Applications Conference Series. Academic Press [Harcourt Brace Jovanovich, Publishers], London-New York-Toro Ont., 1980. x+303 pp. ISBN 0-12-285780-1 (John P. Coleman) 82a:65053 65 (65L07, 65L10, 65L15, 68-04)
- tations in algebra, number theory and combinatorics *Вычисления в алгебре, теории чисся и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] Edited by L. A. Kalužnin and N. M. Glazunov. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. 88 pp. (Editors) 82d:20006 20-06 (05-06, 10-06)
- netic *Computer arithmetic. Edited by Earl E. Swartzlander, Jr. Benchmark Papers in Electrical Engineering and Computer Science, 21. Dowden Hutchinson & Ross, Inc., Stroudsburg, Pa., 1980. xiii + 379 pp. ISBN 0-87933-350-2 (Editors) 82c:68003 68-06 (01A75, 68A05)
- aputer-assisted analysis and model simplification *Computer-assisted analysis and model simplification. Proceedings of the First Symposium held at the University of Colorado, Boulder, Colo., March 24-28, 1980. Edited by Harvey J. Greenberg and John S. Maybee. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xii + 522 pp. ISBN 0-12-299680-1 (A. A. Mullin) 82g:00016 00A69 (05C99, 68B15, 68J10, 90-06, 92A20)
- aputer methods Advances in computer methods for partial differential equations. II.

 Proceedings of the Second IMACS International Symposium on Computer Methods for Partial Differential Equations held at Lehigh University, Bethlehem, Pa., June 22-24, 1977. Edited by R. Vichnevetsky. International Association for Mathen Computers in Simulation (IMACS), New Brunswick, N.J., 1977. vii + 392 pp. (Editors) 82a:65004 65-06
 - *Advances in computer methods for partial differential equations. III. Proceedings of the Third IMACS International Symposium on Computer Methods for Partial
 Differential Equations held at Lehigh University, Bethlehem, Pa., June 20–22, 1979. Edited by R. Vichnevetsky and R. S. Stepleman. Interna ional Association for Mathe and Computers in Simulation (IMACS), New Brunswick, N.J., 1979. vii + 442 pp. (Editors) 82x65005 65-06
- papter in optical research The computer in optical research. Methods and applications. Edited by B. Roy Frieden. Topics in Applied Physics, 41. Springer-Verlag, Berlin-New York, 1980. xv+371 pp. ISBN 3-540-10119-5 (Editors) 82d:78007 78A10
- ng of public transport *Computer scheduling of public transport. Urban passenger vehicle and crew scheduling. Papers based on presentations at the International Workshop held at the University of Leeds, Leeds, July 16-18, 1980. Edited by Anthony Wren. North-Holland Publishing Co., Amsterdam-New York, 1981. viii + 359 pp. ISBN 0-444-86170-X (Editors) 82f:90053 90B35
- er science *20th Annual Symposium on Foundations of Computer Science. Held in San Juan, Puerto Rico, October 29-31, 1979. IEEE Computer Society, New York, 1979.
 - vii+431 pp. (Editors) 82ac89004 68-06 ★1979 International Symposium on Circuits and Systems. Held in Tokyo, July 17-19, 1979. IEEE Computer Society, New York, 1979. xxi+1091 pp. (Editors) 94-06 (65-06, 90-06, 93-06)
 - * 1979 National Computer Conference. Proceedings of the AFIPS Conference held in New York, June 4-7, 1979. Edited by Richard E. Merwin. AFIPS Conference Proceedings, 48. AFIPS Press, Arlington, Va., 1979. xi+1114 pp. (Editors) 82f:68003 68-06 (94-06)
 - ★Алгоритынческие модели в автоматизации исследований. (Russian) [Algorithmic models in computerization of research] Edited by V. M. Ponomarev. Nauka", Moscow, 1980. 255 pp. (loose errata). (Editors) 82b:68002 68-06
 - ★GI—10. Jahrestagung, (German). Held in Saarbrücken, September 30—October 2, 1980. Edited by R. Wilhelm. Informatik-Fachberichte [Technical Reports on Information Science], 33. Springer-Verlag, Berlin-New York, 1980, xv + 563 pp. ISBN 3-540-10388-0 (Editors) 82b:68003 68-06

- ★1980 National Computer Conference. Proceedings of the AFIPS Conference held in Anaheim, Calif., May 19-22, 1980. Edited by Don Medley. AFIPS Conference Proceedings, 49. AFIPS Press, Arlington, Va., 1980. xii + 919 pp. (Editors) 82f:68004
- ★Технические средства мини- и микро-ЭВМ. (Russian) [Technical resources of i- and micro-computers] Edited by B. N. Malinovskii and E. T. Makovenko. Akad. mini- and micro-cor
- mini- and micro-computers] Edited by B. N. Malinovskil and E. I. Makovenko. Akad.

 Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. 102 pp. (Editors) 821:68007 68-06

 **CONPAR 81. Proceedings of the Conference on Analysing 19.10. 108. Editors and 19.10. Editors and 19.10. Ed Programming for Parallel Computing held at Nuremberg, June 10–12, 1981. Edited by Wolfgang Händler. Lecture Notes in Computer Science, 111. Springer-Verlag, Berlin-New York, 1981. xi+508 pp. ISBN 3-540-10827-0 (Editors) 82e:68002 68–06 (68A05,
- ★Formalization of programming concepts. Proceedings of the International Colloquium held in Peñiscola, April 19-25, 1981. Edited by Josep Diaz and Isidro Ramos. Lecture Notes in Computer Science, 107. Springer-Verlag, Berlin-New York, 1981. vii + 478 pp. ISBN 3-540-10699-5 (Editors) 82f:68005 68-06 (68B05)
- ★Graph-theoretic concepts in computer science. Proceedings of the Sixth International Workshop WG 80 held in Bad Honnef, June 15-18, 1980. Edited by Hartmut Noltemeier. Lecture Notes in Computer Science, 100. Springer-Verlag, Berlin-New York, 1981. x + 403 pp. ISBN 3-540-10291-4 (Editors) 82g:68005 (68E10)
- ter software *Вычислительные методы и математическое обеспечение Bhin. 2. (Russian) [Computational methods and computer software. No. 2] Edited by A. N. Čekalin and E. V. Ermolin. Kazan. Gos. Univ., Kazan, 1980. 159 pp. (Editors) 76-06
- lary value problems 🖈 Вычислительная техника и кра 3anava. Bam. 19. (Russian) [Computer technology and boundary value problems. No. 19] Edited by A. P. Spalvin'. Rižsk. Politehn. Inst., Riga, 1978. 174 pp. (Editors) 82i:65085a
- nterized process control *Transmiterea numerică, prelucrarea datelor și conducerea proceselor cu ajutorul calculatoarelor. (Romanian) [Numerical transmission, data processing and computerized process control] Edited by Gh. Cartianu and Edmond Nicolau. Probleme de Automatizare [Problems of Automation], 11. Editura Academiei
- Republicii Socialiste România, Bucharest, 1979. 245 pp. (Editors) 82a:94003 94-06

 uputers Fourteenth Asilomar Conference on Circuits, Systems & Computers. Held in Pacific Grove, Calif., November 17-19, 1980. Edited by Donald E. Kirk. IEEE Computer
- Society, New York, 1981. viii+520 pp. (Editors) 82d:93001 93-06 mputing ★Proceedings of the Eleventh Southeastern Conference on Combinatorics. Graph Theory, and Computing. Vol. I. Held at Florida Atlantic University, Boca Raton, Fla., March 3-7, 1980. Edited by F. O. Hadlock, F. Hoffman, R. C. Mullin, R. G. Stanton and G. H. J. Van Rees. Congr. Numer. 28 (1980). Utilitas Mathe Publishing, Inc., Winnipeg, Man., 1980. pp. i-xi and 1-452. (Editors) 82b:05004a
 - *Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. II. Held at Florida Atlantic University, Boca Raton, Fla., March 3-7, 1980. Edited by F. O. Hadlock, F. Hoffman, R. C. Mullin, R. G. Stanton and G. H. J. Van Rees. Congr. Numer. 29 (1980). Utilitas Mathematica Publishing, Inc., Winnipeg, Man., 1980, pp. i-vii and 453–936. (Editors) 82b:05004b 05–06 (68–06)
 - ★Proceedings of the 1980 CERN School of Computing. Held in Vraona, September 14-27, 1980. Edited by C. Verkerk. CERN 81, 3. CERN-Organisation Europée la Recherche Nucléaire, Geneva, 1981. vii + 408 pp. (Editors) 82d:68003 68-06
- Conceptual implications of quantum physics **Les implications conceptuelles de la physique quantique. (French) [Conceptual implications of quantum physics] Proceedings of a Colloquium held in Paris, June 17-18, 1980. J. Physique 42 (1981), no. 3, suppl. Colloq. C-2. Les Éditions de Physique, Orsay, 1981. pp. 1-118. (Editors) 82j:81002 (00A69, 81-06)
- ditionals Special issue on conditionals. J. Philos. Logic 10 (1981), no. 2,127–289. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. pp. 127–291. (Editors) 82e:03009 03-06 (03A05, 03B45)

- nard Memorial, Philosophy ★Scientific discovery, logic, and rationality. Papers presented at the First Guy L. Leonard Memorial Conference in Philosophy held at Leonard Me the University of Nevada, Reno, Nev., October 29-31, 1978. Edited by Thomas Nickles. Boston Studies in the Philosophy of Science, 56. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xii + 385 pp. ISBN 90-277-1069-4, 90-277-1070-8 (Editors) 82g:03006 03-06 (03A05)
- Acoustic Propagation *Journées d'Études sur la Propagation Acoustique. (French) [Study Conference on Acoustic Propagation] Held in Marseille, October 21-24, 1980. Rev. CETHEDEC Cahier 1980, no. 1. Centre d'Études Théoriques de la nications, Paris, 1980. pp. 1-370. (Editors) 82d:76082 76005
- Additive Number Theory *Journées de Théorie Additive des Nombres. (French) [Conference on Additive Number Theory] Held at Bordeaux, March 14-16, 1977. Université de Bordeaux I, U. E. R. de Mathématiques et d'Inform Théorie des Nombres, Talence, 1978. v+160 pp. (Editors) 82d:10004 10Jxx
 ADINA, Nonlinear Finite Element Analysis ★Nonlinear finite element analysis and
- ADINA. Proceedings of the Third ADINA Conference held at the Massachusetts Institute of Technology, Cambridge, Mass., June 10-12, 1981. Edited by K.-J. Bathe. Comput. & Structures 13 (1981), no. 5-6. Pergamon Press, Oxford-New York, 1981. 73-06 pp. i-v and 575-779. (Editors) 82e:73002
- AFIPS, Computer ★1979 National Computer Conference. Proceedings of the AFIPS Conference held in New York, June 4-7, 1979. Edited by Richard E. Merwin. AFIPS Conference Proceedings, 48. AFIPS Press, Arlington, Va., 1979. xi + 1114 pp. (Editors) 82f:68003 68-06 (94-06)
 - ★1980 National Computer Conference. Proceedings of the AFIPS Conference held in Anaheim, Calif., May 19–22, 1980. Edited by Don Medley. AFIPS Conference Proceedings, 49. AFIPS Press, Arlington, Va., 1980. xii + 919 pp (Editors) 82f:68004 68-06 (94-06)
- vraic Geometry *Journées de Géométrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers 1979. Variétés de petite dimension. [Small

Conference: (continued)

- dimension varieties] Papers presented at the Conference held in Angers, July 2-7, 1979. Edited by Arnaud Beauville. Sijthoff & Noordhoff, Alphen aan den Rijn—Germantown, Md., 1980. xii + 323 pp. ISBN 90-286-0500-2 (Editors) 82a:14003 14-06
- Algebraic K-Theory Algebraic K-theory, Evanston 1980. Proceedings of the Conference held at Northwestern University, Evanston, Ill., March 24-27, 1980. Edited by Eric M. Friedlander and Michael R. Stein. Lecture Notes in Mathematics, 854. Springer-Verlag, Berlin-New York, 1981. ii + 517 pp. ISBN 3-540-10698-7 (Editor), 28ct 1980. 18.06 (4), 206. 14.06 (1873).

(Editors) 82e:18001 18-06 (12-06, 14-06, 18F25)

Algebraic Methods in Graph Theory ★Algebraic methods in graph theory. Vol. I, II. Papers from the Conference held in Szeged, August 24-31, 1978. Edited by L. Lovász and Vera T. Sós. Colloquia Mathematica Societatis János Bolyai, 25. North-Holland Publishing Co., Amsterdam-New York, 1981. 847 pp. ISBN 0-444-85442-8 (Editors) 82k-05002 05-06 (05Cxx)

- Analysing Problem Classes and Programming for Parallel Computing ★CONPAR 81.

 Proceedings of the Conference on Analysing Problem Classes and Programming for Parallel Computing held at Nuremberg, June 10–12, 1981. Edited by Wolfgang Handler. Lecture Notes in Computer Science, 111. Springer-Verlag, Berlin-New York, 1981. xi + 508 pp. ISBN 3-540-10827-0 (Editors) 82e:68002 68-06 (68A05, 68Para).
- Analysis on Manifolds ★Analyse sur les variétés. (French) [Analysis on manifolds]
 Papers from a Conference held at the University of Metz, Metz, May 28–30, 1979.
 Astérisque, 80. Société Mathématique de France, Paris, 1980. 96 pp. (Editors)
 82e:58001 58–06
- Analysis and Optimization of Systems ★Analysis and optimization of systems.

 Proceedings of the Fourth International Conference held in Versailles, December 16-19, 1980. Edited by A. Bensoussan and J.-L. Lions. Lecture Notes in Control and Information Sciences, 28. Springer-Verlag, Berlin-New York, 1980. xiv+999 pp. ISBN 3-540-10472-0 (Editors) 82bx49002 49-06 (90-06, 93-06)

 Analytic and Elementary Number Theory ★Journées de Théorie Analytique et Elémentaire des Nombres. (French) [Conference on Analytic and Elementary
- Analytic and Elementary Number Theory * Journées de Théorie Analytique et Elémentaire des Nombres. (French) [Conference on Analytic and Elementary Number Theory] Held in Orsay, June 2-3, 1980. Publications Mathématiques d'Orsay 81 [Mathematical Publications of Orsay 81], 1. Université de Paris-Sud, Département de Mathématique, Orsay, 1981. ii+81 pp. (Editors) 82b:10001 10-06
- Analytic Sets ★Analytic sets. Lectures delivered at a Conference held at University College, University of London, London, July 16-29, 1978. Academic Press, Inc. [Harcourt Brace Jouanovich, Publishers], London-New York, 1980. x+499 pp. 1SBN 0-12-593150-6 (Douglas Cenzer) 82m:03063 03E15 (03D55, 04A15, 54H05, 60G40, 90D13)
- Applications of Logic to Algebra and Arithmetic

 ★ Model theory of algebra and arithmetic. Proceedings of the Conference on Applications of Logic to Algebra and Arithmetic held at Karpacz, September 1–7, 1979. Edited by L. Pacholski, J. Wierzejewski, and A. J. Wilkie. Lecture Notes in Mathematics, 834. Springer-Verlag, Berlin-New York, 1980. vi+410 pp. ISBN 3-540-10269-8 (Editors) 82a:03003 03-06 (030560, 030562)
- Army Mathematicians ★Transactions of the Twenty-seventh Conference of Army Mathematicians. Held in West Point, N.Y., June 10–12, 1981. ARO Report 82, 1. U. S. Army Research Office, Research Triangle Park, N.C., 1982. xv+765 pp. (Editors) 823-60010. 004.10 (65–16.73–05.76–16.80–06)
- 82k:00010 00A10 (65-06, 73-06, 76-06, 80-06)

 Asilomar, Circuits, Systems and Computers ★Fourteenth Asilomar Conference on Circuits, Systems & Computers. Held in Pacific Grove, Calif., November 17-19, 1980. Edited by Donald E. Kirk. IEEE Computer Society, New York, 1981. viii + 520 pp. (Editors) 82d:93001 93-06
- Aspects of Effective Algebra ★Aspects of effective algebra. Proceedings of a Conference held at Monash University, Clayton, August 1-4, 1979. Edited by John N. Crossley. Upside Down A Book Co., Yarra Glen, Vic., 1981. x + 290 pp. ISBN 0-949865-01-X (Editors) 821-03003 03-06 (03Dxx)
- Australian, Combinatorial Mathematics

 Combinatorial mathematics

 Combinatorial mathematics. VII.

 Proceedings of the Seventh Australian Conference held at the University of Newcastle, Newcastle, August 20–24, 1979. Edited by Robert W. Robinson, George W. Southern and Walter D. Wallis. Lecture Notes in Mathematics, 829.

 Springer-Verlag, Berlin-New York, 1980. x+256 pp. ISBN 3-540-10254-X (Editors)
 82a-68004 05–06

★Combinatorial mathematics. VIII. Proceedings of the Eighth Australian Conference held at Deakin University, Geelong, August 25–29, 1980. Edited by Kevin L. McAvaney. Lecture Notes in Mathematics, 884. Springer-Verlag, Berlin-New York, 1981. xiv+359 pp. ISBN 3-540-10883-1 (Editors) 82k:05003 05–06

- British Combinatorial ★Combinatorics. Proceedings of the Eighth British Combinatorial Conference held at University College, Swansea, July 20–24, 1981. Edited by H. N. V. Temperley. London Mathematical Society Lecture Note Series, 52. Cambridge University Press, Cambridge-New York, 1981. iii + 190 pp. ISBN 0-521-28514-3 (Editors) 821-05001 05–06
- Entitled by Ir. N. V. Temperey. London Mathematical Society Lecture Note Series, 52. Cambridge University Press, Cambridge-New York, 1981. iii + 190 pp. 1SBN 0-521-28514-3 (Editors) 82165001 05-06
 CNRS, Model Theory and Arithmetic ★Model theory and arithmetic. Proceedings of the CNRS Conference held in Paris, 1979-1980. Edited by Chantal Berline, Kenneth McAloon and Jean-Pierre Ressayre. Lecture Notes in Mathematics, 890. Springer-Verlag, Berlin-New York, 1981. vi+306 pp. 1SBN 3-540-11159-X (Editors) 82mc3004 03-06 (03C62, 03F30)
- Codes for Boundary Value Problems in Ordinary Differential Equations ★Codes for boundary value problems in ordinary differential equations. Proceedings of a Working Conference held at the University of Houston, Houston, Tex., May 14–17, 1978. Edited by B. Childs, M. Scott, J. W. Daniel, E. Denman and P. Nelson [Paul Nelson, Jr.]. Lecture Notes in Computer Science, 76. Springer-Verlag, Berlin-New York, 1979, vii + 388 pp. ISBN 3-540-09554-3 (Ian Gladwell) 82b:e5074 65L10 (65–06)
- Collective Phenomena ★Third International Conference on Collective Phenomena. Held in Moscow, December 27–29, 1978. Edited by Joel L. Lebowitz, James S. Langer and William I. Glaberson. Annals of the New York Academy of Sciences, 337. New York Academy of Sciences, New York, 1980. iii + 223 pp. 15BN 0-89766-074-9 (Editors) 82;82002 82–06

Conference: (continued)

- Complex Analysis ★Journées Complexes, Nancy 80. (French) [Conference on Complex Analysis, Nancy 80] Held in Nancy, May 27–31, 1980. Institut Élie Cartan, 3. Université de Nancy, Institut Élie Cartan, Nancy, 1981. ii + 106 pp. ISBN 2-90-3594-02-3 (Editors) 821-32004 32-06
- Computational Techniques for Ordinary Differential Equations
 techniques for ordinary differential equations. Based on the Proceedings of the
 Conference held at the University of Manchester, Manchester, December 18–20,
 1978. Edited by I. Gladwell and D. K. Sayers. The Institute of Mathematics and its
 Applications Conference Series. Academic Press [Harcourt Brace Jovanovich,
 Publishers], London-New York-Toronto, Ont., 1980. x + 303 pp. 1SBN 0-12-285780-1
 (John P. Coleman) \$2ac65083 651.05 (651.07, 651.10, 651.15, 68-04)

Computer Communication ★Evolutions in computer communications. Proceedings of the Fourth International Conference on Computer Communication held in Kyoto, September 26-29, 1978. Edited by H. Inose. North-Holland Publishing Co., Amsterdam-New York, 1978. vi+842 pp. ISBN 0-444-85258-1 (Editors) 82am:94001 94-06 (68-06)

- Constructive Mathematics ★Constructive mathematics. Proceedings of the Conference held at the New Mexico State University, Las Cruces, N.M., August 11–15, 1980. Edited by Fred Richman. Lecture Notes in Mathematics, 873. Springer-Verlag, Berlin-New York, 1981. vii+347 pp. ISBN 3-540-10850-5 (Editors) 82m:03003 03-06 (03F65)
- Convergence ★Proceedings of the Conference on Convergence. Held in Szczyrk, October 22–27, 1979. Edited by Czesław Kliś. Polska Akademia Nauk, Oddział w Katowicach, Komisja Matematyczno-Fizyczna, Katowice, 1980. ii+112 pp. (Editors) 82:c54001 54–06 (46–06)
- Crystallographic Groups ★Proceedings of the Conference on Kristallographische Gruppen. Part II. Held at the University of Bielefeld, Bielefeld, September 2–16, 1979. Edited by A. W. M. Dress and N. Neubüser. Match No. 10 (1981). Max-Planck-Institut für Kohlenforschung, Institut für Strahlenchemie, Mülheim, 1981. pp. i-iii and 1–233. (Editors) 82e:20060 20H15 (82A60)

Data Analysis and Computer Science ★Analyse de données et informatique. [Data analysis and computer science] Proceedings of the Conference held at Fontainebleau, March 19-30, 1979. Edited by M. Amirchahy and D. Néel. Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. ix +310 pp. ISBN 2-7261-0232-8 (Editors) 82hc6096 62H30 (92-06)

1980. ix+310 pp. ISBN 2-7261-0232-8 (Editors) 82h:62096 62H30 (92-06)

Design of Experiments in Army Research, Development and Testing ★Proceedings of the Twenty-Sixth Conference on the Design of Experiments in Army Research, Development and Testing. Held at New Mexico State University, Las Cruces, N.M., October 22-24, 1980. ARO Report 81, 2. U. S. Army Research Office, Research Triangle Park, N.C., 1981. xviii+587 pp. (Editors) 82g:62008 62-06

Differential Equations and Applications in Ecology, Epidemics, and Population Problems

† Differential equations and applications in ecology, epidemics, and population problems. Proceedings of the Conference held at Harvey Mudd College, Claremont, Calif., January 10-11, 1981. Edited by Stavros N. Busenberg and Kenneth L. Cooke. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xv + 359 pp. ISBN 0-12-148360-6 (Editors) 82m:92003 92-06 (34-06, 45-06).

Differential Equations and Numerical Mathematics ★Теория кубатурных формул и вычислятельная математика. (Russian) [Theory of cubature formulas and numerical mathematics] Proceedings of a Conference on Differential Equations and Numerical Mathematics held in Novosibirsk, 1978. Edited by S. L. Sobolev. "Nauka" Sibirsk. Oldel., Novosibirsk, 1980. 258 pp. (loose errata). (Editors) 82465903 65-06 Differential Geometric Methods in Mathematical Physics ★ Differential geometric

Differential Geometric Methods in Mathematical Physics ★ Differential geometric methods in mathematical physics. Proceedings of the International Conference held at the Technical University of Clausthal, Clausthal-Zellerfeld, July 1978. Edited by Heinz-Dietrich Doebner. Lecture Notes in Physics, 139. Springer-Verlag, Berlin-New York, 1981. vii+329 pp. ISBN 3-540-10578-6 (Editors) 82681004 81-06 (53-06)

Differential Geometrical Methods in Mathematical Physics ★Differential geometrical methods in mathematical physics. Proceedings of the International Colloquium of the CNRS held in Aix-en-Provence, September 3-7, 1979, and a conference held in Salamanca, September 10-14, 1979. Edited by P. L. Garcia, A. Pérez-Rendón and J. M. Souriau. Lecture Notes in Mathematics, 836. Springer-Verlag, Berlin-New York, 1980. xii+533 pp. ISBN 3-540-10275-2 (Editors) 82a-81003 81-06 (83-06)

Dynamic Modelling and Control of National Economies ★Models and decision making in national economies. Proceedings of the Second International Conference on Dynamic Modelling and Control of National Economies held in Vienna, January 24–27, 1977. Edited by J. M. L. Janssen, L. F. Pau and A. Straszak. North-Holland Publishing Co., Amsterdam-New York, 1979. ix + 425 pp. ISBN 0-444-85280-8 (Editors) 82m-90001 90–06

Electric Power Problems: the Mathematical Challenge ★Electric power problems: the mathematical challenge. Proceedings of a Conference held in Seattle, Wash., March 18–20, 1980. Edited by A. M. Erisman, K. W. Neves and M. H. Dwarakanath. Society for Industrial and Applied Mathematics (SIAM), Philadelphia, Pa., 1980. xix+531 pp. ISBN 0-89871-173-8 (Editors) 82a-90004 90-06 (65-06)

xix+531 pp. ISBN 0-89871-173-8 (Editors) 82a:90004 90-06 (65-06)

Environmetrics *Environmetrics 81: selected papers. Papers from a Conference held in Alexandria, Va., April 8-10, 1981. SIAM-SIMS Conference Series, 8. Society for Industrial and Applied Mathematics (SIAM), Philadelphia, Pa., 1981. vii+259 pp. ISBN 0-89871-178-9 (Editors) 82k:62004 62-06 (90-06, 92A17)

European Cooperation in Informatics *Trends in information processing systems.

European Cooperation in Informatics ★Trends in information processing systems. Proceedings of the Third Conference of the European Cooperation in Informatics held in Munich, October 20-22, 1981. Edited by A. J. W. Duijvestijn and P. C. Lockemann. Lecture Notes in Computer Science, 123. Springer-Verlag, Berlin-New York, 1981. xi+348 pp. ISBN 3-540-10885-8 (Editors) \$2k:68004 68-06 (68B15, 68B20)

European, Signal Processing ★Signal processing: theories and applications.

Proceedings of the First European Signal Processing Conference (EUSIPCO-80) held in Lausanne, September 16-18, 1980. Edited by M. Kunt and F. de Coulon. North-Holland Publishing Co., Amsterdam-New York, 1980. xiii+797 pp. 1SBN 0-444-86050-9 (Editors) 82g:34001 94-06 (68Gxx, 92-06, 93E11, 94Axx)

Fixed Point Theory *Fixed point theory. Proceedings of a Conference held at the

pe: (com

Université de Sherbrooke, Sherbrooke, Que., June 2-21, 1980. Edited by Edward Fadell and Gilles Fournier. Lecture Notes in Mathematics, 886. Springer-Verlag, Berlin-New York, 1981. xii + 511 pp. ISBN 3-540-11152-2 (Editors) 82m:55002 55-06 (47-06, 54-06)

33-06 (47-06, 34-06)
ecasting Public Utilities ★Forecasting public utilities. Proceedings of the International Conference held at Nottingham University, Nottingham, March 25-29, 1980. Edited by O. D. Anderson. North-Holland Publishing Co., Amsterdam-New York, 1980. v+209 pp. 158N 0-444-86046-0 (Editors) 82±9004 90A19 seral Inequalities ★General inequalities. 2. Proceedings of the Second International Conference of the Second International Con

teral Inequalities

General inequalities 2. Proceedings of the Second International Conference held at the Mathematical Research Institute, Oberwolfach, July 30-August 5, 1978. Edited by E. F. Beckenbach. Birkhäuser Verlag, Basel-Baston, Och 10, 100 (1997). ass., 1980. xix + 485 pp. ISBN 3-7643-1056-1 (Editors) 82b:00004 (05-06, 26Dxx, 41-06)

eral Topology and Modern Analysis *General topology and modern analysis.

Proceedings of the Conference held at the University of California, Riverside, Calif., May 28-31, 1980. In honor of the retirement of Professor F. Burton Jones. Edited by L. F. McAuley and M. M. Rao. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xv+514 pp. ISBN 0-12-481820-X (Editors)

metry Manifolds and Lie groups. Papers in honor of Yozò Matsushima.

Including papers delivered at the Conference on Geometry held at the University of otre Dame, Notre Dame, Ind., May 14-15, 1980. Edited by J. Hano, A. Morimoto, S. Murakami [Shingo Murakami], K. Okamoto and H. Ozeki. Progress in Mathematics, 14. Birkhäuser, Boston, Mass., 1981. xii + 459 pp. (1 plate). ISBN 3-7643-3053-8 (Editors) 82m:53001 53-06

22m:53001 53-06 ement, Modeling and Evalu schaft für Informatik, Mea executant for informatis, recognition, violenting and Computing Systems ** Messung, Modellierung und Bewertung von Rechensystemen. (German) [Measurement, modeling and evaluation of computing systems] GI-NTG Conference held in Jülich, February 23-25, 1981. Edited by Burkhard Mertens. Informatik-Fachberichte [Technical Reports on Information Science], 41. Springer-Verlag, Berlin-New York, 1981. viii+368 pp. ISBN 3-540-10619-7 (Editors) 82h:68002 68-06 (68C15, 90-06)

tory and Philosophy of Science *Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. I. Theory change, ancient axiomatics, and Galileo's methodology. Second International Conference held at Pisa, September 4-8, 1978. Edited by Jaakko Hintikka, David Gruender and Evandro Agazzi Synthese Library, 145. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xiv+354 pp. ISBN 90-277-1126-7 (Editors) 82f-01001a 01-06 (03-06)

*Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. II. Probabilistic thinking, thermodynamics and the interaction of the history and philosophy of science. Synthese Library, 146. D. Reidel Publishing Co., Dordrecht-Baston, Mass., 1981. xiv+326 pp. ISBN 90-277-1127-5 (Editors) 92f-01001b 01-06 (03-06)

University of Patras, Patras, July 9-14, 1979. Edited by Demetrios G. Lainiotis and Nicolaos S. Tzannes. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xvi+591 pp. ISBN 90-277-1129-1 (Editors) 824:93002 93-06

★Second International Conference on Information Sciences and Systems. Vol. III. Applications of information and control systems. Papers from INFO II held at the University of Patras, Patras, July 9-14, 1979. Edited by Demetrios G. Lainiotis and Nicolaos S. Tzannes. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xiv+520 pp. ISBN 90-277-1143-7 (Editors) 824:93003 93-06 (94Axx)

★Second International Conference on Information Sciences and Systems. Vol. I.

Advances in communications. Papers from INFO II held at the University of Patras, Patras, July 9-14, 1979. Edited by Demetrios G. Lainiotis and Nicolaos S. Tzannes.

D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xiv + 524 pp.

ISBN 90-277-1140-2 (Editors) 82d-94002 94-06

★Integral and Functional Differential Equations ★Integral and functional differential equations. Proceedings of the Conference held at West Virginia University, Morgantown, W.Va., June 18-20, 1979. Edited by Terry L. Herdman, Harlan W. Stech and Samuel M. Rankin, III. Lecture Notes in Pure and Applied Mathematics, 67. Marcel Dekker, Inc., New York, 1981. x+276 pp. ISBN 0-8247-1354-0 (Editors) 45-06 (34-06)

gration, Topology, and Geometry in Linear Spaces Proceedings of the Conference on Integration, Topology, and Geometry in Linear Spaces. Held at the University of North Carolina, Chapel Hill, N.C., May 17–19, 1979. Edited by William H. Graves. Contemporary Mathematics, 2. American Mathe ematical Society, Providence, R.I., 1980. ix + 269 pp. ISBN 0-8218-5002-4 (Editors) 82e:46003 46-06

Isle of Thorus, Finite Geometries and Designs ★Finite geometries and designs.

Proceedings of the Second Isle of Thorus Conference held at Chelwood Gate, June 15-19, 1980. Edited by P. J. Cameron, J. W. P. Hirschfeld and D. R. Hughes. London Mathematical Society Lecture Note Series, 49. Cambridge University Press, bridge-New York, 1981. iii+371 pp. ISBN 0-521-28378-7 (Editors) 82g:05003 05-06 (05Bxx, 20B25, 51Exx)

manian Mathematical Society Abstracts from the 19th Conference of the Lithuanian Mathematical Society (Kaunas, June 16-17, 1978). (Russian) Litousk. Mat. Sb. 19 (1979), no. 3, 103-199. (Editors) 82j:00008 00A10

(1979), no. 3, 103–199. [Editors) actions in a minoba, Numerical Mathematics and Computing Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. I. Held at the University of Manitoba, Winnipeg, Man., October 1–4, 1980. Edited by D. S. Meek and H. C. Williams, Congr. Numer. 30 (1981). Utilitus Mathematica Publishing, Inc., Winnipeg, Man., 1981. pp. 1–317. (Editors) 82j-00010 00A10 (65–06,

*Proceedings of the Tenth Manitoba Conference on Numerical Mathem and Computing, Vol. II. Held at the University of Manitoba, Winnipeg, Man., October 1-4, 1980. Edited by D. S. Meek and H. C. Williams. Congr. Numer. 31 (1981). Utilitas Mathematica Publishing, Inc., Winnipeg, Man., 1981. pp. 1-313. (Editors) 82j:00011 00A10 (65-06, 68-06)

s *Recent developments in Markov decision processes

ceedings of an International Conference on Markov Decision Processes held at the University of Manchester, Manchester, July 17-19, 1978. Edited by R. Hartley [Roger Hartley], L. C. Thomas and D. J. White. Institute of Mathematics and its Applications Conference Series. Academic Press, Inc. [Harcourt Brace Jova Publishers], London-New York, 1980. xiv+334 pp. ISBN 0-12-328460-0 (A. A. Juškevič) 82k:90128 90C40 (90C39)

stical Aspects of Marine Traffic *Mathematical aspects of marine traffic. Proceedings of the Conference held at Chelsea College, London University, London, September, 1977. Edited by S. H. Hollingdale. Institute of Mathematics and its Applications Conference Series. Academic Press, Inc. [Harcourt Brace Jovanovich, blishers], London-New York, 1979. xii + 269 pp. ISBN 0-12-352450-4 (Editors) 90-06

tical Logic *Logic Year 1979-80. Proceedings of Seminars and of the Conference on Mathematical Logic held at the University of Connecticut, Storrs, Conn., November 11-13, 1979. Edited by Manuel Lerman, James Henry Schmerl and Robert Irving Soare. Lecture Notes in Mathematics, 859. Springer-Verlag, Berlin-New York, 1981. viii + 326 pp. ISBN 3-540-10708-8 (Editors) 82e:03007

thematical Methods and Applications of Scattering Theory *Mathematical methods and applications of scattering theory. Proceedings of a Conference held at Catholic University, Washington, D.C., May 21-25, 1979. Edited by John A. DeSanto, Albert W. Saenz and Woodford W. Zachary. Lecture Notes in Physics, 130. Springer-Verlag, Berlin-New York, 1980. xiii + 331 pp. ISBN 3-540-10023-7 (Editors) 82h:81117 81Fxx (35P25, 73D99, 78A45, 81-06)

thematical Methods in Economics ★6. Konferenz "Mathematische Methoden in der Ökonomie". (German) [Sixth Conference on Mathematical Methods in Economics] Papers presented at the Conference held in Vitte, September 28-October 3, 1980. Edited by K. Lommatzsch. Seminarberichte [Seminar Reports], 29. Humboldt Universität, Sektion Mathematik, Berlin, 1980. 79 pp. (Editors) 82a:90002

Mathematics of Hydrology and Water Resources & The mathematics of hydrology and Water Resources & The mathematics of hydrology and Water Resources. Based on the Proceedings of the Conference held at the University of Lancaster, Lancaster, July 1976. Edited by Emlyn H. Lloyd, Terence O'Donnell and John Craven Wilkinson. Institute of Mathematics and its Applications Conference Series. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1979. xi + 138 pp. ISBN 0-12-453350-7 (J. C. J. Nihoul) 86-06 (86A05)

tics in the Intellectual Life and Society of Tomorrow Round table on "Mathematics in the intellectual life and society of tomorrow". (Italian) Riv. Mat. Univ. Parma (4) 6 (1980), 485-525 (1981). (Mario Bunge) 82i:00030

Measure Theory and its Applications *Measure theory and its applications Proceedings of the Conference held at Northern Illinois University, DeKalb, Ill., October 24-25, 1980. Edited by Gerald A. Goldin and Robert F. Wheeler. Northern Illinois University, Department of Mathematical Sciences, DeKalb, Ill., 1981. x+286 pp. (Pedro Jiménez Guerra) 82g:28002 28-02 (28-06, 46-02, 47-02,

Measuring and Modelling of the Cardiac Electrical Field *Measuring and modelling of the cardiac electrical field. Proceedings of the International Conference held at Smolenice, June 14-17, 1976. Edited by Peter Kneppo. VEDA, Vydavatel'stvo Slovenskej Akadémie Vied, Bratislava, 1980. 303 pp. (Editors) 82f:92010

west, Algebraic Geometry *Algebraic geometry. Proceedings of the Midwest Algebraic Geometry Conference held at the University of Illinois at Chicago Circle, Chicago, Ill., May 2-3, 1980. Edited by Anatoly Libgober and Philip Wagreich. Lecture Notes in Mathematics, 862. Springer-Verlag, Berlin-New York, 1981. ii + 281 pp. ISBN 3-540-10833-5 (Editors) 82m:14001 14-06

el Selection *Model selection. Papers presented at the Conference held at the University of Florida, Gainesville, Fla., April 18-21, 1980. Edited by G. S. Maddala. J. Econometrics 16 (1981), no. 1. North-Holland Publishing Co., Amsterdam-New York, 1981. pp. 1-170. (Editors) 82f:62195 62P20

Models of Biological Growth and Spread *Biological growth and spread. Mathematical theories and applications. Proceedings of a Conference on Models of Biological Growth and Spread held in Heidelberg, July 16-21, 1979. Edited by Willi Jäger, Hermann Rost and Petre Tautu. Lecture Notes in Biomathematics, 38. Springer-Verlag, Berlin-New York, 1980. xi+511 pp. ISBN 3-540-10257-4 (Editors) 92-06 (60J80, 60J85, 60K35) 820-92004

linear Differential Equations *Nonlinear differential equations. Invariance, stability, and bifurcation. Proceedings of an International Conference held in Trento, May 25-30, 1980. Edited by Piero de Mottoni and Luigi Salvadori. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xi+357 pp. ISBN 0-12-508780-2 (Editors) 82d:34003 34-06

inear Oscillations *Proceedings of the VIIIth International Conference on Nonlinear Oscillations. Vol. I. Held in Prague, September 11-15, 1978. Academia [Publishing House of the Czechoslovak Academy of Sciences], Prague, 1979. 548 pp. (Editors) 82k:70002a 70-06 (93-06)

★Proceedings of the VIIIth International Conference on Nonlinear Oscillations. Vol. II. Held in Prague, September 11-15, 1978. Academia [Publishing House of the Czechoslovak Academy of Sciences], Prague, 1979. pp. 553-1078. (Editors)

82k:70002b 70-06 (93-06)

nlinear Problems in Geometry ★Nonlinear problems in geometry. Proceedings of the Sixth International Symposium of the Division of Mathematics of the Taniguchi Foundation. Conference on Nonlinear Problems in Geometry held in Katata. September 3-8, 1979. Tohoku University, Department of Mathematics, Sendai, 1979.

v+23 pp. (Editors) 82j:58001 58-06 (35-06, 53-06)

NSF-CBMS Regional, Recent Developments in Celestial Mechanics

**Classic mechanics and dynamical systems. Papers from the NSF-CBMS Regional Conference on Recent Developments in Celestial Mechanics held at Tufts University, Medford, Mass., August 13-17, 1979. Edited by Robert L. Devaney and Zbigniew H. Nitecki. Lecture Notes in Pure and Applied Mathematics, 70. Marcel Dekker, Inc.,

New York, 1981. x+237 pp. ISBN 0-8247-1529-2 (Editors) 82k:58002 58-06 (70-06)

ar Physics *Quarks and leptons as fundamental particles. Proceedings of the XVIII. Internationale Universitätswochen für Kernphysik held at Karl-Franzens-Universität Graz, Schladming, February 28-March 10, 1979. Edited by Paul Urban. Acta Physica Austriaca Supplement, XXI. Springer-Verlag, Vienna,

1979. i+716 pp. ISBN 3-211-81564-3 (Editors) 821:81003 81-06 (81Cxx)

★Field theory and strong interactions. Proceedings of the XIX. Internationale Universitätswochen für Kernphysik held at Karl-Franzens-Universität Graz, Schladming, February 20-29, 1980. Edited by Paul Urban. Acta Physica Austriaca Supplement, XXII. Springer-Verlag, Vienna, 1980. 815 pp. ISBN 3-211-81615-1 (Editors) 82c:81001 81-06 (Editors) 82c:81001

her Theory *Proceedings of the Conference on Number Theory. Held in Mysore, August 19-22, 1979. Edited by R. Jagannathan. Matscience Report, 101. Institute of Mathematical Sciences, Madras, 1980. iv+237 pp. (loose errata). (Editors) 82d:10005 10-06

erical Methods in Fluid Dynamics **Seventh International Conference on Numerical Methods in Fluid Dynamics. Proceedings of the Conference held at Stanford University, Stanford, Calif., and at the NASA/Ames Research Center, Moffett Field, Calif., June 23-27, 1980. Edited by William Craig Reynolds and Robert William MacCormack. Lecture Notes in Physics, 141. Springer-Verlag, Berlin-New York, 1981. viii + 485 pp. ISBN 3-540-10694-4 (Editors) 82h:76002

nerical Methods in Fracture Mechanics
Numerical methods in fracture mechanics.

Proceedings of the First International Conference held at University College, Swansea, January 9-13, 1978. Edited by A. R. Luxmoore and D. R. J. Owen. University College of Swansea, Swansea, 1978. vii + 836 pp. (Editors) 82i:73003

★Numerical methods in fracture mechanics. Proceedings of the Second International Conference held at University College, Swansea, July 7-11, 1980.

Edited by D. R. J. Owen and A. R. Luxmoore. Pineridge Press Ltd., Swansea, 1980. vi+801 pp. 15BN 0-906674-08-5 (Editors) 82c:73005 73-06 (73M05) merical Methods in Thermal Problems *Numerical methods in thermal problems. Proceedings of the First International Conference held at University College, Swansea, July 2-6, 1979. Edited by R. W. Lewis and K. Morgan. Pineridge Press Ltd., Swansea, 1979. xi+1155 pp. ISBN 0-906674-01-8 (Editors) 82g:80001 80-06 (65-06)

Oberwolfach, Operations Research *IX. Oberwolfach Conference on Operations Research. Held in Oberwolfach, October 15-21, 1978. Edited by Rudolf Henn, Hans Paul Künzi and Horst Schubert. Operations Research Verfahren [Operations Research Procedures], 36. Verlagsgruppe Athenäum/Hain/Scriptor/Hanstein, Königstein/Ts.; Oelgeschlager, Gunn & Hain Publishers, Inc., Cambridge, Mass., 1980. iii+326 pp. ISBN 3-445-01917-7 (Editors) 82a:90007 90-06 (62-06)

timization and Optimal Control *Optimization and optimal control. Proceedings of a Conference held at the Mathematical Research Institute, Oberwolfach, March 16-22, 1980. Edited by Alfred Auslender, Werner Oettli [Karl Werner Oettli] and Josef Stoer. Lecture Notes in Control and Information Sciences, 30. Springer-Verlag, Berlin-New York, 1981. viii + 254 pp. ISBN 3-540-10627-8 (Editors) 82e:49004

Ordinary and Partial Differential Equations *Ordinary and partial differential equations. Proceedings of the Fifth Conference held at the University of Dundee, Dundee, March 29-31, 1978. Edited by W. N. Everitt. Lecture Notes in Mathematics, 827. Springer-Verlag, Berlin-New York, 1980. xvi+271 pp. ISBN 3-540-10252-3 (Editors) 82c:34003 34-06 (35-06)

★Ordinary and partial differential equations. Proceedings of the Sixth Conference held at the University of Dundee, Dundee, March 31-April 4, 1980. Edited by W. N. Everitt and B. D. Sleeman. Lecture Notes in Mathematics, 846. Springer-Verlag, Berlin-New York, 1981. xiv + 384 pp. ISBN 3-540-10569-7 (Editors) 34-06 (35-06)

rallel Processing *Proceedings of the 1979 International Conference on Parallel Processing. Held at Bellaire, Mich., August 21-24, 1979. Edited by Oscar N. García. IEEE Computer Society, New York, 1979. viii + 326 pp. (Editors) 82b:68024 68B20 (68-06, 94-06)

Pattern Recognition ★Proceedings of the 5th International Conference on Pattern Recognition. Vol. 1. Held in Miami Beach, Fla., December 1-4, 1980. IEEE Computer Society, New York, 1980. xv+774 pp. (Editors) 82g:68088a (68-06, 92-06)

*Proceedings of the 5th International Conference on Pattern Recognition. Vol. 2. Held in Miami Beach, Fla., December 1-4, 1980. IEEE Computer Society, New York, 1980. pp. i-xxiii and 776-1382. (Editors) 82g:68088b 92-06)

Physics in One Dimension *Physics in one dimension. Proceedings of an International Conference held in Fribourg, August 25-29, 1980. Edited by Jakob Bernasconi and Toni Schneider. Springer Series in Solid-State Sciences, 23. Springer-Verlag, Berlin-New York, 1981. ix+368 pp. ISBN 3-540-10586-7 (Editors) 82-06 (82A42, 82A51, 82A68)

odel *Modelling and simulation in practice. 2. Proceedings of the Second Annual Polymodel Conference held at Teesside Polytechnic, Middlesbrough, May 1979. Edited by M. J. O'Carroll, A. W. Bush, M. Cross [Mark Cross], R. D. Gibson nd T. S. Wilkinson. Emjoc Press, Northallerton, 1980. iii + 349 pp. 65-06 (68J05)

ISBN 0-9506994-0-3 (Editors) 82c:65001 bility Theory *Proceedings of the Sixth Conference on Probability Theory. Held in Braşov, September 10-15, 1979. Edited by Bernard Bereanu, Şerban Grigorescu,

Marius Iosifescu and Tiberiu Postelnicu. Editura Academiei Republicii Socialiste România, Bucharest, 1981. 547 pp. (Editors) 82is60002 60-06 (62-06)

Probability Theory on Vector Spaces * Probability theory on vector spaces. II.

Proceedings of the Second International Conference held at Blażejewko, September 17-23, 1979. Edited by Aleksander Weron. Lecture Notes in Mathematics, 828.

Springer-Verlag, Berlin-New York, 1980. xiii + 324 pp. ISBN 3-540-10253-1 (Editors)

82d:60004 60-06 (46-06, 47-06)
blems in Applied Mathematics ★Numerische Behandlung mathematischer
Modellgleichungen. (German) [Numerical treatment of mathematical model equations] First Conference on Problems in Applied Mathematics held in Matzlow/Garwitz, September 22-26, 1980. Summaries of lectures. Edited by Georg Hebermehl. Report 1980, 9. Akademie der Wissenschaften der DDR, Institut für

Mathematik, Berlin, 1980. vi + 176 pp. (Editors) 82e:65004 65-06

Recent Advances in Differential Equations ★Recent advances in differential equations.

Proceedings of the International Conference held in Trieste, August 24-26, 1978. Edited by Roberto Conti. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xi+447 pp. ISBN 0-12-186280-1 (Editors)

Recent Developments in Number Theory

★Proceedings of the Queen's Number Theory

Conference, 1979. Held at Queen's University, Kingston, Ont., July 2-20, 1979.

Edited by Paolo Ribenboim. Queen's Papers in Pure and Applied Mathematics, 54. Queen's University, Kingston, Ont., 1980. xiii+497 pp. (Editors) 82j:10003 10-06

tent Developments in Several Complex Variables *Recent developments in several complex variables. Proceedings of a Conference held at Princeton University, Recent Develope Princeton, N. J., April 16-20, 1979. Edited by John E. Fornaess. Annals of Mathematics Studies, 100. Princeton University Press, Princeton, N.J.: University of Tokyo Press, Tokyo, 1981. xi+452 pp. ISBN 0-691-08285-5, 0-691-08281-2 (Editors) 82g:32002 32-06

Representations of Algebras *Representation theory. II. Proceedings of the Second International Conference on Representations of Algebras held at Carleton University, Ottawa, Ont., August 13-25, 1979. Edited by Vlastimil Dlab and Peter Gabriel. Lecture Notes in Mathematics, 832. Springer-Verlag, Berlin-New York, 1980. xiv+673 pp. ISBN 3-540-10264-7 (Editors) 82a:16002b 16-06 (16A64)

Revolutionary Developments in the Field of Science and Engineering *Revolučni změny v oblasti vědy a techniky. (Czech) [Revolutionary developments in the field of science and engineering] 2. poloviny 19. a počátku 20. století jako předpoklad vědeckotechnické revoluce. [The second half of the nineteenth and the beginning of the twentieth century as the basis of the scientific-technical revolution]. Papers presented at the Conference held at Liblice, October 18-20, 1979. Edited by Luboš Nový. Práce z Dějin Přirodních Věd [Works in the History of Natural Sciences], 13. Československé Akademie Věd (ČSAV), Prague, 1980. 462 pp. (Editors) 82g:01002 01-06 (01A55, 01A60)

Riemann Surfaces and Related Topics *Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference. Held at the State University of New York, Stony Brook, N.Y., June 5-9, 1978. Edited by Irwin Kra and Bernard Maskit, Annals of Mathematics Studies, 97. Princeton University Press, Princeton, N. J.; University of Tokyo Press, Tokyo, 1981. ix + 517 pp. ISBN 0-691-08264-2 (Editors) 82f:32002 32-06 (30Fxx, 32G15)

Role of Coherent Structures in Modelling Turbulence and Mixing *The role of coherent structures in modelling turbulence and mixing. Proceedings of the International Conference held in Madrid, June 25-27, 1980. Edited by Javier Jimenez. Lecture Notes in Physics, 136. Springer-Verlag, Berlin-New York, 1981. xiii + 393 pp. ISBN 3-540-10289-2 (Editors) 82c:76062 76Fxx (76−06, 80A25) nigroups ★Semigroups. Proceedings of a Conference held at the Mathematical

Research Institute, Oberwolfach, December 16-21, 1978. Edited by H. Jürgensen, M. Petrich and H. J. Weinert. Lecture Notes in Mathematics, 855. Springer-Verlag, Berlin-New York, 1981. v+221 pp. ISBN 3-540-10701-0 (Editors) 82f:20009 20-06 (20Mxx)

Shape Theory and Geometry Topology ★ Shape theory and geometric topology.

Proceedings of the Second Conference held at the Inter-University Centre of Postgraduate Studies, Dubrovnik, January 19-30, 1981. Edited by Sibe Mardešić and Jack Segal. Lecture Notes in Mathematics, 870. Springer-Verlag, Berlin-New York, 1981. iii + 265 pp. ISBN 3-540-10846-7 (Editors) 82m:55003 55-06 (54-06,

Sitges, Statistical Mechanics *Systems far from equilibrium. Papers from the Sitges Conference on Statistical Mechanics held in Sitges and Barcelona, June 1980. Edited by Luis Garrido. Lecture Notes in Physics, 132. Springer-Verlag, Berlin-New York, 1980. xv+403 pp. ISBN 3-540-10251-5 (Editors) 82g:82004 76F99, 82A35, 82A70)

Southeastern, Combinatorics, Graph Theory and Computing *Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing, Vol. I. Held at Florida Atlantic University, Boca Raton, Fla., March 3-7, 1980. Edited by F. O. Hadlock, F. Hoffman, R. C. Mullin, R. G. Stanton and G. H. J. Van Rees, Congr. Numer. 28 (1980). Utilities Mathematica Publishing, Inc., Winnipeg, Man., 1980. pp. i–xi and 1–452. (Editors) 82b:05004a 05–06 (68–06. 05-06 (68-06,

★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing, Vol. II. Held at Florida Atlantic University, Boca Raton, Fla., March 3-7, 1980. Edited by F. O. Hadlock, F. Hoffman, R. C. Mullin, R. G. Stanton and G. H. J. Van Rees. Congr. Numer. 29 (1980). Utilitas Math Publishing, Inc., Winnipeg, Man., 1980. pp. i-vii and 453-936. (Editors) 82b:05004b 05-06 (68-06)

uthern Illinois, Algebra Algebra, Carbondale 1980. Lie algebras, group theory, and partially ordered algebraic structures. Proceedings of the Southern Illinois Algebra Conference held at Southern Illinois University, Carbondale, Ill., April 18-19, 1980. Edited by Ralph K. Amayo. Lecture Notes in Mathematics, 848. Springer-Verlag, Berlin-New York, 1981. vi + 298 pp. ISBN 3-540-10573-5 (Editors) 82d:20004 20-06 (06-06, 17-06)

Spectral Theory of Differential Operators *Spectral theory of differential operators. Proceedings of the Conference held at the University of Alabama, Birmingham, Ala., March 26-28, 1981. Edited by Ian W. Knowles and Roger T. Lewis. North-Holland Mathematics Studies, 55. North-Holland Publishing Co., Amsterdam-New York, 1981. xv+384 pp. ISBN 0-444-86277-3 (Editors) 82k:34002 34-06 (47-06) Conference: (continued)

Statistics *Statistique non paramètrique asymptotique. (French) [Nonparametric asymptotic statistics] Proceedings of the Conference on Statistics held at Rouen, June 13-14, 1979. Edited by Jean-Pierre Raoult. Lecture Notes in Mathematics, 821. Springer-Verlag, Berlin-New York, 1980. vi+175 pp. ISBN 3-540-10239-6 (Editors) 82a-62007 62-06

Theoretical and Applied Questions of Mathematics ★Тезисы Копференции
"Теоретические и Прикладиме Вопросы Математики". (Russian) [Abstracts of
the Conference on Theoretical and Applied Questions of Mathematics] Edited by M.
Tynnov [M. Tonnov]. Tartu. Gos. Univ., Tartu, 1980. 300 pp. (Editors) 82±00003
000.10

Theory and Applications of Graphs ★The theory and applications of graphs.

Proceedings of the Fourth International Conference held at Western Michigan
University, Kalamazoo, Mich., May 6-9, 1980. Edited by Gary Chartrand, Yousef
Alavi, Donald L. Goldsmith, Linda Lesniak-Foster and Don R. Lick. John Wiley &
Sons, Inc., New York, 1981. xvi+611 pp. ISBN 0-471-08473-5 (Editors) 82i:05002
DS-DS.

Thermodynamics and Statistical Mechanics ★Statphys 14. Proceedings of the 14th International Conference on Thermodynamics and Statistical Mechanics held at the University of Alberta, Edmonton, Alta, August 17–22, 1980. Edited by John Stephenson. Phys. A 106 (1981), no. 1-2. North-Holland Publishing Co., Amsterdam-New York, 1981. pp. i-viii and 1-368. (Editors) 82d:82003 82-06 (80-06)

Time Series Analysis ★Time series analysis. Proceedings of the Third International Conference (ITSM) held in Houston, Tex., August 14–15, 1980. Edited by Oliver D. Anderson and Marlin Ray Perryman. North-Holland Publishing Co., Amsterdam-New York, 1981. ix+661 pp. ISBN 0-444-81677-7 (Editors) 82k:62005 62-06 (62M10)

Topology ★The Proceedings of the 1980 Topology Conference. Held at the University of Alabama, Birmingham, Ala., 1980. Edited by Włodzimierz Kuperberg, G. M. Reed and Phillip Zenor. Topology Proc. 5 (1980), (1981). Auburn University, Mathematics Department, Auburn, Ala., 1981. pp. 1–264. (Editors) 821:54002 54-06

Department, Auburn, Ala., 1981. pp. 1–264. (Editors) 82:5-6002. 54–06

Transport Theory ★New frontiers in transport theory. Selected papers from the Sixth Conference held at the University of Arizona, Tucson, Ariz., April 1979. Edited by B. D. Ganapol. Ann. Nuclear Energy 7 (1980), no. 4-5. Pergamon Press, Oxford-New York, 1980. pp. 198–312. (Editors) 822:82001. 82–06 (76–06, 82A70)

Transportation ★Scientific management of transport systems. Papers presented at the

Transportation ★Scientific management of transport systems. Papers presented at the International Conference on Transportation held in New Delhi, November 26–28, 1980. Edited by N. K. Jaiswal. North-Holland Publishing Co., Amsterdam-New York, 1981. ix+377 pp. ISBN 0-444-86205-6 (Editors) 82i:90001 90–06

VLSI Systems and Computations *VI.SI systems and computations. Papers presented at the Conference held at Carnegie-Mellon University, Pittsburgh, Pa., October 19–21, 1981. Edited by H. T. Kung, Robert F. Sproull and Guy Steele, Ir. Computer Science Press, Rockville, Md., 1981. xi+415 pp. ISBN 0-914894-35-8 (Editors) 82:e3006 68-06 (03-06)

Leibniz ★Theoria cum praxi: zum Verhältnis von Theorie und Praxis im 17. und 18. Jahrhundert. Band I. (German) [Theoria cum praxi: on the relationship of theory and praxis in the seventeenth and eighteenth centuries. Vol. I] Theorie und Praxis, Politik, Rechts- und Staatsphilosophie. [Theory and praxis, politics, philosophy of law and state] Proceedings of the Third International Leibniz Congress held in Hannover, November 12–17, 1977. Edited by Albert Heinekamp and Reinhard Finster. Studia Leibnitiana Supplementa, XIX. Franz Steiner Verlag GmbH, Wiesbaden, 1980. vii +284 pp. ISBN 3-515-03419-6 (Editors) 8Zhe01003 01–06

(01A45, 01A50)

European Federation of Medical Informatics ★ Medical informatics, Europe 81.

Proceedings of the Third Congress of the European Federation of Medical Informatics held in Toulouse, March 9–13, 1981. Edited by F. Grémy, P. Degoulet, B. Barber and R. Salamon. Lecture Notes in Medical Informatics, 11.

Springer-Verlag, Berlin-New York, 1981. xxiii + 975 pp. ISBN 3-540-10568-9 (Editors) 82m:92004a 92-06

Japan, Applied Mechanics ★Theoretical and applied mechanics. Vol. 29. Proceedings of the 29th Japan National Congress for Applied Mechanics held in Tokyo, November 20–22, 1979. University of Tokyo Press, Tokyo, 1981. ix+487 pp. ISBN 0-86008-282-2 (Editors) 82e:73003 73–06 (76–06)

Scandinavian, Mathematicians. ★18th Scandinavian Congress of Mathematicians.

Proceedings of the Congress held in Aarhus, August 18–22, 1980. Edited by Erik Balslev. Progress in Mathematics, 11. Birkhäuser, Boston, Mass., 1981. ix+515 pp. 1SBN 3-7643-3040-6 (Editors) 82i:00012 00A10

Spanish Society for the History of Science ★1 Congreso de la Sociedad Española de

Spanish Society for the History of Science ★1 Congress of la Sociedad Española de Historia de las Ciencias. (Spanish) [First Congress of the Spanish Society for the History of Science] Held in Madrid, December 1978. El cientifico español ante su historia. La ciencia en España entre 1750-1850. [The Spanish scientist before the history of science. Science in Spain between 1750 and 1850] Edited by Santiago Garma. Diputación Provincial de Madrid, Servicios de Extensión Cultural y Divulgación, Madrid, 1980. 589 pp. ISBN 84-500-4142-2 (Editors) 82d-01001

Theoretical and Applied Mechanics ★Theoretical and applied mechanics. Proceedings of the 15th International Congress held at the University of Toronto, Toronto, Ont., August 17-23, 1980. Edited by F. P. J. Rimrott and B. Tabarrok. North-Holland Publishing Co., Amsterdam-New York, 1980. xxxi + 457 pp. ISBN 0-444-85411-8 (Editors) 824:00008 70-06 (00A10, 73-06, 76-06)

CONPAR **CONPAR 81. Proceedings of the Conference on Analysing Problem Classes and Programming for Parallel Computing held at Nuremberg, June 10–12, 1981. Edited by Wolfgang Handler. Lecture Notes in Computer Science, 111. Springer-Verlag, Berlin-New York, 1981. xi+508 pp. ISBN 3-540-10827-0 (Editors) 82e:68002 (68A05, 68Bxx)

Construction and application of specialized tools of computer technology

*Конструпрование и применение специализированных средств вычислительной техники. (Russian) [Construction and application of specialized tools of computer technology] Edited by N. A. Levčenko and S. A. Sablina. Akad. Nauk Ukrain. SSR,

Congress: (continued)

Inst. Kibernet., Kiev, 1980. 97 pp. (Editors) 82e:68003 68-06

onstructive description of groups with properties prescribed on their subgroups

★Конструктивное описание групп с заданивами свойствами подгрупп. (Russian)
[Constructive description of groups with properties prescribed on their subgroups]
Edited by S. N. Černikov [S. M. Černikov], Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev.,
1980. 148 pp. (Editors) 82c:20004 20−06

Constructive mathematics ★Constructive mathematics. Proceedings of the Conference held at the New Mexico State University, Las Cruces, N.M., August 11–15, 1980. Edited by Fred Richman. Lecture Notes in Mathematics, 873. Springer-Verlag, Berlin-New York, 1981. vii + 347 pp. ISBN 3-540-10850-5 (Editors) 82mc09003 03–06 (03F65)

Contemporary aspects of science *Aspects contemporains de la science (French) [Contemporary aspects of science] Proceedings of a Colloquium held in Brussels, March 2–3, 1979. Acad. Roy. Belg. Cl. Sci. Mém. Collect. 8° (2) 44 (1981), no. 1. Académie Royale de Belgique, Brussels, 1981, pp. 1–285. (Editors) 82k-00008 00A10

Royale de Belgique, Brussels, 1981. pp. 1–285. (Editors) 82k-00008 00A10

Continuum dynamics ★Избрантые вопросы динамики сплоивых сред. (Russian)

[Selected questions in continuum dynamics] Edited by O. V. Golubeva. "Nauka", Mascow. 1980. 86 pp. (Editors) 82k-76003 76–06 (76505).

Mascow, 1980. 86 pp. (Editors) 82e:76003 76-06 (76S05)

Continuum hypothesis ★O teorema de Gödel e a hipótese do continuo. (Portuguese) [Gödel's theorem and the continuum hypothesis] Edited, translated and with a preface by Manuel Lourenço. Fundação Calouste Gulbenkian, Lisbon, 1979. xcv+900 pp. (Editors) 82bc03003 03-06 (00A10, 01-06)

Contributions to algebraic geometry ★Contributions to algebraic geometry. In honor of Oscar Zariski. Edited by Michael Artin and David Mumford. Reprint of Amer. J. Math. 101 (1979), no. 1-2. Johns Hopkins University Press, Baltimore, Md., 1979. vii+514 pp. ISBN 0-8018-2307-2 (Editors) 82g:14003 14-06

Contributions to probability ★Contributions to probability. A collection of papers dedicated to Eugene Lukacs. Edited by J. Gani and V. K. Rohatgi. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xxi+311 pp. (1 plate). ISBN 0-12-274460-8 (Editors) 821-60005 60-06 (62-06)

Control *Structural control. Proceedings of the International IUTAM Symposium held at the University of Waterloo, Waterloo, Ont., June 4-7, 1979. Edited by H. H. E. Leipholz. North-Holland Publishing Co., Amsterdam-New York, 1980. xv + 810 pp.

North-Holland Publishing Co., Amsterdam-New York, 1980. xv+810 pp.
ISBN 0-444-85485-1 (Hassan K. Khalil) 82g-93003 93-06 (49-06)
★Статистические методы в управления. (Russian) [Statistical methods in control]
Edited by T. V. Rjabuškin. Učen. Zap. Statist. 37 (1980). "Nauka", Moscow, 1980.
pp. 1-320. (Editors) 82k:90004 90Axx (01-06, 93-06)

Control networks ★Optimization of design and computation of control networks. Proceedings of the International Symposium held at Sopron, July 4–10, 1977. Edited by F. Halmos and J. Somogyi. Akadėmiai Kiadó (Publishing House of the Hungarian Academy of Sciences), Budapest, 1979. 733 pp. ISBN 963-05-1716-7 (Editors) 82c:90026 90Bxx (86A30)

Control of objects with distributed parameters ★Управление объектами с распределенными параметрами. (Russian) [Control of objects with distributed parameters] Edited by Ju. I. Samoilenko and V. A. Tkačenko. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. 87 pp. (Editors) 82:76041a 76E25

Control and optimization in ecological systems ★Управление и оптимизация в

Control and optimization in ecological systems ★Управление и оптимизация в экологических системых. (Russian) [Control and optimization in ecological systems] Edited by Ju. M. Svirežev. Voprosy Kibernet. (Moscow) No. 52 (1979). Akad. Nauk SSSR, Naučn. Sovet po Kompleksnoi Probleme "Kibernetika", Moscow, 1979, pp. 1–111. [Editors] 821-92001 92-06

Control systems ★Сложные системы управления. (Russian) [Complex control systems] Edited by A. I. Kuhtenko [O. I. Kuhtenko] and D. V. Lebedev. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. 96 pp. (Editors) 82a:93005 93-06 (58-06)

★Адаптивные системы управления. (Russian) [Adaptive control systems] Edited by V. I. Ivanenko. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 82 pp. (Editors) 82a:93003 93-06

★Дискретные системы управления. (Russian) [Discrete control systems] Edited by V. M. Kuncevič and V. P. Jakovlev. *Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev.*, 1980. 72 pp. (Editors) **82d:93004** 93–06

★Сложиме системы управления. (Russian) [Complex control systems] Edited by O. I. Kuhtenko and D. V. Lebedev. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. 100 pp. (Editors) 82e:93002 93-06

Control theory ★Renewable resource management. Proceedings of a Workshop on Control Theory Applied to Renewable Resource Management and Ecology held at the University of Canterbury, Christchurch, January 7–11, 1980. Edited by Thomas L. Vincent and Janislaw M. Skowrónski. Lecture Notes in Biomathematics, 40. Springer-Verlag, Berlin-New York, 1981. xii+236 pp. ISBN 3-540-10566-2 (Editors) 82k:90001 90-06 (92-06)

Convective flows and hydrodynamic stability ★Конвективные течения и гидродинамическая устойчивость. (Russian) [Convective flows and hydrodynamic stability] Edited by E. L. Tarunin and V. A. Briskman. Akad. Nauk SSSR, Ural. Naukn.

Centr, Soerdiousk, 1979. 138 pp. (Editors) 82d:76041 76E15 (76-06)

Convergence structures and applications to analysis ★Convergence structures and applications to analysis. Edited by S. Gähler, W. Gähler and G. Kneis. Proceedings of the International Summer School held in Frankfurt a.d. Oder, May 8-12, 1978.

Abhandlungen der Akademie der Wissenschaften der DDR, Abteilung Mathematik, Naturwissenschaften, Technik, 1979 [Transactions of the Academy of Sciences of the DDR, Section for Mathematics, Sciences and Technology, 1979], 4. Akademie-Verlag, Berlin, 1980. 175 pp. (Editors) 82d:46001 46-06 (54-06, 58-06)

Correspondence:

Baire, René Lettres à René Baire. Cahiers du Séminaire d'Histoire des Mathématiques, 1 (French), pp. 37-50, Inst. Henri Poincaré, Paris, 1980. (D. W. Bressler) 82:01041 01A60 (01A70, 04-03, 26-03, 28-03)

Egorov, D. F.-Luzin, N. N. Letters of D. F. Egorov to N. N. Luzin. (Russian) With a preface by P. S. Aleksandrov. With notes by F. A. Medvedev and A. P. Juškevič. Istor.-Mat. Issled. No. 25 (1980), 335-361, 381. (Pierre Dugae) 82k:01028 01A66

tein, Albert-Besso, Michele Correspondence of A. Einstein and M. Besso, 1903-1955. (Russian) Translated from the German by I. L. Gandel'sman, Ju. A. Danilov and V. Ja. Frenkel'. Einstein collection, 1977 (Russian), pp. 5-72, 327, "Nauka", Moscow, 1980. (H. Treder) 82i:01040 01A60 (01A70, 83-03)

Fresnel, Augustin See Chappert, André, 82f:01042 Gauss, Carl Friedrich-Bessel, Friedrich Wilhelm See Gauß, Carl Friedrich, 82j:01076 Gauss, Carl Friedrich-Gerling, Christian Ludwig See Gauß, Carl Friedrich, 82e:01123 ss, Carl Friedrich-Schumacher, H. C. See Gauß, Carl Friedrich, 82e:01124

Levy, Paul Lettres à Paul Lévy. Cahiers du Séminaire d'Histoire des Mathématique (French), pp. 51-67, Inst. Henri Poincaré, Paris, 1980. (I. Grattan-Guinness) 820:01034 01A60 (28-03, 30-03, 46-03)

Lusin, Nicolas-Denjoy, Arnaud See Dugac, Pierre, 82d:01018 Newton, Isaac See Newton, Isaac, 82i:01079

eeliger, Hugo-Mach, Ernst See v. Seeliger, Hugo, 82g:01069 Steklov, V. A.-Kneser, Adolph See Steklov, V. A.; et al., 82j:01073

Crystallographic groups *Proceedings of the Conference on Kristallographische Gruppen. Part II. Held at the University of Bielefeld, Bielefeld, September 2-16, 1979. Edited by W. M. Dress and N. Neubüser. Match No. 10 (1981). Max-Planck-Institut für Kohlenforschung, Institut für Strahlenchemie, Mülheim, 1981. pp. i-iii and 1-233. (Editors) 82e:20060 20H15 (82A60)

ms in mathe atics *Современные проблемы математики. Том 13. (Russian) [Current problems in mathematics. Vol. 13] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. 270 pp. (loose errata). (Marc A. Rieffel) 82d:47025 47A60 (47-02, 47D99, 58G15, 81D05)

★Современные проблемы математики. Том 16. (Russian) [Current problems in mathematics. Vol. 16] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. 228 pp. (loose errata). (Editors) 82d:81003 81-06 (20C30, 53C65)

★Современные проблемы математики. Том 18. (Russian) [Current problems in mathematics. Vol. 18] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii,

Moscow, 1981. 208 pp. (errata insert). (Editors) 82m:14002 14-06

★Современные проблемы математики. Том 17. (Russian) [Current problems in mathematics. Vol. 17] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Infor Moscow, 1981. 220 pp. (errata inseria). (Editors) 82m:81002 81–06 (58–06)

Current state of the theory of operations research *Современное состояние теории сследования операций. (Russian) [Current state of the theory of operations research] Edited by N. N. Moiseev. Оптимизация и Исследование Операций. [Optimization and Operations Research] "Nauka", Moscow, 1979. 464 pp. (Editors) 82f:90002

etics *Математические методы кибериетики. (Russian) [Mathematical methods in cybernetics] Edited by V. L. Rvačev [Rvačov, V. L.] and V. P. Nazyrova. Akad. Nauk Ukrain, SSR, Inst. Kibernet., Kiev. 1979, 86 pp. (Editors) 82a:93006

★Вероятностные методы и кибернегика. Выт. 16. (Russian) [Probabilistic methods and cybernetics. No. 16] Edited by R. G. Buharaev and R. G. Nigmatullin. Kazan. Gos. Unio., Kazan, 1980. 96 pp. (Editors). 82a:68006 68-06

★Вероятностные методы и киберпетика. Вып. 17. (Russian) [Probabilistic

methods and cybernetics. No. 17] Edited by Ju. V. Golunkov. Kazan. Gos. Univ., Kazan,

1980. 88 pp. (Editors) 82d:68002 68-06 (03-06, 06-06)

★Математические методы киберистики. (Russian) [Mathematical methods in cybernetics] Edited by Ju. G. Stojan and V. P. Nazyrova. Akad. Nauk Ukrain. SSR, Inst.

Kibernet., Kiev., 1980. 92 pp. (Editors) 824:93006 93-06

★Теоретическая киберпетика. (Russian) [Theoretical cybernetics] Edited by V. E. Žukovin. "Mecniereba", Tbilisi, 1980. 180 pp. (Editors) 82f:90004 90-06 (68Gxx)

★Вопросы математической киберистики и прикладной математики. Вып. 4. (Russian) [Questions of mathematical cybernetics and applied mathematics. No. 4] Edited by Dž. È. Allahverdiev. "Èlm", Baku, 1980. 180 pp. (Editors) 82g:93002

Cybernetics collection ★Киберистический сборинк. Новая серия. Вып. 17. (Russian) [Cybernetics collection. New series. No. 17] A collection of translations edited by O. B. Lupanov. "Mir", Moscow, 1980. 232 pp. (Editors) 824:68001 68-06 (94-06)

Data analysis and computer science *Analyse de données et informatique. [Data analysis and computer science] Proceedings of the Conference held at Fontainebleau, March 19-30, 1979. Edited by M. Amirchahy and D. Néel. Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. ix + 310 pp ISBN 2-7261-0232-8 (Editors) 82h:62096 62H30 (92-06)

Data analysis and informatics *Data analysis and informatics. Proceedings of the Second International Symposium held in Versailles, October 17-19, 1979. Edited by E. Diday, L. Lebart, J. P. Pages and R. Tomassone. North-Holland Publishing Co., Amsterdam-New York, 1980. viii + 790 pp. ISBN 0-444-86005-3 (Editors) 82f:62004 62-02

Data banks and information retrieval systems * Banku gammax u информационно-поисковые системы. (Russian) [Data bases and information retrieval systems] Edited by A. A. Stognii. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 132 pp. (Editors) **82g:68003** 68–06 (03E72, 68B15, 68H05)

a bases ★Advances in data base theory. Vol. I. Proceedings of the Workshop on Formal Bases for Data Bases held in Toulouse, December 12-14, 1979. Edited by Hervé Gallaire, Jack Minker and Jean-Marie Nicolas. Plenum Press, New York-London, 1981.

viii+432 pp. ISBN 0-306-40629-2 (Editors) **82a:68040** 68B15 (68−06) Data bases and information retrieval systems ★Банки данных и

информационно-поисковые системы. (Russian) [Data bases and information retrieval systems] Edited by A. A. Stognii [A. O. Stognii] and F. I. Andon. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. 143 pp. (Editors) 824:68057a 68H05 (68-06)

Data processing *Transmiterea numerică, prelucrarea datelor și conducerea proceselor cu ajutorul calculatoarelor. (Romanian) [Numerical transmission, data processing and

puterized process control] Edited by Gh. Cartianu and Edmond Nicolau. Probleme de Automatizare [Problems of Automation], 11. Editura Academiei Republicii Socialiste România, Bucharest, 1979. 245 pp. (Editors) 82a:94003 94-06

а processing systems * Meтоды и ощит построения систем обработки данных.
(Russian) [Methods and practice of construction of data processing systems] Edited by A. A. Stognyi. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. 100 pp. (Editors) 90-06 (90Bxx)

★Иерархические автоматизированиме системы обработки даними. (Russian) [Hierarchical automated data processing systems] Edited by N. L. Gavrilova. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. 74 pp. (Editors) 821:68006 68-06

tabase organization *Colloquium Databankorganisatie. Deel 1. (Dutch) [Colloquium on Database Organization. Part 1] Edited by P. M. G. Apers. MC Syllabus, 46.1.

Database Organization. Fart J Entitled by F. M. G. Apers, Mc Synabus, 46.1.

Mathematisch Centrum, Amsterdam, 1981. ix+174 pp. (loose errata).

ISBN 90-6196-212-9 (Editors) \$2m:68005a 68-06 (68B15, 68H05)

ciston making processes and related fields Decision making processes and related fields. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 15-17, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 358 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-ii and 1-238. (Editors) 82a:90003

cisions in small groups *Entscheidungen in kleinen Gruppen. (German) [Decisions in small groups] Papers presented at a Workshop held in Jungholz, October 1977. Edited by Wulf Albers, Günter Bamberg and Reinhard Selten. Mathematical Systems in Economics, 45. Verlag Anton Hain, Königstein/Ts., 1979. 230 pp. ISBN 3-445-01961-4 (Milan Mareš) 82e:90130 90D45 (90A05, 90A07)

Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 17-20, 1980. Sürikaisekikenkyüsho Kõkyüroku No. 388 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980, pp. 1–4 and i–iii and 1–204. (Editors) 82b:58001 58–06 (14–06, 34–06, 35–06) (Salb, Ill. *Proceedings of a Symposium on Regular Semigroups. Held at Northern Illinois University, DeKalb, Ill., April 20–21, 1979. Northern Illinois University,

Department of Mathematical Sciences, DeKalb, Ill., 1979. iv+192 pp. (G. J. Lallement)

20M10 (20-06)

*Measure theory and its applications. Proceedings of the Conference held at Northern Illinois University, De Kalb, Ill., October 24-25, 1980. Edited by Gerald A. Goldin and Robert F. Wheeler. Northern Illinois University, Department of Mathen Sciences, DeKalb, III., 1981. x+286 pp. (Pedro Jiménez Guerra) 82g:28002 (28-06, 46-02, 47-02, 54H99)

Delft *Colloquium: Numerical Solution of Partial Differential Equations. Held in Delft, Nijmegen and Amsterdam during 1980. Edited by J. G. Verwer. MC Syllabus, 44. Mathematisch Centrum, Amsterdam, 1980. iv+194 pp. ISBN 90-6196-205-6 (Editors) 82a:65006 65-06 (65Mxx)

★Traffic and control. Papers presented at the Symposium held in Delft, November 4, 1980. Dedicated to the scientific work of Professor L. Kosten on the occasion of his retirement. Delft Progr. Rep. 5 (1980), no. 3. Delft University Press, Delft, 1980. pp. 154-212. (Editors) 82a:90099 90B20 (90-06)

Design of experiments *Proceedings of the Twenty-Sixth Conference on the Design of

Experiments in Army Research, Development and Testing. Held at New Mexico State University, Las Cruces, N.M., October 22-24, 1980. ARO Report 81, 2. U. S. Army Research Office, Research Triangle Park, N.C., 1981. xviii + 587 pp. (Editors) \$2g:62008

undary element methods *Developments in boundary element methods. 1. Edited by P. K. Banerjee and R. Butterfield. Developments Series. Applied Science Publishers, Ltd., Barking, 1979. xii + 292 pp. ISBN 0-85334-845-6 (Editors) 821:65005 65-06 (65R20, 73-06, 78-06)

Biographical, American Science See Elliott, Clark A., 82f:01089

hies of mathematicians See Borodin, A. I.; et al., 82h:01043 and Meschkowski, Herbert, 82h:01062

Computer ★Computer dictionary. Draft standard. Edited by Martin H. Weik. IEEE Computer Society, New York, 1979. i+79 pp. (From the text) 82a:68001 68-XX (00A20, 94-XX)

Cybernetics ★Саоварь по киберистике. (Russian) [Dictionary of cybernetics] Edited by V. M. Gluškov. Glavn. Redak. Ukrain. Sovet. Énciklopedii, Kiev, 1979. 623 pp. (Editors) 82i:00015 00A20 (68-01, 93-01)

English-Nepali Glossary of mathematical terms, English-Nepali (B-C). Nepali Math. Sci. Rep. 3 (1978), no. 2, 96-99. 82e:00017 00A20

Glossary of mathematical terms, English-Nepali (D-F). Nepali Math. Sci. Rep. 4 (1979), no. 1, 46-50. (Editors) 82c:00006 00A20

Glossary of mathematical terms, English-Nepali (G-I). Nepali Math. Sci. Rep. 4 79), no. 2, 93-96. (Editors) 82h:00008 00A20 (1979), no. 2, 93-96. (Editors) 82h:00008

English-Russian-Azerbaijani *Словарь математических терминов (на английском русском, азербайджанском языках). (Russian) [Dictionary of mathematical terms (in English, Russian and Azerbaijani)] Edited by F. G. Magsudov. "Elm", Baku,

(III angust, Nassai and State-00007 00A20

Mathematics: ★The facts on file: dictionary of mathematics. Edited by Carol Gibson.

Facts on File, New York, 1981. 216 pp. ISBN 0-87195-512-7 (Editors) 821:00016

Polish-German technical *Slownik naukowo-techniczny polsko-niemiecki. (Polish) [Polish-German scientific-technical dictionary] Fourth edition. Edited by Zbigniew J. Koch. Wydawnictwa Naukowo-Techniczne (WNT), Warsaw, 1980. viii + 598 pp. (errata insert). ISBN 83-204-0021-X (Editors) 821:00010 00A20

ssian-English-French *Fachwortschatz Mathematik.

Russisch-Englisch-Französisch. (German) [Technical vocabulary for mathematics Russian—English—French] Häufigkeitswörterbuch. [Frequency dictionary] Edited and with a foreword by Lothar Loffmann. Second edition. VEB Verlag Enzyklopädie, Leipzig, 1980. 96 pp. (Editors) 82a:00011

ybekov, C.; et al., 82a:00010 tical logic See Feys, Robert; et al., 82m:03001

The control equations The transmin series of reopain дифеременальных ривнять та іх застосувания. (Ukrainian) [Studies in the qualitative theory of differential equations and its applications] Edited by V. Ja. Skorobogat'ko. Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1978. 76 pp. (Editors) 824:00007 00A10

жV Вессопозная Комференция по Качественной Теории Дифференциальных Урамений. (Russian) [Fifth All-Union Conference on Qualitative Theory of Differential Equations] Abstracts. Edited by K. S. Sibirskii. "Štiinca", Kishinev, 1979. 204 pp. (Editors) 324-24602 34-06 (35-06, 58-06)

**Kawacrasenna reopens инфоренциальных уравнений. (Russian) [Qualitative theory of differential equations] Edited by B. S. Žanbyrbaev. Kazah. Gos. Ped. Inst., Alma-Ata, 1979. 144 pp. (Editors) 225-3403 34-06

**Stochastic differential equations on manifolds. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University,

Kyoto, March 22-26, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 391 (1980). Kyoto University, Research Institute for Mathema (Editors) 82x60006 60-06 (58G32) tical Sciences, Kyoto, 1980. pp. i-ii and 1-135.

★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 17–20, 1980. Sürikaisekikenkyüsho Kökyüroku No. 388 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. 1-4 and i-iii and 1-204. (Editors) 82h:58001 58-06 (14-06, 34-06, 35-06)

★Теория кубатурных формул в вычислительная математика. (Russian) [Theory of cubature formulas and numerical mathematics] Proceedings of a Conference on Differential Equations and Numerical Mathematics held in Novosibirsk, 1978. Edited by S. L. Sobolev. "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. 258 pp. (loose errata). (Editors) 824:65003 65-06

ж Исследование дифференциальных и дифференциально-разностных внений. (Russian) [An investigation of differential and differential-difference equations] Edited by A. N. Šarkovskii [O. M. Šarkovs'kii]. Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. 192 pp. (Editors) 82e:34069 34Kxx

ЖПрибляженное решение некоторых задач пля дифференциальных и интегральных уравнений прикладного характера. (Russian) [Approximate solution of some problems for differential and integral equations of applied character] Edited by M. N. Zaharova. Преприят 80 [Preprint 80], 17. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev. 1980. 48 pp. (Editors) 82g:65004 65−06

★Ordinary and partial differential equations. Proceedings of the Sixth Conference held at the University of Dundee, Dundee, March 31-April 4, 1980. Edited by W. N. Everitt and B. D. Sleeman. Lecture Notes in Mathematics, 846. Springer-Verlag, Berlin-New York, 1981. xiv + 384 pp. ISBN 3-540-10569-7 (Editors) 82c:34004 (35-06)

Differential equ erential equations and their applications *Дифференциальные уравнения и их приложения. (Russian) [Differential equations and their applications] Edited by U. M. Sultangazin. Kazah. Gos. Univ., Alma-Ata, 1980. 119 pp. (Editors) 82k:93003 93-06

★Дифференциальные уравнения и их приложения. (Russian) [Differential ations and their applications] Vestnik L'vov. Politehn. Inst. No. 150 (1981). "Višča

Skola", Lvov, 1981. pp. 1–148. (Editors) 82k:73002 73–06 (41–06, 47–06, 65–06) erential equations and applications in ecology, epidemics, and population problems ★Differential equations and applications in ecology, epidemics, and population roblems. Proceedings of the Conference held at Harvey Mudd College, Claremont, Calif., January 10-11, 1981. Edited by Stavros N. Busenberg and Kenneth L. Cooke. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xv+359 pp. ISBN 0-12-148360-6 (Editors) 82m:92003 92-06 (34-06, 45-06)

erential equations with a small parameter *Двфференциальные уравнения с малым параметром. (Russian) [Differential equations with a small parameter] Edited by Ju. P. Gor'kov and K. V. Emel'janov. Akad. Nauk SSSR, Ural. Naučn. Centr., Sverdlovsk, 1980.

Gorkov and R. V. Emerjanov. Akad. Nauk SSSR, Ord. Naukn. Centr., Sections R. 159. pp. (Editors) 82d:35008 35-06 (34-06)

Differential geometric methods in mathematical physics

Differential geometric methods in mathematical physics

Differential geometric methods in mathematical physics. Proceedings of the International Conference held at the Technical University of Clausthal, Clausthal-Zellerfeld, July 1978. Edited by Heinz-Dietrich Doebner. Lecture Notes in Physics, 139. Springer-Verlag, Berlin-New York, 1981. vii + 329 pp. ISBN 3-540-10578-6 (Editors) 824:81004 81-06 (53-06)

Differential geometrical methods in mathematical physics Differential geometrical

methods in mathematical physics. Proceedings of the International Colloquium of the CNRS held in Aix-en-Provence, September 3-7, 1979, and a conference held in Salamanca, September 10-14, 1979. Edited by P. L. García, A. Pérez-Rendón and J. M. Souriau. Lecture Notes in Mathematics, 836. Springer-Verlag, Berlin-New York, 1980. xii + 533 pp. ISBN 3-540-10275-2 (Editors) 82a:81003 81-06 (83-06)

erential geometry ★Лифферскцивальная геометрия. (Russian) [Differential geometry] Edited by A. M. Šelehov. Kalinin. Gos. Univ., Kalinin, 1977. 142 pp. (Editors) 82c:53001 53-06

★The Chern Symposium 1979. Proceedings of the International Symposium on Differential Geometry in honor of S. S. Chern held in Berkeley, Calif., June 1979. Edited by W. Y. Hsiang, S. Kobayashi [Shoshicki Kobayashi], I. M. Singer, A. Weinstein, J. Wolf and H. H. Wu. Springer-Verlag, New York-Berlin, 1980. ii + 259 pp. ISBN 0-387-90537-5 (Editors) 82c:58002 58-06

★Современная reometrpus. (Russian) [Modern geometry] Вопросы ренциальной reometpum. [Questions of differential geometry] Edited by A. L. Leningrad. Univ., Leningrad, 1980. 100 pp. (Editors) 82e:53003 53-06

Differential geometry, Lie groups and mechanics ★Дифференциальная геометрия, группы Ли и механика. III. (Russian) [Differential geometry, Lie groups and mechanics. III] Edited by L. D. Faddeev. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 95 (1980). "Nauka" Leningrad. Otdel., Leningrad, 1980. pp. 1-161. (Editors) 58-06

жДифференцияльная геометрия, группы Ли и механика. IV. (Russian)

[Differential geometry, Lie groups and mechanics. IV] Edited by A. I. Vinogradov and L.

D. Faddeev. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 109 (1981).

"Nauka" Leningrad. Otdel., Leningrad, 1981. pp. 1−184. (Editors) 82g:81002 81−06

Differential ge

(1980). Kyoto University, Research Institute for Mathe tical Sciences, Kyoto, 1980.

(1900). Pythology, Research Institute for Mannematical Sciences, Rydio, 1900. pp. i—ii and 1—155. (Editors) 824:53001 53—06 (53С40) [erential and integral equations ★Дифферекциальные и интегральные уравнения. Вып. 3. (Russian) [Differential and integral equations. No. 3] Edited by N. R. Radžabov. Tadžik. Gos. Univ., Dushanbe, 1980. 140 pp. (Editors) 82m:34002 34-06 (35-06)

Digital processing of signals and its applications — Управленения. (Russian) [Digital processing of signals and its applications] Edited by L. P. Jaroslavskii. "Nauka", Moscow, 1981. 223 pp. (Editors) 82h:94001 94–06 (94A11, 94A12)

Directions in time series Directions in time series. Proceedings of the IMS Special Topics Meeting on Time Series Analysis held at Iowa State University, Ames, Iowa, May 1-3, 1978. Edited by David R. Brillinger and George C. Tiao. Institute of Mathe

Statistics, Hayward, Calif., 1980. iv+302 pp. (Editors) 82f:62174 62M10

Discrete control systems *Дискретные системы управления. (Russian) [Discrete control systems] Edited by V. M. Kuncevič and V. P. Jakovlev. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 72 pp. (Editors) 82d:93004 93-06

Distributions ★Проблемы теории вероятностных распределений. VI. (Russian)
[Problems of the theory of probability distributions. VI] Edited by V. N. Sudakov. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 97 (1980). "Nauka

Leningrad. Otdel., Leningrad, 1980. pp. 1–238. (Editors) 82c:60025 60Exx (60–06) Division algebras $\bigstar SK_1$ von Schiefkörpern. (German) $[SK_1]$ of division algebras] Seminar held at Bielefeld and Göttingen, 1976. Edited by Peter Draxl and Martin Kneser. Lecture Notes in Mathematics, 778. Springer-Verlag, Berlin-New York, 1980. 124 pp. ISBN 3-540-09747-3 (Chr. U. Jensen) 82b:16014 16A39 (12A80)

Cornal students of Kleen, Stephen C. Ph.D. students of Stephen C. Kleene. The Kleene Symposium (Proc. Sympos., Univ. Wisconsin, Madison, Wis., 1978), p. xvii, Stud. Logic idations Math., 101, North-Holland, Amsterdam, 1980. (Editors) 82b:01070

wnik *Shape theory and geometric topology. Proceedings of the Second Conference held at the Inter-University Centre of Postgraduate Studies, Dubrovnik, January 19-30, 1981. Edited by Sibe Mardešić and Jack Segal. Lecture Notes in Mathematics, 870. Springer-Verlag, Berlin-New York, 1981. iii + 265 pp. ISBN 3-540-10846-7 (Editors) 55-06 (54-06, 57-06)

Duluth, Minn. *Operations research. Mathematics and models. Lecture notes prepared for the American Mathematical Society Short Course held in Duluth, Minn., August 19-20, 1979. Edited by Saul I. Gass. Proceedings of Symposia in Applied Mathematics, 25. American Mathe matical Society, Providence, R.I., 1981. x+198 pp. ISBN 0-8218-0029-9 (Editors) 82j:90002 90-06

e *Ordinary and partial differential equations. Proceedings of the Fifth Conference held at the University of Dundee, Dundee, March 29-31, 1978. Edited by W. N. Everitt. Lecture Notes in Mathematics, 827. Springer-Verlag, Berlin-New York, 1980. xvi+271 pp. ISBN 3-540-10252-3 (Editors) 82c:34003 34-06 (35-06)

★Ordinary and partial differential equations. Proceedings of the Sixth Conference held at the University of Dundee, Dundee, March 31-April 4, 1980. Edited by W. N. Everitt and B. D. Sleeman. Lecture Notes in Mathematics, 846. Springer-Verlag, Berlin-New York, 1981. xiv + 384 pp. ISBN 3-540-10569-7 (Editors) 82c:34004 (35-06)

rham ★Aspects of contemporary complex analysis. Proceedings of the NATO
Advanced Study Institute held at the University of Durham, Durham, July 1–20, 1979. Edited by David A. Brannan and James G. Clunie. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1980. xiii + 572 pp. ISBN 0-12-125950-1 (Editors) 82f:30001 30-06

★Finite simple groups. II. Proceedings of the Symposium held at the University of Durham, Durham, July 31-August 10, 1978. Edited by Michael J. Collins. Academic Press, Inc. [Harcourt Brace Jocanovich, Publishers], London-New York, 1980. xv+345 pp.

ISBN 0-12-181480-7 (Stephen D. Smith) 82h-20021 20D05 (20C15, 20C20, 20D08)

★Stochastic integrals. Proceedings of the LMS Durham Symposium held at the University of Durham, Durham, July 7-17, 1980. Edited by David Williams. Lecture

Notes in Mathematics, 851. Springer-Verlag, Berlin-New York, 1981. ix +540 pp.

15BN 3-540-10690-1 (Editors) 821:60009

60-06 (60Hxx, 60Jxx)

*Recent progress in analytic number theory. Vol. 1. Papers from the Symposium held at Durham University, Durham, July 22-August 1, 1979. Edited by H. Halberstam and C. Hooley. Academic Press, Inc. [Harcourt Brace Jovanovich, Publish London-New York, 1981. xii + 348 pp. ISBN 0-12-318201-8 (Editors) 82k:10005a

*Recent progress in analytic number theory. Vol. 2. Papers from the Symposium held at Durham University, Durham, July 22-August 1, 1979. Edited by H. Halberstam and C. Hooley. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers]. London-New York, 1981. xii + 280 pp. ISBN 0-12-318202-6 (Editors) 82k:10005h

seldorf **Innovation im 15./16. und im 19. Jahrhundert als technikgeschichtliches Problem. Conference held in Düsseldorf, October 6-7, 1977. Technikgeschichte 45 (1978), no. 2,115-188. Verein Deutscher Ingenieure (VDI), Düsseldorf, 1978. pp. 115-202.

(Table of contents) 82h:01001 01−06 (01A40, 01A55)

Dynamic processes in gases and solid bodies

Динамические процессы в газах и твердых телах. (Russian) [Dynamic processes in gases and solid bodies] Edited by B. V. Filippov. Физическая Механика [Physical Mechanics], 4. Leningrad. Univ., Leningrad, 1980. 228 pp. (Editors) 82g:76001 76-06

ic systems *Numerical optimisation of dynamic systems. Edited by L. C. W. Dixon and G. P. Szegő. North-Holland Publishing Co., Amsterdam-New York, 1980. viii + 410 pp. ISBN 0-444-85494-0 (Editors) 82a:49004 49-06 (90Cxx)

Dynamical recognition of random processes and sequences *Динамическое распознавание случайных процессов и последовательностей. (Russian) [Dynamical recognition of random processes and sequences] Edited by É. K. Špilevskii. Statist. Problemy

Upravlenija-Trudy Sem. Processy Optimal. Upravlenija V Sekcija No. 47 (1980). Akad. Nauk Litovsk. SSR, Inst. Mat. i Kibernet., Vilnius, 1980. pp. 1-117. (Editors) 82d:62146

★Various problems for nonlinear circuits in dynamical system (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 11-14, 1979. Sürikaisekikenkyüsho Kökyüroku No. 370 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-ii and 1–183. (Editors) 82b;94034 94Cxx (54H20, 58C10)

*American Mathematical Society Translations, Ser. 2, Vol. 116. Three papers on dynamical systems. A partial translation of Ninth Mathematical Summer School (Kaciveli, 1971) (Russian), "Naukova Dumka", Kiev, 1976. Edited by J. Szücs. American Mathematical Society, Providence, R.I., 1981. v+169 pp. ISBN 0-8218-3066-X (Editors) 00A10 (58Fxx, 70F15, 70K50)

namics of ecological-economic systems *Динамика эколого-экономических систем. (Russian) [Dynamics of ecological-economic systems] Edited by L. M. Galkin, A. I. Moskalenko and V. V. Kontorin. "Nauka" Sibirsk. Otdel., Novosibirsk, 1981. 224 pp. nics of ecological-economic systems *Дина (Editors) 82f:92002 92-06 (90-06)

namics and stability of mechanical systems *Динамика и устойчивость механических систем. (Russian) [Dynamics and stability of mechanical systems] Edited by I. A. Lukovskii. Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. 194 pp. (Editors) 82e:34003

namics of synergetic systems *Dynamics of synergetic systems. Proceedings of the International Symposium on Synergetics held at Bielefeld, September 24-29, 1979. Edited by Hermann Haken. Springer Series in Synergetics, 6. Springer-Verlag, Berlin-New York, 1980. viii + 271 pp. ISBN 3-540-09918-2 (Editors) 82m:00030 00A69

ogical-economic systems *Динамика эколого-экономических систем. (Russian) [Dynamics of ecological-economic systems] Edited by L. M. Galkin, A. I. Moskalenko and V. V. Kontorin. "Nauka" Sibirsk. Otdel., Novosibirsk, 1981. 224 pp. (Editors) 82f:92002 92-06 (90-06)

ogical systems *Управление и оптимизация в экологических системах. (Russian) [Control and optimization in ecological systems] Edited by Ju. M. Svirežev. Voprosy Kibernet. (Moscow) No. 52 (1979). Akad. Nauk SSSR, Naučn. Sovet po Kompleksnoi

Probleme "Kibernetika", Moscow, 1979, pp. 1–111. (Editors) 821:92001 92-06
nometric modeling and policy design at the Federal Reserve ★Econometric modeling
and policy design at the Federal Reserve. Part I. Edited by William A. Barnett. J. Econometrics 14 (1980), no. 1. North-Holland Publishing Co., Amsterdam-New York, 1980. pp. 1-159. (Editors) 82c:90003a 90Axx (62P20)

Econometric modeling and policy design at the Federal Reserve. Part II. Edited by William A. Barnett. J. Econometrics 15 (1981), no. 1. North-Holland Publishing Co., Amsterdam-New York, 1981. pp. 1-175. (Editors) 82c:90003b 90Axx (62P20)

metrics *Applied stochastic control in econometrics and management science Edited by Alain Bensoussan, Paul Kleindorfer and Charles S. Tapiero. Contributions to Economic Analysis, 130. North-Holland Publishing Co., Ansterdam-New York, 1980. xv+304 pp. ISBN 0-444-85408-8 (Editors) 82a:90001 90-06

*Bayesian analysis in econometrics and statistics. Essays in honor of Harold Jeffreys. Edited by Arnold Zellner. Studies in Bayesian Econometrics, 1. North-Holland Publishing Co., Amsterdam-New York, 1980. xi+474 pp. ISBN 0-444-85270-0 (J. M. Bernardo) 824:62170 62P20 (62A15)

momic statistics ★1979 Proceedings of the Business and Economic Statistics Section, American Statistical Association. Papers presented at the Annual Meeting held in Washington, D.C., August 13-16, 1979. American Statistical Association, Washington, D.C., 1979. x+614 pp. (Editors) 82c:62004e 62-06 (90A19)

Economics ★6. Konferenz "Mathematische Methoden in der Ökonomie". (German) [Sixth

Conference on Mathematical Methods in Economics Papers presented at the Conference held in Vitte, September 28-October 3, 1980. Edited by K. Lommatzsch. Seminarberichte [Seminar Reports], 29. Humboldt Universität, Sektion Mathe Berlin, 1980. 79 pp. (Editors) 82a:90002 90-06

★Применение экономико-математических методов в народном хозяйстве. (Russian) [Application of mathematical economics methods in national planning] Edited by I. D. Stepanenko and E. G. Lange. "Ilim", Frunze, 1980. 240 pp. (Editors) 82e:90001

★Математические методы решения экономических задач. Сб. 9. (Russian) [Mathematical methods for the solution of economic problems. No. 9] Edited by E. G. Gol'štein. Supplement to Ekonom. i Mat. Metody. Серия "Оптимальное Планировнание и Упрадение". [Optimal Planning and Control Series] "Nauka"

v, 1980. 185 pp. (Editors) 82d:90001 90-06 ★Topology and economics. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 26-30, 1979. Sūrikaisekikenkyūsho Kõkyūroku No. 407 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-89. (Editors) 82d:90004

ems *Математическое моделирование водных экологических систем. (Russian) [Mathematical modeling of aquatic ecosystems] Edited by L. Ja. Aščepkova. Irkutsk. Gos. Univ., Irkutsk, 1978. 148 pp. (Editors) 82a:92037 92A17

on, Alta. *Statphys 14. Proceedings of the 14th International Conference on Thermodynamics and Statistical Mechanics held at the University of Alberta, Edmonto Alta., August 17-22, 1980. Edited by John Stephenson. Phys. A 106 (1981), no. 1-2. North-Holland Publishing Co., Amsterdam-New York, 1981. pp. i-viii and 1-368. (Editors) 82-06 (80-06) 824-82003

stein: philosopher and scientist *Albert Einstein als Philosoph und Naturforscher. (German) [Albert Einstein: philosopher and scientist] Edited by Paul Arthur Schilpp. Translated from the English by Hans Hartmann. Friedr. Vieweg & Sohn. Braunschweig, 1979. xv+540 pp. (1 plate). ISBN 3-528-08427-8 (H. Treder) 82e:01077 01A60 (81-03, 83-03)

tein and the theory of gravitation *Альберт Эйнстейн и теория гравитаци (Russian) [Albert Einstein and the theory of gravitation] Edited by E. Kuranskii. "Mir",

(Russian) [Albert Einstein and the theory of gravitation] Edited by E. Ruranskii. "Mir", Moscow, 1979. 592 pp. (Editors) 82a:83002 83-03 (01-06, 53-03) энот. i Mat. Metody (Supplement) ★ Математические методы решения экономических задач. Сб. 9. (Russian) [Mathematical methods for the solution of economic problems. No. 9] Edited by E. G. Gol'štein. Supplement to Ékonom. i Mat.

Metody. Серия "Онтимальное Планиро e". [Optimal Pla

Mettody. Cepin Official Parameters of Special Policies (Special Policies) Policies (Nation, 1980, 185 pp. (Editors) 824-9001 90-06
El Paso, Tex. *American mathematical heritage: algebra and applied mathematics. Papers m the Third American Mathematical Heritage Symposium on the History of Algebra held at the University of Texas, El Paso, Tex., November 15, 1975 and from the Fourth American Mathematical Heritage Symposium on the History of Applied Mathematics held at the University of Texas, Arlington, Tex., October 2, 1976. Edited by J. Dalton Tarwater, John T. White, Carl Hall and Marion E. Moore. Mathematics Series, 13. Texas Tech University, Department of Mathematics, Lubbock, Tex., 1981. iii+127 pp. (Editors) 01-06

*Tруды Института Прикладной Математики Имени И. Н. Векуа. 7 (Russian) [Proceedings of the I. N. Vekua Institute of Applied Mathematics. 7] (Kussian) [Froce-tings of the 1.N. vexua institute of Applied Matternatics. 7] Herotropiae nompocar reopiau ympyrorau. [Some problems of the theory of elasticity] Edited by A. V. Bicadze. Tbilis. Gos. Univ., Tbilisi, 1980. 152 pp. (Editors) 821:73004

etric power problems: the mathematical challenge *Electric power problems: the mathematical challenge. Proceedings of a Conference held in Seattle, Wash., March 18-20, 1980. Edited by A. M. Erisman, K. W. Neves and M. H. Dwarakanath. Society for Industrial and Applied Mathematics (SIAM), Philadelphia, Pa., 1980. xix +531 pp. ISBN 0-89871-173-8 (Editors) 82a:90004 90-06 (65-06)

nents of the system dynamics method *Elements of the system dynamics method. Edited by Jørgen Randers. MIT Press/Wright-Allen Series in Systems Dynamics. MIT Press, Cambridge, Mass.-London, 1980. xxiv + 320 pp. ISBN 0-262-18092-8 (A. A. 90A17

pering *Mathematical methods in software science and engineering. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 10-12, 1979. Sürikaisekikenkyüsho Kökyüroku No. 363 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-ii and 1-291. (Editors) 82a:68005 68-06

★Equations of state in engineering and research. Based on a Symposium held at the 176th Meeting of the American Chemical Society, Miami Beach, Fla., September 11-14, 1978. Edited by Kwang Chu Chao and Robert L. Robinson, Jr. Advances in Chemistry Series, 182. American Chemical Society, Washington, D.C., 1979. x+466 pp. (Editors) 82-06 (80-06)

★Техническая кибернетика. Том 13. (Russian) [Engineering **Engineering cybernetics** cybernetics. Vol. 13] Edited by B. N. Petrov. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Mascow, 1980. 324 pp. (Editors) 82d:93005 93-06 (90-06)

★Техническая киберистика. Том 14. (Russian) [Engineering cybernetics. Vol. 14] Edited by S. V. Emel'janov and Z. B. Golembo. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Mascow, 1981. 376 pp. (Editors) 82h:93001 93-06

★Fundamental problems in statistical mechanics. V. Proceedings of the Fifth

International Summer School held in Enschede, June 23-July 5, 1980. Edited by E. G. D. Cohen. North-Holland Publishing Co., Amsterdam-New York, 1980. ix + 387 pp. ISBN 0-444-86137-8 (Editors) **82g:82002** 82-06 (82-XX) ISBN 0-444-86137-8 (Editors) 82g:82002

eration problems of combinatorial analysis *Перечислительные задачи комбинаторного анализа. (Russian) [Enumeration problems of combinatorial analysis] Сборник переводов. [A collection of translations] Edited by G. P. Gavrilov. Выблютека "Киберистического Сборника". [Library of the "Cybernetics Collection"]. "Mir", Moscow, 1979. 365 pp. (Duro Kurepa) 82h:08018 05A15 (00A10)

nmental biomonitoring, assessment, prediction, and management *Enviro biomonitoring, assessment, prediction, and management. Certain case studies and related quantitative issues. Edited by John Cairns, Jr., Ganapati P. Patil and William E. Waters. Statistical Ecology Series, 11. International Co-operative Publishing House, Fairland, Md., 1979. xviii+438 pp. ISBN 0-89974-008-1 (Editors) 82j:92001

(Conference held in Alexandria, Va., April 8–10, 1981. SIAM-SIMS Conference Series, 8. Society for Industrial and Applied Mathematics (SIAM), Philadelphia, Pa., 1981. vii + 259 pp. ISBN 0-89871-178-9 (Editors) 82k:62004 62-06 (90-06, 92A17)

nations of state in engineering and research *Equations of state in engineering and research. Based on a Symposium held at the 176th Meeting of the American Chemical Society, Miami Beach, Fla., September 11-14, 1978. Edited by Kwang Chu Chao and Robert L. Robinson, Jr. Advances in Chemistry Series, 182. American Chemical Society, Washington, D.C., 1979. x+466 pp. (Editors) 82f:82003 82-06 (80-06)

Ergodic theory *Théorie ergodique. (French) [Ergodic theory] Papers presented at the Seminar held at Les Plans-sur-Bex, March 23-29, 1980. Monographies de L'Enseignement Mathématique [Monographs of L'Enseignement Mathématique], 29. Université de Genève, L'Enseignement Mathématique, Geneva, 1981. 112 pp. (Editors) 28-06 (28Dxx)

Ergodic theory and dynamical systems *Ergodic theory and dynamical systems. I Proceedings of the Special Year at the University of Maryland, College Park, Md., 1979-80. Edited by Anatole Katok. Progress in Mathematics, 10. Birkhäuser, Boston, Mass., 1981. xi+333 pp. ISBN 3-7643-3036-8 (Editors) 82i:28001 28-06 (28Dxx)

Probability and statistics *Essays in probability and statistics. A volu Professor Junjiro Ogawa. Edited by Sadao Ikeda, Takesi Hayakawa, Hirosi Hudimoto, Masashi Okamoto, Minoru Siotani and Sumiyasu Yamamoto. Published by the Editorial Committee for Publication of Essays in Probability and Statistics; distributed by Shinko Tsusho Co. Ltd., Tokyo, 1976. xix + 716 pp. (1 plate). (Editors) 62-06 (05Bxx)

Essays in statistical science *Essays in statistical science. Papers in honour of P. A. P. Moran. Edited by J. Gani and E. J. Hannan. J. Appl. Probab. 1982, Special Vol. 19A. Applied Probability Trust, Sheffield, 1982. pp. i-viii and 1-434. (Editors) 82::62004 62-06 (76-06, 82-06)

series analysis-theory and applications *Estimation of time series

analysis—theory and applications. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, November 27-29, 1980. Sürikaisekikenkyüshö Kökyüröku No. 418 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-162. (Editors) 821-63005 62-06 (60-06, 60F05)

Prabation of mathematical softwares. ★Evaluation of mathematical softwares. (Japanese)

Proceedings of a Symposium held at the Research Institute for Mathematical Sciences,
Kyoto University, Kyoto, March 22–24, 1979. Sürikaisekikenkyüshö Kökyüroku No. 359
(1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979.
pp. i-iii and 1–215. (Editors) 82k:68001 68–06 (68Bxx)

Evanston, Ill. ★Algebraic K-theory, Evanston 1980. Proceedings of the Conference held at

Evanston, Ill. #Algebraic K-theory, Evanston 1980. Proceedings of the Conference held at Northwestern University, Evanston, Ill., March 24-27, 1980. Edited by Eric M. Friedlander and Michael R. Stein. Lecture Notes in Mathematics, 854. Springer-Verlag Berlin-New York, 1981. ii +517 pp. ISBN 3-540-10698-7 (Editors) 82e:18001 18-06 (12-06, 14-06, 18F25)

Evolutions in computer communications ★Evolutions in computer communications. Proceedings of the Fourth International Conference on Computer Communication held in Kyoto, September 26–29, 1978. Edited by H. Inose. North-Holland Publishing Co., Amsterdam-New York, 1978. vi + 842 pp. ISBN 0-444-85258-1 (Editors) 82m:94001 94-06 (68-06)

Experimental physics *Proceedings of the Third Workshop on Lie-Admissible Formulations. Part C. Experimental physics and bibliography. Held at the University of Massachusetts, Boston, Mass., August 7-9, 1980. Hadronic J. 4 (1980/81), no. 4. Hadronic Press, Inc., Nonantum, Mass., 1981. pp. 1166–1625. (Editors) 828:81002c 81-06 (17-06)

Factor demand functions ★Fonctions de production et de demande de facteurs. (French)
[Production functions and factor demand functions] Ann. LN.S.É.É. No. 38-39 (1980),
1-286. Institut National de la Statistique et des Études Économiques, Paris, 1980.
pp. 1-292. (G. Tintner) 82es90019 90All
Facts on file: dictionary of mathematics.

Facts on file: dictionary of mathematics ★The facts on file: dictionary of mathematics.

Edited by Carol Gibson. Facts on File, New York, 1981. 216 pp. ISBN 0-87196-512-7 (Editors) 82i-00016 00A20

Festschrift:

Hubeny, Karl ★Festschrift zur Emeritierung von Karl Hubeny. (German) [Festschrift on the retirement of Karl Hubeny] Edited by K. Rinner. Mitteilungen des Geodätischen Instituts der Technischen Universität Graz [Reports of the Geodetic Institute of the Technical University of Graz], 35. Technische Universität Graz, Graz, 1980. 200 pp. (Editors) 82b:86001 86-06

Fibonacci sequence ★A collection of manuscripts related to the Fibonacci sequence. 18th

Fibonacci sequence A collection of manuscripts related to the Fibonacci sequence. 18th anniversary volume of the Fibonacci Association. Edited by Verner E. Hoggatt, Jr. and Marjorie Bicknell-Johnson. Fibonacci Association, Santa Clara, Calif., 1980. vi + 229 pp. (Editors) 82f:10003 10-06

Field theory, quantization and statistical physics ★ Field theory, quantization and statistical physics. In memory of Bernard Jouvet. Edited by E. Tirapegui. Mathematical Physics and Applied Mathematics, 6. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xxii+322 pp. ISBN 90-277-1128-3 (Editors) 82bc81004 81-06 (82-06, 83-06)

Field theory and strong interactions *Field theory and strong interactions. Proceedings of the XIX. Internationale Universitätswochen für Kernphysik held at Karl-Franzens-Universität Graz, Schladming, February 20–29, 1980. Edited by Paul Urban. Acta Physica Austriaca Supplement, XXII. Springer-Verlag, Vienna, 1980. 815 pp. ISBN 3-211-81615-1 (Editors) 82c:81001 81–06

Finite geometries and designs *Finite geometries and designs. Proceedings of the Second Isle of Thorns Conference held at Chelwood Gate, June 15–19, 1980. Edited by P. J. Cameron, J. W. P. Hirschfeld and D. R. Hughes. London Mathematical Society Lecture Note Series, 49. Cambridge University Press, Cambridge-New York, 1981. iii+371 pp. ISBN 0-521-28378-7 (Editors) 82g05003 05–06 (05Bxx, 20825, 51Exx)
Finite group theory and neighboring areas *Finite group theory and neighboring areas. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical

Finite group theory and neighboring areas ★Finite group theory and neighboring areas. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, December 18–20, 1980. Sūrikaisekikenkyūsho Kõkyūroku No. 424 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1–136. (Editors) 82g:20001 20–06 (05Bxx, 20Dxx)

Finite simple groups ★Finite simple groups. II. Proceedings of the Symposium held at the University of Durham, Durham, July 31-August 10, 1978. Edited by Michael J. Collins. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1980. xv+345 pp. ISBN 0-12-181480-7 (Stephen D. Smith) 82h:20021 20D05 (20C15, 20C20, 20D08)

Fixed point theory ★Fixed point theory. Proceedings of a Conference held at the Université de Sherbrooke, Sherbrooke, Que., June 2-21, 1980. Edited by Edward Fadell and Gilles Fournier. Lecture Notes in Mathematics, 886. Springer-Verlag, Berlin-New York, 1981. xii+511 pp. ISBN 3-540-11152-2 (Editors) 82m:55002 55-06 (47-06, 54-06)

Flow of viscous and inviscid gas. Two-phase fluids ★Течение вязкого и невязкого газа. Двихфазиме жилкости. (Russian) [The flow of viscous and inviscid gas. Two-phase fluids] Edited by N. N. Poljahov. Газодинамика и Теплообыен [Gas Dynamics and Heat Transfer], 6. Leningrad. Univ., Leningrad, 1981. 216 pp. (Editors) 82g:76024a 76-06

Fluid dynamics

★Seventh International Conference on Numerical Methods in Fluid
Dynamics.

Proceedings of the Conference held at Stanford University, Stanford, Calif.,
and at the NASA/Ames Research Center, Moffett Field, Calif., June 23–27, 1980. Edited
by William Craig Reynolds and Robert William MacCormack. Lecture Notes in Physics,
141. Springer-Verlag, Berlin-New York, 1981. viii + 485 pp. ISBN 3-540-10694-4 (Editors)
82h:76002
76–06 (65–06, 76A60)

Fluid mechanics
★Recent developments in theoretical and experimental fluid mechanics.
Compressible and incompressible flows. Edited by U. Müller, K. G. Roesner and B. Schmidt. Dedicated to Jürgen Zierep on his 50th birthday. Springer-Verlag, Berlin-New York, 1979. xxvii+642 pp. ISBN 3-540-09228-5 (Editors) 82c-76004
76-06

★Mixed boundary value problems in fluid mechanics. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 10–12, 1978. Sürikaisekikenkyüsho Kökyüroku No. 360 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-ii and 1–242. (Editors) 824-76003

★Nonstationary problems in fluid mechanics. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 12–14, 1979. Sürikaisekikenkyûsho Kôkyûroku No. 393 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1–214. (Editors) 82d:76004 76–06

★Annual review of fluid mechanics. Vol. 13. Edited by Milton Van Dyke, J. V. Wehausen and John L. Lumley. Annual Reviews Inc., Palo Alto, Calif., 1981. iv + 530 pp. ISBN 0-8243-0713-5 (Editors) 828:76001 76-02 (49F10, 82A05, 85A05, 86-02, 92A09).

★25th anniversary issue: editorial reflections on the development of fluid mechanics. Edited by G. K. Batchelor and H. K. Moffatt. J. Fluid Mech. 106 (1981). Cambridge University Press, Cambridge-New York, 1981. pp. i-vi and 1-357. (Editors) 82g:76002 76-06 (76-XX)

Fontainebleau ★Analyse de données et informatique. [Data analysis and computer science]
Proceedings of the Conference held at Fontainebleau, March 19–30, 1979. Edited by M.
Amirchahy and D. Néel. Institut National de Recherche en Informatique et en Automatique
(INRIA), Recquencourt, 1980. ix+310 pp. ISBN 2-7261-0232-8 (Editors) 82h:62096
62H30 (92–06)

Forecasting public utilities *Forecasting public utilities. Proceedings of the International Conference held at Nottingham University, Nottingham, March 25-29, 1980. Edited by O. D. Anderson. North-Holland Publishing Co., Amsterdam-New York, 1980. v+209 pp. 158N 0-444-86046-0 (Editors) 82a:90040 90A19

Formal methods in policy formulation ★Formal methods in policy formulation. The application of Bayesian decision analysis to the screening, structuring, optimisation and implementation of policies within complex organisations. Edited by Derck W. Bunn and Howard Thomas. Interdisciplinary Systems Research, 49. Birkhäuser Verlag, Basel-Baston, Mass., 1978. xi+238 pp. ISBN 3-7643-0971-7 (Andrew P. Sage) 82k:90009 90A05

Formal methods in the study of language ★Formal methods in the study of language. Part 1. Proceedings of the Third Amsterdam Colloquium held in Amsterdam, March 25–28, 1980. Edited by Jeroen A. G. Groenendijk, Theo M. V. Janssen and Martin B. J. Stokhof. Mathematical Centre Tracts, 135. Mathematisch Centrum, Amsterdam, 1981. v + 322 pp. ISBN 90-6196-211-0 (Editors) 82k-03031a 03B65 (03–06, 68F99)

★Formal methods in the study of language. Part 2. Proceedings of the Third Amsterdam Colloquium held in Amsterdam, March 25-28, 1980. Edited by Jeroen A. G. Groenendijk, Theo M. V. Janssen and Martin B. J. Stokhof. Mathematical Centre Tracts, 136. Mathematical Centrum, Amsterdam, 1981. pp. i-iii and 323-599.

ISBN 90-6196-213-7 (Editors) 82k:03031b 03Be5 (03-06, 68F99)

Formalization of programming concepts ★Formalization of programming concepts.

Proceedings of the International Colloquium held in Peñiscola, April 19-25, 1981. Edited by Josep Diaz and Isidro Ramos. Lecture Notes in Computer Science, 107.

Springer-Verlag, Berlin-New York, 1981. vii + 478 pp. ISBN 3-540-10699-5 (Editors) 821-68005 68-06 (68B05)

Formula manipulation and its applications for mathematical studies ★Formula manipulation and its applications for mathematical studies. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, September 4–6, 1980. Sūrikaisekikenkyūsho Kökyūroku No. 406 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-vi and 1-134. (Editors) 82e:68035 68C20 (68-06)

Fourier analysis ★The study of Hardy spaces and several variable Fourier analysis by real analytical methods. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 12-14, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 383 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980, no. i-ii and 1-139. (Editors) 82as42003 42-06

Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-139. (Editors) 82a:42003 42-06

Fractional calculus and its applications ★On fractional calculus and its applications.

Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, October 20-24, 1980. Sûrikaisekikenkŷûsho Kôkyûroku No. 412 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i and 1-80. (Editors) 82a:26003 26-06 (26A33, 35C99)

Fracture mechanics ★Numerical methods in fracture mechanics. Proceedings of the Second International Conference held at University College, Swansea, July 7–11, 1980. Edited by D. R. J. Owen and A. R. Luxmoore. Pineridge Press Ltd., Swansea, 1980. vi+801 pp. ISBN 0-906674-08-5 (Editors) 82c;73005 73–06 (73M05)

Frankfurt a.d. Oder ★Convergence structures and applications to analysis. Edited by S. Gähler, W. Gähler and G. Kneis. Proceedings of the International Summer School held in Frankfurt a.d. Oder, May 8–12, 1978. Abhandlungen der Akademie der Wissenschaften der DDR, Abteilung Mathematik, Naturwissenschaften, Technik, 1979 [Transactions of the Academy of Sciences of the DDR, Section for Mathematics, Sciences and Technology, 1979], 4. Akademie-Verlag, Berlin, 1980. 175 pp. (Editors) 82d:46001 46–06 (54–06, 58–06)

Freiberg ★Die moderne Potentialtheorie als Grundlage des inversen Problems in der Geophysik. (German) [Modern potential theory as a foundation for the inverse problem in geophysics] Laplace-Gleichung, Warmeleitungsgleichung, Wellengleichung und Bipotentialgleichung. [Laplace equation, heat equation, wave equation and bipotential equation]. Summer School of the KAPG Working Group 5.2 held in Freiberg, June 5–16, 1978. Geodatische und Geophysikalische Veröffentlichungen, Reihe III [Geodetic and Geophysical Publications, Series III], 45. Akademie der Wissenschaften der DDR, Nationalkomitee für Geodasie und Geophysik, Berlin, 1980. 271 pp. (V. M. Isakov) 82g;31001 31–02 (31–06, 86–06)

Fribourg ★Physics in one dimension. Proceedings of an International Conference held in Fribourg, August 25-29, 1980. Edited by Jakob Bernasconi and Toni Schneider. Springer Series in Solid-State Sciences, 23. Springer-Verlag, Berlin-New York, 1981. is +368 pp. 15BN 3-540-10586-7 (Editors) 82e-82003 82-06 (82A42, 82A51, 82A68)

Function theory *Миследования по линейным операторам в теории функций. (Russian) [Investigations on linear operators and the theory of functions] 99 нерешенных задач линейного в комплексиого авализа. 199 unsolved problems in linear and complex analysis] Compiled and edited by N. K. Nikółskii, V. P. Havin and S. V. Hruščev. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 81 (1978). "Nauka", Leningrad. Otdel., Leningrad, 1978. pp. 1–296. (Editors) 82e:46002 46–02 (00A05, 30-0.2, 47-02)

*Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) Proceedings of a Symposium held at the extension of abetain function theory, (Japanese) Proceedings of a symposium net at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 17–20, 1980. Sūrikaisekikenkyūsho Kōkyūroku No. 388 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. 1–4 and i–iii and 1–204. (Editors) 82b:58001 58–06 (14–06, 34–06, 35–06)

ctional analysis *Special issue dedicated to Władysław Orlicz on the occasion of his ectional analysis. "A Special issue dedicated to Waldyslaw Office on the occasion of ms seventy-fifth birthday. Comment. Math. Special Issue 2 (1979), Paistwowe Wydawnictwo Naukowe (PWN), Warsaw, 1979. pp. i-vi and 1–347. (Editors) 82h:00005 00A10

*Функциональный анализ. Вып. 15. (Russian) [Functional analysis. No. 15]
Теория операторов. [Operator theory] Edited by A. V. Straus. UI janousk. Gos. Ped.
Inst., UI yanousk, 1980. 200 pp. (Editors) 82h:47001 47-06 (15-06)
tctional analysis, holomorphy, and approximation theory ★Punctional analysis, holomorphy and approximation theory. Proceedings of the Seminar held at the

Universidade Federal do Rio de Janeiro, Rio de Janeiro, August 7-11, 1978. Edited Silvio Machado. Lecture Notes in Mathematics, 843. Springer-Verlag, Berlin-New York, 1981. vi+636 pp. ISBN 3-540-10560-3 (Editors) 82c:46003 46-06 (32-06)

nctional-differential equations *Functional-differential equations. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, January 31-February 2, 1980. Sürikaisekikenkyüsho Kôkyûroku No. 379 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-117. (Editors) 82a:34001 34-06

★Качественное исследование дифференциально-функциональных уравнений. (Russian) [Qualitative investigation of functional differential equations] Edited by Ju. A. Mitropol'skiĭ and A. N. Šarkovskiĭ [O. M. Šarkovs'kiĭ]. "Naukova Dumka", Kiev, 1980.

188 pp. (Editors) 82e-34070 34Kxx

★Abstract Cauchy problems and functional differential equations. Proceedings of the Workshop on Functional Differential Equations and Nonlinear Semigroups held in Leibnitz, June 25-30, 1979. Edited by F. Kappel and W. Schappacher. Research Notes in Mathematics, 48. Pitman (Advanced Publishing Program), Baston, Mass. vii + 238 pp. ISBN 0-273-08494-1 (Editors) 82d-34001 34-06 (34Kxx) ston, Mass.-London, 1981.

*Integral and functional differential equations. Proceedings of the Conference held at West Virginia University, Morgantown, W.Va., June 18-20, 1979. Edited by Terry L. Herdman, Harlan W. Stech and Samuel M. Rankin, III. Lecture Notes in Pure and Applied Mathematics, 67. Marcel Dekker, Inc., New York, 1981. x+276 pp.

- 15BN 0-824-1354-0 (Editors) 82d-85001 45-06 (34-06)
 sectional integration theory and applications

 Functional integration theory and applications applications. Proceedings of the Colloquium held at Louvain-la-Neuve, November 6-9. 1979. Edited by Jean-Pierre Antoine and Enrique Tirapegui. Plenum Press, New York-London, 1980. x + 355 pp. ISBN 0-306-40573-3 (Editors) 82b:81005 (81C35)
- ems in statistical mechanics *Fundamental problems in statistical ics. V. Proceedings of the Fifth International Summer School held in Enschede, June 23-July 5, 1980. Edited by E. G. D. Cohen. North-Holland Publishing Co., Amsterdam-New York, 1980. ix + 387 pp. ISBN 0-444-86137-8 (Editors) 82g:82002
- nental theories and applications of mathe ematical information science *Fundamental theories and applications of mathematical information science. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 2-4, 1981. Sürikaisekikenkyüsho Kôkyüroku No. 421 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-iv and 1–283. (Editors) 82g:68004 68–06 (68Dxx)

nesville, Fla. *Model selection. Papers presented at the Conference held at the University of Florida, Gainesville, Fla., April 18-21, 1980. Edited by G. S. Maddala. J. Econometrics 16 (1981), no. 1. North-Holland Publishing Co., Amsterdam-New York,

1981. pp. 1-170. (Editors) 82f:62195 62P20

- e-theoretic methods for solving problems of artificial intelligence and their application ★Теоретико-игровые методы решения задач искусственного интеллекта и и приложение. (Russian) [Game-theoretic methods for solving problems of artificial intelligence and their applications] Edited by V. A. Koševaja. Препринт 80 [Preprint 80], 14. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 65 pp. (Editors) 82d:68054
- Game theory ★Теория штр. (Russian) [Game theory] Авиотированный указатель отечественной и зарубежной литературы за 1969–1974 гт. [Annotated index of Soviet and foreign literature for the years 1969–1974] Edited by N. N. Vorob'ev. "Nauka" Leningrad. Otdel., Leningrad, 1980. 290 pp. (Publisher's description) 82m:90161 90Dxx (00A15)
- ne theory and its applications *Game theory and its applications. prepared for the American Mathematical Society Short Course held in Biloxi, Miss., January 22-23, 1979. Edited by William F. Lucas. Proceedings of Symposia in Applied Mathematics, 24. American Mathematical Society, Providence, R.I., 1981. viii + 125 pp.

ISBN 0-8218-0025-6 (Editors) 82j:90079 90Dxx (90-06)
nes ★Mathematical solitaires & games. Reprints from the Journal of Recreational
Mathematics. Edited by Benjamin L. Schwartz. Excursions in Recreational Mathematics Series, I. Baywood Publishing Co., Inc., Farmingdale, N.Y., 1980. viii + 152 pp. ISBN 0-89503-017-9 (D. A. Klarner) 82i:00005 00A05 (05-01, 90D99)

- sch-Partenkirchen *Pattern formation by dynamic systems and pattern recognition. Proceedings of the International Symposium on Synergetics held at Garmisch-Partenkirchen, April 30-May 5, 1979. Edited by Hermann Haken. Springer Series in Synergetics, 5. Springer-Verlag, Berlin-New York, 1979. viii + 305 pp.

 ISBN 3-540-09770-8 (J. S. Joel) 82k:90028 00A69 (58E07, 68G10, 76Rxx, 81K05,
- Gauge theories ★Proceedings of the UNAM Workshop on Gauge Theories. Held at the Universidad Nacional Autónoma de Mexico, Mexico City, December 10-14, 1979. Edited by S. Hojman, L. Jacobs, M. Rosenbaum and M. P. Ryan. Hadronic J. 4 (1980/81), no. 1. Hadronic Press, Inc., Nonantum, Mass., 1980. pp. 1-182. (Editors) 824:81005 81-06 (81E99, 83E99)
- Gauge theory *To fulfill a vision. Jerusalem Einstein Centennial Symposium on Ga Theories and Unification of Physical Forces held in Jerusalem, March 14-23, 1979.

- Edited by Yuval Ne'eman. Addison-Wesley Publishing Co., Reading, Mass., 1981 xxxi+279 pp. ISBN 0-201-05289-X (Editors) 82-83003 3-03 (01-06, 8162)

 *Combinatorial mathematics. VIII. Proceedings of the Eighth Australian 83-03 (01-06, 81G20)
- aference held at Deakin University, Geelong, August 25-29, 1980. Edited by Kevin L. McAvaney. Lecture Notes in Mathematics, 884. Springer-Verlag, Berlin-New York, 1981. xiv+359 pp. ISBN 3-540-10883-1 (Editors) 82k:05003 05-06
- reral inequalities *General inequalities 2. Proceedings of the Second International Conference held at the Mathematical Research Institute, Oberwolfach, July 30-August 5, 1978. Edited by E. F. Beckenbach. Birkhäuser Verlag, Basel-Boston, Mass., 1980. xix+485 pp. ISBN 3-7643-1056-1 (Editors) 82b:00004 00A10 (05-06, 26Dxx, 41-06)

meral relativity and gravitation *General relativity and gravitation. Vol. 2. One hundred years after the birth of Albert Einstein. Edited by A. Held. *Plenum Press, New York-London, 1980. xviii + 540 pp. ISBN 0-306-40266-1 (Editors) 824:83004

- eral topology and modern analysis *General topology and modern analysis Proceedings of the Conference held at the University of California, Riverside, Calif., May 28-31, 1980. In honor of the retirement of Professor F. Burton Jones. Edited by L. F McAuley and M. M. Rao. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xv+514 pp. ISBN 0-12-481820-X (Editors) 82e:54001 54-06
- enoa *CAAP '81. Proceedings of the Sixth Colloquium on Trees in Algebra and Programming held in Genoa, March 5-7, 1981. Edited by Egidio Astesiano and Corrado Böhm. Lecture Notes in Computer Science, 112. Springer-Verlag, Berlin-New York, 1981. vi+364 pp. ISBN 3-540-10828-9 (Editors) 827-68002 68-06 (68В05, 68Е10)

 Geometric methods in problems of algebra and analysis ★Геометрические методы в задачах алгебры и апализа. Выт. 2. (Russian) [Geometric methods in problems of

algebra and analysis. No. 2] Edited by A. V. Černavskil. Jaroslav. Gos. Univ., Yaroslavl', 1980. 164 pp. (Editors) 82d:00004 58-06 (00A10) 1980. 164 pp. (Editors) 82d:00004

metrical methods for the theory of linear systems. Focuedings of a NATO Advanced Study Institute and AMS Summer Seminar in Applied Mathematics held at Harvard University, Cambridge, Mass., June 18-29, 1979. Edited by Christopher I. Byrnes and Clyde F. Martin. NATO Advanced Study Institute Series. Ser. C: Mathematical and Physical Sciences, 62. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. x + 317 pp. ISBN 90-277-1154-2 (Editors) 93-06 (14-06, 53-06)

metry ★Исследования по геометрии и алгебре. (Russian) [Studies in geometry and algebra] Edited by V. D. Fedorov. Kirgiz. Gos. Univ., Frunze, 1978. 147 pp. (Editors)

★Selected papers on geometry. Reprinted from the American Mathematical Monthly (Vols. 1-81) and from the Mathematics Magazine (Vols. 1-47). Edited by Ann K. Stehney, Tilla K. Milnor, Joseph E. D'Atri and Thomas F. Banchoff. Raymond W. Brink Selected Mathematical Papers, 4. Mathematical Association of America, Washington, D.C., 1979. x+338 pp. ISBN 0-88385-204-7 (B. Artmann) 82c:01041 01A60 (00A05, 01A75, 51-01)

*Proceedings of the Colloquium on Geometry and Topology. (Romanian) Held in Cluj-Napoca, September 22-24, 1978. Universitatea "Babey-Bolyai", Facultatea de Matematica, Cluj-Napoca, 1979. 290 pp. (Editors) 82h:53003 53-06

*Nonlinear problems in geometry. Proceedings of the Sixth International Symposium of the Division of Mathematics of the Taniguchi Foundation. Conference on Nonlinear Problems in Geometry held in Katata, September 3-8, 1979. Tohoku University, Department of Mathematics, Sendai, 1979. v+23 pp. (Editors) 82j:58001 58-06 (35-06, 53-06)

★Проблемы геометрии. Том 9. (Russian) [Problems in geometry. Vol. 9] Edited by R. V. Gamkrelidze. Итоги Науки и Техинки. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. 248 pp. (loose errata). (Editors) 82k:53054a 53-06 (55R10)

*Proceedings of the Conference on Integration, Topology, and Geometry in Linear Spaces. Held at the University of North Carolina, Chapel Hill, N.C., May 17-19, 1979. Edited by William H. Graves. Contemporary Mathematics, 2. American Mathematic Society, Providence, R.I., 1980. ix+269 pp. ISBN 0-8218-5002-4 (Editors) 82e:46003

★Алгебра. Топология. Геометрия. Том. 18. (Russian) [Algebra. Topology. Geometry. Vol. 18] Edited by R. V. Gamkrelidze. HTOTH HAYKH IN TEXHIKKH. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. 214 pp. (Editors) 82d:00002 00A10

★Nonlinear problems of analysis in geometry and mechanics. Proceedings of the Symposium held at the Université Paul Sabatier, Toulouse, April 4-6, 1979. Edited by M. Atteia, D. Bancel and I. Gumowski. Research Notes in Mathematics, 46. Pitma (Advanced Publishing Program), Boston, Mass.-London, 1981. iii + 208 pp. ISBN 0-273-08493-3 (Editors) 824:00005 58-06 (00A10)

metry of imbedded manifolds * Теометрия погружскимих многообразий. (Russian) [Geometry of imbedded manifolds] Edited by L. S. Atanasjan. Moskov. Gas. Ped. Inst., Mascow, 1979. 128 pp. (Editors) 82e:53002 53-06

- metry of positive quadratic forms ★Геометрыя положительных квапратичных форм. (Russian) [Geometry of positive quadratic forms] Edited by S. S. Ryškov. Trudy Mat. Inst. Steklov. 152 (1980). "Nauka", Mascow, 1980. pp. 1–238. (Editors) 82a:10001
- metry—von Staudt's point of view **Geometry—von Staudt's point of view.

 Proceedings of the NATO Advanced Study Institute held at Bad Windsheim, July 21-August 1, 1980. Edited by Peter Plaumann and Karl Strambach. NATO Advanced Study Institute Series. Ser. C: Mathematical and Physical Sciences, 70. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xi+430 pp. ISBN 90-277-1283-2 (Editors) 82e:51005 51-06
- Geophysics *Die moderne Potentialtheorie als Grundlage des inversen Problems in der Geophysik. (German) [Modern potential theory as a foundation for the inverse problem in geophysics] Laplace-Gleichung, Wärmeleitungsgleichung, Wellengleichung und Bipotentialgleichung. [Laplace equation, heat equation, wave equation and bipotential equation]. Summer School of the KAPG Working Group 5.2 held in Freiberg, June 5-16, 1978. Geodätische und Geophysikalische Veröffentlichungen, Reihe III [Geodetic and Geophysical Publications, Series III], 45. Akademie der Wissenschaften der DDR, Nationalkomitee für Geodäsie und Geophysik, Berlin, 1980. 271 pp. (V. M. Isakov) 82g:31001 31-02 (31-06, 86-06)

thal differential geometry and global analysis ★Global differential geometry and global analysis. Proceedings of the Colloquium held at the Technical University of Berlin, Bertin, November 21–24, 1979. Edited by Dirk Ferus, Wolfgang Kühnel, Ugo Simon and Bernd Wegner. Lecture Notes in Mathematics, 338. Springer-Verlag, Berlin-New York, 1981. xi+299 pp. ISBN 3-540-10285-X (Editors) 82i:53001 53–06 lefts theorem and the continuum hypothesis ★O teorema de Gödel e a hipótese do continuo. (Portuguese) (Cilchall ch. 1987)

continuo. (Portuguese) [Gödel's theorem and the continuum hypothesis] Edited, translated and with a preface by Manuel Lourenço. Fundação Calouste Gu Lisbon, 1979. xcv + 900 pp. (Editors) 82b:03003 03-06 (00A10, 01-06)

- mel' **Hogrpymnonoe crpoenne консчиых групп. (Russian) [Subgroup structure of finite groups] Proceedings of the Gomel' Algebraic Seminar held in Gomel', 1977-80. Edited by V. S. Monahov. "Nauka i Tehnika", Minsk, 1981. 232 pp. (Editors) 82j:20004
- agen $\star SK_1$ von Schiefkörpern. (German) [SK_1 of division algebras] Seminar held at ielefeld and Göttingen, 1976. Edited by Peter Draxl and Martin Kneser. Lecture Notes in Mathematics, 778. Springer-Verlag, Berlin-New York, 1980. 124 pp. ISBN 3-540-09747-3 (Chr. U. Jensen) 82b:16014 16A39 (12A80)
- ★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. I. Held at Florida Atlantic University, Boca Raton, Fla., March 3-7, 1980. Edited by F. O. Hadlock, F. Hoffman, R. C. Mullin, R. G. Stanton and G. H. J. Van Rees. Congr. Numer. 28 (1980). Utilitas Mathe Publishing, Inc., Winnipeg, Man., 1980. pp. i-xi and 1-452. (Editors) 82b:05004a 05-06 (68-06, 68E10)

*Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing, Vol. II. Held at Florida Atlantic University, Boca Raton, Fla., March 3-7, 1980. Edited by F. O. Hadlock, F. Hoffman, R. C. Mullin, R. G. Stanton and Marca >-/, 1980. Edited by F. O. Hadlock, F. Holfman, R. C. Mullin, R. G. Stanton and G. H. J. Van Rees. Congr. Numer. 29 (1980). Utilitas Mathematica Publishing, Inc., Winnipeg, Man., 1980. pp. i-vii and 453-936. (Editors) 82h:05004b 05-06 (68-06) *Regards sur la théorie des graphes. (French) [A look at graph theory] Proceedings of a Colloquium held at Cerisy, June 12-18, 1980. Edited by P. Hansen [Pierre Hansen]

and D. de Werra. Presses Polytechniques Roi es, Laus nne, 1980. xi+316 pp. (Editors) 05Cxx (65-02)

ohs and combinatorics *Graphs and combinatorics. III. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, December 24-25, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 397 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-248. (Editors) 82kv05003 05-06 (05Cxx)

phtheoretic concepts in computer science *Graph-theoretic concepts in computer science. Proceedings of the Sixth International Workshop WG 80 held in Bad Honnef, June 15–18, 1980. Edited by Hartmut Noltemeier. Lecture Notes in Computer Science, 100. Springer-Verlag, Berlin-New York, 1981. x+403 pp. ISBN 3-540-10291-4 (Editors)

82g:68005 68-06 (68E10)

Gratings ★Electromagnetic theory of gratings. Edited by Roger Petit. Topics in Current Physics, 22. Springer-Verlag, Berlin-New York, 1980. xv+284 pp. ISBN 3-540-10193-4 (From the preface) 82a:78001 78-02 (78A45)

Gravitation ★Альберт Эйнстейн в теория гравитации. (Russian) [Albert Einstein and the theory of gravitation] Edited by E. Kuranskii. "Mir", Moscow, 1979. 592 pp. (Editors) 82a:83002 83-03 (01-06, 53-03)

Gravitation, quanta and the universe *Gravitation, quanta and the universe. Proceedings of the Einstein Centenary Symposium held at Ahmedabad, January 29–February 3, 1979. Edited by A. R. Prasanna, J. V. Narlikar and C. V. Vishveshwara. A Halsted Press Book. John Wiley & Sons, Inc., New York, 1980. xiv + 326 pp. (1 plate). ISBN 0-470-27007-1 (Editors) 824:83005 83-06 (81-06, 85-06)

★12. Steiermärkisches Mathematisches Symposium. (German) [Twelfth Styrian Mathematical Symposium] Held in Graz, September 22-25, 1980. Bericht [Report], 140-150. Forschungszentrum Graz, Mathematisch-Statistische Sektion, Graz, 1980. 178 pp. (not consecutively paged). (Editors) 821:52003 52-06 (51-06)

*1. Geometrie-Kolloquium. (German) [First Geometry Colloquium] Held in Graz, September 25–26, 1980. Bericht [Report], 163–167. Forschungszentrum Graz, Mathematisch-Statistische Sektion, Graz, 1981. 82 pp. (not consecutively paged). (Editors)

Greifswald *Colloquium in memoriam Prof. Willi Rinow. (German) Held in Greifswald, February 28-29, 1980. Mitt. Math. Ges. DDR No. 4 (1980), 1-90. Mathematische

Gesellschaft der DDR, Berlin, 1980. pp. 1–112. (Editors) 82ee01002 01–06 (01A70) sup theoretical methods in physics Group theoretical methods in physics. Proceedings of the Eighth International Colloquium held at Kiryat Anavim, March 25–29, 1979. Edited by L. P. Horwitz and Y. Ne'eman. Annals of the Israel Physical Society, 3. Adam Hilger, Ltd., Bristol; Israel Physical Society, Haifa, 1980. xvi+417 pp. (errata insert). ISBN 0-85274-424-2 (Editors) 82h:81004 81-06 (20-06, 22-06)

Group theory *Kонструктивное описание групп с заданными свойствами подгрупп. (Russian) [Constructive description of groups with properties prescribed on their subgroups] Edited by S. N. Černikov [S. M. Černikov]. Akad. Nauk Ukrain. SSR, Inst.

Маі., Кіес., 1980. 148 рр. (Editors) 82с:20004 20-06

★VI Вессовзяный Свыпознум по Теории Групп. (Russian) [Sixth All-Union posium on Group Theory] Held in Čerkassy, September 19-21, 1978. Edited by S. N. Černikov [S. M. Černikov]. "Naukova Dumka", Kiev., 1980. 224 pp. (Editors) 005 20-06

★Коуровская тетрадь: нерешенные задачи теории групп. (Russian) [Kourovka notebook: unsolved problems in group theory] Seventh edition. Including problems from the Seventh All-Union Symposium on Group Theory held at Shushenskoe, 1980. Edited by V. D. Mazurov, Ju. I. Merzljakov and V. A. Čurkin. Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1980. 115 pp. (Editor's review (Ju.I.M.)) 20-06

★Algebra, Carbondale 1980. Lie algebras, group theory, and partially ordered algebraic structures. Proceedings of the Southern Illinois Algebra Conference held at Southern Illinois University, Carbondale, Ill., April 18-19, 1980. Edited by Ralph K. Amayo. Lecture Notes in Mathematics, 848. Springer-Verlag, Berlin-New

vi+298 pp. ISBN 3-540-10573-5 (Editors) 82d:20004 20-06 (06-06, 17-06) pup theory and its applications in physics ★Group theory and its applications in physics—1980. Papers from the Latin American School of Physics held in Mexico City,

- June 2-20, 1980. Edited by Thomas H. Seligman. AIP Conference Proceedings, 71. American Institute of Physics, New York, 1981. vi+349 pp. ISBN 0-88318-170-3 (Editors) 82k:81001 81-06
- Haifa ★Approximation theory and applications. Proceedings of a Workshop held at the Technion—Israel Institute of Technology, Haifa, May 5-June 25, 1980. Edited by Zvi Ziegler. Academic Press, Inc. (Harcourt Brace Jocanovich, Publishers), New York-London, 1981. xi+358 pp. ISBN 0-12-780650-4 (Editors) 82d:41001 41-06 (65-06)

Handbook of Applicable Mathematics See Lloyd, Emlyn H., 82t-60001

Handbook of Statistics ★Analysis of variance. Edited by P. R. Krishnaiah. Handbook of Statistics, 1. North-Holland Publishing Co., Amsterdam-New York, 1980. xvii+1002 pp. ISBN 0-444-85335-9 (S. John) 82f:62102 62H15

ver ★Theoria cum praxi: zum Verhältnis von Theorie und Praxis im 17. und 18. Jahrhundert. Band I. (German) [Theory and praxis: on the relationship of theory and praxis in the seventeenth and eighteenth centuries. Vol. I] Theorie und Praxis, Politik, Rechts- und Staatsphilosophie. [Theory and praxis, politics, philosophy of law and state] Recents und staatspiniosopine, [incory and praxis, points, pinitospiny of law and state] Proceedings of the Third International Leibniz Congress held in Hannover, November 12–17, 1977. Edited by Albert Heinekamp and Reinhard Finster. Studia Leibnitiana

Supplementa, XIX. Franz Steiner Verlag GmbH, Wiesbaden, 1980. vii + 284 pp. ISBN 3-515-03419-6 (Editors) 82h:01003 01-06 (01A45, 01A50)

Hardy spaces *The study of Hardy spaces and several variable Fourier analysis by real analytical methods. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 12-14, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 383 (1980). Kyoto University, Research Institute for

Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-139. (Editors) 82a:42003 monic analysis *Теория аналитических функций и гармонический анализ (Russian) [Theory of analytic functions and harmonic analysis] Edited by B. V. Hvedelidze. Trudy Tbiliss. Mat. Inst. Razmadze Akad. Nauk Gruzin. SSR 66 (1980). "Mecniereba", Tbilisi, 1980. pp. 1-117. (Editors) 82d:00009 30-06 (00A10)

*Analyse harmonique. (French) [Harmonic analysis] Groupe de travail sur les espaces de Banach invariants par translation. [Study group on translation invariant Banach spaces] Publications Mathématiques d'Orsay 81 [Mathematical Publications of Orsay 81], 8. Université de Paris-Sud, Département de Mathématique, Orsay, 1981. 132 pp. (not consecutively paged). (Editors) 82k:43001 43-06 (46-06)

omogeneous spaces *Harmonic analysis in homogeneous spaces. ic analysis in he (Japanese) Proceedings of a Symposium held at the Research Institute for Mathen Sciences, Kyoto University, Kyoto, February 19-21, 1981. Sûrikaisekikenkyûsho Kôkyûroku No. 426 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-115. (Editors) 82g:43001

Heidelberg *Biological growth and spread. Mathematical theories and applications.

Proceedings of a Conference on Models of Biological Growth and Spread held in Heidelberg, July 16-21, 1979. Edited by Willi Jäger, Hermann Rost and Petre Tautu. Lecture Notes in Biomathematics, 38. Springer-Verlag, Berlin-New York, 1980. xi+511 pp. ISBN 3-540-10257-4 (Editors) 82c:92004 92-06 (60J80, 60J85, 60K35)

Helsinki *The logic and epistemology of scientific change. Proceedings of a Colloquium held in Helsinki, December 12–14, 1977. Edited by Hand Publishing Co., Acta Philos. Fenn. 30 (1978), no. 2-4 (1979). North-Holland Publishing Co., 03–06, (1978). 1 461 (Mario Bunge) 82i:00024 00A25 (03–06,

rarchical automated data processing systems *Иерархические автоматизированные системы обработки данных. (Russian) [Hierarchical automated data processing systems] Hierarchical a Edited by N. L. Gavrilova. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. 74 pp. (Editors) 82f:68006

Hilbert's sixteenth problem ★American Mathematical Society Translations. Ser. 2, Vol. 112. Nine papers on Hilbert's 16th problem. A translation of Gor'kov. Gos. Univ. Učen. Zap. No. 87 (1969). Translated from the Russian by M. A. Dostal and M. D. Tretkoff. American Mathematical Society Translations, Series 2, 112. American Mathematical Society, Providence, R.I., 1978. iv+172 pp. ISBN 0-8218-3062-7 (Editors) 82a:00009

History of the Academy of Sciences of the Ukrainian SSR ★История Академии Наук Украинской ССР. (Russian) [History of the Academy of Sciences of the Ukrainian SSR] Edited by B. E. Paton. "Naukova Dumka", Kiev, 1979. 836 pp. (Editors) 82h:01072

ogy of the natural sciences *История и методология естественных наук. Вып XXV. (Russian) [History and methodology of the natural sciences. No. XXV] Математика, механика. [Mathematics, mechanics] Edited by I. G. Bašmakov, K. A Rybnikov and I. A. Tjulina. Moskov. Gos. Univ., Moscow, 1980. 168 pp. (Editors) 01-06 (03-03, 05-03, 15-03, 46-03, 51-03, 70-03, 76-03)

History and philosophy of logic *History and philosophy of logic. Vol. 1. Edited by Ivor Grattan-Guinness. Abacus Press, Tunbridge Wells, 1980. viii + 250 pp. ISBN 0-85626-189-0 (Editors) 82g:03005 03-06 (01A05, 03-03, 03A05)

History of science *I Congreso de la Sociedad Española de Historia de las Ciencias. (Spanish) [First Congress of the Spanish Society for the History of Science] Held in Madrid, December 1978. El científico español ante su historia. La ciencia en España entre 1750-1850. [The Spanish scientist before the history of science. Science in Spain between 1750 and 1850] Edited by Santiago Garma. Diputación Provincial de Madrid, Servicios de Extensión Cultural y Divulgación, Madrid, 1980. 589 pp. ISBN 84-500-4142-2 (Editors) 82d:01001 01-06

orphy *Functional analysis, holomorphy and approximation theory. Proceedings of the Seminar held at the Universidade Federal do Rio de Janeiro, Rio de Janeiro, August 7-11, 1978. Edited by Silvio Machado. Lecture Notes in Mathematics, 843. Springer-Verlag, Berlin-New York, 1981. vi + 636 pp. ISBN 3-540-10560-3 (Editors)

82c:46003 46-06 (32-06) notopic theory of differential forms *Гомотопическая теория дифференциальных форм. (Russian) [The homotopic theory of differential forms] A collection of articles translated from the English and French by I. V. Savel'ev. Математика: Новое в Зарубежной Науке [Mathematics: Recent Publications in Foreign Science], 25. "Mir", Moscow, 1981. 192 pp. (Editors) 82k:55001 55-06 (55P62)

ston, Tex. *Codes for boundary value problems in ordinary differential equations Proceedings of a Working Conference held at the University of Houston, Houston, Tex., May 14-17, 1978. Edited by B. Childs, M. Scott, J. W. Daniel, E. Denman and P. Nelson [Paul Nelson, Jr.]. Lecture Notes in Computer Science, 76. Springer-Verlag, Berlin-New York, 1979. vii + 388 pp. ISBN 3-540-09554-3 (Ian Gladwell) 82b:65074 65L10

★Some mathematical questions in biology. Proceedings of the Thirteenth Symposium on Mathematical Biology held in Houston, Tex., January 4, 1979. Edited by Simon A. Levin. Lectures on Mathematics in the Life Sciences, 12. American tical Society, Providence, R.I., 1979. ix+218 pp. ISBN 0-8218-1162-2 (Editors) 82i:92001 92-06

★Time series analysis. Proceedings of the Third International Conference (ITSM) held in Houston, Tex., August 14–15, 1980. Edited by Oliver D. Anderson and Marlin Ray Perryman. North-Holland Publishing Co., Amsterdam-New York, 1981. ix+661 pp. ISBN 0-444-81677-7 (Editors) 82k:62005 62–06 (62M10)

Hybrid computing *Vorträge aus dem Problemseminar: Hybridrechentechnik. (German) [Lectures from the Problem Seminar: Hybrid Computing] Held in Weißig, March 26-30, 1979. Weiterbildungszentrum für Mathematische Kybernetik und Rechentechnik. Informationsverarbeitung [Center for Continuing Education for Mathematical Cybernetics, Computing Technique and Information Processing], 41. Technische

Universität Dresden, Dresden, 1980. 121 pp. (Editors) 82c:68064 68K05

Hydrodynamic interaction of particles in suspension ★Гидродинамическое

взаимодействие частиц в суспензиях. (Russian) [Hydrodynamic interaction of particles in suspensions] Articles translated from the English by V. G. Markov. Edited by Ju. A. Buevič. Механика: Новое в Зарубежной Науке [Mechanics: Recent Publications in Foreign Science], 22. "Mir", Moscow, 1980. 246 pp. (Editors) 82e:76070

Hydrodynamic stability *Конвективные течения и гидрод (Russian) [Convective flows and hydrodynamic stability] Edited by E. L. Tarunin and V. A. Briskman. Akad. Nauk SSSR, Ural. Naučn. Centr, Sverdlovsk, 1979. 138 pp. (Editors) 76E15 (76-06)

Hydrology ★The mathematics of hydrology and water resources. Based on the Proceedings of the Conference held at the University of Lancaster, Lancaster, July 1976. Edited by Emlyn H. Lloyd, Terence O'Donnell and John Craven Wilkinson. Institute of Mathematics and its Applications Conference Series. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1979. xi+138 pp. ISBN 0-12-453350-7 (J. C. J. Nihoul) 82k:86001 86-06 (86A05)

Hyperfunctions and linear differential equations *Hyperfunctions and linear differential equations. VI. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 5-8, 1978. Sürikaisekikenkyüsho Kôkyûroku No. 341 (1978). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1978. pp. i-iii and 1-195. (Editors) 82d:35009 35-06 (32-06, 46-06)

IEEE Symposium: Circuits and Systems *1979 International Symposium on Circuits and Systems. Held in Tokyo, July 17-19, 1979. IEEE Computer Society, New York, 1979. xxi+1091 pp. (Editors) 82e:94002

litors) 82e:94002 94-06 (65-06, 90-06, 93-06) tions of Computer Science \$20th Annual Symposium on Foundations of Computer Science. Held in San Juan, Puerto Rico, October 29-31, 1979. IEEE Computer Society, New York, 1979. vii + 431 pp. (Editors) 82a:68004

IFIP Conference:

astic Differential Systems *Stochastic differential systems. Filtering and control. Proceedings of the IFIP-WG 7/1 Working Conference held in Vilnius, August 28-September 2, 1978. Edited by Bronius Grigelionis. Lecture Notes in Control and Information Sciences, 25. Springer-Verlag, Berlin-New York, 1980. ix + 363 pp. ISBN 3-540-10498-4 (Editors) 82b:60002 60-06 (60Hxx, 93Exx)

IMACS Symp

Computer Methods for Partial Differential Equations *Advances in computer methods for partial differential equations. II. Proceedings of the Second IMACS rnational Symposium on Computer Methods for Partial Differential Equation held at Lehigh University, Bethlehem, Pa., June 22-24, 1977. Edited by R. Vichnevelsky. International Association for Mathematics and Computers in Sim (IMACS), New Brunswick, N.J., 1977. vii + 392 pp. (Editors) 82a:65004 6 *Advances in computer methods for partial differential equations. III.

Proceedings of the Third IMACS International Symposium on Computer Methods for Partial Differential Equations held at Lehigh University, Bethlehem, Pa., June

20-22, 1979. Edited by R. Vichnevetsky and R. S. Stepleman. International Association for Mathematics and Computers in Simulation (IMACS), New Brunswick, N.J., 1979. vii + 442 pp. (Editors) 82a:65005 65-06 sedded manifolds ★Геометрия погруженных многообразий. (Russian) [Geometry of imbedded manifolds] Edited by L. S. Atanasjan. Maskov. Gas. Ped. Inst., Mascow, 1979.

128 pp. (Editors) 82e:53002 53-06 spact of modern scientific ideas on society *The impact of modern scientific ideas on

society. In commemoration of Einstein. Papers presented at the UNESCO Symposium held in Munich and in Ulm, September 18-20, 1978. Edited by Colette M. Kinnon, A. N. Kholodilin and J. G. Richardson. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xiv + 203 pp. ISBN 90-277-1238-7 (Editors) 82k:01046 01A80 (00A69, 01-06) INDAM Conference

Statistical Theory of Decisions *Symposia Mathematica. Vol. XXV. Conference on Statistical Theory of Decisions held at the Istituto Nazionale di Alta Matematica Francesco Severi (INDAM), Rome, June 4-7, 1979. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1980. 204 pp. (Editors) 82e:62015

INDAM Symp

Algebraic Geometry ★Symposia Mathematica. Vol. XXIV. International Symposium on Algebraic Geometry held at the Istituto Nazionale di Alta Matematica Francesco Severi (INDAM), Rome, April 9-14, 1979. In the centenary of the birth of Francesco Severi. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1981. xv+356 pp. (1plate). (Editors) 82e:14005 14-06

Académie des Sciences ★Index biographique de l'Académie des Sciences (1666–1978). (French) [Biographical index of the Academy of Sciences (1666–1978)] uthier-Villars, Paris, 1979. 513 pp. (Editors) 82e:00015 00A15 (01A74)

British mathematicians See Wallis, Peter John, 82k:01020 Enseign. Math. (2) Table alphabétique des auteurs. IIe Série. Tomes XVI à XXV,

1970-1979. Enseign. Math. (2) 1981, Index (1970-1979), 16 pp. (Editors) 82f:00006 00A15

Game theory *Teopus игр. (Russian) [Game theory] Авиотированный указатель отечественной и зарубежной литературы за 1969-1974 гг. [Annotated index of Soviet and foreign literature for the years 1969-1974] Edited by N. N. Vorob'ev. "Nauka" Leningrad. Otdel., Leningrad, 1980. 290 pp. (Publisher's description) 82m:90161 90Dxx (00A15)

Ködai Math. Sem. Rep. Total index, Vol. 1 (1949)-Vol. 29 (1977). Ködai Math. Sem. Rep. 29 (1979), no. 4, 1-88. (Editors) 82e:00016 00A15

Lecture Notes in Physics *An index and other useful information. Lecture Notes in Physics, 1-111. Springer-Verlag, Berlin-New York, 1979. 35 pp. (Editors) 82f:00007 00A15

Math. Mag. * Mathe th. Mag. ★ Mathematics Magazine: 50 year index. Volumes 1–50, 1926–1977. Edited and with a preface by J. Arthur Seebach and Lynn Arthur Steen. With a brief history of Mathematics Magazine by Edwin F. Beckenbach, Mathematical Association of America, Washington, D.C., 1978. xxvi+165 pp. ISBN 0-88385-432-5 (Editors) 00A15 (01A60, 01A70)

Nonassociative algebra . See Tomber, Marvin L.; et al., 82j:17001 Stud. Appl. Math. Index to Volumes 47 through 59 (1968–1978). Stud. Appl. Math. 60 (1979), no. 3, 277-298. (Editors) 82j:00012 00A15

Z. Wahrsch. Verw. Gebiete Author index for Volumes 1-50 (1962-1979). Z. Wahrsch. Verw. Gebiete 51 (1980), no. 3, i-xlvii. (Editors) 82f:00008 00A15 (60-XX)

m processing *Методы передачи и обработки информации. (Russian)

отпанов processing

Методы передачи и сорасотки виформации. (кизмап)

[Methods of information transmission and processing] Edited by M. S. Pinsker and V. A.

Garmas. "Nauka", Moscow, 1980. 118 pp. (Editors) 82a-94002

• 4-06 (62-06)

отпатiон reception and processing in structurally complex systems

#Прием и обработка

виформация в сложных жиформационных системах. Вып. 9. (Russian) [Information] reception and processing in structurally complex systems. No. 9] Edited by T. K. Nežmetdinov. Kazan. Gos. Univ., Kazan, 1979. 134 pp. (Editors) 82e:94008 94A15 (94A17, 94A40)

ormation retrieval systems ★Банки данных и информационно-поисковые системы. (Russian) [Data bases and information retrieval systems] Edited by A. A. Stognii [A. O. Stognii] and F. I. Andon. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. 143 pp.

(Editors) 82d:68057a 68H05 (68-06)

rmation science ★Ссыкогика и виформатика. Вып. 15. (Russian) [Semiotics and information science. No. 15] Edited by A. I. Mihailov. Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. 168 pp. (loose errata). (Editors) 82a 68-06 (03-06, 68Gxx)

Information sciences *Second International Conference on Information Sciences and Systems. Vol. II. Advances in control. Papers from INFO II held at the University of Patras, Patras, July 9-14, 1979. Edited by Demetrios G. Lainiotis and Nicolaos S. Tzannes. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xvi+591 pp. ISBN 90-277-1129-1 (Editors) 82d:93002 93-06

★Second International Conference on Information Sciences and Systems. Vol. III. Applications of information and control systems. Papers from INFO II held at the University of Patras, Patras, July 9-14, 1979. Edited by Demetrios G. Lainiotis and Nicolaos S. Tzannes. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xiv+520 pp. ISBN 90-277-1143-7 (Editors) 82d:93003 93-06 (94Axx)

★Second International Conference on Information Sciences and Systems. Vol. I. Advances in communications. Papers from INFO II held at the University of Patras, Patras, July 9-14, 1979. Edited by Demetrios G. Lainiotis and Nicolaos S. Tzannes. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xiv+524 pp. ISBN 90-277-1140-2 (Editors) 824:94002 94-06

rmation theory approach to com nications *The information theory approach to communications. Lectures presented at CISM Summer Schools of 1976 and 1977. Edited by Giuseppe Longo. CISM Courses and Lectures, 229. Springer-Verlag, Vienna, 1978. viii+432 pp. ISBN 3-211-81484-1 (I. Vajda) 824-94024 94A15 (94-06, 94A40)

ovation in the fifteenth-sixteenth and in the nineteenth centuries over a problem of the history of technology *Innovation im 15./16. und im 19. Jahrhundert als technikgeschichtliches Problem. Conference held in Düsseldorf, October 6-7, 1977. Technikgeschichte 45 (1978), no. 2,115–188. Verein Deutscher Ingenieure (VDI),
Düsseldorf, 1978. pp. 115–202. (Table of contents) 82h:01001 01–06 (01A40, 01A55)

Instability of flows and turbulence *Instability of flows and turbulence. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, January 21-23, 1980. Sůrikaisekikenkyůsho Kôkyůroku No. 390 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-211. (Editors) 82d:76001 76-06 (76Exx, 76Fxx)

Integral equations *Приближению решение некоторых задач для дяфференциальных и витегральных уравнений прикладного характера. (Russian) [Approximate solution of some problems for differential and integral equations of applied character] Edited by M.

N. Zaharova. Преприит 80 [Preprint 80], 17. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 48 pp. (Editors) 82g:65004 65-06

★Линейные операторы в интегральные уравнения. (Russian) [Linear operators and integral equations] Edited by I. V. Suveika, G. I. Russu and I. A. Fel'dman. Mat. Issled. No. 61 (1981). "Stiinca", Kishinev, 1981. pp. 1-160. (Editors) 82e:47001 47-06 (45-06)

Integral and functional differential equations *Integral and functional differential equations. Proceedings of the Conference held at West Virginia University. Morgantown, W.Va., June 18-20, 1979. Edited by Terry L. Herdman, Harlan W. Stech and Samuel M. Rankin, III. Lecture Notes in Pure and Applied Mathematics, 67. Marcel Dekker, Inc., New York, 1981. x+276 pp. ISBN 0-8247-1354-0 (Editors) 824:45001 45-06 (34-06)

*Nonlinear differential equations. Invariance, stability, and bifurcation Proceedings of an International Conference held in Trento, May 25-30, 1980. Edited by Piero de Mottoni and Luigi Salvadori. Academic Press, Inc. [Harcourt Brace Jovanovich, ers], New York-London, 1981. xi+357 pp. ISBN 0-12-508780-2 (Editors) 34-06 824:34003

erse scattering problems in optics. ★Inverse scattering problems in optics. Edited by Heinrich P. Baltes. Topics in Current Physics, 20. Springer-Verlag, Berlin-New York, 1980. xiv+313 pp. ISBN 3-540-10104-7 (Editors) 82d:78021 78A45

- on of differential and difference-differential equations *Hocaegonan фференциальных и дифференциально-развостных уравнений. (Russian) [An estigation of differential and differential-difference equations] Edited by A. N. vskii [O. M. Šarkovs'kii]. Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. 192 pp.
- (Editors) 82e-34669 34Kxx estigations in functional analysis and differential equations

 ★Исследования по функциональному анализу и инфференциальным уравнениям. (Russian) [Investigations in functional analysis and differential equations] Edited by В. А. Sčerbakov. "Stiinca", Kishineo, 1981. 148 pp. (Editors) 82i:00013 00A10
- ns on linear operators and the theory of function пь жИсследо линейным операторым и теории функций. (Russian) [Investigations on linear operators and the theory of functions] 99 нерешенных задач линейного и комплексного анализа. [99 unsolved problems in linear and complex analysis] Compiled and edited by N. K. Nikol'skii, V. P. Havin and S. V. Hruščev. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Stekkov. (LOMI) 81 (1978). "Nauka", Leningrad. Oidel., Leningrad, 1978. pp. 1–296. (Editors) 82e:46002 46–02 (00A05, 30–02, 47–02)
- *Исслепования по измежным операторам в теории функций. XI. (Russian) [Investigations on linear operators and the theory of functions. XI] Edited by N. K. Nikol'skii. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 113 (1981). "Nauka" Leningrad. Otdel., Leningrad, 1981. pp. 1–272. (Editors) 82h:46002 46–06 (30-06, 47-06)
- in the metric theory of surfaces *Mccnegonanus no метрической теории стей. (Russian) [Investigations in the metric theory of surfaces] Papers ions in the n slated from the English and from the French by I. H. Sabitov. Edited by A. N. Kolmogorov and S. P. Novikov. Математика: Новое в Зарубежной Науке [Mathematics: Recent Publications in Foreign Science], 18. "Mir", Moscow, 1980. 294 pp. (Editors) 82b:53083 53C45 (00A10) IRIA S
 - Analysis and Control of Systems *Analyse et contrôle de systèmes. (English) [Analysis and control of systems] Papers from the Seminar organized by the Institut de Recherche d'Informatique et d'Automatique (IRIA) held at Rocquencourt, February-October 1979. Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. 121 pp. ISBN 2-7261-0237-9 (Editors) 821:60004 60-06 (49-06) 60-06 (49-06)
 - Recherche d'Informatique et d'Automatique (IRIA) held at Rocquencourt, October 1978-June 1979. Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. 345 pp. ISBN 2-7261-0238-7 (Editors) 82f:68001 68-06 (68G10)
- norphisms of classical groups over integral rings *Изоморфизмы классических групп пад целостиваем кольцаам. (Russian) [Isomorphisms of classical groups over integral rings] A collection of articles translated from the English. Edited by Ju. I. Merzijakov. Математика: Honoe в Зарубежной Науке [Mathematics: Recent Publications in Foreign Science], 20. "Mir", Moscow, 1980. 272 pp. (Editors) 82h:20001 20-(
- is Nauki i Tehniki ★Cospessensse проблемы математики. Tom 13. (Russian) [Current problems in mathematics. Vol. 13] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. gi Nauki i Tehniki ★Cospessess Naučn. i Tehn. Informacii, Moscow, 1979. 270 pp. (loose errata). (Marc A. Rieffel) 82447025 47A60 (47-02, 47D99, 58G15, 81D05)
- *Проблемы геометрии. Том 9. (Russian) [Problems in geometry. Vol. 9] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. 248 pp. (loose errata). (Editors) 82k:53054a 53-06 (55R10)
- ★Современные проблемы математики. Том 16. (Russian) [Current problems in cs. Vol. 16] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Inform. Moscow, 1980. 228 pp. (loose errata). (Editors) 82d:81003 81-06 (20C30, 53C65)
- **★**Техническая киберистика. Том 13. (Russian) [Engineering cybernetics. Vol. 13] Edited by B. N. Petrov. HTOTH HAYKH II TEXHIKH. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. 324 pp
- Жалин В 22493005 93-06 (90-06)

 ★Алгебра. Топология. Геометрия. Том. 18. (Russian) [Algebra. Topology.

 Geometry. Vol. 18] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. 214 pp. (Editors) 82d:00002 00A10
- ★Теория вероятностей. Математическая статистика. Теоретическая киберистика. Том 18. (Russian) [Probability theory. Mathematical statistics. Theoretical ernetics. Vol. 18] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informac Moscow, 1981. 188 pp. (errata insert). (Editors) 821:60003 60-02 (60K25, 60K35)
- **★**Проблемы reометрин. Том 12. (Russian) [Problems in geometry. Vol. 12] Edited by N. M. Ostianu. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. 192 pp. (errata insert). (Editors) 82h:53002 53-06 (35-06, 58-06)
- ★Техническая киберистика. Том 14. (Russian) [Engineering cybernetics. Vol. 14] Edited by S. V. Emel'janov and Z. B. Golembo. Итоги Науки и Техники. [Progress in Edited by S. V. Emer janov and E. B. Common States and Science and Technology Akad. Nauk SSSR, Vesegiuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. 376 pp. (Editors) 822-93001 93-06
- Moscow, 1981. 376 pp. (Editors) 82h:93001 93-06

 ★Алиебра. Tononorum. Feomerpum. Tom 19. (Russian) [Algebra. Topology.
 Geometry. Vol. 19] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naukn. i Tehn. Informacii,
- Мозсоw, 1981. 276 pp. (Editors) 82k:00007 00A10

 ★Современные проблемы математики. Том 18. (Russian) [Current problems in mathematics. Vol. 18] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vesojuz. Inst. Naučn. i Tehn. Informacii, Mascow, 1981. 208 pp. (errata insert). (Editors) 82m:14002 14-06
- е проблемы математики. Том 17. (Russian) [Current problems in mathematics. Vol. 17] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress

- in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. 220 pp. (errata inserta). (Editors) 82m:81002
- restagung:
 Gesellschaft für Informatik

 *GI-10. Jahrestagung. (German) Held in Saarbrücken,
 September 30-October 2, 1980. Edited by R. Wilhelm. Informatik-Fachberichte [Technical Reports on Information Science], 33. Springer-Verlag, Berlin-New York, 1980. xv + 563 pp. ISBN 3-540-10388-0 (Editors) 82b:68003 68-06
- lem *To fulfill a vision. Jerusalem Einstein Centennial Symposium on Gauge Theories and Unification of Physical Forces held in Jerusalem, March 14-23, 1979. Edited by Yuval Ne'eman. Addison-Wesley Publishing Co., Reading, Mass., 1981. xxxi + 279 pp. ISBN 0-201-05289-X (Editors) 824-83003 83-03 (01-06, 81G20)
- *Messung, Modellierung und Bewertung von Rechensystemen. (Germa [Measurement, modeling and evaluation of computing systems] GI-NTG Conference held in Jülich, February 23-25, 1981. Edited by Burkhard Mertens. Informatik-Fachberichte [Technical Reports on Information Science], 41. Springer-Verlag, Berlin-New York, 1981. viii + 368 pp. ISBN 3-540-10619-7 (Editors)
- 82h:68002 68-06 (68C15, 90-06) Papers presented at a Workshop held in Jungholz, October 1977. Edited by Wulf Albers, Günter Bamberg and Reinhard Selten. Mathematical Systems in Economics, 45. Verlag Anton Hain, Königstein/Ts., 1979. 230 pp. ISBN 3-445-01961-4 (Milan Mareš) 82e:90130 90D45 (90A05, 90A07)
- Kagel ★Proceedings of the Sur er School on Yang-Mills Equations. Bereich Geometrie. [Geometry section] Held at Kagel, June 25-29, 1979. Seminarberichte [Seminar Reports], 25. Humboldt Universität, Sektion Mathematik, Berlin, 1980. i+246 pp. (M. Schneider) 82j:53062 53C05 (14F05, 53-02, 58E20, 81E10)
- amazoo, Mich. ★The theory and applications of graphs. Proceedings of the Fourth International Conference held at Western Michigan University, Kalamazoo, Mich., May 6-9, 1980. Edited by Gary Chartrand, Yousef Alavi, Donald L. Goldsmith, Linda Lesniak-Foster and Don R. Lick. John Wiley & Sons, Inc., New York, 1981. xvi+611 pp. ISBN 0-471-08473-5 (Editors) 82i-05002 05-06
- dsruhe ★New phenomena in lepton-hadron physics. Lectures presented at the NATO Advanced Study Institute held in Karlsruhe, September 4-16, 1978. Edited by Dietrich E. C. Fries and Julius Wess. NATO Advanced Study Institute Series, Ser. B: Physics, 49. um Press, New York-London, 1979. viii + 436 pp. ISBN 0-306-40301-3 (Editors) 81G15 (81G05)
- pacz *Mathematical aspects of quantum field theory. Part I. Papers from the XVth Winter School of Theoretical Physics held in Karpacz, February 20-March 4, 1978. Edited by Andrzej Pękalski and Tadeusz Paszkiewicz. ACTA Universitatis Wratislaviensis, 519. Wydawnictwa Uniwersytetu Wrocławskiego, Wrocław, 1979. 312 pp.
 - (Editors) 82i:81004a 81-06

 *Mathematical aspects of quantum field theory. Part II. Papers from the XVth Winter School of Theoretical Physics held in Karpacz, February 20-March 4, 1978. Edited by Andrzej Pękalski. ACTA Universitatis Wratislaviensis, 519. Wydawnictwa
 - Universytetu Wrocławskiego, Wrocław, 1979. 329 pp. (Editors) 82±81004b 81−06

 ★Model theory of algebra and arithmetic. Proceedings of the Conference on Applications of Logic to Algebra and Arithmetic Hold at Karpacz, September 1-7, 1979. Edited by L. Pacholski, J. Wierzejewski, and A. J. Wilkie. Lecture Notes in Mathematics, 834. Springer-Verlag, Berlin-New York, 1980. vi + 410 pp. ISBN 3-540-10269-8 (Editors) 03-06 (03C60, 03C62)
- Katata *Nonlinear problems in geometry. Proceedings of the Sixth International Symposium of the Division of Mathematics of the Taniguchi Foundation. Conference on Nonlinear Problems in Geometry held in Katata, September 3-8, 1979. Tohoka University, Department of Mathematics, Sendai, 1979. v+23 pp. (Editors) 82j:58001 58-06 (35-06, 53-06)
- mas Abstracts from the 19th Conference of the Lithuanian Mathematical Society (Kaunas, June 16-17, 1978). (Russian) Litovsk. Mat. Sb. 19 (1979), no. 3, 103-199. (Editors) 82i:00008 00A10
- Keszthely ★Point processes and queueing problems. Papers from the Colloquium held in Keszthely, September 4–8, 1978. Edited by P. Bártfai and J. Tomkó. Colloquia Mathematica Societatis János Bolyai, 24. North-Holland Publishing Co., Amsterdam-New York, 1981. 426 pp. ISBN 0-444-85432-0 (Editors) 82f:60006 60-06 (60G55, 60G60, 60J80, 60K25, 60K35)
- ★ Nonlinear and turbulent processes in physics. Proceedings of the International Workshop held in Kiev, September 4–16, 1979. Edited by V. D. Shapiro [V. D. Šapiro] and V. I. Shevchenko [V. I. Ševčenko]. Phys. D 2 (1981), no. 1. North-Holland Publishing , Amsterdam-New York, 1981. pp. i-ix and 1-243. (Editors) 82c:82002 (58Fxx, 76-06)
 - ★Soliton theory. Proceedings of the Soviet-American Symposium held in Kiev, September 4-16, 1979. Edited by S. V. Manakov and V. E. Zakharov [V. E. Zaharov]. Phys. D 3 (1981), no. 1-2. North-Holland Publishing Co., Amsterdam-New York, 1981. pp. i-xiv and 1-438. (Editors) 82k:81002 81-06 (35-06, 35Q20, 76B25)
- on, Ont. *Proceedings of the Queen's Number Theory Conference, 1979. Held at Queen's University, Kingston, Ont., July 2-20, 1979. Edited by Paolo Ribenboim. Queen's Papers in Pure and Applied Mathematics, 54. Queen's University, Kingston, Ont., 1980. xiii + 497 pp. (Editors) 82j:10003 10-06
 - ★The Curves Seminar at Queen's Vol. I. Held at Queen's University, Kingston, Ont., 1979–1980. Edited by Anthony V. Geramita. Queen's Papers in Pure and Applied Mathematics, 58. Queen's University, Kingston, Ont., 1981. 148 pp. (not consecutively paged). (Editors) 82m:14015 14H20 (14–06)
- chberg am Wechsel ★Language, logic, and philosophy. Proceedings of the Fourth International Wittgenstein Symposium held in Kirchberg am Wechsel, August 27-September 2, 1979. Edited by Rudolf Haller and Wolfgang Grassl. Schriftenreihe der
- Wittgenstein-Gesellschaft. [Wittgenstein Society Publications Series]

 Hölder-Pichler-Tempsky, Vienna, 1980. 617 pp. ISBN 3-209-00249-5 (Editors) 82e:03006 03-06 (03A05)
- Kiryat Anavim

 Group theoretical methods in physics. Proceedings of the Eighth International Colloquium held at Kiryat Anavim, March 25-29, 1979. Edited by L. P. Horwitz and Y. Ne'eman. Annals of the Israel Physical Society, 3. Adam Hilger, Ltd., Bristol; Israel Physical Society, Haifa, 1980. xvi + 417 pp. (errata insert). ISBN 0-85274-424-2 (Editors) 82h:81004 81-06 (20-06, 22-06)

ska notebook

★Коуровская тетрадь: перешенные задачи теории групп. (Russian) [Kourovka notebook: unsolved problems in group theory] Seventh edition. Including problems from the Seventh All-Union Symposium on Group Theory held at Shushenskoe, 1980. Edited by V. D. Mazurov, Ju. I. Merzljakov and V. A. Čurkin. Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1980. 115 pp. (Editor's review (Ju.I.M.))

821:20005 20-06

Кгаsnoyarsk. ★XV Всесоюзная Алгебранческая Конференция. Часть Первая. (Russian)

[Fifteenth All-Union Algebra Conference. Part I] Группы. [Groups] Held in

Krasnoyarsk, July 3-6, 1979. Abstracts of papers. Edited by В. К. Durakov. Krasnojarsk.

Krasnoyarsk, July 3-6, 1979. Austracts of papers. Edited by B. R. Билаков. Artsmigaras. Gos. Unic., Krasnoyarsk, 1979. 201 pp. (Editors) 82h220001a 20-06

★XV Всесоконая Антебранческая Конференция. Часть Вторая. (Russian)

[Fifteenth All-Union Algebra Conference. Part II] Кольпа. Антебранческие системы.

[Rings. Algebraic systems] Held in Krasnoyarsk, July 3-6, 1979. Abstracts of papers.

Edited by B. K. Durakov. Krasnojarsk. Gos. Unio., Krasnoyarsk, 1979. 183 pp. (Editors) 08-06 (16-06)

Kyoto ★Evolutions in computer communications. Proceedings of the Fourth International Conference on Computer Communication held in Kyoto, September 26-29, 1978. Edited by H. Inose. North-Holland Publishing Co., Amsterdam-New York, 1978. vi + 842 pp. 1SBN 0-444-85258-1 (Editors) 82m-34001 94-06 (68-06)

ster *The mathematics of hydrology and water resources. Based on the Proceeding of the Conference held at the University of Lancaster, Lancaster, July 1976. Edited by Emlyn H. Lloyd, Terence O'Donnell and John Craven Wilkinson. Institute of Mathematics and its Applications Conference Series. Academic Press, Inc. [Harco Brace Jovanovich, Publishers], London-New York, 1979. xi+138 pp. ISBN 0-12-453350-7 (J. C. J. Nihoul) 82k:86001 86-06 (86A05)

guage, logic, and philosophy *Language, logic, and philosophy. Proceedings of the Fourth International Wittgenstein Symposium held in Kirchberg am Wechsel, August 27-September 2, 1979. Edited by Rudolf Haller and Wolfgang Grassl. Schriftenreihe der Wittgenstein-Gesellschaft. [Wittgenstein Society Publications Series] Hölder-Pichler-Tempsky, Vienna, 1980. 617 pp. ISBN 3-209-00249-5 (Editors) 82e:03006

03-06 (03A05)

ns *Large scale matrix problems. Reprint of Linear Algebra Large scale matrix pro Appl. 34 (1980). Edited by Åke Björck, Robert J. Plemmons and Hans Schneider.

North-Holland Publishing Co., New York-Amsterdam, 1981. iv + 404 pp.

ISBN 0-444-00563-3 (Editors) 82;65017 65Fxx (65-06)

Las Cruces, N.M. *Proceedings of the Twenty-Sixth Conference on the Design of Experiments in Army Research, Development and Testing. Held at New Mexico State University, Las Cruces, N.M., October 22-24, 1980. ARO Report 81, 2. U. S. Army Research Office, Research Triangle Park, N.C., 1981. xviii+587 pp. (Editors) 82g:62008

★Constructive mathematics. Proceedings of the Conference held at the New Mexico State University, Las Cruces, N.M., August 11–15, 1980. Edited by Fred Richman. Lecture Notes in Mathematics, 873. Springer-Verlag, Berlin-New York, 1981. vii + 347 pp.

ISBN 3-540-10850-5 (Editors) 82m:03003 03-06 (03F65)

★Signal processing: theories and applications. Proceedings of the First European Signal Processing Conference (EUSIPCO-80) held in Lausanne, September 16-18, 1980. Edited by M. Kunt and F. de Coulon. North-Holland Publishing Co., Amsterdam-New York, 1980. xiii+797 pp. ISBN 0-444-86050-9 (Editors) 82g-94001 94-06 (68Gxx, 92-06, 93E11, 94Axx)

Leeds *Computer scheduling of public transport. Urban passenger vehicle and crew scheduling. Papers based on presentations at the International Workshop held at the University of Leeds, Leeds, July 16–18, 1980. Edited by Anthony Wren. North-Holland Publishing Co., Amsterdam-New York, 1981. viii+359 pp. ISBN 0-444-86170-X (Editors) 221-00053 90B35

Leibnitz *Abstract Cauchy problems and functional differential equations. Proceedings of the Workshop on Functional Differential Equations and Nonlinear Semigroups held in Leibnitz, June 25-30, 1979. Edited by F. Kappel and W. Schappacher. Research Notes in

Mathematics, 48. Pitman (Advanced Publishing Program), Boston, Mass.-London, 1981. vii +238 pp. ISBN 0-273-08494-1 (Editors) 824:34001 34-06 (34Kxx) bniz' calculation with zero and one ★Herrn von Leibniz' Rechnung mit Null und Eins. (German) [Leibniz' calculation with zero and one] Third edition. Siemens Aktiengesellschaft, Berlin, 1979. 61 pp. (1 plate; 1 foldout). ISBN 3-8009-1279-1 (Editors)

01A45 (01-06)

ingrad *Complex analysis and spectral theory. Papers from the Seminar held in Leningrad, 1979/1980. Edited by V. P. Havin and N. K. Nikol'skii. Lecture Notes in Mathematics, 864. Springer-Verlag, Berlin-New York, 1981. vi + 480 pp. ISBN 3-540-10695-2 (Editors) 82m:46001 46-06 (30-06, 47-06)

Lepton-hadron physics *New phenomena in lepton-hadron physics. Lectures presented at the NATO Advanced Study Institute held in Karlsruhe, September 4-16, 1978. Edited by Dietrich E. C. Fries and Julius Wess. NATO Advanced Study Institute Series, Ser. B: Physics, 49. Plenum Press, New York-London, 1979. viii + 436 pp. ISBN 0-306-40301-3

Physics, 49. Flemini Press, New York London, 1975.

(Editors) 82h:81135 81G15 (81G05)

Les Plans-sur-Bex * Théorie ergodique. (French) [Ergodic theory] Papers presented at the Seminar held at Les Plans-sur-Bex, March 23–29, 1980. Monographies de L'Enseignement Mathématique [Monographs of L'Enseignement Mathématique], 29. Université de Genèce, L'Enseignement Mathématique, Geneca, 1981. 112 pp. (Editors) 28-06 (28Dxx)

★Groupe de Brauer (French) [The Brauer group] Papers from a Seminar held at Les Plans-sur-Bex, March 16-22, 1980. Edited by Michel Kervaire and Manuel Ojanguren. Lecture Notes in Mathematics, 844. Springer-Verlag, Berlin-New York, 1981. iii + 274 pp. ISBN 3-540-10562-X (Editors) 82c:14004 14-06 (16-06)

voluční změny v oblasti vědy a techniky. (Czech) [Revolutionary developments in the field of science and engineering 2. poloviny 19, a počátku 20. století jako předpoklad vědeckotechnické revoluce. [The second half of the nineteenth and the beginning of the twentieth century as the basis of the scientific-technical revolution].

Papers presented at the Conference held at Liblice, October 18-20, 1979. Edited by Luboš Nový. Práce z Dějin Přirodních Věd [Works in the History of Natural Sciences], venské Akademie Věd (ČSAV), Prague, 1980. 462 pp. (Editors) 82g:01002 01-06 (01A55, 01A60)

ations *Proceedings of the Third Workshop on Lie-Admissible

Formulations. Part A. Mathematics. Held at the University of Massachusetts, Boston, Mass., August 4-9, 1980. Hadronic J. 4 (1980/81), no. 2. Hadronic Press, Inc.

Mass., August 4-9, 1900. Hautonk 5. 4(1-06) (Riditors) 828.81-06 (17-06)

★Proceedings of the Third Workshop on Lie-Admissible Formulations. Part B.
Theoretical physics. Held at the University of Massachusetts, Boston, Mass., August 4-9, 1980. Hadronic J. 4 (1980/81), no. 3. Hadronic Press, Inc., Nonantum, Mass., 1981. pp. 608-1165. (Editors) 82f:81002b 81-06 (17-06)

★Proceedings of the Third Workshop on Lie-Admissible Formulations. Part C. Experimental physics and bibliography. Held at the University of Massachusetts, Boston, Mass., August 7-9, 1980. Hadronic J. 4 (1980/81), no. 4. Hadronic Press, Inc., Nonantum, Mass., 1981. pp. 1166-1625. (Editors) 821:81002c 81-06 (17-06)

Lie algebras *Algebra, Carbondale 1980. Lie algebras, group theory, and partially ordered algebraic structures. Proceedings of the Southern Illinois Algebra Conference held at Southern Illinois University, Carbondale, Ill., April 18–19, 1980. Edited by Ralph K. Amayo. Lecture Notes in Mathematics, 848. Springer-Verlag, Berlin-New York, 1981. vi+298 pp. ISBN 3-540-10573-5 (Editors) 824:20004 20–06 (06–06, 17–06)

Lie algebras, algebraic groups and related topics *Lie algebras, algebraic groups and related topics. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 29-June 2, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 394 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-259. (Editors) 82a:17001 (16-06, 20Gxx)

groups *Дифференц

льная геометрия, группы Ли и механика. III. (Russian) [Differential geometry, Lie groups and mechanics. III] Edited by L. D. Faddeev. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 95 (1980). "Nauka" Leningrad. Otdel., Leningrad, 1980. pp. 1–161. (Editors) 82a:58002 58–06

Lille *Les arbres en algèbre et en programmation. (French) [Trees in algebra and programming] Proceedings of the Fifth Lille Colloquium held in Lille, February 21–23, 1980. Université de Lille I, U.E.R., I.E.E.A., Lille, 1980. iv+268 pp. (Editors) 68-06

82e:68004 68-06
Linear analysis ★Исследования по линейным операторам и теории функций. (Russian)
[Investigations on linear operators and the theory of functions] 99 перешенных задач линейного и комплексного анализа. [99 unsolved problems in linear and complex analysis] Compiled and edited by N. K. Nikol'skii, V. P. Havin and S. V. Hruščev. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 81 (1978). "Nauka" Leningrad. Otdel., Leningrad, 1978. pp. 1-296. (Editors) 82e:46002

ear differential equations *Hyperfunctions and linear differential equations. VI. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 5-8, 1978. Sűrikaisekikenkyűsho Kôkyűroku No. 341 (1978). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1978, pp. i-iii and 1-195. (Editors) 82d:35009 35-06 (32-06, 46-06)

★Microfunctions and linear differential equations. VII. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 24-26, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 410 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kvoto, 1980, pp. i-ii and 1-153. (Editors) 82d:46002 46-06 (35-06, 46F15, 58-06)

ear groups *Mogy, m muentimae rpymma (Russian) [Modules and linear groups]
Edited by Z. I. Borevič and A. I. Skopin. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst.
Steklov. (LOMI) 103 (1980). "Nauka" Leningrad. Otdel., Leningrad, 1980. pp. 1–160.

(Editors) 82f:20006 20-06
ear multivariable feedback systems *Complex variable methods for linear multivariable Feedback systems. A collection of reprints from the International Journal of Control.

Edited by A. G. J. MacFarlane. Taylor & Francis, Ltd., London, 1980. v+368 pp. ISBN 0-85066-197-8 (Editors) 82e:93064 93C35 (01A75)

ear and nonlinear partial differential equations *Linear and nonlinear partial differential equations. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 17-19, 1980.

Sûrikaisekikenkyûsho Kôkyûroku No. 402 (1980). Kyoto University, Research Institute for

Mathematical Sciences, Kyoto, 1980. pp. i−ii and 1−162. (Editors) 82d:35010 ear operators and integral equations ★Линскиме операторы и интегральны уравиемия. (Russian) [Linear operators and integral equations] Edited by I. V. Suvelka, G. I. Russu and I. A. Fel'dman. Mat. Issled. No. 61 (1981). "Štiinca", Kishineo, 1981. pp. 1-160. (Editors) 82e:47001 47-06 (45-06)

ear operators related to normal operators. *Linear operators related to normal operators.

(Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 28-August 1, 1980. Sürikaisekikenkyüsho Kôkyûroku No. 399 (1980). Kyoto University, Research Institute for Mather Sciences, Kyoto, 1980, pp. 1-ii and 1-160. (Editors) 82be7001 47-06

Linear systems theory *Algebraic and geometric methods in linear systems theory. Papers

presented at the AMS-NASA-NATO Summer Seminar held at Harvard University, Cambridge, Mass., June 1979. Edited by Christopher I. Byrnes and Clyde F. Martin. Lectures in Applied Mathematics, 18. American Mathematical Society, Providence, R.I., 1980. viii + 327 pp. ISBN 0-8218-1118-5 (Editors) 82a:93004 93-06

Logarithmic potential and other monographs *The logarithmic potential and other monographs. A collection of reprints. Chelsea Publishing Co., New York, 1980. 387 pp (not consecutively paged). ISBN 0-8284-0305-8 (Editors) 82j:01081 01A75 (31A15,

Logic *Model theory of algebra and arithmetic. Proceedings of the Conference on Applications of Logic to Algebra and Arithmetic held at Karpacz, September 1-7, 1979.
Edited by L. Pacholski, J. Wierzejewski, and A. J. Wilkie. Lecture Notes in Mathematics, 834. Springer-Verlag, Berlin-New York, 1980. vi + 410 pp. ISBN 3-540-10269-8 (Editors) 03-06 (03C60, 03C62)

★Rassegna di matematica. (Italian) [Mathematics review] Logica matematica. Matematica applicata. Didattica della matematica. [Mathematical logic. Applied mathematics. Teaching of mathematics]. Edited by Marco Borga, Paolo Freguglia and Dario Palladino. Casa Editrice Tilgher, Genoa, 1980. 100 pp. (Editors) 82h:e03005

★Логико-методологические исследования. (Russian) [Studies in logical methodology] Edited by A. A. Starčenko. Moskov. Gos. Univ., Moscow, 1980. 375 pp.

(louse errata). (Editors) 82::03003 03-06

★Bertrand Russell's early philosophy. Part I. Edited by Jaakko Hintikka. Synthese 45 (1980), no. 1. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. pp. 1–189. (Editors) 82e-93005a 03–03 (00A25, 01A70, 03A05)

**TLanguage, logic, and philosophy. Proceedings of the Fourth International
Wittgenstein Symposium held in Kirchberg am Wechsel, August 27–September 2, 1979.
Edited by Rudolf Haller and Wolfgang Grassl. Schriftenreihe der
Wittgenstein-Gesellschaft [Wittgenstein Society Publications Series] Hölder-Pichler-Tempsky, Vienna, 1980. 617 pp. ISBN 3-209-00249-5 (Editors) 82e:03006

03-06 (03A05)

*History and philosophy of logic. Vol. 1. Edited by Ivor Grattan-Guinness. Abacus Press, Tunbridge Wells, 1980. viii+250 pp. ISBN 0-85626-189-0 (Editors) 82g:03005 03-06 (01A05, 03-03, 03A05)

★Cabal Seminar 77–79. Proceedings of the Caltech-UCLA Logic Seminar, 1977–79. Edited by Alexander S. Kechris, Donald A. Martin and Yiannis N. Moschovakis. Lecture Notes in Mathematics, 839. Springer-Verlag, Berlin-New York, 1981. ii + 274 pp. ISBN 3-540-10288-4 (Editors) 82e-03002 03-06 (03E15)

*Bertrand Russell's early philosophy. Part II. Edited by Jaakko Hintikka. Synthese 46 (1981), no. 2. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. pp. 149-284.

(Editors) 82e:03005b 03-03 (00A25, 01A70, 03A05, 92A05)

★Modern logic—a survey. Historical, philosophical, and mathematical aspects of modern logic and its applications. Edited by Evandro Agazzi. Synthese Library, 149. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. viii + 475 pp. ISBN 90-277-1137-2 (Charles F. Kielkopf) 82f:03002 03-06 (01A60, 03-02) (Charles F. Kielkopf) 82f:03002

ic and epistemology of scientific change *The logic and epistemology of scientific change. Proceedings of a Colloquium held in Helsinki, December 12–14, 1977. Edited by Ilkka Niiniluoto and Raimo Tuomela. Acta Philos. Fenn. 30 (1978), no. 2-4 (1979). North-Holland Publishing Co., Amsterda m-New York, 1979. pp. 1-461. (Mario Bunge) 00A25 (03-06, 03A05)

Logic Year ★Logic Year 1979-80. Proceedings of Seminars and of the Conference on Mathematical Logic held at the University of Connecticut, Storrs, Conn., November 11-13, 1979. Edited by Manuel Lerman, James Henry Schmerl and Robert Irving Soare. Lecture Notes in Mathematics, 859. Springer-Verlag, Berlin-New York, 1981.

viii + 326 pp. ISBN 3-540-10708-8 (Editors) 82e:03007

ogical studies of the categorical structure of thought ★Логико-гиосеологические исследования категориальной структуры мышления. (Russian) [Logical-gnoseological studies of the categorical structure of thought] Edited by M. V. Popovič. "Naukova Dumka", Kiev, 1980. 339 pp. (Editors) 82b:03004

don *Mathematical aspects of marine traffic. Proceedings of the Conference held at Chelsea College, London University, London, September, 1977. Edited by S. H. Hollingdale. Institute of Mathematics and its Applications Conference Series. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1979. xii + 269 pp. ISBN 0-12-352450-4 (Editors) 82a:90005 90-06

★Analytic sets. Lectures delivered at a Conference held at University College,

University of London, London, July 16-29, 1978. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1980. x + 499 pp. ISBN 0-12-593150-6 (Douglas Cenzer) **82m:03063** 03E15 (03D55, 04A15, 54H05, 60G40, 90D13)

wain-la-Neuve *Functional integration theory and applications. Proceedings of the Colloquium held at Louvain-la-Neuve, November 6-9, 1979. Edited by Jean-Pierre Antoine and Enrique Tirapegui. Plenum Press, New York-London, 1980. x+355 pp. ISBN 0-306-40573-3 (Editors) 82b:81005 81-06 (81C35)

ock, Tex. *Topology and order structures. Part 1. Papers presented at a Workshop on Topology and Linear Orderings held at Texas Tech University, Lubbock, Tex., August 1980. Edited by H. R. Bennett and D. J. Lutzer. Mathematical Centre Tracts, 142. atisch Centrum, Amsterdam, 1981. iii+184 pp. ISBN 90-6196-228-5 (Editors) 82h:54001 54-06 (06F30, 54F05)

★Visiting scholars' lectures — 1980. Lectures from the Visiting Mathematician Program held at Texas Tech University, Lubbock, Tex., 1980. Mathematics Series, 14. Texas Tech University, Department of Mathematics, Lubbock, Tex., 1981. ii+139 pp. (Editors) 82k:00011 00A10

(Russian) [Classification and clustering]
Proceedings of an Advanced Seminar held at the University of Wisconsin, Madison, Wis. May 3-5, 1976. Edited by John Van Ryzin. Translated from the English by P. P. Kol'cov.
"Mir", Mascow, 1980. 389 pp. (Editors) 82d:62108 62H30

★Transition and turbulence. Proceedings of a Symposium held at the Mathematics

Research Center, University of Wisconsin, Madison, Wis., October 13-15, 1980. Edited by Richard E. Meyer. Publication of the Mathematics Research Center, University of Wisconsin, 46. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. ix + 245 pp. ISBN 0-12-493240-1 (Editors) 82k:76002 (58F13, 76Exx, 76Fxx)

rid *I Congreso de la Sociedad Española de Historia de las Ciencias. (Spanish) [First Congress of the Spanish Society for the History of Science] Held in Madrid, December 1978. El científico español ante su historia. La ciencia en España entre 1750-1850. [The Spanish scientist before the history of science. Science in Spain between 1750 and 1850] Edited by Santiago Garma. Diputación Provincial de Madrid, Servicios de Extensión Cultural y Divulgación, Madrid, 1980. 589 pp. ISBN 84-500-4142-2 (Editors) 82d:01001

★The role of coherent structures in modelling turbulence and mixing. Proceedings of the International Conference held in Madrid, June 25-27, 1980. Edited by Javier Jimenez. Lecture Notes in Physics, 136. Springer-Verlag, Berlin-New York, 1981. xiii+393 pp. ISBN 3-540-10289-2 (Editors) 82c:76062 76Fxx (76-06, 80A25)

cience *Applied stochastic control in econometrics and management science. Edited by Alain Bensoussan, Paul Kleindorfer and Charles S. Tapiero. science. Edited by Atain Bensoussan, rau Escherolica de Oblishing Co., Amsterda Contributions to Economic Analysis, 130. North-Holland Publishing Co., Amsterda Vod. 1000 rsv+304 nn. ISBN 0-444-85408-8 (Editors) 82a:90001 90-06

nchester *Computational techniques for ordinary differential equations. Based on the Proceedings of the Conference held at the University of Manchester, Manchester, December 18-20, 1978. Edited by I. Gladwell and D. K. Sayers. The Institute of Mathematics and its Applications Conference Series. Academic Press [Harcourt Brace

oich, Publishers], London-New York-Toronto, Ont., 1980. x+303 pp. ISBN 0-12-285780-1 (John P. Coleman) 82a:65053 65L05 (65L07, 65L10, 65L15,

★Recent developments in Markov decision processes. Proceedings of a International Conference on Markov Decision Processes held at the University of Manchester, Manchester, July 17-19, 1978. Edited by R. Hartley [Roger Hartley], L. C. Thomas and D. J. White. Institute of Mathematics and its Applications Conference Series. Academic Press, Inc. [Harcourt Brace Jocanovich, Publishers], London-New York, 1980. xiv+334 pp. ISBN 0-12-328460-0 (A. A. Juškevič) 82k:90128 90C40 (90C39)

1980, XIV+ 3.54 pp. 15BN 0-12-328400-0 (A. A. Juskevic) 2423-0128 90-40 (800.39) mildolds and Lie groups "Manifolds and Lie groups Papers in honor of Yoo's Matsushima. Including papers delivered at the Conference on Geometry held at the University of Notre Dame, Notre Dame, Ind., May 14-15, 1980. Edited by J. Hano, A. Morimoto, S. Murakami [Shingo Murakami], K. Okamoto and H. Özeki. Progress in Mathematics, 14. Birkhäuser, Boston, Mass., 1981. xii+459 pp. (1 plate).

ISBN 3-7643-3053-8 (Editors) 82m:53001 53-06

Map data processing ★Map data processing. Proceedings of a NATO Advanced Study Institute held in Maratea, June 18-29, 1979. Edited by Herbert Freeman and Goffredo G. Pieroni. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1980. ix+374 pp. ISBN 0-12-267180-5 (Editors) 82m:68006a (65Dxx, 68G10, 86A30)

Maratea *Map data processing. Proceedings of a NATO Advanced Study Institute held in Maratea, June 18-29, 1979. Edited by Herbert Freeman and Goffredo G. Pieroni.

Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1980.

ix + 374 pp. 1SBN 0-12-267180-5 (Editors) 82m:68006a 68-06 (65Dxx, 68G10,

★Singularities in boundary value problems. Proceedings of the NATO Advanced Study Institute held in Maratea, September 22-October 3, 1980. Edited by H. G. Garnir. NATO Advanced Study Institute Series. Ser. C: Mathematical and Physical Sciences, 65. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xvi + 377 pp.

ISBN 90-277-1240-9 (Editors) 82i-35005 35-06 (58-06)

wine traffic ★Mathematical aspects of marine traffic. Proceedings of the Conference held at Chelsea College, London University, London, September, 1977. Edited by S. H. Hollingdale. Institute of Mathematics and its Applications Conference Series. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1979. xii+269 pp.

ISBN 0-12-352450-4 (Editors) 82æ90005 90-06

rkov decision processes ★ Recent developments in Markov decision processes.

Proceedings of an International Conference on Markov Decision Processes held at the University of Manchester, Manchester, July 17-19, 1978. Edited by R. Hartley [Roger Hartley], L. C. Thomas and D. J. White. Institute of Mathematics and its Applications Conference Series. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers] London-New York, 1980. xiv + 334 pp. ISBN 0-12-328460-0 (A. A. Juškevič) 82k:90128

Marseille ★Journées d'Études sur la Propagation Acoustique. (French) [Study Conference on Acoustic Propagation] Held in Marseille, October 21–24, 1980. Rev. CETHEDEC Cahier 1980, no. 1. Centre d'Études Théoriques de la Détection et des Communications, Paris, 1980. pp. 1–370. (Editors) 82d:76082 76Q05

★Noncommutative harmonic analysis and Lie groups. Proceedings of the Colloquium on Noncommutative Harmonic Analysis held in Marseille, June 16-20, 1980. Edited by Jacques Carmona and Michèle Vergne. Lecture Notes in Mathematics, 880. Springer-Verlag, Berlin-New York, 1981. iv + 553 pp. ISBN 3-540-10872-6 (Editors) 82m:22001 22-06 (43-06)

Mathematical analysis and applications ★Mathematical analysis and applications. Part A.

Essays dedicated to Laurent Schwartz on the occasion of his 65th birthday. Edited by Leopoldo Nachbin. Advances in Mathematics, Supplementary Studies, 7a. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981.

xviii+416 pp. ISBN 0-12-512801-0 (Editors) 82:00014a 00A10 (35-06, 46-06)

Mathematical analysis and applications. Part B. Essays dedicated to Laurent Schwartz on the occasion of his 65th birthday. Edited by Leopoldo Nachbin. Advances in Mathematics, Supplementary Studies, 7b. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. pp. i-xiv and 417-791. ISBN 0-12-512802-9 (Editors) 82:00014b 00A10 (35-06, 46-06)

Mathematical analysis and the theory of functions ★Математический анализ и теория

функций. (Russian) [Mathematical analysis and the theory of functions] Edited by I. I. Bavrin. Moskov. Oblast. Ped. Inst., Moscow, 1980. 164 pp. (Editors) 82g:32001

natical aspects of marine traffic *Mathematical aspects of marine traffic Proceedings of the Conference held at Chelsea College, London University, London, September, 1977. Edited by S. H. Hollingdale. Institute of Mathematics and its Applications Conference Series. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1979. xii + 269 pp. ISBN 0-12-352450-4 (Editors) 90-06

Mathematical aspects of physiology *Mathematical aspects of physiology. Proceedings of the Twelfth Summer Seminar on Applied Mathematics held at the University of Utah, Salt Lake City, Utah, June 15-27, 1980. Edited by Frank C. Hoppensteadt. Lectures in Applied Mathematics, 19. American Mathematical Society, Providence, R. I., 1981. vi+394 pp. ISBN 0-8218-1119-3 (Editors) 82f:92003 92-06 (34-06, 35-06, 76-06)

Mathematical aspects of quantum field theory ★Mathematical aspects of quantum field theory. Part I. Papers from the XVth Winter School of Theoretical Physics held in Karpacz, February 20-March 4, 1978. Edited by Andrzej Pękalski and Tadeusz Paszkiewicz. ACTA Universitatis Wratislaviensis, 519. Wydawnictwa Uniwersytetu Wrocławskiego, Wrocław, 1979. 312 pp. (Editors) 82i:81004a 81-06

★Mathematical aspects of quantum field theory. Part II. Papers from the XVth Winter School of Theoretical Physics held in Karpacz, February 20-March 4, 1978. Edited by Andrzej Pękalski. ACTA Universitatis Wratislaviensis, 519. Wydawnictwa

Uniwersytetu Wrocławskiego, Wrocław, 1979. 329 pp. (Editors) 82i:81004b 81-06

Mathematical calendar for the 1979/80 school year Mathematical calendar for the 1979/80 school year. (Russian) Mat. v Škole 1979, no. 5, 66-67. (Editors) 82b:01067 01A70

Mathematical frontiers of the social and policy sciences ★Mathematical frontiers of the social and policy sciences. Edited by Loren Cobb and Robert M. Thrall. AAAS Selected Symposia Series, 54. Westisian Pages Boulday Color Cob tack American Color Color Cobb and Robert M. Thrall. AAAS Selected

Symposia Series, 54. Westview Press, Boulder, Colo.; for the American Association for the

- Advancement of Science, Washington, D.C., 1981. xiv+186 pp. ISBN 0-89158-953-8 (Editors) 82c:92005a 92-06 (60H10)
- matical Gardner The mathematical Gardner. Edited by David A. Klarner. Wadsworth International, Belmont, Calif.; Prindle, Weber & Schmidt, Boston, Mass., 1981. viii + 382 pp. ISBN 0-534-98015-5 (A. K. Austin) 82h:00003 00A05
- Mathematical logic ★Пятая Всесовозная Конференция по Математической Логикс. (Russian) [Fifth All-Union Conference on Mathematical Logic] Held at Novosibirsk, November 27-29, 1979. Abstracts of papers. Dedicated to Academician A. I. Mal'cev on the occasion of his seventieth birthday. Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1979. 173 pp. 82a:03002 03-06

 *Logic Year 1979-80. Proceedings of Seminars and of the Conference on

Mathematical Logic held at the University of Connecticut, Storrs, Conn., November 11-13, 1979. Edited by Manuel Lerman, James Henry Schmerl and Robert Irving Soare. Lecture Notes in Mathematics, 859. Springer-Verlag, Berlin-New York, 1981. viii + 326 pp. ISBN 3-540-10708-8 (Editors) 82e:03007 03-06

thematical methods and applications of scattering theory *Mathematical methods and applications of scattering theory. Proceedings of a Conference held at Catholic University, Washington, D.C., May 21-25, 1979. Edited by John A. DeSanto, Albert W. Sáenz and Woodford W. Zachary. Lecture Notes in Physics, 130. Springer-Verlag, Berlin-New York, 1980. xiii + 331 pp. ISBN 3-540-10023-7 (Editors) 82h:81117 (35P25, 73D99, 78A45, 81-06)

matical methods in control of urban transportation systems *Математические етоды в управлении городскими транспортными системами. (Russian) [Mathematical methods in control of urban transportation systems] Edited by O. G. Fajans. "Nauka" Leningrad. Otdel., Leningrad, 1979. 152 pp. (Editors) 82e:90045

thematical methods in cybernetics * Математические методы киберистики. (Russian) [Mathematical methods in cybernetics] Edited by V. L. Rvačev [Rvačov, V. L.] and V. P. Nazyrova. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. 86 pp. (Editors) 93-06

★Математические методы киберпетики. (Russian) [Mathematical methods in cybernetics] Edited by Ju. G. Stojan and V. P. Nazyrova. Akad. Nauk Ukrain. SSR, Inst.

Kibernet., Kieo, 1980. 92 pp. (Editors) 82d:93006 93-06

Mathematical methods for the design of experiments ★Математические методы
планирования эксперимента. (Russian) [Mathematical methods for the design of experiments] Edited by V. V. Penenko. "Nauka" Sibirsk. Otdel., Novosibirsk, 1981. 256 pp. (Editors) 82f:62147 62K99

Mathematical methods of investigation and optimization of econo omic systems ★Математические методы исследования и оптимизации экономических систем. (Russian) [Mathematical methods of investigation and optimization of economic systems] Edited by N. Z. Sor. Препринт 80 [Preprint 80], 34. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 68 pp. (Editors) 82h:90002 90-06

(1980). "Štiinca", Kishinev, 1980. pp. 1–140. (Editors) 82c:73004 73–06 thematical methods of optimization and structuring of systems ★Математические методы оптимизации и структурирования систем. (Russian) [Mathematical methods of optimization and structuring of systems] Edited by Ju. A. Abramov. Kalinin. Gos. Univ., Kalinin, 1980. 172 pp. (Editors) 82b:93004 93-06 (90-06)

ematical methods in software science and engineering *Mathematical methods in software science and engineering. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 10-12, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 363 (1979). Kyoto University, Research Institute for atical Sciences, Kyoto, 1979. pp. i-ii and 1-291. (Editors) 82a:68005

★Mathematical methods in software science and engineering. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 9-11, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 396 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-354. (Editors) 82c:68004 68-06

thematical methods for the solution of economic problems *Математические методы решения экономических задач. Сб. 9. (Russian) [Mathematical methods for the solution of economic problems. No. 9] Edited by E. G. Gol'štein. Supplement to Ekonom. i Mat. Metody. Серия "Оптимальное Планировнание и Упрадение". [Optimal Planning and Control Series] "Nauka", Moscow, 1980. 185 pp. (Editors) 82d:90001 90-06

Mathematical modeling of aquatic ecosystems ★ Математическое моделирование водных экологических систем. (Russian) [Mathematical modeling of aquatic ecosystems]
Edited by L. Ja. Aščepkova. Irkutsk. Gos. Univ., Irkutsk, 1978. 148 pp. (Editors) 92A17

thematical modeling and optimal control *Математическое моделирование и оптимальное управление. (Russian) [Mathematical modeling and optimal control] T. Luk'janov. Kazah. Gos. Univ., Alma-Ata, 1980. 178 pp. (Editors) 49-06

Mathematical modeling in psychology *Математическое моделирование в исихологии.

(Russian) [Mathematical modeling in psychology] Edited by G. E. Žuravlev, Ju. M. Zabrodin and V. F. Rubahin. Voprosy Kibernet. (Moscow) No. 50 (1979). Akad. Nauk SSSR, Naučn. Sovet po Kompleksnoi Probleme "Kibernetika", Moscow, 1979. pp. 1-155. (Editors) 82f:92052 92A25

ematical models *Statistical analysis of the data in biescience and mathematical models. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 27-28, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 384 (1980). Kyoto University, Research Institu

Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-182. (Editors) 82e:62169 62P10

Mathematical models as a tool for the social sciences ★Mathematical models as a tool for the social sciences. Edited by Bruce J. West. Gordon & Breach Science Publishers, New York, 1980. v+120 pp. ISBN 0-677-10390-5 (A. Rapoport) 82g:92002 92-02 (90-02,

Mathematical perspectives Mathematical perspectives. Essays on mathematics and its historical development. Papers in honor of Kurt-Reinhard Biermann on the occasion of his 60th birthday. Edited by Joseph W. Dauben. Academic Press, Inc. [Harcourt Brace Jocanocich, Publishers], New York-London, 1981. viii+272 pp. (1 plate). ISBN 0-12-204050-3 (Editors) 82j:01004 01-06 (01A70)

matical physics *Differential geometrical methods in mathematical physics. Proceedings of the International Colloquium of the CNRS held in Aix-en-Provence, September 3-7, 1979, and a conference held in Salamanca, September 10-14, 1979. Edited by P. L. Garcia, A. Pérez-Rendón and J. M. Souriau. Lecture Notes in

ntics, 836. Springer-Verlag, Berlin-New York, 1980. xii + 533 pp. ISBN 3-540-10275-2 (Editors) 82a:81003 81-06 (83-06)

★Красвые задачи для урависний мятсматической филики. (Russian) [Boundary value problems for equations of mathematical physics] Edited by M. S. Salahitdinov. , Tashkent, 1980. 171 pp. (Editors) 824:35006 35-06

★Descartes. Philosophy, mathematics and physics. Edited by Stephen Gaukroger. Harvester Readings in the History of Science and Philosophy, 1. Harvester Press, Brighton; Barnes and Noble Books, Totowa, N. J., 1980, xi + 329 pp. ISBN 0-85527-798-X (F. C. Kreiling) 82m:01035 01A45 (01-06, 03A05)

★Differential geometric methods in mathematical physics. Proceedings of the International Conference held at the Technical University of Clausthal,

Physics, 139. Springer-Verlag, Berlin-New York, 1981. vii + 329 pp. ISBN 3-540-10578-6 (Editors) 824:81004 81-06 (53-06)

thematical plums ★Mathematical plums. Edited by Ross Honsberger. The Dolciani Mathematical Expositions, 4. Mathematical Association of America, Washington, D.C., 1979. ix+182 pp. ISBN 0-88385-304-3 (K. E. Hirst) 82e:00006 00A05

atical problems in the quantum theory of irreversible processes *Mathematical problems in the quantum theory of irreversible processes. Proceedings of a Symposium held at the Laboratorio di Cibernetica del CNR di Arco Felice, Naples, March 13-17, 1978. Edited by L. Accardi, V. Gorini and G. Parravicini. Laboratorio di Cibernetica del CNR, Naples, 1978. ii + 224 pp. (Editors) 82j:82003 82-06 (46160)

Mathematical software ★Evaluation of mathematical softwares. (Japanese) Proceedings of

a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 22-24, 1979. Sürikaisekikenkyüsho Kõkyüroku No. 359 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-iii and 1-215. (Editors) 82h:68001 68-06 (68Bxx)

Mathematical solitaires and games ★Mathematical solitaires & games. Reprints from the Journal of Recreational Mathematics. Edited by Benjamin L. Schwartz. Excursions in Recreational Mathematics Series, 1. Baywood Publishing Co., Inc., Farmingdale, N.Y., 1980. viii+152 pp. ISBN 0-89503-017-9 (D. A. Klarner) 82i:00005 00A05 (05-01,

Mathematical statistics ★Mathematical statistics. Selecta Statistica Canadiana, V.
University Press of Canada, Toronto, Ont., 1979. 150 pp. ISBN 0-920788-04-1 (Editors)

★Теория вероятностей. Математическая статистика. Теоретическая киберистика. Том 18. (Russian) [Probability theory. Mathematical statistics. Theoretical cybernetics. Vol. 18] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. 188 pp. (errata insert). (Editors) 82f:60003 60-02 (60K25, 60K35)

★The First Pannonian Symposium on Mathematical Statistics. Held at Bad Tatzmannsdorf, September 16-21, 1979. Edited by Pál Révész, Leopold Schmetterer and V. M. Zolotarev. Lecture Notes in Statistics, 8. Springer-Verlag, New York-Berlin, 1981. vi+308 pp. ISBN 0-387-90583-9 (Editors) 821:62005 62-02 (60-02)

Mathematical topics in biology *Mathematical topics in biology. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, December 11-13, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 420 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981, pp. i-ii and 1-172. (Editors) 82g:92003 92-06

thematics *Mathématiques (French) [Mathématics] Comité des Travaux Historiques et Scientifiques (CTHS): Bulletin de la Section des Sciences [Committee for Historical and Scientific Works: Bulletin of the Science Section], III. Bibliothèque Nationale, Paris,

1981. 156 pp. ISBN 2-7177-1596-7 (Editors) 82;00009 00A10

Mathematics of hydrology and water resources The mathematics of hydrology and water resources. Based on the Proceedings of the Conference held at the University of Lancaster, Lancaster, July 1976. Edited by Emlyn H. Lloyd, Terence O'Donnell and John Craven Wilkinson. Institute of Mathematics and its Applications Conference Series. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1979. xi + 138 pp. ISBN 0-12-453350-7 (J. C. J. Nihoul) 82k:86001 86-06 (86A05)

athematicians and society *Mathématiques, mathématiciens et société. (French) [Mathematics, mathematicians and society] Edited by Pierre Samuel. Second printing. Publications Mathématiques d'Orsay 74, 16. Université de Paris-Sud. Département de Mathématique, Orsay, 1979. 116 pp. (not consecutively paged). (Gregory H. Moore) 82f:01191 01A80 (00A05)

Mathematics and the real world *Mathematics and the real world. Proceedings of an International Workshop held at the Roskilde University Centre, Roskilde, August 1978. Edited by Bernhelm Booss and Mogens Niss. Interdisciplinary Systems Research, 68. Birkhäuser Verlag, Basel-Boston, Mass., 1979. 136 pp. ISBN 3-7643-1079-0 (K. E. Hirst)

thematics review Rassegna di matematica. (Italian) [Mathematics review] Logica matematica. Matematica applicata. Didattica della matematica. [Mathematical logic. Applied mathematics. Teaching of mathematics]. Edited by Marco Borga, Paolo Freguglia and Dario Palladino. Casa Editrice Tilgher, Genoa, 1980. 100 pp. (Editors) 82h:03005

03-06

★Mathematics tomorrow. Edited by Lynn Arthur Steen Mathematics ton Springer-Verlag, New York-Berlin, 1981. vi + 250 pp. ISBN 0-387-90564-2 (K. E. Hirst) 00A25

Mathématiques Mathématiques. (French) [Mathematics] Comité des Travaux Historiques et Scientifiques (CTHS): Bulletin de la Section des Sciences [Committee for Historical and Scientific Works: Bulletin of the Science Section], III. Bibliothèque Nationale, Paris,

1981. 156 pp. ISBN 2-7177-1596-7 (Editors) 82;00009 00A10 tsumoto ★Proceedings of the 14th Symposium on Ring Theory. Held at Shinshu University, Matsumoto, July 30-August 1, 1981. Edited by Hisao Tominaga. Okayama Mathematical Lectures. Okayama University, Department of Mathematics, Okayama, 1981. ii+115 pp. (Editors) 82j:16001 16-06
Izlow/Garwitz ★Numerische Behandlung mathematischer Modellgleichungen.

(German) [Numerical treatment of mathematical model equations] First Conference on Problems in Applied Mathematics held in Matzlow/Garwitz, September 22-26, 1980. Summaries of lectures. Edited by Georg Hebermehl. Report 1980, 9. Akademie der Wissenschaften der DDR, Institut für Mathematik, Berlin, 1980. vi+176 pp. (Editors) 65-06

ory and its applications *Measure theory and its applications. Proceedings of terence held at Northern Illinois University, DeKalb, Ill., October 24-25, 1980. sure theory and its app

the Conference held at Northern Illinois University, Dekalb, Ill., October 24–25, 1980. Edited by Gerald A. Goldin and Robert F. Wheeler. Northern Illinois University, Department of Mathematical Sciences, DeKalb, Ill., 1981. x+286 pp. (Pedro Jiménez Guerra) 82g:28002 28–02 (28–06, 46–02, 47–02, 54H99)

assurement, modeling and evaluation of computing systems *Messung, Modellierung und Bewertung von Rechensystemen. (German) [Measurement, modeling and evaluation of computing systems] GI-NTG Conference held in Jülich, February 23–25, 1981. Edited by Burkhard Mertens. Informatik: Fachberichte [Technical Reports on Information ence], 41. Springer-Verlag, Berlin-New York, 1981. viii + 368 pp. ISBN 3-540-10619-7 (Editors) 82h:68002 68-06 (68C15, 90-06)

usuring and modelling of the cardiac electrical field *Measuring and modelling of the cardiac electrical field. Proceedings of the International Conference held at Smolenice, June 14-17, 1976. Edited by Peter Kneppo. VEDA, Vydavatel stvo Slovenskej Akadémie Vied, Bratislava, 1980. 303 pp. (Editors) 82f:92010 92A07 (92-06)

chanical systems */ ILBERTANTE B VICTOR WEBDOCTS MEXAREPROCERED CRITCH (Russian)
[Dynamics and stability of mechanical systems] Edited by I. A. Lukovskii. Akad. Nauk
Ukrain. SSR, Inst. Mat., Kiev, 1980. 194 pp. (Editors) 82e:34003 34-06

Сельнісь ★Дифференциальная геометрия, группы Ли и механика. III. (Russian) [Differential geometry, Lie groups and mechanics. III] Edited by L. D. Faddeev. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 95 (1980). "Nauka" Leningrad. Otdel., Leningrad, 1980. pp. 1–161. (Editors) 82a:58002 58-06

* Математические методы в механике. (Russian) [Mathematical methods in mechanics] Edited by V. G. Čeban. Mat. Issled. No. 57 (1980). "Štiinca", Kishinev. mechanics] Edited by V. G. Ceban, Mat. Issuer, No. 37 (1990). Statute 1980, pp. 1–140. (Editors) 82c:73044 73–06

*Theoretical and applied mechanics. Proceedings of the 15th Internation

Congress held at the University of Toronto, Toronto, Ont., August 17-23, 1980. Edited by F. P. J. Rimrott and B. Tabarrok. North-Holland Publishing Co., Amsterdam-New York, 1980. xxxi+457 pp. ISBN 0-444-85411-8 (Editors) 82d:00008 70-06 (00A10, 73-06, 76-06)

★Nonlinear problems of analysis in geometry and mechanics. Proceedings of the Symposium held at the Université Paul Sabatier, Toulouse, April 4-6, 1979. Edited by M. Atteia, D. Bancel and I. Gumowski. Research Notes in Mathematics, 46. Pitma (Advanced Publishing Program), Boston, Mass.-London, 1981. iii + 208 pp. ISBN 0-273-08493-3 (Editors) 824:0005 58-06 (00A10)

★Theoretical and applied mechanics. Vol. 29. Proceedings of the 29th Japan National Congress for Applied Mechanics held in Tokyo, November 20-22, 1979. University of Tokyo Press, Tokyo, 1981. ix + 487 pp. ISBN 0-86008-282-2 (Editors) 73-06 (76-06)

naecionus (3-чо) (10-чо) (меснаника жидкостей и газа. (Russian) [Mechanics of fluids and gases] Edited by D. F. Faizullaev. "Fan", Tashkent, 1980. 96 pp. (Editors) 82±76002 76-06

anics and dynamical systems. Papers from the NSF-CBMS Regional Conference on Recent Developments in Celestial Mechanics held at Tufts University, Medford, Mass., August 13-17, 1979. Edited by Robert L. Devaney and Zbigniew H. Nitecki. Lecture Notes in Pure and Applied Mathematics, 70. Marcel Dekker, Inc., New York, 1981. x+237 pp. ISBN 0-8247-1529-2 (Editors) 82k:58002 58-06 (70-06)

dical informatics *Medical informatics, Europe 81. Proceedings of the Third Congress of the European Federation of Medical Informatics held in Toulouse, March 9-13, 1981. Edited by F. Grémy, P. Degoulet, B. Barber and R. Salamon. Lecture Notes in Medical Informatics, 11. Springer-Verlag, Berlin-New York, 1981. xxiii + 975 pp. 1SBN 3-540-10568-9 (Editors) 82m:92004a 92-06

American Chemical Society *Equations of state in engineering and research. Based on a Symposium held at the 176th Meeting of the American Chemical Society, Miami Beach, Fla., September 11-14, 1978. Edited by Kwang Chu Chao and Robert L.

Robinson, Jr. Advances in Chemistry Series, 182. American Chemical Society, Washington, D.C., 1979. x+466 pp. (Editors) 821:82003 82-06 (80-06) erican Mathematical Society ★Problems of elastic stability and vibrations. Proceedings of the Special Session on Problems in Elastic Vibrations, Stability and Placetoning of the American Mathematical Society, Duquesne University, Pittsburgh, Pa., May 15-16, 1981. Edited by Vadim Komkov. Contemporary Mathematics, 4. American Mathematical Society, Providence, R.I., 1981. x+137 pp. ISBN 0-8218-5005-9 (Editors) 82k:73003 73-06 (73D30,

iation, Bus ess and Econo Proceedings of the Business and Economic Statistics Section, American Statistical Association. Papers presented at the Annual Meeting held in Washington, D.C., August 13-16, 1979. American Statistical Association, Washington, D.C., 1979

x+614 pp. (Editors) 82e:62004e 62-06 (90A19)

erican Statistical Association, Social Statistics Section

†1978 Proceedings of the Social Statistics Section, American Statistical Association. Papers presented at the Annual Meeting held in San Diego, Calif., August 14-17, 1978. American Statistical Association, Washington, D.C., 1978. xii + 806 pp. (Editors) 82c:62004a

★1979 Proceedings of the Social Statistics Section, American Statistical Association. Papers presented at the Annual Meeting held in Washington, D.C., August 13-16, 1979. American Statistical Association, Washington, D.C., 1979.

August 13-10, 1979. American Statistical Association, Plansington, D. C., 1979. Statistical Statistical Association, Statistical Computing Section

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

Toronto Translation

**Toro presented at the Annual Meeting held in San Diego, Calif., August 14-17, 1978.

American Statistical Association, Washington, D.C., 1978. viii+425 pp. (Editors)

82::62004b 62-06 (65U05, 90A19, 90Cxx)

★1979 Proceedings of the Statistical Computing Section, American Statistical Association. Papers presented at the Annual Meeting held in Washington, D.C., August 13-16, 1979. American Statistical Association, Washington, D.C., 1979. viii + 412 pp. (Editors) 82e:62004e 62-06 (65U05, 90A19, 90Cxx)

resian Statistics *Bayesian statistics. Proceedings of the First International Meeting held in Valencia, May 28-June 2, 1979. Edited by J. M. Bernardo, M. H. DeGroot, D. V. Lindley and A. F. M. Smith. *University Press, Valencia*, 1980. es *Bayesian statistics. Proceedings of the First Internation 647 pp. ISBN 84-370-0172-2 (Editors) 82k:62003

bol, D. V. Lindey and A. F. N. Samuel. Ontersity Fress, valencia, 1980. J. ISBN 84-370-0172-2 (Editors) 82k:62003 ★Konstruktive Methoden der finiten nichtlinearen Optimierung. (German) [Constructive methods of finite nonlinear optimization] Papers from the Meeting held at Oberwolfach, January 27-February 2, 1980. Edited by Lothar Collatz, Günther Meinardus and Wolfgang Wetterling. International Series of Numerical Mathematics, 55. Birkhäuser Verlag, Basel-Boston, Mass., 1980. 211 pp. ISBN 3-7643-1205-X (Editors) 82g-49001 49-06 (65-06, 90-06)

ral Topology *Proceedings of the Meeting on General Topology. Held at the University of Trieste, Trieste, September 4-8, 1978. Università degli Studi di Trieste, Stitute of Matematica Applicata, Trieste, 1981. 163 pp. (Editors) 821:54001 54-06 ovation in the Fifteenth-Sixteenth and in the Nineteenth Centuries as a Problem of the

History of Technology ★Innovation im 15./16. und im 19. Jahrhundert als technikgeschichtliches Problem. Conference held in Düsseldorf, October 6-7, 1977. Technikgeschichte 45 (1978), no. 2,115-188. Verein Deutscher Ingenieure (VDI), Düsseldorf, 1978. pp. 115-202. (Table of contents) 82h:01001

Model Theory ★Proceedings of the Model Theory Meeting. Held at the University of Brussels, Brussels, and the University of Mons, Mons, June 2-5, 1980. Bull. Soc. Math. Belg. Sér. B 33 (1981), no. 1. Société Mathématique de Belgique, Brussels, 1981. 03-06 (03Cxx)

pp. 1–169. (Editors) 82e:03008 03–06 (03Cxx)
erwolfach, Operations Research *IX. Oberwolfach Conference on Operations
Research. Held in Oberwolfach, October 15–21, 1978. Edited by Rudolf Henn, Hans Paul Künzi and Horst Schubert. Operations Research Verfahren [Operations Research Procedures], 36. Verlagsgruppe Athenäum/Hain/Scriptor/Hanstein, Königstein/Ts.; Oelgeschlager, Gunn & Hain Publishers, Inc., Cambridge, Mass., 1980. iii + 326 pp. ISBN 3-445-01917-7 (Editors) 82a:90007 90-06 (62-06)

anxi Provincial Mathematical Society **Proceedings of the Annual Meeting of the Shaanxi Provincial Mathematical Society. (Chinese) Held in Xian, 1979. Shaanxi Provincial Mathematical Society, Shaanxi, 1980. 148 pp. (Editors) 82f:00005

Time Series ★Time series analysis. Proceedings of the Third International Conference (ITSM) held in Houston, Tex., August 14-15, 1980. Edited by Oliver D. Anderson and Marlin Ray Perryman. North-Holland Publishing Co., Amsterdam-New York, 1981. ix + 661 pp. ISBN 0-444-81677-7 (Editors) 82k:62005 62-06 (62M10)

ne Series Analysis *Directions in time series. Proceedings of the IMS Special Topics Meeting on Time Series Analysis held at Iowa State University, Ames, Iowa, May 1-3, 1978. Edited by David R. Brillinger and George C. Tiao. Institute of tical Statistics, Hayward, Calif., 1980. iv+302 pp. (Editors) 82f:62174 62M10

nticians *II. Mathematikertreffen Zagreb-Graz. (German) [Second Zagreb-Graz Meeting of Mathematicians] Held in Plitvice, November 14-15, 1980. Bericht [Report], 154-162. Forschungszentrum Graz, natisch-Statistische Sektion, Graz, 1981. 111 pp. (not consecutively paged). (Editors) 82g:00002 00A10

ng, Modellierung und Bewertung von Rechensystemen *Messung, Modellierung und Bewertung von Rechensystemen. (German) [Measurement, modeling and evaluation of computing systems] GI-NTG Conference held in Jülich, February 23-25, 1981. Edited by Burkhard Mertens. Informatik-Fachberichte [Technical Reports on Information Sciencel, 41. Springer-Verlag, Berlin-New York, 1981. viii + 368 pp. ISBN 3-540-10619-7 (Editors) 82h:68002 68-06 (68C15, 90-06)

Methods for calculating shells See Guz', O. M.; et al., 82f:73037a and Amiro, I. Ja.; et al., 82f:73037b

Methods of information transmission and processing

**Mетоды передачи и обработки информации. (Russian) [Methods of information transmission and processing] Edited M. S. Pinsker and V. A. Garmaš. "Nauka", Moscow, 1980. 118 pp. (Editors) 94-06 (62-06)

Methods and means for modeling physical processes

* Методы и средства моделирования физических процессов. (Russian) [Methods and means for modeling physical processes] Edited by V. S. Koroljuk and B. B. Nesterenko, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1979. 164 pp. (Editors) 82k:00027 00A69

Methods for optimization, identification and allocation of resources in complex systems ★Некоторые методы оптимизации, идентификации и распределения ресурсов в сложных системах. (Russian) [Some methods for optimization, identification and allocation of resources in complex systems] Edited by A. V. Dabagjan, E. G. Goloskokov and L. V. Šipulina. Preprint 80-9. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 48 pp. (Editors) 82c:90002 90-06

мору. (Editors) выстоям морольного профессов обращения и методы оптимовация и распознавания образов в задачах планирования. (Russian) [Methods of optimization and pattern recognition in problems of planning] Edited by I. I. Eremin and V. D. Skarin. Akad. Nauk SSSR, Ural. Naučn. Centr. Sverdlovsk, 1980. 150 pp. (Editors) 82e:90004 90-06

Methods and practice of construction of data processing systems ★Методы и опыт построения систем обработки данных. (Russian) [Methods and practice of construction of data processing systems] Edited by A. A. Stognyi. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979. 100 pp. (Editors) 82a:90006 90-06 (90Bxx)

Methods of solution of problems of nonsmooth optimization and stochastic progra

★Методы решения задач негладкой оптимизации и стохастического программирования. (Russian) [Methods of solution of problems of nonsmooth optimization and stochastic programming] Edited by V. A. Koševaja. Preprint 79-75. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. 36 pp. (Editors) 82c:90052

- Methods for solving systems of variational-difference equations * Методы реше вариационно-разностных уравнений. Вып. 5. (Russian) [Methods for solving systems of variational-difference equations. No. 5] Proceedings of the Seminar on Methods of Numerical and Applied Mathematics held in Novosibirsk, 1979. Edited by G. I. Marčuk. Akad. Nauk SSSR Sibirsk. Otdel., Vyčisl. Centr, Novosibirsk, 1979. 159 pp. (Editors) 82i:65001 65-06
- hods of statistical mechanics ★Meтоды статистической механики. (Russian) [Methods of statistical mechanics] Edited by Ju. M. Seidov. "Élm", Baku, 1980. 184 pp. (Editors) 82-06
- es et relations *Métriques et relations. Math. Sci. Humaines No. 67 (1979), 3-127. reques et ressions — A rectinques et l'estate : l'active de Mathématique Sociale, Paris, Ecole des Hautes Études en Sciences Sociales, Centre de Mathématique Sociale, Paris, 1979, pp. 1–131. (Fred W. Roush) 82e:92060 92A90 (06A99, 62H30, 90A06)
- Metz ★Analyse sur les variétés. (French) [Analysis on manifolds] Papers from a Conference held at the University of Metz, Metz, May 28-30, 1979. Astérisque, 80.
- Société Mathématique de France, Paris, 1980. 96 pp. (Editors) 82e:59001 58-06

 Mexico City *Proceedings of the UNAM Workshop on Gauge Theories. Held at the
 Universidad Nacional Autónoma de Mexico, Mexico City, December 10-14, 1979. Edited by S. Hojman, L. Jacobs, M. Rosenbaum and M. P. Ryan. Hadronic J. 4 (1980/81), no. 1. Hadronic Press, Inc., Nonantum, Mass., 1980. pp. 1-182. (Editors) 81-06 (81E99, 83E99)
 - ★Group theory and its applications in physics—1980. Papers from the Latin American School of Physics held in Mexico City, June 2-20, 1980. Edited by Thomas H. Seligman. AIP Conference Proceedings, 71. American Institute of Physics, New York, 1981. vi+349 pp. ISBN 0-88318-170-3 (Editors) 82kc81001 81-06
- mi Beach, Fla. *Equations of state in engineering and research. Based on a Symposium held at the 176th Meeting of the American Chemical Society, Miami Beach, Fla., September 11-14, 1978. Edited by Kwang Chu Chao and Robert L. Robinson, Jr. Advances in Chemistry Series, 182. American Chemical Society, Washington, D.C., 1979. x+466 pp. (Editors) 82!:82003 82-06 (80-06)
- *Proceedings of the 5th International Conference on Pattern Recognition. Vol. 1. Held in Miami Beach, Fla., December 1-4, 1980. IEEE Computer Society, New York,
- 1980. xv+774 pp. (Editors) 82g:68068a 68G10 (68-06, 92-06)

 ★Proceedings of the 5th International Conference on Pattern Recognition. Vol. 2. Held in Miami Beach, Fla., December 1-4, 1980. IEEE Computer Society, New York,
- 1980. pp. i-xxiii and 776-1382. (Editors) 82g:68088b 68G10 (68-06, 92-06)

 Microfunctions and linear differential equations ★Microfunctions and linear differential equations. VII. (Japanese) Proceedings of a Symposium held at the Research Institute Mathematical Sciences, Kyoto University, Kyoto, March 24-26, 1980. Sürikaisekikenkyüsho Kõkvüroku No. 410 (1980), Kvoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-153. (Editors) 824:46002 (35-06, 46F15, 58-06)
- ddlesbrough ★Modelling and simulation in practice. 2. Proceedings of the Second Annual Polymodel Conference held at Teesside Polytechnic, Middlesbrough, May 1979. Edited by M. J. O'Carroll, A. W. Bush, M. Cross [Mark Cross], R. D. Gibson and T. S. Wilkinson. Emjoc Press, Northallerton, 1980. iii + 349 pp. ISBN 0-9506994-0-3 (Editors) 82c:65001 65-06 (68J05)
- Mixed boundary value problems in fluid mechanics *Mixed boundary value problems in fluid mechanics. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 10-12, 1978. Sûrikaisekikenkyûsho Kôkyûroku No. 360 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-ii and 1-242. (Editors) 82d:76003
- Model selection ★Model selection. Papers presented at the Conference held at the University of Florida, Gainesville, Fla., April 18-21, 1980. Edited by G. S. Maddala. J. Econometrics 16 (1981), no. 1. North-Holland Publishing Co., Amsterdam-New York,
- 1981. pp. 1–170. (Editors) 821:62195 62P20

 Model theory ★Proceedings of the Model Theory Meeting. Held at the University of Brussels, Brussels, and the University of Mons, Mons, June 2–5, 1980. Bull. Soc. Math. Belg. Sér. B 33 (1981), no. 1. Société Mathématique de Belgique, Brussels, 1981. pp. 1-169.
- (Editors) 82e:03008 03-06 (03Cxx)

 del theory of algebra and arithmetic Model theory of algebra and arithmetic Proceedings of the Conference on Applications of Logic to Algebra and Arithmetic held at Karpacz, September 1-7, 1979. Edited by L. Pacholski, J. Wierzejewski, and A. J. Wilkie. Lecture Notes in Mathematics, 834. Springer-Verlag, Berlin-New York, 1980. vi+410 pp. ISBN 3-540-10269-8 (Editors) 82a:03003 03-06 (03C60, 03C62)
- Model theory and arithmetic *Model theory and arithmetic. Proceedings of the CNRS Conference held in Paris, 1979-1980. Edited by Chantal Berline, Kenneth McAloon and Jean-Pierre Ressayre. Lecture Notes in Mathematics, 890. Springer-Verlag, Berlin-New York, 1981. vi+306 pp. ISBN 3-540-11159-X (Editors) 82m:03004 03-06 (03C62,
- dation in practice *Modelling and simulation in practice. 2. Modelling and simu Proceedings of the Second Annual Polymodel Conference held at Teesside Polytechnic, Middlesbrough, May 1979. Edited by M. J. O'Carroll, A. W. Bush, M. Cross [Mark Cross], R. D. Gibson and T. S. Wilkinson. *Emjoc Press*, *Northallerton*, 1980. iii + 349 pp. ISBN 0-9506994-0-3 (Editors) **82c:65001** 65-06 (68J05)
- Models and decision making in national economies *Models and decision making in national economies. Proceedings of the Second International Conference on Dynamic Modelling and Control of National Economies held in Vienna, January 24-27, 1977. Edited by J. M. L. Janssen, L. F. Pau and A. Straszak. North-Holland Publishing Co., Amsterdam-New York, 1979. ix+425 pp. 1SBN 0-444-85280-8 (Editors) 82m:90001
- ern geometry *Coвременная геометрия. (Russian) [Modern geor дифференциальной геометрии. [Questions of differential geometry] Edited by A. L. Berner. Leningrad. Univ., Leningrad, 1980. 100 pp. (Editors) 82e:53003 53-06
- odern logic—a survey ★Modern logic—a survey. Historical, philosophical, and mathematical aspects of modern logic and its applications. Edited by Evandro Agazzi. Synthese Library, 149. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. viii + 475 pp. ISBN 90-277-1137-2 (Charles F. Kielkopf) 82f:03002 03-06 (01A60.
- dern potential theory as a foundation for the inverse problem in geophysics *Die moderne Potentialtheorie als Grundlage des inversen Problems in der Geophysik.

- (German) [Modern potential theory as a foundation for the inverse problem in geophysics] Laplace-Gleichung, Warmeleitungsgleichung, Wellengleichung und Bipotentialgleichung, [Laplace equation, heat equation, wave equation and bipotential equation]. Summer School of the KAPG Working Group 5.2 held in Freiberg, June 5–16, 1978. Geodätische und Geophysikalische Veröffentlichungen, Reihe III [Geodetic and Geophysical Publications, Series III], 45. Akademie der Wissenschaften der DDR, Nationalkomitee für Geodäsie und Geophysik, Berlin, 1980. 271 pp. (V. M. Isakov) 31-02 (31-06, 86-06)
- dern statistics: methods and applications *Modern statistics: methods and applications Lecture notes prepared for the American Mathematical Society Short Course held in San Antonio, Tex., January 7-8, 1980. Edited by Robert V. Hogg. Proceedings of Symposia
- in Applied Mathematics, XXIII. American Mathematical Society, Providence, R.1., 1980. vi+110 pp. ISBN 0-8218-0023-X (P. K. Sen) 82c62003 62-01 dules *Komana, aure6pm, monyam (Russian) [Rings, algebras, modules] Edited by V. A. Andrunakievič. Mat. Issled. No. 62 (1981). "Stiinca", Kishinev, 1981. pp. 1-152. (Editors) 82d:16001 16-06
- dules and linear groups *Monyam и линейшые группы. (Russian) [Modules and linear groups] Edited by Z. I. Borevič and A. I. Skopin. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 163 (1980). "Nauka" Leningrad. Otdel., Leningrad, 1980. pp. 1-160. (Editors) 82f:20006 20-06
- Moffett Field, Calif. ★Seventh International Conference on Numerical Methods in Fluid Dynamics. Proceedings of the Conference held at Stanford University, Stanford, Calif., and at the NASA/Ames Research Center, Moffett Field, Calif., June 23-27, 1980. Edited by William Craig Reynolds and Robert William MacCormack. Lecture Notes in Physics, 141. Springer-Verlag, Berlin-New York, 1981. viii + 485 pp. ISBN 3-540-10694-4 (Editors) 82h:76002 76-06 (65-06, 76A60)
- Mons *Proceedings of the Model Theory Meeting. Held at the University of Brussels, Brussels, and the University of Mons, Mons, June 2-5, 1980. Bull. Soc. Math. Belg. Sér. B 33 (1981), no. 1. Société Mathématique de Belgique, Brussels, 1981. pp. 1-169. (Editors) 03-06 (03Cxx)
- Morgantown, W.Va. *Integral and functional differential equations. Proceedings of the Conference held at West Virginia University, Morgantown, W.Va., June 18-20, 1979. Edited by Terry L. Herdman, Harlan W. Stech and Samuel M. Rankin, III. Lecture Notes in Pure and Applied Mathematics, 67. Marcel Dekker, Inc., New York, 1981. x + 276 pp. ISBN 0-8247-1354-0 (Editors) 824:45001 45-06 (34-06)
- scow *Third International Conference on Collective Phenomena. Held in Moscow, December 27-29, 1978. Edited by Joel L. Lebowitz, James S. Langer and William I. Glaberson. Annals of the New York Academy of Sciences, 337. New York Academy of Sciences, New York, 1980. iii + 223 pp. ISBN 0-89766-074-9 (Editors) 82j:82002
- m systems *Миогокомпонентные случайн [Multicomponent random systems] Edited by R. L. Dobrušin and Ja. G. Sinaï "Nauka", Moscow, 1978. 324 pp. (Editors) 82a:60004a 60-06 (82-06)
 - ★Multicomponent random systems. Translated from the Russian. Edited by R. L. Dobrushin [R. L. Dobrušin], Ya. G. Sinai [Ja. G. Sinai] and D. Griffeath. Advances in Probability and Related Topics, 6. Marcel Dekker, Inc., New York, 1980. xi+606 pp. ISBN 0-8247-6831-0 (Editors) 82ac60004b 60-06 (82-06) Illidimensional complex analysis *Hekoropsie вопросы многомерного комплексного анализа. (Russian) [Some problems of multidimensional complex analysis] Edited by A.
- M. Kytmanov. Akad. Nauk SSSR Sibirsk. Otdel., Inst. Fiz., Krasnoyarsk, 1980. 280 pp. (Editors) 82f:32003 32-06
- Multiprocessor computer systems with reorganizable structure *Mnorompon вычислительные системы с нерестранваемой структурой. (Russian) [Multiprocessor computer systems with reorganizable structure] Архитектура: Структура. Применения. [Architecture. Structure. Applications]. Voprosy Kibernet. (Moscow) No. Akad. Nauk SSSR, Naučn. Sovet po Kompleksnoi Probleme "Kibernetika", Moscow, 1981. pp. 1-167. (Editors) 82m:68007 68-06 (68B20)

 Munich ★Parallel computers—parallel mathematics. Proceedings of the IMACS-GI
- ium held at the Technical University of Munich, Munich, March 14-16, 1977. Edited by M. Feilmeier. North-Holland Publishing Co., Amsterdam-New York, 1977. xii+331 pp. ISBN 0-444-85042-2 (Editors) 82k:68003 68-06 (68B20)
- ★The impact of modern scientific ideas on society. In commemoration of Einstein. Papers presented at the UNESCO Symposium held in Munich and in Ulm, September 18-20, 1978. Edited by Colette M. Kinnon, A. N. Kholodilin and J. G. Richardson. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xiv+203 pp. ISBN 90-277-1238-7 (Editors) 82k:01046 01A80 (00A69, 01-06)
- ★Trends in information processing systems. Proceedings of the Third Conference of the European Cooperation in Informatics held in Munich, October 20–22, 1981. Edited by A. J. W. Duijvestijn and P. C. Lockemann. Lecture Notes in Computer Science, 123.

 Springer-Verlag, Berlin-New York, 1981. xi + 348 pp. ISBN 3-540-10885-8 (Editors)

 82k:68004 68-06 (68B15, 68B20)
- ter *Zur Philosophie der mathematischen Erkenntnis. (German) [On the philosophy of mathematical knowledge] Colloquium held at the University of Münster, Münster, 1978/79. Edited by Egon Börger, Donatella Barnocchi and Friedrich Kaulbach. Königshausen + Neumann, Würzburg, 1981. 159 pp. ISBN 3-88479-022-6 (Editors) 82e:00033 00A25 (03A05)
- Mysore *Proceedings of the Conference on Number Theory. Held in Mysore, August 19-22, 1979. Edited by R. Jagannathan. Matscience Report, 101. Institute of Mathematical Sciences, Madras, 1980. iv+237 pp. (loose errata). (Editors) 82d:10005
- Nancy *Journées Complexes, Nancy 80. (French) [Conference on Complex Analysis, Nancy 80] Held in Nancy, May 27-31, 1980. Institut Élie Cartan, 3. Université de Nancy, Institut Élie Cartan, Nancy, 1981. ii + 106 pp. ISBN 2-90-3594-02-3 (Editors) 82i:32004 32-06
- Naples *Mathematical problems in the quantum theory of irreversible processes Proceedings of a Symposium held at the Laboratorio di Cibernetica del CNR di Arco Felice, Naples, March 13-17, 1978. Edited by L. Accardi, V. Gorini and G. Parravicini. Laboratorio di Cibernetica del CNR, Naples, 1978. ii+224 pp. (Editors) 82;82003 82-06 (46L60)

O Advanced Study In spects of Contents ects of Contemporary Complex Analysis *Aspects of contemporary complex analysis. Proceedings of the NATO Advanced Study Institute held at the University of Durham, Durham, July 1-20, 1979. Edited by David A. Brannan and James G.

of Durham, Durham, July 1-20, 1979. Edited by David A. Brannan and James G. Clunie. Academic Press, Inc. [Harcourt Brace Jocanocich, Publishers], London-New York, 1980. xiii +572 pp. ISBN 0-12-125950-1 (Editors) 82£30001 30-06 ometrical Methods for the Theory of Linear Systems. ★Geometrical methods for the theory of linear systems. Proceedings of a NATO Advanced Study Institute and AMS Summer Seminar in Applied Mathematics held at Harvard University, Cambridge, Mass., June 18-29, 1979. Edited by Christopher I. Byrnes and Clyde F. Martin. NATO Advanced Study Institute Series. Ser. C: Mathematical and Physical Sciences, 62. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. x+317 pp. ISBN 90-277-1154-2 (Editors) 82bs39003 93-06 (14-06, 53-06) ometry—von Staudt's Point of View ★Geometry—von Staudt's Point of View. Proceedings of the NATO Advanced Study Institute held at Bad Windsheim, July 21-August 1, 1980. Edited by Peter Plaumann and Karl Strambach. NATO

21-August 1, 1980. Edited by Peter Plaumann and Karl Strambach. NATO Advanced Study Institute Series. Ser. C: Mathematical and Physical Sciences, 70. D.

Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xi + 430 pp.

15BN 90-277-1283-2 (Editors) 82e-51005

S1-06

Map Data Processing *Map data processing. Proceedings of a NATO Advanced Study Institute held in Maratea, June 18-29, 1979. Edited by Herbert Freeman and Goffredo G. Pieroni. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1980. ix+374 pp. ISBN 0-12-267180-5 (Editors) 82m:68006a 68-06 (65Dxx, 68G10, 86A30)

ena in Lepton-Hadron Physics *New phenor physics. Lectures presented at the NATO Advanced Study Institute held in Karlsruhe, September 4-16, 1978. Edited by Dietrich E. C. Fries and Julius Wess. NATO Advanced Study Institute Series, Ser. B: Physics, 49. Plenu n Press. New York-London, 1979. viii + 436 pp. ISBN 0-306-40301-3 (Editors) 82h:81135 81G15 (81G05)

57. Plenum Press, New York-London, 1980. xiv + 557 pp. ISBN 0-306-40462-1 (Editors) 82481175

ditors) 82±81175 81G55 (81-06)
arities in Boundary Value Problems
Singularities in boundary value problems. Proceedings of the NATO Advanced Study Institute held in Maratea, September 22-October 3, 1980. Edited by H. G. Garnir. NATO Advanced Study Institute Series, Ser. C: Mathematical and Physical Sciences, 65, D. Reidel Publishing Co. Dordrecht-Boston, Mass., 1981. xvi + 377 pp. ISBN 90-277-1240-9 (Editors) 82i:35005 35-06 (58-06)

Natural sciences ★История и методология естественных наук. Вып XXV. (Russian) [History and methodology of the natural sciences. No. XXV] Математика, механика. ematics, mechanics] Edited by I. G. Bašmakov, K. A. Rybnikov and I. A. Tjulina. Maskov. Gos. Univ., Mascow, 1980. 168 pp. (Editors) 82c:01004 05-03, 15-03, 46-03, 51-03, 70-03, 76-03) 01-06 (03-03,

work models and associated applications *Network models and associated applications.

Edited by D. Klingman and J. M. Mulvey. Math. Programming Stud. No. 15 (1981). North-Holland Publishing Co., Amsterdam-New York, 1981. pp. i-viii and 1-176. (Editors)

82;-90001 90-06
Networks ** Състемы управления сетвов. (Russian) [Systems for control of networks]
Edited by O. V. Šamfarova. Автоматы и Управление. [Automata and Control]
"Nauka", Moscow. 1980. 140 pp. (Editors) 824:94048 94Cxx (94-06)
New Delhi *** Proceedings of the 41st Session of the International Statistical Institute. Vol.

1. Held in New Delhi, December 5-15, 1977. Bull. Inst. Internat. Statist. 47 (1977), no.

1. Indian Statistical Institute, Calcutta, 1977. pp. i-viii and 1-717. (Editors) 824:62006a

★Proceedings of the 41st Session of the International Statistical Institute. Vol. 2. Held in New Delhi, December 5-15, 1977. Bull. Inst. Internat. Statist. 47 (1977), no. 2. Indian Statistical Institute, Calcutta, 1977. pp. i-v and 1-558. (Editors) 824:6

★Proceedings of the 41st Session of the International Statistical Institute. Vol. 3. Held in New Delhi, December 5-15, 1977. Bull. Inst. Internat. Statist. 47 (1977), no. 3. Indian Statistical Institute, Calcutta, 1977. pp. i-v and 1-533. (Editors) 82d:62006c 62-06

★Scientific management of transport systems. Papers presented at the International Conference on Transportation held in New Delhi, November 26–28, 1980. Edited by N. K. Jaiswal. North-Holland Publishing Co., Amsterdam-New York, 1981. ix+377 pp.

ISBN 0-444-86205-6 (Editors) 82i:90001 90-06

w developments in semiconductor physics

↑New developments in semiconductor physics.

Proceedings of the International Summer School held at the University of Szeged, Szeged, July 1-6, 1979. Edited by Ferenc Beleznay, György Ferenczi and János Giber. Lecture Notes in Physics, 122. Springer-Verlag, Berlin-New York, 1980. ii + 276 pp.

ISBN 3-540-09988-3 (Editors) 82f:82004 82-06

* frontiers in transport theory New frontiers in transport theory. Selected papers from

w frontiers in transport theory *New frontiers in transport theory. Selected papers from the Sixth Conference held at the University of Arizona, Tucson, Ariz., April 1979. Edited by B. D. Ganapol. Ann. Nuclear Energy 7 (1980), no. 4-5. Pergamon Press, Oxford-New York, 1980. pp. 198-312. (Editors) 82k:82001 82-06 (76-06, 82A70) York, 1980. pp. 198-312. (Editors) 82k:82001

New phenomena in lepton-hadron physics *New phenomena in lepton-hadron physics.

Lectures presented at the NATO Advanced Study Institute held in Karlsruhe, September 4-16, 1978. Edited by Dietrich E. C. Fries and Julius Wess. NATO Advanced Study Institute Series, Ser. B: Physics, 49. Plenum Press, New York-London, 1979. viii + 436 pp ISBN 0-306-40301-3 (Editors) 82h:81135 81G15 (81G05)

studies in deontic logic *New studies in deontic logic. Norms, actions, and the Fullishing Co., Dordrecht-Boston, Mass., 1981. ix + 256 pp. ISBN 90-277-1278-6, 90-277-1346-4 (Editors) 82m:03023 03B45 (03-06)

New York ★Recursive function theory. Proceedings of the Fifth Symposium in Pure Mathematics of the American Mathematical Society held in New York, April 6-7, 1961.

Edited by J. C. E. Dekker. Corrected reprint of the 1962 original. Proceedings of Symposia in Pure Mathematics, V. American Mathematical Society, Providence, R.I., 1979. vii + 247 pp. ISBN 0-8218-1405-2 (Editors) 824:03065 03Dxx (03-06)

★1979 National Computer Conference. Proceedings of the AFIPS Conference held in New York, June 4-7, 1979. Edited by Richard E. Merwin. AFIPS Conference Proceedings, 48. AFIPS Press, Arlington, Va., 1979. xi+1114 pp. (Editors) 82f:68003

weastle *Combinat orial mathematics. VII. Proceedings of the Seventh Australian Conference held at the University of Newcastle, Newcastle, August 20-24, 1979. Edited by Robert W. Robinson, George W. Southern and Walter D. Wallis. Lecture Notes in Mathematics, 829. Springer-Verlag, Berlin-New York, 1980. x+256 pp. ISBN 3-540-10254-X (Editors) 82c:05004 05-06

megen *Colloquium: Numerical Solution of Partial Differential Equations. Held in Delft, Nijmegen and Amsterdam during 1980. Edited by J. G. Verwer. MC Syllabus, 44. m, Amsterdam, 1980. iv+194 pp. ISBN 90-6196-205-6 (Editors)

65-06 (65Mxx)

and Lie groups. Proceedings of the Colloquium on Noncommutative Harmonic Analysis

held in Marseille, June 16–20, 1980. Edited by Jacques Carmona and Michèle Vergne.

Lecture Notes in Mathematics, 880. Springer-Verlag, Berlin-New York, 1981. iv+553 pp.

ISBN 3-540-10872-6 (Editors) 82m:22001 22–06 (43–06)

n-cooperative approaches to the theory of perfect competition *Noncooperative
approaches to the theory of perfect competition. Edited by Karl Shell. J. Econom.

Theory 22 (1980), no. 2. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], York-London, 1980. pp. 121-376. (M. Ali Khan) 82e:90023

alysis *Nonlinear analysis. Theory and applications. Proceedings of the Seventh International Summer School held in Berlin, August 27-31, 1979. Edited by Reinhard Kluge. Abhandlungen der Akademie der Wissenschaften der DDR, Abteilung Mathematik, Naturwissenschaften und Technik, 1981 [Transactions of the Academy of Sciences of the DDR, Section for Mathematics, Sciences and Technology, 1981], 2. Akademie-Verlag, Berlin, 1981. 439 pp. (Editors) 82k:49004 49-06

Nonlinear differential equations Nonlinear differential equations. Invariance, stability, and bifurcation. Proceedings of an International Conference held in Trento, May 25-30, 1980. Edited by Piero de Mottoni and Luigi Salvadori. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xi+357 pp. ISBN 0-12-508780-2

(Editors) 82d:34003 34-06

ics and the beam-be am interaction *Nonlinear dynamics and the beam-beam interaction. Papers from the Symposium held at Brookhaven National Laboratory, N.Y., March 19-21, 1979. Edited by Melvin Month and John C. Herrera. AIP Conference Proceedings, 57. American Institute of Physics, New York, 1980. viii + 340 pp. ISBN 0-88318-156-8 (Editors) 82g:78001 78-06 (58F13, 78A35)

Millinear dynamics of elastic bodies & Nonlinear dynamics of elastic bodies. Edited by Z. Wesolowski. CISM Courses and Lectures, 227. Springer-Verlag, Vienna, 1978. ii +212 pp. ISBN 3-211-81512-0 (Xanthippi Markenscoff) 82j:73002 73-06 (73C50) milinear finite element analysis and ADINA. Proceedings of the Third ADINA Conference held at the Massachusetts Institute of Technology, Cambridge, Mass., June 10-12, 1981. Edited by K.-J. Bathe. Comput. & Structures 13 (1981), no. 5-6. Pergamon Press, Oxford-New York, 1981. pp. i-v and 575-779. (Editors) 82e:73002 73-06

llinear functional analysis *Nonlinear functional analysis. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, October 13-15, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 428 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-168. (Editors) 35-06 (47-06, 76-06)

lilinear methods of spectral analysis ★Nonlinear methods of spectral analysis. Edited by Simon Haykin. Topics in Applied Physics, 34. Springer-Verlag, Berlin-New York, 1979. xi+247 pp. ISBN 3-540-09351-6 (Melvin Hinich) 82;62069 62M15 (93E10, 94A05)

ar partial differential equations and their applications. Collège de France Seminar ★Nonlinear partial differential equations and their applications. Collège de France Seminar. Vol. I. Proceedings of the Seminar on Applied Mathematics held at the Collège de France, Paris, 1978-1979. Edited by Haïm Brézis and Jacques-Louis Lions. Research Notes in Mathematics, 53. Pitman (Advanced Publishing Program), Boston, Mass.-London, 1981. iv+388 pp. ISBN 0-273-08491-7 (Editors) 82i:35002

intensity 2. Domain, 1961. 194368 pp. 1351/ 0232008211 (2010); 0333002 355002 355002 in geometry and mechanics

*\times problems of analysis in geometry and mechanics

*\times Nonlinear problems of analysis in geometry and mechanics

*\times value of the Symposium held at the Université Paul Sabatier, Toulouse, April 4-6, 1979. Edited by M. Atteia, D. Bancel and I. Gumowski. Research Notes in Mathematics, 46. Pitman (Advanced Publishing Program), Boston, Mass.-London, 1981. iii + 208 pp. ISBN 0-273-08493-3 (Editors) 82d:00005

Nonlinear problems in geometry *Nonlinear problems in geometry. Proceedings of the Sixth International Symposium of the Division of Mathematics of the Taniguchi Foundation. Conference on Nonlinear Problems in Geometry held in Katata, September 3-8, 1979. Tohoku University, Department of Mathematics, Sendai, 1979. v+23 pp. (Editors) 82j:58001 58-06 (35-06, 53-06)

illinear and turbulent processes in physics *Nonlinear and turbulent processes in physics. Proceedings of the International Workshop held in Kiev, September 4–16, 1979. Edited by V. D. Shapiro [V. D. Šapiro] and V. I. Shevchenko [V. I. Ševčenko]. Phys. D 2

(1981), no. 1. North-Holland Publishing Co., Amsterdam-New York, 1981. pp. i-ix and 1-243. (Editors) 82c-82002 82-06 (58Fxx, 76-06)

nlinear waves: classical theory and quantum theory

Nonlinear waves: classical theory and quantum of a Symposium held at the Research and quantum theory. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, September 24-27, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 414 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-iii and 1-278. (Editors) 82h:35002

parametric asymptotic statistics

Statistique non parametrique asymptotique. (French)
[Nonparametric asymptotic statistics] Proceedings of the Conference on Statistics held at Rouen, June 13-14, 1979. Edited by Jean-Pierre Raoult. Lecture Notes in Mathematics, 821. Springer-Verlag, Berlin-New York, 1980. vi+175 pp. ISBN 3-540-10239-6 (Editors) 82a:62007 62-06

ms in fluid mechanics *Nonstationary problems in fluid mechanics. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 12–14, 1979. Sůrikaisekikenkyůsho Kôkyůroku No. 393 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto,

1980. pp. i-iii and 1-214. (Editors) 82d:76004 76-06

Notes on semigroups ★Notes on semigroups. VI. Edited by S. Lajos. DM 80, 4. Karl Marx University of Economics, Department of Mathematics, Budapest, 1980. 28 pp. (Editors)

- 82::2007 20-06 (20Mxx)

 Notre Dame, Ind. ★Manifolds and Lie groups. Papers in honor of Yozô Matsushima.

 Including papers delivered at the Conference on Geometry held at the University of Notre Dame, Notre Dame, Ind., May 14-15, 1980. Edited by J. Hano, A. Morimoto, S. Murakami [Shingo Murakami], K. Okamoto and H. Ozeki. Progress in Mathematics, 14. Birkhäuser, Boston, Mass., 1981. xii+459 pp. (1 plate). ISBN 3-7643-3053-8 (Editors)
- nosibirsk ★Пятая Всесовзная Конференция по Математической Логике. (Russian) [Fifth All-Union Conference on Mathematical Logic] Held at Novosibirsk, November 27-29, 1979. Abstracts of papers. Dedicated to Academician A. I. Mal'cev on the occasion of his seventieth birthday. Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1979. 173 pp. 82a:03002 03-06

*Mercan penemae curren вариационно-разностных уравнений. Выл. 5.

(Russian) [Methods for solving systems of variational-difference equations. No. 5]

Proceedings of the Seminar on Methods of Numerical and Applied Mathematics held in Novosibirsk, 1979. Edited by G. I. Marčuk. Akad. Nauk SSSR Sibirsk. Otdel., Vyčisl. Centr. Novosibirsk, 1979. 159 pp. (Editors) 82i:65001 65-06

★Теория кубатурных формул и вычислительная математика. (Russian) [Theory of cubature formulas and numerical mathematics] Proceedings of a Conference on Differential Equations and Numerical Mathematics held in Novosibirsk, 1978. Edited by S. L. Sobolev. "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. 258 pp. (loose errata). (Editors) 82d:65003 65–06

clear physics *Quarks and leptons as fundamental particles. Proceedings of the XVIII. Internationale Universitätswochen für Kernphysik held at Karl-Franzens-Universität Graz, Schladming, February 28-March 10, 1979. Edited by Paul Urban. Acta Physica Austriaca Supplement, XXI. Springer-Verlag, Vienna, 1979. i+716 pp. ISBN 3-211-81564-3 (Editors) 821:81003 81-06 (81Gxx)

★Field theory and strong interactions. Proceedings of the XIX. Internationale Universitätswochen für Kernphysik held at Karl-Franzens-Universität Graz, Schladming, February 20–29, 1980. Edited by Paul Urban. Acta Physica Austriaca Supplement, XXII. Springer-Verlag, Vienna, 1980. 815 pp. ISBN 3-211-81615-1 (Editors) 82c:81001 81-06

ber theory *Number theory. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, December 5-8, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 378 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-122. (Editors) 82a:10002

★Proceedings of the Conference on Number Theory. Held in Mysore, August 19-22, 1979. Edited by R. Jagannathan. Matscience Report, 101. Institute of Mathematical Sciences, Madras, 1980. iv+237 pp. (loose errata). (Editors) 82d:10005

★Вычисления в амебре, теории чисея и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] Edited by L. A. Kalužnin and N. M. Glazunov. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. 88 pp. (Editors) 82d:20006 20-06 (05-06, 10-06)

★Journées de Théorie Analytique et Élémentaire des Nombres. (French) [Conference on Analytic and Elementary Number Theory] Held in Orsay, June 2-3, 1980. Publications Mathématiques d'Orsay 81 [Mathematical Publications of Orsay 81], 1. Université de Paris-Sud, Département de Mathématique, Orsay, 1981. ii + 81 pp. (Editors)

★Théorie analytique des nombres. (French) [Analytic number theory] Proceedings of the Mathematical Symposium held in Tokyo, November 30, 1980. Edited by Tikao Tatuzawa and Jean-Loup Mauclaire. Monographies Scientifiques de la Maison Franco-Japonaise [Scientific Monographs of the Maison Franco-Japonaise], 3. Maison

Franco-Japonaise, Tokyo, 1981. i+151 pp. (Editors) 82h:10004 10-06

mber and thought *Число и мысль. Вып. 3. (Russian) [Number and thought. No. 3]

Edited by V. M. Petrov. "Znanie", Moscow, 1980. 192 pp. (Editors) 82e:00007 00A05

nerical algorithms
Studies on numerical algorithms. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, November 13-15, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 422 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-171. (Editors) 82g:65006 65-06

recrical integration and related topics

*Numerical integration and related topics.

*Numerical integration and related topics.

*Proceedings of a Seminar held at the Research Institute for Mathematical Sciences Kyoto University, Kyoto, June 23-24, 1980. Edited by Masatake Mori. Sûrikaisekikenkyûsho Kôkyûroku No. 401 (1980). Kyoto University, Research Institute for ical Sciences, Kyoto, 1980. pp. i and 1-94. (Editors) 82c:65002 65-06

nerical mathematics *Теория кубатурных формуя и вычислительная математика. (Russian) [Theory of cubature formulas and numerical mathematics] Proceedings of a Conference on Differential Equations and Numerical Mathematics held in Novosibirsk, 1978. Edited by S. L. Sobolev. "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. 258 pp. (loose errata). (Editors) 82d:65003 65-06

Edited by I. V. Sergeenko. Препринт 80 [Preprint 80], 40. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. 40 pp. (Editors) 82ic65002 65-06

★Seventh International Conference on Numerical Methods in Fluid Dynamics Proceedings of the Conference held at Stanford University, Stanford, Calif., and at the NASA/Ames Research Center, Moffett Field, Calif., June 23-27, 1980. Edited by William Craig Reynolds and Robert William MacCormack. Lecture Notes in Physi 141. Springer-Verlag, Berlin-New York, 1981. viii + 485 pp. ISBN 3-540-10694-4 (Editors) 76-06 (65-06, 76A60)

merical methods in fracture mechanics

*Numerical methods in fracture mechanics

Proceedings of the First International Conference held at University College, Swansea, January 9-13, 1978. Edited by A. R. Luxmoore and D. R. J. Owen. University College of Swansea, Swansea, 1978. vii + 836 pp. (Editors) 82i:73003 73-06

★Numerical methods in fracture mechanics. Proceedings of the Second

International Conference held at University College, Swansea, July 7-11, 1980. Edited by D. R. J. Owen and A. R. Luxmoore. *Pineridge Press Ltd.*, Swansea, 1980. vi+801 pp. ISBN 0-906674-08-5 (Editors) **82c:73065** 73-06 (73M05)

nerical methods and questions in the organization of calculations * Численные методы и вопросы организации вычислений. 5. (Russian) [Numerical methods and questions in the organization of calculations. 5] Edited by V. P. Il'in and V. N. Kublanovskaja. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 111 (1981). "Nauka Leningrad, Otdel., Leningrad, 1981. pp. 1-240. (Editors) 82g:65005 65-06 merical methods in thermal problems *Numerical methods in thermal problems

Proceedings of the First International Conference held at University College, Swansea, July 2-6, 1979. Edited by R. W. Lewis and K. Morgan. Pineridge Press Ltd., Swansea, 1979. xi+1155 pp. ISBN 0-906674-01-8 (Editors) 82g:80001 80-06 (65-06)

merical optimisation of dynamic systems *Numerical optimisation of dynamic systems
Edited by L. C. W. Dixon and G. P. Szegő. North-Holland Publishing Co., Amsterdam-New York, 1980. viii + 410 pp. ISBN 0-444-85494-0 (Editors) 82a:49004 49-06 (90Cxx)

nerical solution of partial differential equations ★Colloquium: Numerical Solution of Partial Differential Equations. Held in Delft, Nijmegen and Amsterdam during 1980. Edited by J. G. Verwer. MC Syllabus, 44. Mathematisch Centrum, Amsterdam, 1980. iv+194 pp. ISBN 90-6196-205-6 (Editors) 82a:65006 65-06 (65Mxx)

rical transmission, data processing and computerized process control *Transmiterea americă, prelucrarea datelor și conducerea proceselor cu ajutorul calculatoarelor. (Romanian) [Numerical transmission, data processing and computerized process control] Edited by Gh. Cartianu and Edmond Nicolau. Probleme de Automatizare [Problems of Automation], 11. Editura Academiei Republicii Socialiste România, Bucharest, 1979. 245 pp. (Editors) 82a:94003 94-06

al treatment of mathematical model equations *Numerische Behandlung mathematischer Modellgleichungen. (German) [Numerical treatment of mathematical model equations] First Conference on Problems in Applied Mathematics held in Matzlow/Garwitz, September 22-26, 1980. Summaries of lectures. Edited by Georg Hebermehl. Report 1980, 9. Akademie der Wissenschaften der DDR, Institut für Mathematik, Berlin, 1980. vi + 176 pp. (Editors) 82e:65004 65-06

Nuremberg *CONPAR 81. Proceedings of the Conference on Analysing Problem Classes and Programming for Parallel Computing held at Nuremberg, June 10–12, 1981. Edited by Wolfgang Händler. Lecture Notes in Computer Science, 111. Springer-Verlag, Berlin-New York, 1981. xi+508 pp. ISBN 3-540-10827-0 (Editors) 82e:68002 68-06 (68A05, 68Bxx)

erwolfach ★IX. Oberwolfach Conference on Operations Research. Held in Oberwolfach, October 15-21, 1978. Edited by Rudolf Henn, Hans Paul Künzi and Horst Schubert. Operations Research Verfahren [Operations Research Procedures], 36. Verlagsgruppe Athenaum/Hain/Scriptor/Hanstein, Königstein/Ts.; Oelgeschlager, Gunn & Hain Publishers, Inc., Cambridge, Mass., 1980. iii + 326 pp. ISBN 3-445-01917-7 (Editors) 82a:90007 90-06 (62-06)

*General inequalities. 2. Proceedings of the Second International Conference held at the Mathematical Research Institute, Oberwolfach, July 30-August 5, 1978. Edited by E. F. Beckenbach. Birkhäuser Verlag, Basel-Boston, Mass., 1980. xix + 485 pp.

ISBN 3-7643-1056-1 (Editors) 822c00004 00A10 (05-06, 26Dxx, 41-06)

★Konstruktive Methoden der finiten nichtlinearen Optimierung. (German)

[Constructive methods of finite nonlinear optimization] Papers from the Meeting held at Oberwolfach, January 27-February 2, 1980. Edited by Lothar Collatz, Günther Meinardus and Wolfgang Wetterling. International Series of Numerical Mathematics, 55. Birkhäuser Verlag, Basel-Boston, Mass., 1980. 211 pp. ISBN 3-7643-1205-X (Editors) 49-06 (65-06, 90-06)

★Optimization and optimal control. Proceedings of a Conference held at the Mathematical Research Institute, Oberwolfach, March 16-22, 1980. Edited by Alfred Auslender, Werner Oettli [Karl Werner Oettli] and Josef Stoer. Lecture Notes in Control and Information Sciences, 30. Springer-Verlag, Berlin-New York, 1981. viii + 254 pp. ISBN 3-540-10627-8 (Editors) 82e:49004 49-06 (90-06)

★Semigroups. Proceedings of a Conference held at the Mathematical Research stitute, Oberwolfach, December 16-21, 1978. Edited by H. Jürgensen, M. Petrich and H. J. Weinert. Lecture Notes in Mathematics, 855. Springer-Verlag, Berlin-New York, 1981. v+221 pp. ISBN 3-540-10701-0 (Editors) 82f-29009 20-06 (20Mxx)

Alexits, György G. Alexits (5 January 1899-14 October 1978). (Hungarian) Mat. Lapok 27 (1976/79), no. 3-4, 205-209. (Editors) 82f:01167 01A70

Aržanyh, I. S. See Džuraev, T. D.; et al., 82b:01042 Baer, Reinhold See Kegel, Otto H., 82a:01037

Behnke, Heinrich See Horst, Tietz, 82c:01050 and Grauert, Hans; et al., 82f:01105 Bergman, Stefan See Schiffer, Menahem M.; et al., 82c:01053 and 82e:01100 Bernays, Paul See Weingartner, Paul, 82f:01155 and Lauener, Henri, 82m:01062

Bliss, Chester Ittner See Finney, D. J., 82f:01095 Brauer, Richard See Rohrbach, H., 82j:01071

Brun, Viggo See Selberg, Sigmund, 82f:01142; Scriba, Christoph J., 82i:01061a and Taton, René, 82i:01061b

Bydžovský, Bohumil See Šindelář, Karel, 82f:01144 Cattaneo, Carlo See Graffi, Dario, 82h:01045

Checchi, Pedro Luis See Niell, Arcadio, 82f:01128

Cochran, William Genmell See Dempster, A. P.; et al., 82h:01041
Cooper, Leon See Cooper, Mary W., 82h:01084
Cox, Gertrude Mary Gertrude Mary Cox.—1900—1978. Biometrics 34 (1978), no. 4, 719—720. (Editors) 82f:01168a 01A70

See also Anderson, Richard L.; et al., 82f:01168b

Csiki, Frigyes Fr. Csiki: 1921-1977. Acta Tech. Acad. Sci. Hungar. 87 (1978), no. 3-4, 211-222 (1979). (Editors) 82k:01071 01A70

Curtiss, John Hamilton See Todd, John, 82f:01150

Dinz, Joaquin Basilio Dedicated to the memory of Joaquin Basilio Diaz. Applicable Anal. 10 (1980), no. 1, 1-4 (1 plate). (Editors) 82f:01170 01A70

Dinghas, Alexander See Begeler, H., 82f:01077

Foulkes, Herbert Owen See Foata, Dominique; et al., 82a:01031

Fox, Charles See Srivastava, Hari M., 82f:01146 and 82f:01147

Futili, Svatophak See Mambin, Jean; et al., 82f:01122

Gagnev, B. M. See Laptev, B. L.; et al., 82g:01061

Gabov, F. D. Fedor Druitreivič Gabov. (Russian) Vestnik Beloruss. Gos. Univ. Ser. I 1900, no. 2, 59. (Editors) 82a:01050 01A70

See also Kilbas, A. A.; et al., 82h:01652 and Vekua, N. P.; et al., 82e:01056

Gavrilov, Mikhadl Aleksandrovich Obituary notice: Mikhadl Aleksandrovich Gavrilov. Problemy Pereducti Informacii 15 (1979), no. 3, 110-111 (Russian); translated as Problemy Peredači Informacii 15 (1979), no. 3, 110-111 (Russian); translated a Problems Inform. Transmission 15 (1979), no. 3, 245-246 (1980). (Editors) 82f:01171

on, F. Y.; et al., 82c:01051

seinov, A. I. Ašraf Iskenderovič Guscinov. (Russian) Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk 1 (1980), no. 4, 153-154. (Editors) 82e:01110

Haplanov, M. G. See Vorovič, I. I.; et al., 82d:01032 Hille, Einar See Dunford, Nelson, 82e:01087 Horn, F. J. M. See Jackson, R., 82f:01115 Hornich, Hans See Hlawka, Edmund, 82a:01034 Horowitz, Shlomo See Foguel, Shaul R., 82f:01097 Hotelling, Harold See Smith, Walter L., 82d:01031

Hsū, Pao Lu See Jiang, Ze Han; et al., 82g:01058 and Anderson, T. W.; et al.,

mes, Ralph D. See Robi h D. See Robinson, G. de B., 82f:01136 See Nallet, C.; et al., 82d:01030

Jankowski, Andrzej See Rubinsztein, Ryszard, 82f:01137 Kac, G. I. See Berezans'kii, Ju. M.; et al., 82d:01026

kes, Rolf Professor Dr. Rolf Kaerkes. (German) IX. Oberwolfach Conference on Operations Research (Oberwolfach, 1978), p. i, Operations Research Verfahren Athenäum/Hain/Scriptor/Hanstein, Königstein/Ts., 1980. (Editors) 82m:01073 s Research Verfahren, 36,

U1A70
Kalmár, László See Császár, Ákos, 82e:01085
Kangro, Hans See Scriba, Christoph J., 82f:01141
Kasahara, Shouro See Bhise, V. M., 82g:01043
Klein, Oskar Oskar Klein (1895–1977), (Bulgarian) Fiz.-Mat. Spis. B"Igar. Akad. Nauk. 21(54) (1978), no. 2, 150. (Editors) 82e:01064 01A70
Kondó, Motokiti See Yoshida, Katsuhiko, 82j:01017
Kořinek, Vladimír See Beran, Ladislav, 82m:01053
Kuznecov, N. N. On the death of Nikolai Nikolaevič Kuznecov. (Russian) Vestnik
Motke, Ilini See XV. Vivisi Man. Kibernet 1979, no. 1, 3.4. (Editors) 82:041055

Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. 1979, no. 1, 3-4. (Editors) 82c:01065 01A70

Kveselava, D. A. See Vekua, N. P.; et al., 82g:01076 Lavrent'ev, M. A. Mihail Alekseevič Lavrent'ev (1900–1980). (Russian) Ž. Vyčisl. Mat. i Mat. Fiz. 21 (1981), no. 2, 259-262. (Editors) 82d:01034 01A70

See also Aleksandrov, P. S.; et al., 82e:01081; Gautheret, Roger, 82h:01050 and Mitropol'skii, Ju. A.; et al., 82m:01064

Liepa, A. P. See Bārzdiņš, J.; et al., 82e:01082 May, Kenneth O. See Tropp, Henry S., 82e:01103

Aillescu, Tiberiu In memoriam: Professor Tiberiu Mihăilescu. (Romanian) Studia Univ. Babeş-Bolyai Math. 24 (1979), no. 1, 78. (Editors) 82b:01068 01A70

Moisil, Grigore C. See Teodorescu, Nicolae Victor, 82g:01074

normal, Grigore C. See Teodorescu, Nicolae Victor, 82g:01074
Moller, Christian See Pihl, Mogens; et al., 82m:01065
Morgenstern, Oskar See Shubik, Martin, 82c:01054
Morton, Vernon Charles See Meyler, Dorothy S., 82e:01097
Nevanlinna, Rolf See Cartan, Henri, 82a:01028; Lehto, Olli, 82b:01056 and
Gautheret, Roger, 82f:01100

Pagni, Mauro See Magenes, Enrico, 82a:01039 Pearson, Egon Sharpe See Neyman, Jerzy, 82b:01057 and David, Herbert Aron, 82h:01045

Petrašen', M. I. In memory of M. I. Petrašen'. (Russian) Vestnik Leningrad. Univ. Fiz. Him. 1979, vyp. 1, 118-119. (Editors) 82d:01035 01A70

drov, B. N. Boris Nikolaevič Petrov. (Russian) With an English translation. Problems Control Inform. Theory/Problemy Upravlen. Teor. Inform. 9 (1980), no. 6, i-vi. (Editors) 82f:01172 01A70

Picone, Mauro See Fichera, Gaetano, 82f:01093 and 82f:01094
Prager, William See Gautheret, Roger, 82f:01099; Germain, Paul, 82f:01101 and
Hodge, Philip G., Jr., 82f:01113
Rejewski, Marian Marian Rejewski. (Polish) Wiadom. Mat. (2) 23, no. 1, i-ii (1 plate) (1980). (Editors) 82f:01173 01A70

Résibois, Pierre See Prigogine, Ilya; et al., 82f:01132 Rivière, Néstor Marcelo See Porta, Horacio, 82f:01131

Rivoire, Paul À la mémoire de Paul Rivoire. Ann. Sci. Univ. Clermont Math. No. 18 (1979), iii+1 plate. (Editors) 82d:01036 01A70

Samelson, Klaus See Götze, H.; et al., 82g:01036
Sansone, Glovanni See Conti, Roberto, 82b:01039
Savage, Leonard Jimmie See Lindley, Dennis V., 82e:01096
Scheffé, Henry See Chernoff, Herman, 82c:01046 and Daniel, C.; et al., 82i:01047

Schröder, Kurt See Förste, Joachim; et al., 82:01096 Segre, Beniamino See Tallini, Giuseppe, 82:01149 Seth, Bhoj Raj See Srinivasan, S. K.; et al., 82:01145

v, A. I. In memory of Anatolii Illarionovič Širšov. (Russian) Algebra i Logika 20 (1981), no. 1, 3-4. (Editors) 82m:01074 01A70

ry: (continued)

Stefan, Peter See Brown, Ronald; et al., 82f:01083 Stiefel, Eduard L. See Bauer, F. L.; et al., 82e:01083 and Waldvogel, J.; et al., 821-01063

Szász, Pál Pál Szász (1901-1978). (Hungarian) Mat. Lapok 27 (1976), no. 1-2, 1-5

Szicc, Pal Pal Szas. (1901–1976). (riungarian) Mal. Lapok 21 (1976), no. 1-2, 1-3 (1978). (Editors) 82e:01111 01A70
 Togliatti, Eugenio Giuseppe See Demaria, Davide Carlo, 82f:01089; Marchionna, Ermanno, 82f:01120 and Gallarati, Dionisio, 82f:01050
 Turán, Pal Pál Turán (1910–1976). (Bulgarian) Fiz.-Mal. Spis. B"Igar. Akad. Nauk.

21(54) (1978), no. 3, 235-236. (Editors) 82c:01066 01A70

21(54) (1978), no. 3, 235–236. (Editors) SZc01066 01A70
Van Vleck, John Hashrouck John Hashrouck Van Vleck. Nederl. Akad. Wetensch.
Verslag Afd. Natuurk. 90 (1981), no. 1, 4. (Editors) S2b:01069 01A70
Vekus, I. N. See Penkov, B., SZ:01098 and Haradze, E. K., SZ:01116
Vrinceanu, Gheorghe Chiocanu: Gouder of modern geometry in Romania.
(Romanian) Gaz. Mat. (Bucharest) 84 (1979), no. 10, 361–363. (Editors) 82f:01174

cham's theory of propositions *Cockham's theory of propositions. Part II of the Summa logicae. Translated by Alfred J. Freddoso and Henry Schuurman. With an introduction by Freddoso. University of Notre Dame Press, South Bend, Ind.-London, 1980. viii + 212 pp. ISBN 0-268-01495-7, 0-268-01496-5 (J. Corcoran) 82b:01013

Odobleja: Between Ampère and Wiener *Odobleja: Between Ampère and Wiener. Edited by Mihai Drāgănescu, Constantin Bălăceanu, Pantelimon Golu and Alexand Giuculescu. Editura Academiei Republicii Socialiste România, Bucharest, 1981. 204 pp.

(Editors) 82h:01002 01-06 (93-03) erating systems theory *Operaciós rendszerek elmélete. [Operating systems theory] Papers from the Sixth Visegrad Winter School held in Visegrad, 1980. ulmányok-MTA Számítástech. Automat. Kutató Int. Budapest No. 113 (1980).

MTA Számitástechn. Automat. Kutató Intézet, Budapest, 1980. pp. 1-327. (Editors) 68-06 (68B20)

rations research *Proceedings of the Third Colloquium on Operations Research. Held in Cluj-Napoca, October 20-21, 1978. Edited by Ioan Maruşciac and Wolfgang W. Breckner. Universitatea "Babeş-Bolyai", Facultatea de Matematica, Chuj-Napoca, 1979. 302 pp. (Editors) 82e:90005 90-06

★Современное состояние теории исследования операций. (Russian) [Current state of the theory of operations research] Edited by N. N. Moiseev. Оптимизация и Исследование Операций. [Optimization and Operations Research] "Nauka", Moscow,

1979. 464 pp. (Editors) 82f:90002 90-06

★IX. Oberwolfach Conference on Operations Research. Held in Oberwolfach, October 15-21, 1978. Edited by Rudolf Henn, Hans Paul Künzi and Horst Schubert. Operations Research Verfahren [Operations Research Procedures], 36. Verlagsgruppe Athenaum/Hain/Scriptor/Hanstein, Königstein/Ts.; Oelgeschlager, Gunn & Hain Publishers, Inc., Cambridge, Mass., 1980. iii+326 pp. ISBN 3-445-01917-7 (Editors)

90-06 (62-06) *Operations research. Mathematics and models. Lecture notes prepared for the American Mathematical Society Short Course held in Duluth, Minn., August 19-20, 1979. Edited by Saul I. Gass. Proceedings of Symposia in Applied Mathematics, 25.

American Mathematical Society, Providence, R.I., 1981. x+198 pp. ISBN 0-8218-0029-9

(Editors) 82i:90002 90-06

ns Research Verfahren *IX. Oberwolfach Conference on Operations Research. Held in Oberwolfach, October 15-21, 1978. Edited by Rudolf Henn, Hans Paul Künzi and Horst Schubert. Operations Research Verfahren [Operations Research Procedures], 36. Verlagsgruppe Athenaum/Hain/Scriptor/Hanstein, Königstein/Ts.; Oelgeschlager, Gunn & Hain Publishers, Inc., Cambridge, Mass., 1980. iii+326 pp. ISBN 3-445-01917-7

(Editors) 82a:90007 90-06 (62-06)

Operator algebras and their applications ★Operator algebras and their applications.

(Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 2-4, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 398 (1980). Kvoto University, Research Institute for Mathematical Sciences, Kvoto,

No. 398 (1980). Kyolo University, Research Institute for Maintenancial Sciences, Kyolo, 1980. pp. -ii and 1-174. [Editors] 82b-46002 46-06 (46Lxx, 47A15)

Operator equations ★Качественные в приближенные методы исследования операторных уравнений. (Russian) [Qualitative and approximate methods for the investigation of operator equations] Edited by P. P. Zabreiko. Jaroslav. Gos. Univ., Yaroslav!, 1980. 168 pp. (Editors) 82d:00006 47-06 (00A10)

Taristator, 1960. 108 pp. (Californ) accounts of the 1974 original. Mathematical Surveys, 13. American Mathematical Society, Providence, R.I., 1979. ix+235 pp. ISBN 0-8218-1513-X (Editors) 82c:47001 47-02 (47-06)

erators **Cueктральная теория операторов. Вып. 3. (Russian) [Spectral theory of operators. No. 3] Edited by F. G. Maksudov. "Élm", Baku, 1980. 260 pp. (Editors) 82h:47002 47-06 (47Axx, 47E05)

Optical research *The computer in optical research. Methods and applications. Edited by B. Roy Frieden. Topics in Applied Physics, 41. Springer-Verlag, Berlin-New York, 1980. xv+371 pp. ISBN 3-540-10119-5 (Editors) 82d:78007 78A10 (60-04)

Optics *Inverse scattering problems in optics. Edited by Heinrich P. Baltes. Topics in Current Physics, 20. Springer-Verlag, Berlin-New York, 1980. xiv + 313 pp ISBN 3-540-10104-7 (Editors) 824:78021 78A45

Optimal control *Optimal control *Optimal control Proceedings of a Conference held at the Mathematical Research Institute, Oberwolfach, March 16-22, 1980. Edited by Alfred Auslender, Werner Oettli [Karl Werner Oettli] and Josef Stoer, Lecture Notes in Control and Information Sciences, 30. Springer-Verlag, Berlin-New York, 1981. viii + 254 pp. ISBN 3-540-10627-8 (Editors) 82e:49004 49-06 (90-06)

Optimal control of systems with uncertain information *Оптимальное управление системами с неопределенной информацией. (Russian) [Optimal control of systems with uncertain information] Edited by V. A. Baïdosov, and A. I. Subbotin. Akad. Nauk

1982

SSSR, Ural. Naučn. Centr, Inst. Mat. i Meh., Sverdlovsk, 1980. 152 pp. (Editors)

SSSK, Ural. Nauch. Centr. Inst. Nat. 1 Men., Scenariosk, 1900. 132 pp. (Editions)

82g:49002 49-06 (90-06)

Optimal design theory ★Optimal design theory. Edited by A. Hedayat. Comm. Statist. A

—Theory Methods 7 (1978), no. 14. Marcel Dekker, Inc., New York-Basel, 1978.

pp. 1295-1412. (K. G. Russell) 82g:62106 62K05 (65U05)

mization *Методы решения задач негладкой оптимизации и стохастического программирования. (Russian) [Methods of solution of problems of nonsmooth optimization and stochastic programming Edited by V. A. Koševaja. Preprint 79-75. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kieo, 1979. 36 pp. (Editors) 82c:90052

★Современное состояние теории исследования операций. (Russian) [Current state of the theory of operations research] Edited by N. N. Moiseev. Оптимизация и Исследование Операций. [Optimization and Operations Research] "Nauka", Moscow, 1979. 464 pp. (Editors) 821:90002 90-06

★ Analysis and optimization of systems. Proceedings of the Fourth International Conference held in Versailles, December 16–19, 1980. Edited by A. Bensoussan and J.-L. Lions. Lecture Notes in Control and Information Sciences, 28. Springer-Verlag, Berlin-New York, 1980. xiv + 999 pp. ISBN 3-540-10472-0 (Editors) 82b:49002 (90-06, 93-06)

★Математические методы оптионзации и структурирования систем. (Russian) [Mathematical methods of optimization and structuring of systems] Edited by Ju. A. Abramov. Kalinin. Gos. Univ., Kalinin, 1980. 172 pp. (Editors) 82b:93004 93-06 (90-06)

★Некоторые методы оптимизации, идентификации и распределения ресурсов в еложных системах. (Russian) [Some methods for optimization, identification and allocation of resources in complex systems] Edited by A. V. Dabagjan, E. G. Goloskokov and L. V. Šipulina. Preprint 80-9. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. 48 pp. (Editors) 82c:90002 90-06

★Стохастические методы в задачах оптимизации. (Russian) [Stochastic methods in problems of optimization] Edited by E. N. Stepanenko. Ilpenpuur 80 [Preprint 80], 20. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 62 pp. (Editors) 82d:90003

★ Методы опти ции и распознавания образов в задачах пл (Russian) [Methods of optimization and pattern recognition in problems of planning] Edited by I. I. Eremin and V. D. Skarin. Akad. Nauk SSSR, Ural. Naukn. Centr., Sverdlovsk, 1980. 150 pp. (Editors) 82e:90004 90-06

★Konstruktive Methoden der finiten nichtlinearen Optimierung. (German) [Constructive methods of finite nonlinear optimization] Papers from the Meeting held at Oberwolfach, January 27-February 2, 1980. Edited by Lothar Collatz, Günther Meinardus and Wolfgang Wetterling. International Series of Numerical Mathematics, 55. Birkhäuser Verlag, Basel-Boston, Mass., 1980. 211 pp. ISBN 3-7643-1205-X (Editors) 49-06 (65-06, 90-06)

timization of design and computation of control networks ★Optimization of design and computation of control networks. Proceedings of the International Symposium held at Sopron, July 4-10, 1977. Edited by F. Halmos and J. Somogyi. Akadémiai Kiadé (Publishing House of the Hungarian Academy of Sciences), Budapest, 1979. 733 pp. ISBN 963-05-1716-7 (Editors) 82c:90026 90Bxx (86A30) stimization and optimal control. *Optimization and optimal control. Proceedings of a

Conference held at the Mathematical Research Institute, Oberwolfach, March 16-22, 1980. Edited by Alfred Auslender, Werner Oettli [Karl Werner Oettli] and Josef Stoer. Lecture Notes in Control and Information Sciences, 30. Springer-Verlag, Berlin-New York, 1981. viii + 254 pp. ISBN 3-540-10627-8 (Editors) 82e:49004 49-06 (90-06)

linary differential equations ★Codes for boundary value problems in ordinary differential equations. Proceedings of a Working Conference held at the University of Houston, Houston, Tex., May 14–17, 1978. Edited by B. Childs, M. Scott, J. W. Daniel, E. Denman and P. Nelson [Paul Nelson, Jr.]. Lecture Notes in Computer Science, 76. Springer-Verlag, Berlin-New York, 1979. vii + 388 pp. ISBN 3-540-09554-3 (Ian Gladwell) 82b:65074 65L10 (65-06)

★Computational techniques for ordinary differential equations. Based on the Proceedings of the Conference held at the University of Manchester, Manchester, December 18-20, 1978. Edited by I. Gladwell and D. K. Sayers. The Institute of Mathematics and its Applications Conference Series. Academic Press [Harcourt Brace Jovanovich, Publishers], London-New York-Toronto, Ont., 1980. x + 303 pp. ISBN 0-12-285780-1 (John P. Coleman) 82a:65053 65L05 (65L07, 65L05 (65L07, 65L10, 65L15,

Труды Института Прикладной Математики Имени И. Н. Векуа. 8. (Russian) сceedings of the I. N. Vekua Institute of Applied Mathematics. 8] Некоторые вопросы теории обыкновенных дифференциальных уравнений. [Some problems of the theory of ordinary differential equations] Edited by A. V. Bicadze. *Tbilis. Gos. Univ.*, *Tbilisi*, 1980. 170 pp. (Editors) **82e:34004 34–06

Ordinary and partial differential equations ★Ordinary and partial differential equations.

Proceedings of the Fifth Conference held at the University of Dundee, Dundee, March 29-31, 1978. Edited by W. N. Everitt. Lecture Notes in Mathematics, 827. Springer-Verlag, Berlin-New York, 1980. xvi + 271 pp. ISBN 3-540-10252-3 (Editors) 82c:34003 34-06 (35-06)

★Ordinary and partial differential equations. Proceedings of the Sixth Conference held at the University of Dundee, Dundee, March 31-April 4, 1980. Edited by W. N. Everitt and B. D. Sleeman. Lecture Notes in Mathematics, 846. Springer-Verlag, Berlin-New York, 1981. xiv+384 pp. ISBN 3-540-10569-7 (Editors) 82c:34004

ganization of research in the history of science and technology Organization of research in the history of science and technology (1921–1953) (facts and dates). (Russian. English summary) Compiled by L. V. Žigalova. Voprosy Istor. Estestocanan. i Tehn. 1979, no. 61-63, 47-63, 113, 123. (Author's summary) 82a:01052 01A74

say ★Journées de Théorie Analytique et Élémentaire des Nombres. (French) [Conference on Analytic and Elementary Number Theory] Held in Orsay, June 2-3, 1980.

Publications Mathématiques d'Orsay 81 [Mathematical Publications of Orsay 81], 1. Université de Paris-Sud, Département de Mathématique, Orsay, 1981. ii + 81 pp. (Editors)

★Surfaces algébriques. (French) [Algebraic surfaces] Seminar on Algebraic

Geometry held in Orsay, 1976-78. Edited by Jean Giraud, Luc Illusie and Michel Raynaud, Lecture Notes in Mathematics, 868. Springer-Verlag, Berlin-New York, 1981. ii+314 pp. ISBN 3-540-10842-4 (Editors) 82j:10052 10D21 (14J25)

illations, durability and stability of complex mechanical systems *Koлебания, прочность и устойчивость сложных механических систем. (Russian) [Oscillations, durability and stability of complex mechanical systems] Edited by V. A. Lazarjan. "Naukova Dumka", Kieo, 1979. 163 pp. (Editors) 82e:93029a 93-06

Ottawa, Ont. *Representation theory. I. Proceedings of the Workshop on the Present Trends in Representation Theory held at Carleton University, Ottawa, Ont., August 13-18, 1979. Edited by Vlastimil Dlab and Peter Gabriel. Lecture Notes in Mathematics, 831. Springer-Verlag, Berlin-New York, 1980. xiv+373 pp. ISBN 3-540-10263-9 (Editors) 16-06 (16A64)

★Representation theory. II. Proceedings of the Second International Conference on Representations of Algebras held at Carleton University, Ottawa, Ont., August 13-25, 1979. Edited by Vlastimil Dlab and Peter Gabriel. Lecture Notes in Mathematics, 832. Springer-Verlag, Berlin-New York, 1980. xiv + 673 pp. ISBN 3-540-10264-7 (Editors) 82a:16002b 16-06 (16A64)

standing scientists ★Завечательные ученые. (Russian) [Outstanding scientists] Edited by S. P. Kapica. Библиотечка "Квант" [Library "Kvant"], 9. "Nauka", Мовсоw, 1980. 192 pp. (J. S. Joel) 82g:01001 01-01 (01A70)

p-adic L-functions and algebraic number theory *p-adic L-functions and algebraic number theory. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, October 20-24, 1980. Sürikaisekikenkyüsho Kökyüroku No. 411 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-iii and 1-224. (Editors) 82h:12001 12-06 (12A35)

Pacific Grove, Calif. ★Fourteenth Asilomar Conference on Circuits, Systems & Computers. Held in Pacific Grove, Calif., November 17-19, 1980. Edited by Donald E. Kirk. IEEE Computer Society, New York, 1981. viii + 520 pp. (Editors) 82d:93001 93-06

Palaiseau ★Fonctions abéliennes et nombres transcendants. (French) [Abelian functions and transcendental numbers] Papers from the Colloquium held at the École Polytechnique, Palaiseau, May 23–26, 1979. Edited by D. Bertrand and M. Waldschmidt. Mém. Soc. Math. France (N.S.) 1980/81, no. 2. Gauthier-Villars, Paris, 1980. pp. 1-119. (Editors) 82c:10047 10F35

★Séminaire sur les Singularités des Surfaces. (French) [Seminar on the Singularities

of Surfaces] Held at the Centre de Mathématiques de l'École Polytechnique, Palaiseau,

of surfaces; Fielded by Michel Demazure, Henry Charles Pinkham and Bernard Teissier. 1976—1977. Edited by Michel Demazure, Henry Charles Pinkham and Bernard Teissier. Lecture Notes in Mathematics, 777. Springer-Verlag, Berlin-New York, 1980. viii + 339 pp. ISBN 3-540-09746-5 (I. Dolgachev) 82k:14021 | 14J17 (14B05, 14H20) anga #Проблемы устойчивости стохастических моделей. (Russian) [Problems of stability of stochastic models] Proceedings of the Fourth All-Union Seminar held in Palanga, April 1979. Edited by V. M. Zolotarev and V. V. Kalašnikov. Vsesojuz. Nauč.-Issled. Inst. Sistem. Issled., Moscow, 1980. 124 pp. (loose errata). (Editors) 82c:60005 60-06

Turán's prob lems Recent papers dealing with Turán's problems. P. Turán memorial

volume. J. Approx. Theory 29 (1980), no. 1, 86–89. (P. Vértesi) 82-841004 41–02

Parallel computers—parallel mathematics **Parallel computers—parallel mathematics.

Proceedings of the IMACS-GI Symposium held at the Technical University of Munich, Munich, March 14–16, 1977. Edited by M. Feilmeier. North-Holland Publishing Co., Amsterdam-New York, 1977. xii+331 pp. ISBN 0-444-85042-2 (Editors) 82k:68003 68-06 (68B20)

★Proceedings of the 1979 International Conference on Parallel allel processing Processing. Held at Bellaire, Mich., August 21-24, 1979. Edited by Oscar N. Garcia. IEEE Computer Society, New York, 1979. viii+326 pp. (Editors) 82b:68024 68B20

(105-00, N-00) (105-0 consecutively paged). ISBN 2-85926-277-6 (Editors) 82g:12019 12B40

★Seminaire d'algèbre Paul Dubreil et Marie-Paule Malliavin, 33ème Année. [Paul Dubreil and Marie-Paule Malliavin Algebra Seminar, 33rd Year] Held in Paris, 1980. Edited by Marie-Paule Malliavin [Marie-Paule Malliavin-Brameret]. Lecture Notes in

Mathematics, 867. Springer-Verlag, Berlin-New York, 1981. v + 476 pp.

ISBN 3-540-10841-6 (Editors) 822:16001 16-06

*Nonlinear partial differential equations and their applications. Collège de France Seminar. Vol. I. Proceedings of the Seminar on Applied Mathematics held at the Collège de France, Paris, 1978-1979. Edited by Haim Brèxis and Jacques-Louis Lions. Research Notes in Mathematics. 32. Pitman (Advanced Publishin Programs). Boston. Notes in Mathematics, 53. Pitman (Advanced Publishing Program), Bo Mass.-London, 1981. iv + 388 pp. ISBN 0-273-08491-7 (Editors) 82i:35002

★Processus aléatoires à deux indices. (French) [Two-index random processes]
Papers from the E.N.S.T.-C.N.E.T. Colloquium held in Paris, June 30-July 1, 1980. Edited by Hayri Körezlioğlu, Gerald Mazziotto and Jacques Szpirglas. Lecture Notes in Mathematics, 863. Springer-Verlag, Berlin-New York, 1981. ii + 274 pp.

ISBN 3-540-10832-7 (Editors) 82i:60004 60-06 (60Gxx)

★Séminaire de Théorie des Nombres, Paris 1979-80. [Seminar on Number Theory,

Paris 1979-80] Seminaire Delange-Pisot-Poitou. [Delange-Pisot-Poitou Seminar] Held in Paris, 1979-80. Edited by Marie-José Bertin. Progress in Mathematics, 12. Birkhäuser, Boston, Mass., 1981. ix+394 pp. ISBN 3-7643-3035-X (Editors) 82j:10004 10-06

*Les implications conceptuelles de la physique quantique. (French) [Conceptual implications of quantum physics] Proceedings of a Colloquium held in Paris, June 17–18, 1980. J. Physique 42 (1981), no. 3, suppl. Colloq. C-2. Les Éditions de Physique. Orsay, 1981. pp. 1-118. (Editors) 82j:81002

Torsay, 1981. pp. 1–118. (Editors) \$2\$\$1002 \$18xx (00A69, 81–06)

★Model theory and arithmetic. Proceedings of the CNRS Conference held in Paris,
1979–1980. Edited by Chantal Berline, Kenneth McAloon and Jean-Pierre Ressayre. Lecture Notes in Mathematics, 890. Springer-Verlag, Berlin-New York, 1981. vi + 306 pp. ISBN 3-540-11159-X (Editors) 82m:03004 03-06 (03C62, 03F30)

Partial differential equations *Advances in computer methods for partial differential equations. II. Proceedings of the Second IMACS International Symposium on Computer Methods for Partial Differential Equations held at Lehigh University, Bethlehem, Pa.

June 22-24, 1977. Edited by R. Vichnevetsky. Internati nal Association for Ma

June 22–24, 1977. Edited by R. Vichnevetsky. International Association for Mathematics and Computers in Simulation (IMACS), New Brunswick, N.J., 1977. vii + 392 pp. (Editors) 82ac65004 65–06

*Advances in computer methods for partial differential equations. III. Proceedings of the Third IMACS International Symposium on Computer Methods for Partial Differential Equations held at Lehigh University, Bethlehem, Pa., June 20–22, 1979. Edited by R. Vichnevetsky and R. S. Stepleman. International Association for Mathematics and Computers in Simulation (IMACS). New Brunswick, M. J. 1979. arXiv 1 on (IMACS), New Brunswick, N.J., 1979. vii + 442 pp. and Computers in Simulation (1 (Editors) 82a:65005 65-06

★Colloquium: Numerical Solution of Partial Differential Equations. Held in Delft, Nijmegen and Amsterdam during 1980. Edited by J. G. Verwer. MC Syllabus, 44. Mathematisch Centrum, Amsterdam, 1980. iv+194 pp. ISBN 90-6196-205-6 (Editors) 82a:65006 65-06 (65Mxx)

*Ordinary and partial differential equations. Proceedings of the Fifth Conference held at the University of Dundee, Dundee, March 29-31, 1978. Edited by W. N. Everitt. Lecture Notes in Mathematics, 827. Springer-Verlag, Berlin-New York, 1980. xvi+271 pp. ISBN 3-540-10252-3 (Editors) 82c:34003 34-06 (35-06)

died analysis for partial differential equations in applied sciences. (Japa ngs of a Symposiu n held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 12-15, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 386 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-301. (Editors) 824:35005 35-06 (73-06, 76-06)

*Linear and nonlinear partial differential equations. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 17–19, 1980. Sürikaisekikenkyüsho Kökyüroku No. 402 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-162. (Editors) 82&35010 35-06

★Дифференциальные уравнения с частными производными. (Russian) [Partial differential equations] Edited by S. V. Uspenskii. Труды Семинара С. Л. Соболева, No. 2 [Proceedings of the S. L. Sobolev Seminar, No. 2], 80. Akad. Nauk SSSR Sibirsk. си производными. (Russian) [Partial Otdel., Inst. Mat., Novosibirsk, 1980. 154 pp. (Editors) 82i:35003 35-06

★Двфференциальные уравнения (в частных проквюдных). (Russian) [Partial differential equations] Edited by I. P. Makarov. Rjazan. Gos. Ped. Inst., Ryazan, 1980.

differential equations | Edited by I. F. макатоу. гупсин. 100. Feb. 1101., гупсин. 120 pp. (Editors) 82i-35004 35-06 (34-06)
ЖКраевые задачи для двфференциальных уравнений в частных производных. (Russian) [Boundary value problems for partial differential equations] Edited by K. S. Sibirskii. Mat. Issled. No. 63 (1981). "Stiinca", Kishinev, 1981. pp. 1-188. (Editors) 35-06

ticles and fields *Particles and fields. Proceedings of the Banff Summer Institute held in Banff, Alta., August 25-September 3, 1977. Edited by David H. Boal and Abdul N. Kamal. Plenum Press, New York-London, 1978. viii + 462 pp. ISBN 0-306-31147-X 81-06

adena, Calif. *Theory of numbers. Proceedings of the Symposium in Pure Mathematics of the American Mathematical Society held at the California Institute of Technology, Pasadena, Calif., November 21-22, 1963. Edited by Albert Leon Whiteman. Corrected reprint of the 1965 original. Proceedings of Symposia in Pure Mathematics, VIII. American Mathematical Society, Providence, R. I., 1979. vii+216 pp. 1SBN 0-8218-1408-7 (Editors) 824:10006 10-06

atras *Second International Conference on Information Sciences and Systems. Vol. II. Advances in control. Papers from INFO II held at the University of Patras, Patras, July 9-14, 1979. Edited by Demetrios G. Lainiotis and Nicolaos S. Tzannes. D. Reidel blishing Co., Dordrecht-Boston, Mass., 1980. xvi + 591 pp. ISBN 90-277-1129-1 (Editors) 824:93002 93-06

★Second International Conference on Information Sciences and Systems. Vol. III. Applications of information and control systems. Papers from INFO II held at the University of Patras, Patras, July 9-14, 1979. Edited by Demetrios G. Lainiotis and Nicolaos S. Tzannes. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xiv+520 pp. ISBN 90-277-1143-7 (Editors) 824:93003 93-06 (94Axx)

★Second International Conference on Information Sciences and Systems. Vol. I. Advances in communications. Papers from INFO II held at the University of Patras, Patras, July 9-14, 1979. Edited by Demetrios G. Lainiotis and Nicolaos S. Tzannes. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xiv+524 pp. ISBN 90-277-1140-2 (Editors) 82d:94002 94-06

tern formation by dynamic systems and pattern recognition *Pattern formation by dynamic systems and pattern recognition. Proceedings of the International Symposium n Synergetics held at Garmisch-Partenkirchen, April 30-May 5, 1979. Edited by Hermann Haken. Springer Series in Synergetics, 5. Springer-Verlag, Berlin-New York, 1979. viii + 305 pp. ISBN 3-540-09770-8 (J. S. Joel) 82k:00028 00A69 (58E07, 68G10, 76Rxx, 81K05, 92-XX)

tern recognition ★Pacnosнавание образов. (Russian) [Pattern recognition] Edited by V. A. Kovalevskii and N. I. Borodjanskii. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiec, 1978. 72 pp. (Publisher's description) 82b:68081a 68G10

ttern formation by dynamic systems and pattern recognition. Proceedings of the International Symposium on Synergetics held at Garmisch-Partenkirchen, April 30-May 5, 1979. Edited by Hermann Haken. Springer Series in Synergetics, 5.

Springer-Verlag, Berlin-New York, 1979. viii + 305 pp. ISBN 3-540-09770-8 (J. S. Joel) 82k-00028 00A69 (58E07, 68G10, 76Rxx, 81K05, 92-XX)

★Методы оптимизации и распознавании образов в задачах планировании. (Russian) [Methods of optimization and pattern recognition in problems of planning] (Russian) [Methods of optimization and patient recognition in processes of patients of pat

Held in Miami Beach, Fla., December 1-4, 1980. IEEE Computer Society, New York, 1980. xv+774 pp. (Editors) 82g:68068a 68G10 (68-06, 92-06)

New Yer / 14 pp. (Editors) **Sugroussa

**Proceedings of the 5th International Conference on Pattern Recognition. Vol. 2.

Held in Miami Beach, Fla., December 1-4, 1980. IEEE Computer Society, New York, 1980. pp. :-xiii and 776-1382. (Editors) **82gc\$89880 68G10 (68-06, 92-06)

**Pattern recognition. Research at the Lehrstuhl für Informatik 5. Arbeitsberichte des Instituts für Mathematische Maschinen und Datenverarbeitung, Band 14 [Reports of the Institute for Mathematical Machines and Data Processing, Vol. 14], 1.

Friedrich-Alexander-Universität zu Erlangen-Nürnberg, Erlangen, 1981. ii + 92 pp. (Editors) 82m:68008 68-06 (68G10)

Siscola *Formalization of programming concepts. Proceedings of the International Colloquium held in Peñiscola, April 19-25, 1981. Edited by Josep Diaz and Isidro Ramos. Lecture Notes in Computer Science, 107. Springer-Verlag, Berlin-New York, 1981. vii + 478 pp. ISBN 3-540-10699-5 (Editors) 821:68005 68-06 (68B05)

tum theory *Perspectives in quantum theory. Essays in honor of Affred Landé. Edited by Wolfgang Yourgrau and Alwyn van der Merwe. Reprint of the 1971 original. Dover Publications, Inc., New York, 1979. xxxvii + 283 pp.

ISBN 0-486-63778-6 (Editors) 82d:81002 81-03 (00A89, 01A60)

respectives in statistical physics Perspectives in statistical physics. M. S. Green memorial volume. Edited by H. J. Raveché. Studies in Statistical Mechanics, IX.

North-Holland Publishing Co., Amsterdam-New York, 1981. xxviii + 367 pp.
ISBN 0-444-86026-6 (Editors) 822-82001
see transitions and nonequilibrium processes

фазовые превращения и перавловесные
процессы. (Russian) [Phase transitions and nonequilibrium processes] Edited by V. P. overda and G. N. Muratov. Akad. Nauk SSSR, Ural. Naučn. Centr, Sverdlovsk, 1980.

134 pp. (Editors) 82m:82003 82-06

Philosophy *Language, logic, and philosophy. Proceedings of the Fourth International Wittgenstein Symposium held in Kirchberg am Wechsel, August 27-September 2, 1979. Edited by Rudolf Haller and Wolfgang Grassl. Schriftenreihe der Wittgenstein-Gesellschaft. [Wittgenstein Society Publications Series]

Hölder-Pichler-Tempsky, Vienna, 1980. 617 pp. ISBN 3-209-00249-5 (Editors) 82e:03006 03-06 (03A05)

★Scientific discovery, logic, and rationality. Papers presented at the First Guy L. Leonard Memorial Conference in Philosophy held at the University of Nevada, Reno, Nev., October 29-31, 1978. Edited by Thomas Nickles. Boston Studies in the Philosophy of Science, 56. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xii + 385 pp. ISBN 90-277-1069-4, 90-277-1070-8 (Editors) 82g:03006 03-06 (03A05)

★Descartes. Philosophy, mathematics and physics. Edited by Stephen Gaukroger. Harvester Readings in the History of Science and Philosophy, 1. Harvester Press,

Brighton; Barnes and Noble Books, Totowa, N.J., 1980. xi+329 pp. ISBN 0-85527-798-X (F. C. Krelling) 82m:01035 01A45 (01-06, 03A05) losophy of mathematical knowledge #Zur Philosophie der mathematischen Erkenntnis. (German) [On the philosophy of mathematical knowledge] Colloquium held at the (German) [On the philosophy of mathematical knowledge] Colloquium held at the University of Münster, Münster, 1978/79. Edited by Egon Börger, Donatella Barnocchi and Friedrich Kaulbach. Königshausen + Neumann, Würzburg, 1981. 159 pp. 1SBN 3-88479-022-6 (Editors) 82e-60033 dlosophy of science: contemporary issues ★Philosophy of science: contemporary issues. Rev. Internat. Philos. 34 (1980), no. 1-2, 1-292. Imprimerie UNIVERSA, Wetteren, 1980. pp. 1-327. (Evandro Agazzi) 82e-60034 dlosophy of science: contemporary issues. Rev. Internat. Philosophy of science: contemporary issues. Pp. 1-327. (Evandro Agazzi) 82e-60034 dlosophy of science: contemporary issues. Charles and

storeproductions Photoreproductions. (French) Eleutheria 1979, no. 2, 575-649.
(Editors) 82k:01043 01A75

Physical methods for investigating the solid state *Физические методы исследования твердого тела. Вып. 3. (Russian) [Physical methods for investigating the solid state. No. 3] Edited by R. I. Minc. Ural. Gos. Univ., Sverdlovsk, 1979. 143 pp. (Editors) 82h:82002

Physics *Problems in the foundations of physics. Proceedings of the International School of Physics "Enrico Fermi", Course LXXII, held at Varenna, 25th July-6th August 1977. Edited by G. Toraldo di Francia. North-Holland Publishing Co., Amsterdam-New York, 1979. xii + 497 pp. (1 plate). ISBN 0-444-85285-9 (Editors) 82m:81003 81-06

★Quantum fields—algebras, processes. Proceedings of the Symposium "Bielefeld Encounters in Physics and Mathematics, II" held at the Universität Bielefeld, Bielefeld, December 1–9, 1978. Edited by Ludwig Streit. Springer-Verlag, Vienna, 1980. ix+444 pp. ISBN 3-211-81607-0 (Editors) 82b:81006 81–06 (60–06, 82–06)

★Прикладиме задачи теоретической в математической физики. (Russian)
[Applied problems of theoretical and mathematical physics] Edited by N. A. Avdonin [N. Avdonins]. Latv. Gos. Univ., Riga, 1980. 132 pp. (Editors) 82d:65002

★Group theoretical methods in physics. Proceedings of the Eighth International Colloquium held at Kiryat Anavim, March 25-29, 1979. Edited by L. P. Horwitz and Y. Ne'eman. Annals of the Israel Physical Society, 3. Adam Hilger, Ltd., Bristol; Israel Physical Society, Haifa, 1980. xvi+417 pp. (errata insert). ISBN 0-85274-424-2 (Editors) 81-06 (20-06, 22-06)

★Nonlinear and turbulent processes in physics. Proceedings of the International Workshop held in Kiev, September 4-16, 1979. Edited by V. D. Shapiro [V. D. Šapiro] and V. I. Shevchenko [V. I. Ševčenko]. Phys. D 2 (1981), no. 1. North-Holland Publishing Co., Amsterdam-New York, 1981. pp. i-ix and 1-243. (Editors) 82c:82002

★Proceedings of the Einstein Centennial Symposium on Fundamental Physics. Held at the Universidad de los Andes, Bogotá, July 30-August 5, 1979. Edited by Steven M. Moore, A. M. Rodriguez-Vargas, A. Rueda and G. Violini. Universidad de los Andes,

Bogotá, 1981. xiv+667 pp. (Editors) 82h:81005 81-06 (83-06)

Physics in one dimension ★Physics in one dimension. Proceedings of an International Conference held in Fribourg, August 25-29, 1980. Edited by Jakob Bernasconi and Toni Schneider. Springer Series in Solid-State Sciences, 23. Springer-Verlag, Berlin-New York, 1981. ix+368 pp. ISBN 3-540-10586-7 (Editors) 82g:82003 82-06 (82A42, 82A51,

Physiker über Physiker #Physiker über Physiker. II. (German) [Physicists on physicists. II] Inaugural addresses and replies at the admission of physicists to the Berlin Academy and commemoration speeches 1870 to 1929. Edited by Christa Kirsten and Hans-Günther Körber. Studien zur Geschichte der Akademie der Wissenschaften der DDR [Studies in the History of the Academy of Sciences of the DDR], 8. Akademie-Verlag, Berlin, 1979. 298 pp. (1 plate). (M. Kline) 82a:01053 01A74 (01A70)

Physiology *Mathematical aspects of physiology. Proceedings of the Twelfth Summer Seminar on Applied Mathematics held at the University of Utah, Salt Lake City, Utah, June 15-27, 1980. Edited by Frank C. Hoppensteadt. Lectures in Applied Mathematics, 19. American Mathematical Society, Providence, R. I., 1981. vi + 394 pp. ISBN 0-8218-1119-3 (Editors) 82f:92003 92-06 (34-06, 35-06, 76-06)

Pisa *Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. I. Theory change, ancient axiomatics, and Galileo's methodology. Second International Conference held at Pisa, September 4-8, 1978. Edited by Jaakko Hintikka, David Gruender and Evandro Agazzi. Synthese Library, 145. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xiv+354 pp. ISBN 90-277-1126-7 (Editors) 82f:01001a 01-06 (03-06)

★Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. II. Probabilistic thinking, thermodynamics and the interaction of the history and philosophy of science. Synthese Library, 146. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xiv+326 pp. ISBN 90-277-1127-5 (Editors) 821:01001b

★Proceedings of the Seminar on Harmonic Analysis. Held in Pisa, April 8-17, 1980. Rend. Circ. Mat. Palermo (2) 1981, Suppl. No. 1. Circolo Matematico di Palermo, Palermo, 1981. pp. i-x and 1-209. (Editors) 82m:42001 42-06

sburgh, Pa. *VLSI systems and computations. Papers presented at the Conference held at Carnegie-Mellon University, Pittsburgh, Pa., October 19-21, 1981. Edited by H. T. Kung, Robert F. Sproull and Guy Steele, Jr. Computer Science Press, Rockville, Md., 1981. xi+415 pp. ISBN 0-914894-35-8 (Editors) 82i-68006 68-06 (03-06)

*Problems of elastic stability and vibrations. Proceedings of the Special Session on Problems in Elastic Vibrations, Stability and Related Topics held at the 786th Meeting of the American Mathematical Society, Duquesne University, Pittsburgh, Pa., May 15-16, 1981. Edited by Vadim Komkov. Contemporary Mathematics, 4. American Mathe Society, Providence, R.I., 1981. x+137 pp. ISBN 0-8218-5005-9 (Editors) 82k:73003 73-06 (73D30, 73H05, 73H10)

nent problems *Structure of three-dimensional manifolds and placement problems (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, September 3-5, 1979. Sürikaisekikenkyüsho Kôkyûroku No. 369 (1979). Kyoto University, Research Institute for Mathematical

Sciences, Kyoto, 1979. pp. i-iii and 1-207. (Editors) 82a:57002 57-06

Plitvice ★II. Mathematikertreffen Zagreb-Graz. (German) [Second Zagreb-Graz Meeting of Mathematicians] Held in Plitvice, November 14-15, 1980. Bericht [Report], 154-162. Forschungszentrum Graz, Mathematisch-Statistische Sektion, Graz, 1981. 111 pp. (not

consecutively paged). (Editors) 82g:00002 00A10

Point processes and queueing problems ★Point processes and queueing problems. Papers from the Colloquium held in Keszthely, September 4-8, 1978. Edited by P. Bártfai and J. Tomkó. Colloquia Mathematica Societatis János Bolyai, 24. North-Holland Publishing Co., Amsterdam-New York, 1981. 426 pp. ISBN 0-444-85432-0 (Editors) 82f:60006 60-06 (60G55, 60G60, 60J80, 60K25, 60K35)

Polish bibliography on the philosophy of science and technology during the years 1974–1976

★Polska bibliografia naukoznawstwa i technoznawstwa za lata 1974–1976. (Polish) [Polish bibliography on the philosophy of science and technology during the years 1974–1976] Compiled by Jadwiga Majewska-Tronowicz, Krystyna Betkowska and Marianna Jedlińska. Edited by Wojciech Gasparski, Majewska-Tronowicz and Eugeniusz Olszewski. Zakład Narodowy im. Ossolińskich-Wydawnictwo Polskiej Akademii Nauk (Ossolineum), Wrocław, 1978. 222 pp. (Editors) 821:00009 00A15 (01A75)

reptimization—theoretical foundations and applications
*Polyoptimierung—theoretische Grundlagen und Anwendungen. (German) [Polyoptimization—theoretical foundations and applications] Lectures from the Seminar held at Bad Stuer, March 29-April 4, 1976. ZKI-Informationen 78 [ZKI Information 78], 2. Akademie der Wissenschaften der DDR, Zentralinstitut für Kybernetik und

Informationsprozesse, Berlin, 1978. 136 pp. (Editors) 82d:90002 90-06

Potchefstroom ★Algebra Symposium. Papers presented at the Symposium held at Potchefstroom University for Christian Higher Education, Potchefstroom, August 20-21, 1979. Potchefstroom University for Christian Higher Education, Department of Mathematics and Applied Mathematics, Potchefstroom, 1980. iii + 111 pp. (From the preface) 82i:16002 16-06

Prague ★Proceedings of the VIIIth International Conference on Nonlinear Oscillations.
Vol. I. Held in Prague, September 11–15, 1978. Academia [Publishing House of the Czechoslovak Academy of Sciences], Prague, 1979. 548 pp. (Editors) 82k:70002a

★Proceedings of the VIIIth International Conference on Nonlinear Oscillations. Vol. II. Held in Prague, September 11-15, 1978. Academia [Publishing House of the Czechoslovak Academy of Sciences], Prague, 1979. pp. 553-1078. (Editors) 82k:70002b 70-06 (93-06)

70-06 (93-06)

Princeton, N.J. *Some strangeness in the proportion. A Centennial Sympos celebrate the achievements of Albert Einstein. Lectures presented at the Einstein Centennial Symposium held at the Institute for Advanced Study, Princeton, N.J., March 4–9, 1979. Edited by Harry Woolf. Addison-Wesley Publishing Co., Reading, Mass., 1980. xxxi + 539 pp. ISBN 0-201-09924-1 (Lawrence Sklar) 82d-83002 83-03 (00A89,

★Recent developments in several complex variables. Proceedings of a Conference held at Princeton University, Princeton, N. J., April 16–20, 1979. Edited by John E. Fornaess. Annals of Mathematics Studies, 100. Princeton University Press, Princeton,

Pornaess. Annais of Maintennatus Studies, 100. Frinceton University Press, Princeton, N.J.; University of Tokyo Press, Tokyo, 1981. xi + 452 pp. ISBN 0-691-08285-5, 0-691-08281-2 (Editors) 82g:32002 32-06

habilistic methods and cybernetics ★Вероятноствые методы в кибериствка. Вып. 16.

(Russian) [Probabilistic methods and cybernetics. No. 16] Edited by R. G. Buharaev and B. G. Niemethillo, Kene Co. Main Kenen 1990 (6 pp. (Editors) 82g:2002 1000 (6 pp. (Editors) 82g:2002 (6 pp. (Editor R. G. Nigmatullin. Kazan. Gos. Univ., Kazan, 1980. 96 pp. (Editors) 82a:68006

★Вероятностиме методы и кибернетика. Вып. 17. (Russian) [Probabilistic methods and cybernetics. No. 17] Edited by Ju. V. Golunkov. Kazan. Gos. Univ., Kazan, 1980. 88 pp. (Editors) 824:68002 68-06 (03-06, 06-06)

nal analysis *Вероятностные методы

ого анализа. (Russian) [Probabilistic methods of infinite-dimen analysis] Edited by A. V. Skorohod. Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1980. 174 pp. (Editors) 82f:60007 60-06

thinking, thermodynamics and the interaction of the history and philosophy of **Proceedings of the 1978 Pisa Conference on the History and Philosophy of istic thinking, thermodyna Science. Vol. II. Probabilistic thinking, thermodynamics and the interaction of the history and philosophy of science. Synthese Library, 146. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xiv + 326 pp. ISBN 90-277-1127-5 (Editors) 82f:01001b 01-06 (03-06)

ality *Essays in probability and statistics. A volume in honor of Professor Junjiro Ogawa. Edited by Sadao Ikeda, Takesi Hayakawa, Hirosi Hudimoto, Masashi Okamo Minoru Siotani and Sumiyasu Yamamoto. Published by the Editorial Committee for Publication of Essays in Probability and Statistics; distributed by Shinko Tsusho Co. Ltd., Tokyo, 1976. xix+716 pp. (1 plate). (Editors) 82a:62005 62-06 (05Bxx)

★Séminaire de Probabilités, Rennes 1979. (French) [Seminar on Probability, Rennes 1979] Université de Rennes, Rennes, 1979. 96 pp. (not consecutively paged). (Editors)

★Contributions to probability. A collection of papers dedicated to Eugene Lukacs. Edited by J. Gani and V. K. Rohatgi. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xxi+311 pp. (1 plate). ISBN 0-12-274460-8

#Seminaire de Probabilités. XV. (French) [Seminar on Probability. XV] Held at the University of Strasbourg, Strasbourg, 1979/1980. With a general index to the papers from the Seminars, 1966/67-1978/79. Edited by Jacques Azema and Marc Yor. Lecture Notes in Mathematics, 850. Springer-Verlag, Berlin-New York, 1981. iv +704 pp. ISBN 3-540-10689-8 (Editors) 821:60008 60-06 bability theory. Mathematical statistics. Theoretical cybernetics ★Теория вероятностей.

Mareнатическая статистика. Теоретическая кибернетика. Том 18. (Russian)
[Probability theory. Mathematical statistics. Theoretical cybernetics. Vol. 18] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. 188 pp. (errata insert). (Editors) 82f:60003 60-02 (60K25, 60K35)

(erata insert). (Eartors) sacrosoms → 0-02 (600×2, 600×5)

Trobability theory on vector spaces. ★ Probability theory on vector spaces. II. Proceedings of the Second International Conference held at Blażejewko, September 17–23, 1979. Edited by Aleksander Weron. Lecture Notes in Mathematics, 828. Springer-Verlag, Berlin-New York, 1980. xiii + 324 pp. ISBN 3-540-10253-1 (Editors) 82d:60004 60-06 (46-06, 47-06)

blem, method, solution *Zadanie, metoda, rozwiązanie. (Polish) [Problem, method, solution] Edited by Andrzej Góralski. Techniki Twórczego Myślenia [Techniques of Creative Thinking], 3. Wydawnictwa Naukowo-Techniczne (WNT), Warsaw, 1980. 220 pp. ISBN 83-204-0249-2 (Editors) 82e:00008 00A05 (68G99, 92A25)

Geometry ★Nonlinear problems in geometry. Proceedings of the Sixth International Symposium of the Division of Mathematics of the Taniguchi Foundation. Conference on Nonlinear Problems in Geometry held in Katata, September 3-8, 1979. Tohoku University, Department of Mathematics, Sendai, 1979. v+23 pp. (Editors) 82j:58001 58-06 (35-06, 53-06)

опр theory *Koyponckas тетрадь: нерешенные задачи теории групп. (Russian) [Kourovka notebook: unsolved problems in group theory] Seventh edition. Including problems from the Seventh All-Union Symposium on Group Theory held at Shushenskoe, 1980. Edited by V. D. Mazurov, Ju. I. Merzljakov and V. A. Čurkin. Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1980. 115 pp. (Editor's review (Ju.I.M.)) 82f:20005 20-06 nite-dimensional topology Open problems in infinite-dimensional topology. Edited

by Ross Geoghegan. The Proceedings of the 1979 Topology Conference (Ohio Univ., Athens, Ohio, 1979). Topology Proc. 4 (1979), no. 1, 287–338 (1980). (John J. Walsh) 82a:57015 57N20 (54Cxx, 54Fxx, 54Hxx, 58B05)

dears of complex analysis *Мсс.деопация по эмеймым операторам и теория функций. (Russian) [Investigations on linear operators and the theory of functions] 99 нерешенных задач линейного и комплексного анализа. [99 unsolved problems in linear and complex analysis] Compiled and edited by N. K. Nikol'skii, V. P. Havin and S. V. Hruščev. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 81 (1978). "Nauka", Leningrad. Otdel., Leningrad, 1978. pp. 1-296. (Editors) 82e:46002 46-02 (00A05, 30-02, 47-02)

blems of bionics ★Проблемы бионики. Вып. 22. (Russian) (Problems of bionics. No. 22) Edited by Ju. P. Šabanov-Kušnarenko. "Višča Škola", Kharkov, 1979. 146 pp. (Editors) 82i:68004 68-06 (03-06, 92-06)

ems of combinatorial analysis *Проблемы комбинаторного анализа. (Russian) [Problems of combinatorial analysis] Articles translated from the English and from the French by A. M. Revjakin and B. S. Stečkin. Edited by K. A. Rybnikov. Maxemathera. Новое в Зарубежной Науке [Mathematics: Recent Publications in Foreign Science], 19. "Mir", Moscow, 1980. 252 pp. (Editors) 82d:05005 05-06 (05A15, 05A17, 05B25, 05B35)

blems of elastic stability and vibrations *Problems of elastic stability and vibrations. Proceedings of the Special Session on Problems in Elastic Vibrations, Stability and Related Topics held at the 786th Meeting of the American Mathematical Society, Duquesne University, Pittsburgh, Pa., May 15-16, 1981. Edited by Vadim Komkov. Contemporary Mathematics, 4. American Mathematical Society, Providence, R.I., 1981. x+137 pp. ISBN 0-8218-5005-9 (Editors) 82k:73003

x+137 pp. ISBN 0-8218-5005-9 (Editors) 82k:73003 73-06 (73D30, 73H05, 73H10)
blems in the foundations of physics *Problems in the foundations of physics.

Proceedings of the International School of Physics "Enrico Fermi", Course LXXII, held at Varenna, 25th July-6th August 1977. Edited by G. Toraldo di Francia. North-Holland Publishing Co., Amsterdam-New York, 1979. xii + 497 pp. (1 plate). ISBN 0-444-85285-9 (Editors) 82m:81003 81-06

(Editors) 82m:81003 81-06
bitems in geometry ★Проблемы геометрии. Том 9. (Russian) [Problems in geometry. Vol. 9] Edited by R. V. Gamkrelidze. Итоги Науки и Техинки. [Progress in Science and Technology] Akad. Nauk SSSR, Vsetojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1979. 248 pp. (Ioose errata). (Editors) 82k:53054a 53-06 (55R10) ★Проблемы тесметрии. Том 12. (Russian) [Problems in geometry. Vol. 12] Edited by N. M. Ostianu. Итоги Науки и Техинки. [Progress in Science and Technology] Akad.

- Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. 192 pp. (errata insert). (Editors) 82le:53062 53-06 (35-06, 58-06) htems in mechanics and applied mathematics. **Bompoca механики и прикладной математики. (Russian) [Problems in mechanics and applied mathematics] Edited by V. G. Cepilevič and V. M. Musalimov. Tomsk. Gos. Univ., Tomsk, 1979. 91 pp. (Editors) 73-06
- 82E:73003 73-06
 Molems of the normative theory of games and its applications ★Вопросы пормативной теории игр и ее приложений. (Russian) [Problems of the normative theory of games and its applications] Edited by E. N. Stepanenko. Preprint 79-52. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. 44 pp. (Editors) 82x-90182 90Dxx
 blems of stability of stochastic models ★Проблемы устойчивости стохастических молежей. (Russian) [Problems of stability of stochastic models] Proceedings of the Fourth All-Union Seminar held in Palanga, April 1979. Edited by V. M. Zolotarev and V. V. Kalašnikov. Vsesojuz. Nauč-Issled. Inst. Sistem. Issled., Moscow., 1980. 124 pp. (loose errata). (Editors) 82x-69005
 60-06
- blems of the theory of probability distributions ★Проблемы теории вероитиостных распределений. VI. (Russian) [Problems of the theory of probability distributions. VI] Edited by V. N. Sudakov. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 97 (1980). "Nauka" Leningrad. Otdel., Leningrad, 1980. pp. 1-238. (Editors) 60Exx (60-06)
- ns on the theory of robots and artificial intelligence *Boupocus reopum po60700 m BICKYCCTREGUIDOTO BITTEAUREREA. (Russian) [Problems on the theory of robots and artificial intelligence] Edited by V. I. Rybak and V. M. Krot. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 84 pp. (Editors) 82g:68091a 68-06 (51N05, 68Gxx)
 - stein Centennial Symposium on Fundamental Physics *Proceedings of the Einstein Centennial Symposium on Fundamental Physics. Held at the Universidad de los Andes, Bogotá, July 30-August 5, 1979. Edited by Steven M. Moore, A. M. Rodríguez-Vargas, A. Rueda and G. Violini. Universidad de los Andes, Bogotá, 1981. xiv+667 pp. (Editors) 82h:8105 81-06 (83-06) ski Symposium *Proceedings of the Einstein Control of the E
 - Proceedings of the Tarski Symposium. Held at the University of Tarski Symp California, Berkeley, Calif., June 23-30, 1971. Edited by Leon Henkin, John Addison, William Craig, C. C. Chang [Chen Chung Chang], Dana Scott and Robert Vaught. Corrected reprint of the 1974 original. Proceedings of Symposia in Pure Mathematics, XXV. American Mathematical Society, Providence, R. I., 1979. xx + 498 pp. ISBN 0-8218-1425-7 (Editors) 82h:03006 03-06 (01A70)
 - Vekua, I. N. Institute of Applied Mathematics * Труды Института Прикладной Математики Имени И. Н. Векуа. 8. (Russian) [Proceedings of the I. N. Vekua математики Линевии И. Н. Векуа. 8. (Russian) [Proceedings of the I. N. Vetkin Institute of Applied Mathematics. 8] Некоторые вопросы теории обыкновенных диффережциальных уравнений. [Some problems of the theory of ordinary differential equations] Edited by A. V. Bicadze. Tbilis. Gos. Univ., Tbilisi, 1980. 170 pp. (Editors) 82e-34004 34-06

 *Труды Института Прикладной Математики Имени И. Н. Векуа. 7.
 - (Russian) [Proceedings of the I. N. Vekua Institute of Applied Mathematics. 7] Herotropue nonpocus reopum yupyroctu. [Some problems of the theory of elasticity] Edited by A. V. Bicadze. Tbilis. Gos. Univ., Tbilisi, 1980. 152 pp. (Editors) 82f:73004 73-06
 - mual Meeting of the Shaanxi Provincial Mathematical Society *Proceedings of the Annual Meeting of the Shaanxi Provincial Mathematical Society. (Chinese) Held in Xian, 1979. Shaanxi Provincial Mathematical Society, Shaanxi, 1980. 148 pp. (Editors) 821:60005 00A10
 - ss and Eco ic Statistics Section, American Statistical Association ★1979 Proceedings of the Business and Economic Statistics Section, American Statistical Association. Papers presented at the Annual Meeting held in Washington, D.C., August 13-16, 1979. American Statistical Association, Washington, D.C., 1979. x+614 pp. (Editors) 82c:62904e 62-06 (90A19)
 - RN School of Computing *Proceedings of the 1980 CERN School of Computing.
 Held in Vraona, September 14–27, 1980. Edited by C. Verkerk. CERN 81, 3. CERN CERN Sch -Organisation Européenne pour la Recherche Nucléaire, Geneva, 1981. vii + 408 pp. (Editors) 824:68003 68-06
 - oquium on Geometry and Topology ★Proceedings of the Colloquium on Geometry and Topology. (Romanian) Held in Cluj-Napoca, September 22-24, 1978.

 Universitatea "Babeş-Bolyai", Facultatea de Matematica, Cluj-Napoca, 1979. 290 pp. (Editors) 82h:53003 53-06
 - bequium on Operations Research ★Proceedings of the Third Colloquium on Operations Research. Held in Cluj-Napoca, October 20-21, 1978. Edited by Ioan Maruşciac and Wolfgang W. Breckner. Universitatea "Babes Boya". Facultatea de Matematica, Chij-Napoca, 1979. 302 pp. (Editors) 82e-90005 90-06 diaderence on Convergence **Proceedings of the Conference on Convergence. Held in Szczyrk, October 22-27, 1979. Edited by Czesław Kliš. Polska Akademia Nauk,
 - Oddział w Katowicach, Komisja Matematyczno-Fizyczna, Katowice, 1980. ii + 112 pp. (Editors) 82k:54001 54-06 (46-06)
 - | Gernee on Crystallographic Groups | Proceedings of the Conference on Kristallographic Groups | Proceedings of the Conference on Kristallographische Gruppen. Part II. Held at the University of Bielefeld, Bielefeld, September 2–16, 1979. Edited by A. W. M. Dress and N. Neubüser. Match No. 10 (1981). Max. Planck-Institut für Kohlenforschung, Institut für Strahlenchemic, Mülheim, 1981. pp. i–iii and 1–233. (Editors) 82e:20060 20H15 (82A60)
 - Inference on the Design of Experiments in Army Research, Development and Testing

 ↑ Proceedings of the Twenty-Sixth Conference on the Design of Experiments in

 Army Research, Development and Testing. Held at New Mexico State University,

 Las Cruces, N.M., October 22–24, 1980. ARO Report 81, 2. U. S. Army Research Office, Research Triangle Park, N.C., 1981. xviii + 587 pp. (Editors) 82g:62008
 - derence on Integration, Topology, and Geometry in Linear Spaces *Proceedings of the Conference on Integration, Topology, and Geometry in Linear Spaces. Held at the University of North Carolina, Chapel Hill, N.C., May 17-19, 1979. Edited by William H. Graves. Contemporary Mathematics, 2. American Mathematical Society, Providence, R.I., 1980. ix + 269 pp. ISBN 0-8218-5002-4 (Editors) 82e:46003 46-06
 - per Theory *Proceedings of the Conference on Number Theory

- - Held in Mysore, August 19–22, 1979. Edited by R. Jagannathan. Matscience Report, 101. Institute of Mathematical Sciences, Madras, 1980. iv+237 pp. (loose errata). (Editors) 82&10005 10–06 derence on Probability Theory Proceedings of the Sixth Conference on Probability Theory. Held in Braşov, September 10–15, 1979. Edited by Bernard Bereanu, Şerban Grigorescu, Marius Iosifescu and Tiberiu Postelnicu. Editura Academiei Republicii Socialiste România, Bucharest, 1981. 547 pp. (Editors) 82::60002 60-06 (62-06)
 - ear Oscillations *Proceedings of the VIIIth nal Conference on No International Conference on Nonlinear Oscillations. Vol. I. Held in Prague September 11–15, 1978. Academia [Publishing House of the Czechoslovak Academy of Sciences], Prague, 1979. 548 pp. (Editors) 82k:70002a 70–06 (93–06)

 ★Proceedings of the VIIIth International Conference on Nonlinear Oscillations.
 - Vol. II. Held in Prague, September 11-15, 1978. Academia [Publishing House of the Czechoslovak Academy of Sciences], Prague, 1979. pp. 553–1078. (Editors) 82k:70002h 70–06 (93–06)
 - renational Conference on Parallel Processing *Proceedings of the 1979 International Conference on Parallel Processing. Held at Bellaire, Mich., August 21-24, 1979. Edited by Oscar N. Garcia. IEEE Computer Society, New York, 1979. viii + 326 pp. (Editors) 82b:68024 68B20 (68-06, 94-06)
 - rational Conference on Pattern Recognition *Proceedings of the 5th International Conference on Pattern Recognition. Vol. 1. Held in Miami Beach, Fla., December 1-4, 1980. IEEE Computer Society, New York, 1980. xv+774 pp. (Editors) 82g:68088a 68G10 (68-06, 92-06)
 - ★Proceedings of the 5th International Conference on Pattern Recognition. Vol. 2. Held in Miami Beach, Fla., December 1–4, 1980. IEEE Computer Society, New York, 1980. pp. i-xxiii and 776-1382. (Editors) 82g:68088b 92-06)
 - Manitoba Conference on Numerical Mathematics and Computing *Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing. Held at the University of Manitoba, Winnipeg, Man., October 1-4, 1980. Edited by D. S. Meek and H. C. Williams. Congr. Numer. 30 (1981). Utilitas Mathematica Publishing, Inc., Winnipeg, Man., 1981. pp. 1-317. (Editors) 82;00010 00A10 (65-06, 68-06)
 - ★Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing. Vol. II. Held at the University of Manitoba, Winnipeg, Man., October 1-4, 1980. Edited by D. S. Meek and H. C. Williams. Congr. Numer. 31 (1981). Utilitas Mathematica Publishing, Inc., Winnipeg, Man., 1981. pp. 1-313. (Editors) 82j:00011 00A10 (65-06, 68-06)
 - tical Seminar ★Proceedings of the Mathematical Seminar: Singapore 1980. Held in Singapore, June 24-27, 1980. Edited by K. N. Cheng and C. T. Chong.
 - National University of Singapore, Department of Mathematics, Singapore; Singapore Mathematical Society, Singapore, 1980. iii+54 pp. (Editors) 82e:00010 00A10

 Meeting on General Topology ★Proceedings of the Meeting on General Topology.

 Held at the University of Trieste, Trieste, September 4–8, 1978. Università degli Studi di Trieste, Istituto di Matematica Applicata, Trieste, 1981. 163 pp. (Editors) 82f:54601 54-06
 - Model Theory Meeting *Proceedings of the Model Theory Meeting. Held at the University of Brussels, Brussels, and the University of Mons, Mons, June 2-5, 1980. Bull. Soc. Math. Belg. Sér. B 33 (1981), no. 1. Société Mathématique de Belgique, Brussels, 1981. pp. 1–169. (Editors) 82e:03008 03–06 (03Cxx)
 - National Seminar on Finsler Spaces *The Proceedings of the National Seminar on Finsler Spaces. Held at the University of Braşov, Braşov, February 1980. Edited by I. P. Popescu. Universitatea din Timisoara, Societatie de Științe Matematice din R.S. România, Timisoara, 1981. 221 pp. (Editors) 82k:53002 53-06 (53C60)
 - Pisa Conference on the History and Philosophy of Science *Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. I. Theory change, ancient axiomatics, and Galileo's methodology Second International Conference held at Pisa, September 4-8, 1978. Edited by Jaakko Hintikka, David Gruender and Evandro Agazzi. Synthese Library, 145. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xiv+354 pp. ISBN 90-277-1126-7 (Editors) 82:01001a 01-06 (03-06)

 ★Proceedings of the 1978 Pisa Conference on the History and Philosophy of
 - Science. Vol. II. Probabilistic thinking, thermodynamics and the interaction of the history and philosophy of science. Synthese Library, 146. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xiv+326 pp. ISBN 90-277-1127-5 (Editors) 01-06 (03-06)
 - ent's Number Theory Conference *Proceedings of the Queen's Number Theory Conference, 1979. Held at Queen's University, Kingston, Ont., July 2-20, 1979. Edited by Paolo Ribenboim. Queen's Papers in Pure and Applied Mathematics, 54. Queen's University, Kingston, Ont., 1980. xiii + 497 pp. (Editors) 82j:10003 10-06
 - inar on Harmonic Analysis *Proceedings of the Seminar on Harmonic Analysis. Held in Pisa, April 8-17, 1980. Rend. Circ. Mat. Palermo (2) 1981, Suppl. No. 1. Circolo Matematico di Palermo, Palermo, 1981. pp. i-x and 1-209. (Editors) 82m:42001 42-06
 - sion of the International Statistical Institute ★Proceedings of the 41st Session of the International Statistical Institute. Vol. 1. Held in New Delhi, December 5-15, 1977. Bull. Inst. Internat. Statist. 47 (1977), no. 1. Indian Statistical Institute, Calcutta, 1977. pp. i-viii and 1-717. (Editors) 82d:62006a 62-06
 - Proceedings of the 41st Session of the International Statistical Institute. Vol. 2. Held in New Delhi, December 5-15, 1977. Bull. Inst. Internat. Statist. 47 (1977), no. 2. Indian Statistical Institute, Calcutta, 1977. pp. i-v and 1-558. (Editors) 824:62006b
 - ★Proceedings of the 41st Session of the International Statistical Institute. Vol. 3. Held in New Delhi, December 5–15, 1977. Bull. Inst. Internat. Statist. 47 (1977), no. 3. Indian Statistical Institute, Calcutta, 1977. pp. i-v and 1-533. (Editors) 824:620

s: (contin

1982

ccial Statistics Section, American Statistical Association. ₱ 1978 Proceedings of the Social Statistics Section, American Statistical Association. ₱ 2 1978 Proceedings of the Annual Meeting held in San Diego, Calif., August 14–17, 1978. American Statistical Association. Washington, D.C., 1978. xii+806 pp. (Editors) 82c62004a 62–06 (65U05, 90A19)

*1979 Proceedings of the Social Statistics Section, American Statistical
Association. Papers presented at the Annual Meeting held in Washington, D.C., August 13-16, 1979. American Statistical Association, Washington, D.C., 1979. xii + 690 pp. (Editors) 82c:62004d 62-06 (90A19)

theastern Conference on Combinatorics, Graph Theory and Computing

*Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. I. Held at Florida Atlantic University, Boca Raton, Fla., March 3-7, 1980. Edited by F. O. Hadlock, F. Hoffman, R. C. Mullin, R. G. Stanton and G. H. J. Van Rees. Congr. Numer. 28 (1980). Utilitas Mathematica Publishing, Inc., Winnipeg, Man., 1980. pp. i-xi and 1-452. (Editors) 82h:05004a 05-06 (68-06, 68E10)

★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. II. Held at Florida Atlantic University, Boca Raton, Fla., March 3-7, 1980. Edited by F. O. Hadlock, F. Hoffman, R. C. Mullin, R. G. Stanton and G. H. J. Van Rees. Congr. Numer. 29 (1980). Utilitas Mathe Publishing, Inc., Winnipeg, Man., 1980. pp. i-vii and 453-936. (Editors) 82b:05004b 05-06 (68-06)

Statistical Computing Section, American Statistical Association ★1978 Proceedings of the Statistical Computing Section, American Statistical Association. Papers presented at the Annual Meeting held in San Diego, Calif., August 14-17, 1978. American Statistical Association, Washington, D.C., 1978. viii+425 pp. (Editors) 82c:62004b 62-06 (65U05, 90A19, 90Cxx)

★1979 Proceedings of the Statistical Computing Section, American Statistical Association. Papers presented at the Annual Meeting held in Washington, D.C., August 13-16, 1979. American Statistical Association, Washington, D.C., 1979.

August 13-10, 1979. American Sunstitute Association, Washington, D.C., 1979.
viii +412 pp. (Editors) \$\$2ex2004e: 62-06 (65105, 90A19, 90Cxx)
uner School on Yang-Mills Equations \$\$\pi\text{Proceedings of the Summer School on}\$\$ Yang-Mills Equations. Bereich Geometrie. [Geometry section] Held at Kagel, June 25-29, 1979. Seminarberichte [Seminar Reports], 25. Humboldt Universität, Sektion Mathematik, Berlin, 1980. i+246 pp. (M. Schneider) 82j:53062 53C05 (14F05, 53-02, 58E20, 81E10)

posium on Regular Semigroups *Proceedings of a Symposium on Regular Semigroups. Held at Northern Illinois University, DeKalb, Ill., April 20–21, 1979. ern Illinois University, Department of Mathematical Sciences, DeKalb, Ill., 1979.

whether things of the 182,20120 20M10 (20−06)

nposium on Ring Theory ★Proceedings of the 14th Symposium on Ring Theory.

Held at Shinshu University, Matsumoto, July 30-August 1, 1981. Edited by Hisao Tominaga. Okayama Mathematical Lectures. Okayama University, Departs Mathematics, Okayama, 1981. ii+115 pp. (Editors) 82j:16001 16-06

mposium on Semigroups *Proceedings of the 4th Symposium on Semigroups. Semigroup theory and its related fields. Held at Yamaguchi University, Yamaguchi, October 6-8, 1980. Edited by Kentaro Murata. Yamaguchi University, Yamaguchi, 1980. v+131 pp. (Editors) 821:20008 20-06 (20Mxx)

logy Conference *The Proceedings of the 1980 Topology Conference. Held at the University of Alabama, Birmingham, Ala., 1980. Edited by Włodzimierz Kuperberg, G. M. Reed and Phillip Zenor. Topology Proc. 5 (1980), (1981). Auburn University, Mathematics Department, Auburn, Ala., 1981. pp. 1–264. (Editors) 82f:54002

UNAM Workshop on Gauge Theories ★Proceedings of the UNAM Workshop on Gauge Theories. Held at the Universidad Nacional Autónoma de Mexico, Mexico City, December 10-14, 1979. Edited by S. Hojman, L. Jacobs, M. Rosenbaum and M. P. Ryan. Hadronic J. 4 (1980/81), no. 1. Hadronic Press, Inc., Nonantum, Mass., 1980. pp. 1-182. (Editors) 82d:81005 81-06 (81E99, 83E99)

1980. pp. 1–182. (Editors) 82d:81005 81–06 (81E99, 83E99)
Workshop on Lie-Admissible Formulations **Proceedings of the Third Workshop on Lie-Admissible Formulations. Part A. Mathematics. Held at the University of Massachusetts, Boston, Mass., August 4-9, 1980. Hadronic J. 4 (1980/81), no. 2. Hadronic Press, Inc., Nonantum, Mass., 1981. pp. 183-607. (Editors) 821:81002a

★Proceedings of the Third Workshop on Lie-Admissible Formulations. Part B. Theoretical physics. Held at the University of Massachusetts, Boston, Mass., August 4-9, 1980. Hadronic J. 4 (1980/81), no. 3. Hadronic Press, Inc., Nonantum, Mass., pp. 608-1165. (Editors) 82f:81002b 81-06 (17-06)

*Proceedings of the Third Workshop on Lie-Admissible Formulations. Part C. Experimental physics and bibliography. Held at the University of Massachusetts, Boston, Mass., August 7-9, 1980. Hadronic J. 4 (1980/81), no. 4. Hadronic Press,

nc., Nonantum, Mass., 1981. pp. 1166–1625. (Editors) 82181002c 81–106 (17–06) ceedings of the International School of Physics "Enrico Fermi" ★Problems in the foundations of physics. Proceedings of the International School of Physics "Enrico Fermi", Course LXXII, held at Varenna, 25th July-6th August 1977. Edited by G. Toraldo di Francia. North-Holland Publishing Co., Amsterdam-New York, 1979. xii + 497 pp. (1 plate). ISBN 0-444-85285-9 (Editors) 82m:81003

ceedings of the S. L. Sobolev Seminar, No. 1 *Теория кубатурных формул и приложения функционального анализа к задачам математческой физики. (Russian) [Theory of cubature formulas and the application of functional analysis to problems of

[Theory of cubature formulas and the application of functional analysis to problems of mathematical physics] Edited by S. V. Uspenskii. Труды Семинара С. Л. Соболева, No. 1 [Proceedings of the S. L. Sobolev Seminar, No. 1], 1980. Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1980. 152 pp. (Editors) 82j:65001 65-06 (49-06) seceedings of the S. L. Sobolev Seminar, No. 2 * *Дифферсенциальные уравшения с частными производильные. (Russian) [Partial differential equations] Edited by S. V. Uspenskii. Труды Семинара С. Л. Соболева, No. 2 [Proceedings of the S. L. Sobolev Seminar, No. 2], 80. Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1980. 154 np. (Editors) 282-3503. 35-06. 35-06 154 pp. (Editors) 82i:35003

33-00 sceedings of Symposia in Applied Mathematics ★Modern statistics: methods and applications. Lecture notes prepared for the American Mathematical Society Short

Course held in San Antonio, Tex., January 7-8, 1980. Edited by Robert V. Hogg. Proceedings of Symposia in Applied Mathematics, XXIII. American Mathematical Society, Providence, R.I., 1980. vi+110 pp. ISBN 0-8218-0023-X (P. K. Sen) 82c:62003

★Operations research. Mathematics and models. Lecture notes prepared for the American Mathematical Society Short Course held in Duluth, Minn., August 19–20, 1979. Edited by Saul I. Gass. Proceedings of Symposia in Applied Mathematics, 25. American Mathematical Society, Providence, R.I., 1981. x+198 pp. ISBN 0-8218-0029-9 (Editors) 82j:90002 . 90-06

★Game theory and its applications. Lecture notes prepared for the American Mathematical Society Short Course held in Biloxi, Miss., January 22–23, 1979. Edited by William F. Lucas. Proceedings of Symposia in Applied Mathematica, 24. American Mathematical Society, Providence, R.I., 1981. viii+125 pp. ISBN 0-8218-0025-6 (Editors) 90Dxx (90-06)

decedings of Symposia in Pure Mathematics *Proceedings of the Tarski Symposium.

Held at the University of California, Berkeley, Calif. June 23-30, 1971. Edited by Leon
Henkin, John Addison, William Craig, C. C. Chang [Chen Chung Chang], Dana Scott
and Robert Vaught. Corrected reprint of the 1974 original. Proceedings of Symposia in Pure Mathematics, XXV. American Mathematical Society, Providence, R. I., 1979 xx+498 pp. ISBN 0-8218-1425-7 (Editors) 82b:03006 03-06 (01A70)

★Algebraic geometry, Arcata 1974. Proceedings of the Symposium in Pure Mathematics of the American Mathematical Society (Twenty-First Annual Summer Research Institute) held at Humboldt State University, Arcata, Calif., July 29-August 16, 1974. Edited by Robin Hartshorne. Corrected reprint of the 1975 original. Proceedings of Symposia in Pure Mathematics, XXIX. American Mathematical Society, Providence, R. I., 1979. xiv+642 pp. ISBN 0-8218-1429-X (Editors) 82c:14003 14-06

★Recursive function theory. Proceedings of the Fifth Symposium in Pure Mathematics of the American Mathematical Society held in New York, April 6-7, 1961. Edited by J. C. E. Dekker. Corrected reprint of the 1962 original. Proceedings of Symposia in Pure Mathematics, V. American Mathematical Society, Providence, R.I., 1979, vii + 247 pp. ISBN 0-8218-1405-2 (Editors) 824:03065 03Dxx (03-06)

★Theory of numbers. Proceedings of the Symposium in Pure Mathematics of the American Mathematical Society held at the California Institute of Technology, Pasadena, Calif., November 21-22, 1963. Edited by Albert Leon Whiteman. Corrected reprint of the 1965 original. Proceedings of Symposia in Pure Mathematics, VIII. American tical Society, Providence, R.I., 1979. vii+216 pp. ISBN 0-8218-1408-7 (Editors) 824:10006 10-06

cessus aléatoires à deux indices *Processus aléatoires à deux indices. (French) [Two-index random processes] Papers from the E.N.S.T.-C.N.E.T. Colloquium held in Paris, June 30-July 1, 1980. Edited by Hayri Körezlioğlu, Gerald Mazziotto and Jacques

Fans, June 30-1111, 1980. Emited by Insyl Kolezinoglu, Octaid Mazzotto and Jacques Szpirglas. Lecture Notes in Mathematics, 863. Springer-Verlag, Berlin-New York, 1981. ii+274 pp. ISBN 3-540-10832-7 (Editors) 82i:60004 60-06 (60Gxx) duduction functions and factor demand functions are foreign for foreign for foreign functions and factor demand functions | Ann. I.N.S.É. No. 38-39 (1980), 1-286. Institut National de la Statistique et des Études Économiques, Paris, 1980. pp. 1-292. (G. Tintner) 82e:90019

gramming *Teoperвческое в системное программирование. (Russian) [Theoretical and systems programming] Edited by E. L. Julčenko [K. L. Julčenko] and V. V. Križanovskii. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kieo, 1979. 115 pp. (Editors) 82a:68008 68-06 (68E05)

★Les arbres en algèbre et en programmation. (French) [Trees in algèbra and programming] Proceedings of the Fifth Lille Colloquium held in Lille, February 21-23, 1980. Université de Lille I, U.E.R., I.E.E.A., Lille, 1980. iv + 268 pp. (Editors) 68-06

★CAAP '81. Proceedings of the Sixth Colloquium on Trees in Algebra and Programming held in Genoa, March 5-7, 1981. Edited by Egidio Astesiano and Corrado Bohm. Lecture Notes in Computer Science, 112. Springer-Verlag, Berlin-New York, 1981. vi+364 pp. ISBN 3-540-10828-9 (Editors) 821:68002 68-06 (68B05, 68E10)

укта трабор. 1831 годо под станова за за высовать по под станова и под

Progress in cybernetics and systems research *Progress in cybernetics and systems research. Vol. VI. Cybernetics in biology and medicine, systems analysis, systems engineering methodology, mathematical systems theory. Edited by Franz R. Pichler and Robert Trappl. Hemisphere Publishing Corp., Washington, D.C.-London; distribution outside the United States, McGraw-Hill Book Co. (UK), Ltd., London-New York, 1982. хііі +398 pp. ISBN 0-89116-194-5 (Editors) 821:00031 00A69 (92−06, 93−06)

Psychology ★Mатематическое моделярование в психологии. (Russian) [Mathematical modeling in psychology] Edited by G. E. Žuravlev, Ju. M. Zabrodin and V. F. Rubahin.

Voprosy Kibernet. (Moscow) No. 50 (1979). Akad. Nauk SSSR, Nauén. Sovet po Kompleksnoi Probleme "Kibernetika", Moscow, 1979. pp. 1-155. (Editors) 82f:92052

Public transport ★Computer scheduling of public transport. Urban passenger vehicle and crew scheduling. Papers based on presentations at the International Workshop held at the University of Leeds, Leeds, July 16–18, 1980. Edited by Anthony Wren. North-Holland Publishing Co., Amsterdam-New York, 1981. viii + 359 pp. ISBN 0-444-86170-X (Editors) 90B35 826:90053

жд.: 390853

underature and cubature See Schipke, Siegfried, 82g:00004

unditative and approximate methods for the investigation of operator equations

★Качественные и приближенные методы исследования операторных уравшений.

(Russian) (Qualitative and approximate methods for the investigation of operator equations]

Edited by P. P. Zabrelko. Jaroslav. Gos. Univ., Yaroslav!', 1980. 168 pp.

(Editors) 82d:00006 47-06 (00A10) 4/—со (OOA10) — Качественное последование дифференциальных уравнений. (Russian) [Qualitative investigations of functional differential equations: ★Kaчественное последование дифференциальных уравнений. (Russian) [Qualitative investigation of functional differential equations] Edited by Ju. A. Mitropol'skii and A. N. Šarkovskii [O. M. Šarkovskii]. "Naukova Dumka", Kiev., 1980. 188 pp. (Editors) 82e:34070 — 34Кхх аlitative theory of differential equations ★Качественная теория дифференциальных уравнений. (Russian) [Qualitative theory of differential equations] Edited by B. S.

- Žanbyrbaev. Kazah. Gos. Ped. Inst., Alma-Ata, 1979. 144 pp. (Editors) 82f:34003
- litative theory of optimal systems with continuous-discrete рагашеters * Качественная теория оптимальных систем с непрепрывно-дискретными параметрами. (Russian) [Qualitative theory of optimal systems with continuous-discrete parameters] Edited by
- [Qualitative theory of optimal systems with continuous-discrete parameters] Edited by K. Ja. Kuhta. "Naukova Dumka", Kiev., 1981. 148 pp. (Editors) 82k:49005 49-06 solutions in functional-differential equations **Qualitative theory of solutions in functional-differential equations. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 11-13, 1981. Sürikaisekikenkyüsho Kökyüröku No. 432 (1981). Kyoto University, Research te for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-114. (Editors) 82k:34001 34-06 (34K15)
- mization ★Field theory, quantization and statistical physics. In memory of Bernard Jouvet. Edited by E. Tirapegui. Mathematical Physics and Applied Mathematics, 6. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xxii + 322 pp. ISBN 90-277-1128-3
- Reidet Publishing Co., Dordrecht-Boston, Mass., 1981. xxii + 322 pp. ISBN 90-277-1128-3 (Editors) 82he81004 81-06 (82-06, 83-06) antum dynamics of molecules. The new experimental challenge to theorists. Proceedings of the NATO Advanced Study Institute held at the University of Cambridge, Cambridge, September 15-29, 1979. Edited by R. G. Woolley. NATO Advanced Study Institute Series, Ser. B: Physics, 57. Plenum Press, New York-London, 1980. xiv + 557 pp. ISBN 0-306-40462-1 (Editors) 82d:81175 81G55 (81-06)
- untum field theory *Вопросы квантовой теории поля и статистической физики. 2. (Russian) [Questions in quantum field theory and statistical physics. 2] Edited by P. P. Kuliš and V. N. Popov. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 101 (1981). "Nauka" Leningrad. Otdel., Leningrad, 1981. pp. 1-209. (Editors) 82g:81004
- anium fields—algebras, processes *Quantum fields—algebras, processes. Proceedings of the Symposium "Bielefeld Encounters in Physics and Mathematics, II" held at the Universität Bielefeld, Bielefeld, December 1–9, 1978. Edited by Ludwig Streit. Springer-Verlag, Vienna, 1980. ix + 444 pp. ISBN 3-211-81607-0 (Editors) 82b:81006 81-06 (60-06, 82-06)
- antum mechanics and the theory of relativity *KBarrrobag механика и теория относителности. (Russian) [Quantum mechanics and the theory of relativity] Edited by P. P. Pavinskii and A. M. Mostepanenko. Философские Вопросы Физики [Ph Problems in Physics], 2. Leningrad. Univ., Leningrad, 1980. 167 pp. (Editors) 82g:81003 81-06 (01-06, 81-03, 83-06)
- antum theory *Perspectives in quantum theory. Essays in honor of Alfred Lande. Edited by Wolfgang Yourgrau and Alwyn van der Merwe. Reprint of the 1971 original. Dover Publications, Inc., New York, 1979. xxxvii + 283 pp. ISBN 0-486-63778-6 (Editors) 824:81002 81-03 (00A89, 01A60)
- arks and leptons as fundamental particles *Quarks and leptons as fundamental particles. Proceedings of the XVIII. Internationale Universitätswochen für Kernphysik held at Karl-Franzens-Universität Graz, Schladming, February 28-March 10, 1979. Edited by Paul Urban. Acta Physica Austriaca Supplement, XXI. Springer-Verlag, Vienna, 1979.
- i+716 pp. ISBN 3-211-81564-3 (Editors) 821:81003 81-06 (81Gxx)
 asiconformal mappings and Riemann surfaces

 ★Quasiconformal mappings and Riemann surfaces. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 11-13, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 364 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-ii and 1-88. (Editors) 82a:30001 30-06 (30C60, 30F99) estions of the application of computers in the development and investigation of technical
- estions of the apparation of computers in the development and investigation of remaining systems Вопросы применения ЭВМ при разработке и исследовании технических систем. (Russian) [Questions of the application of computers in the development and investigation of technical systems] Edited by E. N. Stepanenko. Преприит 80 [Preprint 80], 42. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 56 pp. (Editors) 82g:68007 68-06 (03B99, 68K05)
- estions of the computational complexity of algorithms *Вопросы апализа вычислительной сложности алторитиюв. (Russian) [Questions of the computational complexity of algorithms] Edited by V. A. Iščuk. Преприит 79 [Preprint 79], 14. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kieo, 1979. 48 pp. (Editors) \$23c89366 68C25 (68-06)
- estions in the dynamical theory of seismic wave propagation
 **Boupocы динамической
 теория распространения сейсмических воли. Вып. ХХ. (Russian) [Questions in the
 dynamical theory of seismic wave propagation. No. XX] Edited by G. I. Petra8ev.
 "Nauka" Leningrad. Otdel., Leningrad, 1981. 216 pp. (Editors) 82k:86002 86-06 (73D25, 86A15)
- ns on the history of m ematical natural science *Вопросы истории математического естествознания. (Russian) [Questions on the history of mathematical natural science | Edited by A. N. Bogoljubov | O. M. Bogoljubov | Akad. Nauk Ukrain.

 SSR, Inst. Mat., Kiev, 1979. 143 pp. (Editors) 82i:01003 01-06

 stions of mathematical cybernetics and applied mathematics

 Bompocus
- математической киберистики и прикладной математики. Вып. 4. (Russian) [Questions of mathematical cybernetics and applied mathematics. No. 4] Edited by Dž. É.
- of maternatical cycle feets and applied maternatics. No. 4] Edited by DZ. E. Allahverdiev. "Elm", Baku, 1980. 180 pp. (Editors) 82g:93002 93-06 estions of modeling complex systems ★Вопросы моделирования сложных систем. (Russian) [Questions of modeling complex systems] Edited by T. P. Mar'janovič and T. K. Kuhta. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kieo, 1980. 80 pp. (Editors) 82i:93088a 93E12 (35R60, 60H15)
- estions on numerical mathematics *Некоторые вопросы вычислительной математики. (Russian) [Questions on numerical mathematics] Edited by E. N. epanenko. Препринт 80 [Preprint 80], 41. Akad. Nauk Ukrain. SSR, Inst. Kibernet.,
- Stepanenko. Преприят об [герппп об], «1. Akad. Nauk Ukrain. ээк., inst. kioernet., Кieo, 1980. 41 pp. (Editors) 82ic65000 65-06 estions in quantum field theory and statistical physics ★Вопросы квантовой теории поля и статистической физикка. 2. (Russian) [Questions in quantum field theory and statistical physics. 2] Edited by P. P. Kuliš and V. N. Popov. Zap. Naučn. Sem. Lemingrad. Otdel. Mat. Inst. Steklov. (LOMI) 101 (1981). "Nauka" Leningrad. Otdel.,
- Leningrad, 1981. pp. 1–209. (Editors) 82g-81004 81−06 stions of the theory of the approximation of functions

 В поросы теории анпроксымации функций. (Russian) [Questions of the theory of the approximation of

- functions] Edited by V. K. Dzjadyk and N. P. Korneïčuk [M. P. Kornîïčuk]. Akad. Nauk
- Ukrain. SSR, Inst. Mat., Kiev. 1980. 203 pp. (Editors) 82i:41003 41-06 eueing theory and its applications *Queueing theory and its applications. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, January 22-24, 1981. Sürikaisekikenkyüshö Kökyüroku No. 425 (1981). Kyoto University.
- nyoto University, Nyoto, January 22–24, 1981. Sunrkaisekikenkyūsho Kökyūroku No. 425 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i−ii and 1−161. (Editors) 82g:60004 60–06 (60K25) dom systems and dynamical systems ★Random systems and dynamical systems.

 Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, January 7-9, 1981. Sûrikaisekikenkyûsho Kôkyûroku No. 439 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto,
- pp. i-ii and 1-137. (Editors) 82k:58039

 58Fxx (60160, 70K50, 76F99, 82-06, 82A05)

 bent advances in differential equations

 Recent advances in differential equations.

 Proceedings of the International Conference held in Trieste, August 24-26, 1978. Edited by Roberto Conti. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xi+447 pp. ISBN 0-12-186280-1 (Editors) 82m:34003 34-06
- Recent contributions to nonlinear partial differential equations. ★Recent contributions to nonlinear partial differential equations. Lectures given at the University Pierre and Marie Curie, Paris, 1978–1979. Edited by Henry Berestycki and Haïm Brêzis. Research Notes in Mathematics, 50. Pitman (Advanced Publishing Program), Boston,
- Mass.-London, 1981. vi + 226 pp. ISBN 0-273-08492-5 (Editors) 82k:35001 cent developments in Markov decision processes *Recent developments in Markov decision processes. Proceedings of an International Conference on Markov Decision Processes held at the University of Manchester, Manchester, July 17-19, 1978. Edited by R. Hartley [Roger Hartley], L. C. Thomas and D. J. White. Institute of Mathematics and its Applications Conference Series. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1980. xiv+334 pp. ISBN 0-12-328460-0 (A. A. Juškevič) 82k-90128 90C40 (90C39)
- N. J., April 16-20, 1979. Edited by John E. Fornaess. Annals of Mathematics Studies, 100. Princeton University Press, Princeton, N.J.; University of Tokyo Press, Tokyo, 1981. xi + 452 pp. ISBN 0-691-08285-5, 0-691-08281-2 (Editors) 82g:32002
- Recent developments in theoretical and experimental fluid mechanics *Recent developments in theoretical and experimental fluid mechanics. Compressible and incompressible flows. Edited by U. Müller, K. G. Roesner and B. Schmidt. Dedicated to Jürgen Zierep on his 50th birthday. Springer-Verlag, Berlin-New York, 1979. xxvii + 642 pp. ISBN 3-540-09228-5 (Editors) 82c:76004 76-06
- ent progress in analytic number theory Recent progress in analytic number theory.

 Vol. 1. Papers from the Symposium held at Durham University, Durham, July 22-August 1, 1979. Edited by H. Halberstam and C. Hooley. Academic Press, Inc. [Harcourt Brace Jocanovich, Publishers], London-New York, 1981. xii + 348 pp.

 1SBN 0-12-318201-8 (Editors) 82k:10005a 10-06

 ★Recent progress in analytic number theory. Vol. 2. Papers from the Symposium
 - held at Durham University, Durham, July 22-August 1, 1979. Edited by H. Halberstam and C. Hooley. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1981. xii + 280 pp. ISBN 0-12-318202-6 (Editors) 82k:10005b
- cent topics in algebraic geometry *Recent topics in algebraic geometry. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, October 6-8, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 409 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i−ii and 1−152. (Editors) 82d:14001 14−06

 Recursive function theory ★Recursive function theory. Proceedings of the Fifth Symposium in Pure Mathematics of the American Mathematical Society held in New
- York, April 6-7, 1961. Edited by J. C. E. Dekker. Corrected reprint of the 1962 original. Proceedings of Symposia in Pure Mathematics, V. American Mathematical Society, Providence, R. I., 1979. vii + 247 pp. ISBN 0-8218-1405-2 (Editors) 82d:03065 (03-06)
- lections on a mathematical concept. A few reflections on a mathematical concept. Rev. Roumaine Math. Pures Appl. 26 (1981), no. 6, 825. (Editors) 82h:60004 60-03 Reflections on a math
- ular semigroups *Proceedings of a Symposium on Regular Semigroups. Held at Northern Illinois University, DeKalb, Ill., April 20-21, 1979. Northern Illinois University, Department of Mathematical Sciences, DeKalb, Ill., 1979. iv + 192 pp. (G. J. Lallement) 20M10 (20-06)
- Relativity *Gravitation, quanta and the universe. Proceedings of the Einstein Centenary Symposium held at Ahmedabad, January 29-February 3, 1979. Edited by A. R. Prasanna, J. V. Narlikar and C. V. Vishveshwara. A Halsted Press Book. John Wiley & Sons, Inc., New York, 1980. xiv + 326 pp. (1 plate). ISBN 0-470-27007-1 (Editors) 82d:83005 83-06 (81-06, 85-06)
 - ★Квантовая механика и теория относительности. (Russian) [Quantum mechanics and the theory of relativity] Edited by P. P. Pavinskii and A. M. Mostepanenko. Философские Вопросы Физики [Philosophical Problems in Physics], 2. Leningrad. Univ., Leningrad, 1980. 167 pp. (Editors) 82g:81003 81-06 (01-06, 81-03, 83-06)
- Unic., Leningrad, 1980. 167 pp. (Editors) 82g:81003 81-06 (01-06, 81-03, 83-06)

 Relativity, quanta, and cosmology in the development of the scientific thought of Albert

 Einstein *Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein. Vol. I, II. Edited by Mario Pantaleo and Francesco de Finis. n Reprint Corp., New York, 1979. xii+825 pp. (1 plate). ISBN 0-384-14090-4,
- 0-384-14091-2 (Lawrence Sklar) 82h:83002 83-03 (00A69, 01A70, 58D25)

 newable resource management *Renewable resource management. Proceedings of a

 Workshop on Control Theory Applied to Renewable Resource Management and Ecology held at the University of Canterbury, Christchurch, January 7-11, 1980. Edited by Thomas L. Vincent and Janislaw M. Skowrónski. Lecture Notes in Biomathematics, 40. Springer-Verlag, Berlin-New York, 1981. xii + 236 pp. ISBN 3-540-10566-2 (Editors)
- 82k:90001 90-06 (92-06)
 mes ★Séminaire de Probabilités, Rennes 1979. (French) [Seminar on Probability, Rennes 1979] Université de Rennes, Rennes, 1979. 96 pp. (not consecutively paged). (Editors) 82a:60005 60-06
 - ★Colloque d'Algèbre. (French) [Algebra Colloquium] Held at the Université de

- es, Rennes, May 28-31, 1980. Université de Rennes, Rennes, 1980. v+308 pp.
- (Editors) 82m:13001 13-06 (16-06)

 Reno, Nev. ★Scientific discovery, logic, and rationality. Papers presented at the First Guy

 L. Leonard Memorial Conference in Philosophy held at the University of Nevada, Reno, New, October 29–31, 1978. Edited by Thomas Nickles. Boston Studies in the Philosophy of Science, 56. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. xii +385 pp. 158N 90-277-1069-4, 90-277-1070-8 (Editors) 82g:03006 03-06 (03A05) resentation of knowledge and reason in the humans sciences ** Représentation des
- connaissances et raisonnement dans les sciences de l'homme. (French) [Representation of knowledge and reason in the human sciences] Papers from the I.R.I.A.-L.I.S.H. Colloquium held at Saint Maximin, September 17-19, 1979. Edited by Mario Borillo. Institut National de Recherche en Informatique et en Automatique (INRIÁ), Rocquencourt, 1980. iii + 607 pp. ISBN 2-7261-0234-4 (Editors) 82d:03007 03-06

Representation theorems for Hardy spaces * Representation theorems for Hardy spaces.

Astérisque, 77. Société Mathématique de France, Paris, 1980. i+151 pp. (Editors) 32-06 (42-06, 46-06)

See also Colfman, R. R.; et al., 82g:32010

See also Colfman, R. R.; et al., 82g:32010

resentation theory *Representation theory. I. Proceedings of the Workshop on the Present Trends in Representation Theory held at Carleton University, Ottawa, Ont., August 13–18, 1979. Edited by Vlastimil Dlab and Peter Gabriel. Lecture Notes in Mathematics, 831. Springer-Verlag, Berlin-New York, 1980. xiv + 373 pp. ISBN 3-540-10263-9 (Editors) 82a:16002a 16-06 (16A64)

*Representation theory. II. Proceedings of the Second International Conference on Representations of Algebras held at Carleton University, Ottawa, Ont., August 13-25, 1979. Edited by Vlastimil Dlab and Peter Gabriel. Lecture Notes in Mathematics, 832. Springer-Verlag, Berlin-New York, 1980. xiv + 673 pp. ISBN 3-540-10264-7 (Editors)

16-06 (16A64)

in the field of science and engineering *Revoluční změny v oblasti vědy a techniky. (Czech) [Revolutionary developments in the field of science and engineering] 2. poloviny 19. a počátku 20. století jako předpoklad vědeckotechnické revoluce. [The second half of the nineteenth and the beginning of the twentieth century as the basis of the scientific-technical revolution]. Papers presented at the Conference held the basis of the scientific-terminal revolution), Papers presented at the Conference near at Liblice, October 18—20, 1979. Edited by Luboš Nový. Práce z Dějin Přírodních Věd [Works in the History of Natural Sciences], 13. Československé Akademie Věd (ČSAV), Prague, 1980. 462 pp. (Editors) 82g-01002 01—06 (01A55, 01A60) mann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference.

Held at the State University of New York, Stony Brook, N.Y., June 5-9, 1978. Edited by Irwin Kra and Bernard Maskit. Annals of Mathematics Studies, 97. Princeton University

Press, Princeton, N.J.; University of Tokyo Press, Tokyo, 1981. ix +517 pp. ISBN 0-691-08264-2 (Editors) 82f:32002 32-06 (30Fxx, 32G15)

ngs, algebras, modules ** Кольда, алтебры, модули. (Russian) [Rings, algebras, modules]
Edited by V. A. Andrunakievič. Mat. Issled. No. 62 (1981). "Štiinca", Kishinev, 1981. pp. 1-152. (Editors) 82d:16001 16-06

Rio de Janeiro ★Functional analysis, holomorphy and approximation theory. Proceedings of the Seminar held at the Universidade Federal do Rio de Janeiro, Rio de Janeiro, August 7-11, 1978. Edited by Silvio Machado. Lecture Notes in Mathematics, 843. Springer-Verlag, Berlin-New York, 1981. vi + 636 pp. ISBN 3-540-10560-3 (Editors) 46-06 (32-06)

82c:46003 46-06 (32-06)
Riverside, Calif. ★General topology and modern analysis. Proceedings of the Conference held at the University of California, Riverside, Calif., May 28-31, 1980. In honor of the retirement of Professor F. Burton Jones. Edited by L. F. McAuley and M. M. Rao.

Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xv+514 pp. ISBN 0-12-481820-X (Editors) 82e:54001 54-06

*Robuste Verfahren. (German) [Robust methods] Twenty-fifth Biometric Colloquium of the German Region of the International Biometric Society held in Bad Nauheim, March 9, 1979. Edited by Horst Nowak and Reinhard Zentgraf. Medizinische Informatik und Statistik [Medical Information Science and Statistics], 20. Springer-Verlag, Berlin-New York, 1980. v+121 pp. (loose errata). ISBN 3-540-10234-5 (Helmut Rieder) 82i:62003 62-03 (62F35)

equencourt *Analyse et contrôle de systèmes. (English) [Analysis and control of systems] Papers from the Seminar organized by the Institut de Recherche d'Informatique et d'Automatique (IRIA) held at Rocquencourt, February-October 1979. Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. 121 pp. ISBN 2-7261-0237-9 (Editors) 821:60004 60-06 (49-06)

Classification automatique et perception par ordinateur. (French) [Automatic pattern recognition and perception by computer | Papers from the Seminar organized by the Institut de Recherche d'Informatique et d'Automatique (IRIA) held at Rocquencourt. October 1978-June 1979. Institut National de Recherche en Infor Automatique (INRIA), Rocquencourt, 1980. 345 pp. ISBN 2-7261-0238-7 (Editors) 821:68001 68-06 (68G10)

68-06 (68G10)

Role of coherent structures in modelling turbulence and mixing *The role of coherent structures in modelling turbulence and mixing. Proceedings of the International Conference held in Madrid, June 25-27, 1980. Edited by Javier Jimenez. Lecture Notes in Physics, 136. Springer-Verlag, Berlin-New York, 1981. xiii + 393 pp. ISBN 3-540-10289-2 (Editors) 82c:76062 76Fxx (76-06, 80A25)

me ★Symposia Mathematica. Vol. XXV. Conference on Statistical Theory of Decisions held at the Istituto Nazionale di Alta Matematica Francesco Severi (INDAM), Rome,

June 4-7, 1979. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1980. 204 pp. (Editors) 82e:62015 62C99

★Vito Volterra Symposium on Mathematical Models in Biology. Proceedings of a Conference held in Rome, December 17-21, 1979. Edited by Claudio Barigozzi. Lecture Notes in Biomathematics, 39. Springer-Verlag, Berlin-New York, 1980. vi+417 pp. ISBN 3-540-10279-5 (Editors) 82j-92003 92-06 (92A17)

★ Symposia Mathematica. Vol. XXIV. International Symposium on Algebrai

Geometry held at the Istituto Nazionale di Alta Matematica Francesco Severi (INDAM), Rome, April 9-14, 1979. In the centenary of the birth of Francesco Severi. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1981. xv + 356 pp. (1plate). (Editors) 82e:14005 14-06 kilde ★Mathematics and the real world. Proceedings of an International Workshop

held at the Roskilde University Centre, Roskilde, August 1978. Edited by Bernhelm Booss and Mogens Niss. Interdisciplinary Systems Research, 68. Birkhäuser Verlag, Basel-Boston, Mass., 1979. 136 pp. ISBN 3-7643-1079-0 (K. E. Hirst) 82j:00018

Rouen ★Statistique non paramétrique asymptotique. (French) [Nonparametric asymptotic statistics] Proceedings of the Conference on Statistics held at Rouen, June 13-14, 1979. Edited by Jean-Pierre Raoult. Lecture Notes in Mathematics, 821. Springer-Verlag, Berlin-New York, 1980. vi+175 pp. 18BN 3-540-10239-6 (Editors) 82a-63007 62-06 sell's early philosophy Bertrand Russell's early philosophy. Part I. Edited by

Jaakko Hintikka. Synthese 45 (1980), no. 1. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1980. pp. 1-189. (Editors) 82e:03005a 03-03 (00A25, 01A70, 03A05)
 ★Bertrand Russell's early philosophy. Part II. Edited by Jaakko Hintikka. Synthese
 46 (1981), no. 2. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. pp. 149-284.

(Editors) 82e:03005b 03-03 (00A25, 01A70, 03A05, 92A05)

(Editors) 82e:13980b U3-U3 (UAALS, ULA IV, USAUS, 72-U3)

Saarbrücken ★GI-U1 Jahrestagung (German) Held in Saarbrücken, September

30-October 2, 1980. Edited by R. Wilhelm. Informatik-Fachberichte [Technical Reports on Information Science], 33. Springer-Verlag, Berlin-New York, 1980. xv+563 pp. ISBN 3-540-10388-0 (Editors) 82b:68003 68-06

Saint Flour École d'Été de Probabilités de Saint-Flour IX-1979. (French) [Ninth Saint Flour Probability Summer School—1979] Held at Saint Flour, August 19-September 5, 1979. Edited by Paul-Louis Hennequin. Lecture Notes in Mathematics, 876. Springer-Verlag, Berlin-New York, 1981. ix+280 pp. ISBN 3-540-10860-2 (Editors)

82k:6006 60-06

Saint Maximin ★Représentation des connaissances et raisonnement dans les sciences de Papers from the I.R.I.A.-L.I.S.H. Colloquium held at Saint Maximin, September 17-19, 1979. Edited by Mario Borillo. Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. iii +607 pp. ISBN 2-7261-0234-4 (Editors) 03-06

nanca *Differential geometrical methods in mathematical physics. Proceedings of the International Colloquium of the CNRS held in Aix-en-Provence, September 3-7, 1979, and a conference held in Salamanca, September 10-14, 1979. Edited by P. L. García, A. Pérez-Rendón and J. M. Souriau. Lecture Notes in Mathematics, 836. Springer-Verlag, Berlin-New York, 1980. xii + 533 pp. ISBN 3-540-10275-2 (Editors) 82a:81003 (83-06)

Salt Lake City, Utah *Mathematical aspects of physiology. Proceedings of the Twelfth er Seminar on Applied Mathematics held at the University of Utah, Salt Lake City, Utah, June 15-27, 1980. Edited by Frank C. Hoppensteadt. Lectures in Applied Mathematics, 19. American Mathematical Society, Providence, R.I., 1981. vi+394 pp. ISBN 0-8218-1119-3 (Editors) 82f:92003 92-06 (34-06, 35-06, 76-06)

San Antonio, Tex. *Modern statistics: methods and applications. Lecture notes prepared for the American Mathematical Society Short Course held in San Antonio, Tex., January 7-8, 1980. Edited by Robert V. Hogg. Proceedings of Symposia in Applied Mathematics, XXIII. American Mathematical Society, Providence, R. I., 1980. vi+110 pp. ISBN 0-8218-0023-X (P. K. Sen) 82c:62003 62-01

San Diego, Calif. * 1978 Proceedings of the Social Statistics Section, American Statistical Association. Papers presented at the Annual Meeting held in San Diego, Calif., August 14-17, 1978. American Statistical Association, Washington, D.C., 1978. xii+806 pp. (Editors) 82c:62004a 62-06 (65U05, 90A19)

★1978 Proceedings of the Statistical Computing Section, American Statistical Association. Papers presented at the Annual Meeting held in San Diego, Calif., August 14-17, 1978. American Statistical Association, Washington, D.C., 1978. viii+425 pp. (Editors) 82c:62004b 62-06 (65U05, 90A19, 90Cxx)

Francisco, Calif. *Some mathematical questions in biology. Proceedings of the Fourteenth Symposium held in San Francisco, Calif., January 7, 1980. Edited by George F. Oster. Lectures on Mathematics in the Life Sciences, 13. American Mathematical Society, Providence, R.I., 1980. vi+274 pp. ISBN 0-8218-1163-0 (Editors) 82h:92002 92-06

San Juan, Puerto Rico \$20th Annual Symposium on Foundations of Computer Science. Held in San Juan, Puerto Rico, October 29-31, 1979. IEEE Computer Society, New York, 1979. vii + 431 pp. (Editors) 82a:68004 68-06

*(Special issue dedicated to Michael Machtey). Papers presented at the Twentieth Annual Symposium on the Foundations of Computer Science held in San Juan, Puerto Rico, October 29-31, 1979. Edited by S. Rao Kosaraju and Albert R. Meyer. J. Comput. System Sci. 22 (1981), no. 3,261-470. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. pp. 261—471. (Editors) 82i:69005 6f
Scattering theory *Mathematical methods and applications of scattering theory

Proceedings of a Conference held at Catholic University, Washington, D.C., May 21-25, 1979. Edited by John A. DeSanto, Albert W. Sáenz and Woodford W. Zachary. Lecture Notes in Physics, 130. Springer-Verlag, Berlin-New York, 1980. xiii + 331 pp ISBN 3-540-10023-7 (Editors) 82h:81117 81Fxx (35P25, 73D99, 78A45, 81-06)

ladming *Quarks and leptons as fundamental particles. Proceedings of the XVIII. Internationale Universitätswochen für Kernphysik held at Karl-Franzens-Universität Graz, Schladming, February 28-March 10, 1979. Edited by Paul Urban. Acta Physica Austriaca Supplement, XXI. Springer-Verlag, Vienna, 1979. i + 716 pp. ISBN 3-211-81564-3 (Editors) 821:81003 81-06 (81Gxx) ISBN 3-211-81564-3 (Editors) 82f:81003

★Field theory and strong interactions. Proceedings of the XIX. Internationale Universitätswochen für Kernphysik held at Karl-Franzens-Universität Graz, Schladming. February 20-29, 1980. Edited by Paul Urban. Acta Physica Austriaca Supplement, XXII. Springer-Verlag, Vienna, 1980. 815 pp. ISBN 3-211-81615-1 (Editors) 82c:81001

CERN, Computing *Proceedings of the 1980 CERN School of Computing. Held in Vraona, September 14-27, 1980. Edited by C. Verkerk. CERN 81, 3.

CERN—Organisation Européenne pour la Recherche Nucléaire, Geneca, 1981. vii +408 pp. (Editors) \$24c68003 68-06 in American, Physics ★Group theory and its applications in physics—1980. Papers from the Latin American School of Physics held in Mexico City, June 2-20, 1980. Edited by Thomas H. Seligman. AIP Conference Proceedings, 71. American Institu of Physics, New York, 1981. vi+349 pp. ISBN 0-88318-170-3 (Editors) 82k:81001

ence, belief and behaviour
Science, belief and behaviour. Essays in honour Braithwaite. Edited by David Hugh Mellor. Cambridge University Press, Cambr York, 1980. xii + 227 pp. (1 plate). ISBN 0-521-22960-X (I. J. Good) 82g:03014 03A05 (00A25, 03B48, 92A25) *Science, belief and behaviour. Essays in honour of R. B.

mee and history *Science and history. Studies in honor of Edward Rosen. Edited by Erna Hilfstein, Pawel Czartoryski and Frank D. Grande. Studia Copernicana, XVI. Ossolineum Publishing Co., Wrocław, 1978. 553 pp. (1 plate). (William R. Shea)

01-06 (01A35, 01A40)

entific discovery, logic, and rationality

*\Delta Scientific discovery, logic, and rationality. Papers presented at the First Guy L. Leonard Memorial Conference in Philosophy held at the University of Nevada, Reno, Nev., October 29-31, 1978. Edited by Thomas Nickles. Boston Studies in the Philosophy of Science, 56. D. Reidel Publishing Co., ston, Mass., 1980. xii + 385 pp. ISBN 90-277-1069-4, 90-277-1070-8 (Editors) rdrecht-Ba 03-06 (03A05)

ntific management of transport systems
Scientific management of transport systems.

Papers presented at the International Conference on Transportation held in New Delhi, November 26–28, 1980. Edited by N. K. Jaiswal. North-Holland Publishing Co., m-New York, 1981. ix + 377 pp. ISBN 0-444-86205-6 (Editors) 82i:90

90..06

entific research investigations of the Institute of Mathematical Machines *Prace Naukowo-Badawcze Instytutu Maszyn Matematycznych. II. (Polish) [Scientific research investigations of the Institute of Mathematical Machines. II] Instytut Maszyn investigations of the Institute of Mathematical Machines. 11] Instylin Massyn Matematycznych, Warsaw, 1980. 95 pp. (Editors) 82hc68114a 68F25 entific and scientific organizational activity of the Central Economics and Mathe

Institute from 1970–1978 The scientific and scientific-organizational activity of the Central Institute of Economics and Mathematics from 1970–1978. (Russian) Vestnik Akad. Nauk SSSR 1980, no. 3, 3–11. (Editors) 82h:01073 01A74

tle, Wash. *Electric power proble ems: the mathematical challenge. Proceedings of a Conference held in Seattle, Wash., March 18-20, 1980. Edited by A. M. Erisman, K. W. Neves and M. H. Dwarakanath. Society for Industrial and Applied Mathematics (SIAM), Philadelphia, Pa., 1980. xix+531 pp. ISBN 0-89871-173-8 (Editors) 32a:90004 90-06 (65-06)

ted pape

*Selected papers on geometry. Reprinted from the American Mathematical Monthly (Vols. 1-81) and from the Mathematics Magazine (Vols. 1-47). Edited by Ann K. Stehney, Tilla K. Milnor, Joseph E. D'Atri and Thomas F. Banchoff. Raymond W. Brink Selected Mathematical Papers, 4. Mathematical Association of America, Washington, D.C., 1979. x+338 pp. ISBN 0-88385-204-7 (B. Artmann) 82c:01041 01A60 (00A05, 01A75, 51-01) ected questions in continuum dynamics ★Избранные вопросы динамики сплог

cpen. (Russian) [Selected questions in continuum dynamics] Edited by O. V. Golubeva. "Nauka", Moscow, 1980. 86 pp. (Editors) 82e:76003 76-06 (76S05)

lected tables in mathematical statistics See Neff, Norman D.; et al., 82a:62157

nattics of programming languages **Cevaturaxa sustice of programming languages **Cevaturaxa sustice of programming languages **Levaturaxa sustice of programming languages] Papers translated from the English by A. N. Birjukov and V. A. Serebrjakov. Edited and with a preface by V. M. Kuročkin. "Mir", Moscow, 1980. 395 pp. (Editors) \$24.68051 68720 (68-06) ilconductor physics **New developments in semiconductor physics. Proceedings of the

International Summer School held at the University of Szeged, Szeged, July 1-6, 1979. Edited by Ferenc Beleznay, György Ferenczi and János Giber. Lecture Notes in Physics, 122. Springer-Verlag, Berlin-New York, 1980. ii + 276 pp. ISBN 3-540-09988-3 (Editors) 82-06

roups Notes on semigroups. VI. Edited by S. Lajos. DM 80, 4. Karl Marx University of Economics, Department of Mathematics, Budapest, 1980. 28 pp. (Editors) 821:20007 20-06 (20Mxx)

★Proceedings of the 4th Symposium on Semigroups. Semigroup theory and its related fields. Held at Yamaguchi University, Yamaguchi, October 6-8, 1980. Edited by Kentaro Murata. Yamaguchi University, Yamaguchi, 1980. v+131 pp. (Editors) 82f:20008 20-06 (20Mxx)

★Semigroups. Proceedings of a Conference held at the Mathematical Research Institute, Oberwolfach, December 16-21, 1978. Edited by H. Jürgensen, M. Petrich and H. J. Weinert. Lecture Notes in Mathematics, 855. Springer-Verlag, Berlin-New York, 1981. v+221 pp. ISBN 3-540-10701-0 (Editors) 82f:20009 20-06 (20Mxx)

migroups and related topics *Semigroups and related topics. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 15-17, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 395 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-137. (Editors) 82a:20002 20-06 (16-06, 20Mxx) (Editors) 82a:20002

rbaki ★Séminaire Bourbaki. Vol. 1979/80. (French) [Bourbaki Seminar. Vol. 1979/80] Exposés 543-560. Lecture Notes in Mathematics, 842. Springer-Verlag, n-New York, 1981. iv + 317 pp. ISBN 3-540-10292-2 (Editors) 82k:00009 00A10

Delange-Pisot-Poitou *Séminaire de Théorie des Nombres, Paris 1979-80. [Seminar on Number Theory, Paris 1979-80] Séminaire Delange-Pisot-Poitou. [Delange-Pisot-Poitou Seminar] Held in Paris, 1979-80. Edited by Marie-José Bertin. Progress in Mathematics, 12. Birkhäuser, Boston, Mass., 1981. ix + 394 pp.

ISBN 3-7643-3035-X (Editors) 82j:10004 10-06
breil Paul-Malliavin, Marie-Paule, Algebra
Marie-Paule Malliavin, 33ème Année. [Paul Dubreil and Marie-Paule Malliavin Algebra Seminar, 33rd Year] Held in Paris, 1980. Edited by Marie-Paule Malliavin [Marie-Paule Malliavin-Brameret]. Lecture Notes in Mathematics, 867. Springer-Verlag, Berlin-New York, 1981. v+476 pp. ISBN 3-540-10841-6 (Editors) 82i:16001 16-06

abud, D.-Singh, B.-Vogel, W. *Seminar D. Eisenbud / B. Singh / W. Vogel. Vol. 1. Teubner-Texte zur Mathematik [Teubner Texts in Mathematics], 29, 85B B. G. Teubner Verlagsgesellschaft, Leipzig, 1980. 144 pp. (Editors) 82b:14001 14-06 (13-06)

ebraic Geometry ★Surfaces algébriques. (French) [Algebraic surfaces] Seminar on Algebraic Geometry held in Orsay, 1976–78. Edited by Jean Giraud, Luc Illusie and

Michel Raynaud. Lecture Notes in Mathematics, 868. Springer-Verlag, Berlin-New York, 1981. ii+314 pp. ISBN 3-540-10842-4 (Editors) 82:10052 10D21 (14125) slied Mathematics Nonlinear partial differential equations and their applications. Collège de France Seminar. Vol. I. Proceedings of the Seminar on Applied

Mathematics held at the Collège de France, Paris, 1978–1979. Edited by Haim Brézis and Jacques-Louis Lions. Research Notes in Mathematics, 53. Pitman (Advanced ing Program), Boston, Mass.-London, 1981. iv + 388 pp. ISBN 0-273-08491-7 (Editors) 82i:35002 35-06 uer Group ★Groupe de Brauer. (French) [The Brauer group] Papers from a

Seminar held at Les Plans-sur-Bex, March 16-22, 1980. Edited by Michel Kervaire and Manuel Ojanguren. Lecture Notes in Mathematics, 844. Springer-Verla Berlin-New York, 1981. iii + 274 pp. ISBN 3-540-10562-X (Editors) 82c:14004

14-06 (16-06)

ar 77-79. Proceedings of the Caltech-UCLA Logic Seminar,

Nama Seminar, 17-79. Froceedings of the Cartect-O'LA Logic Seminar, 1977-79. Edited by Alexander S. Kechris, Donald A. Martin and Yiannis N. Moschovakis. Lecture Notes in Mathematics, 839. Springer-Verlag, Berlin-New York, 1981. ii + 274 pp. ISBN 3-540-10288-4 (Editors) 82ec03002. 03-06 (03E15)

Caltech-UCLA Logic ★Cabal Seminar 77-79. Proceedings of the Caltech-UCLA Logic Seminar, 1977-79. Edited by Alexander S. Kechris, Donald A. Martin and Yiannis N. Moschovakis. Lecture Notes in Mathematics, 839. Springer-Verlag, Berlin-New York, 1981. ii + 274 pp. ISBN 3-540-10288-4 (Editors) 82c:03002 03-06 (03E15)

U3E-15)

Classification and Clustering ★Классификация и кластер. (Russian) [Classification and clustering] Proceedings of an Advanced Seminar held at the University of Wisconsin, Madison, Wis., May 3-5, 1976. Edited by John Van Ryzin. Translated from the English by P. P. Kol'cov. "Mir", Moscow, 1980. 389 pp. (Editors) 62H30

uplex Analysis and Spectral Theory
Complex analysis and spectral theory. Papers from the Seminar held in Leningrad, 1979/1980. Edited by V. P. Havin and N. K. Nikol'skii. Lecture Notes in Mathematics, 864. Springer-Verlag, Berlin-New York, 1981. vi+480 pp. ISBN 3-540-10695-2 (Editors) 82m:46001

Ergodic Theory ★Théorie ergodique. (French) [Ergodic theory] Papers presented at the Seminar held at Les Plans-sur-Bex, March 23-29, 1980. Monographies de L'Enseignement Mathématique [Monographs of L'Enseignement Mathématique], 29. Université de Genève, L'Enseignement Mathématique, Geneva, 1981. 112 pp. (Editors)

28-06 (28Dxx)

*The Proceedings of the National Seminar on Finsler Spaces. Held at the University of Braşov, Braşov, February 1980. Edited by I. P. Popescu. Universitatea din Timişoara, Societatie de Științe Matematice din R.S. Ro

Timişoara, 1981. 221 pp. (Editors) 82k:53002 53-06 (53C60)

ictional Analysis, Holomorphy, and Approximation Theory *Functional analysis, holomorphy and approximation theory. Proceedings of the Seminar held at the Universidade Federal do Rio de Janeiro, Rio de Janeiro, August 7-11, 1978. Edited by Silvio Machado. Lecture Notes in Mathematics, 843. Springer-Verlag, Berlin-New York, 1981. vi+636 pp. ISBN 3-540-10560-3 (Editors) 82c:46003 46-06 (32-06)

Gomel', Algebraic *Подгрупповое строение конечных групп. (Russian) [Subgroup structure of finite groups] Proceedings of the Gomel' Algebraic Seminar held in Gomel', 1977-80. Edited by V. S. Monahov. "Nauka i Tehnika", Minsk, 1981.

232 pp. (Editors) 82j:20004 20-06

ic Analysis *Séminaire d'Analyse Harmonique (1979-1980). (French) [Seminar on Harmonic Analysis (1979-1980)] Publications Mathématiques d'Orsay 80 [Mathematical Publications of Orsay 80], 7. Université de Paris-Sud, Département de natique, Orsay, 1980. ii + 88 pp. (Editors) 82d:43001

★Proceedings of the Seminar on Harmonic Analysis. Held in Pisa, April 8-17, 1980. Rend. Circ. Mat. Palermo (2) 1981, Suppl. No. 1. Circolo Matematico di Palermo, Palermo, 1981. pp. i-x and 1-209. (Editors) 82m:42001 42-06

uting *Vorträge aus dem Problemseminar: Hybridrechentechnik (German) [Lectures from the Problem Seminar: Hybrid Computing] Held in Weißig, March 26-30, 1979. Weiterbildungszentrum für Mathematische Kybernetik und Rechentechnik, Informationsverarbeitung [Center for Continuing Education for Mathematical Cybernetics, Computing Technique and Information Processing], 41.

Technische Universität Dresden, Dresden, 1980. 121 pp. (Editors) 82c:68064

thematical Statistics *Séminaire de Statistique Mathématique. (French) [Seminar on Mathematical Statistics] Publ. U.E.R. Math. Pures Appl. IRMA 1 (1979), no. 4. Université de Science et Techniques de Lille, Villeneuve d'Ascq, 1979. 106 pp. (not consecutively paged). (Editors) 82c:62005

Methods of Numerical and Applied Mathematics

* Методы решения систем

вариационно-разностных уравнений. Вып. 5. (Russian) [Methods for solving systems of variational-difference equations. No. 5] Proceedings of the Seminar on Methods of Numerical and Applied Mathematics held in Novosibirsk, 1979. Edited by G. I. Marčuk. Akad. Nauk SSSR Sibirsk. Otdel., Vyčisl. Centr., Novosibirsk., 1979.

159 pp. (Editors) 82i:65001 65-06

nber Theory ★Séminaire de Théorie des Nombres, Paris 1979-80. [Seminar on Number Theory, Paris 1979-80] Séminaire Delange-Pisot-Poitou. [Delange-Pisot-Poitou Seminar] Held in Paris, 1979-80. Edited by Marie-José Bertin.

Progress in Mathematics, 12. Birkhäuser, Boston, Mass., 1981. ix + 394 pp

ISBN 3-7643-3035-X (Editors) 82i:10004 10-06

★Séminaire de Théorie de Nombres, 1980-1981. (French) [Seminar on Number Theory, 1980-1981] Held at the Université de Bordeaux I, Talence, during the academic year 1980-1981. Université de Bordeaux I, U.E.R. de Mathématiques et d'Informatique, Laboratoire de Théorie des Nombres, Talence, 1981. 264 pp. (not consecutively paged). (Editors) 282m:10006

10-06 (12-06)

merical Integration and Related Topics *Numerical integration and related topics.

Proceedings of a Seminar held at the Research Institute for Mathematical Sciences,

Kyoto University, Kyoto, June 23-24, 1980. Edited by Masatake Mori. Sûrikaisekikenkyûsho Kôkyûroku No. 401 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i and 1-94. (Editors) 82c:65002 65-06 (65D30)

e: (contin

1982

- Polyoptimization ★Polyoptimierung—theoretische Grundlagen und Anwendungen.

 (German) [Polyoptimization—theoretical foundations and applications] Lectures from the Seminar held at Bad Stuer, March 29-April 4, 1976. ZKI-Informationen 78 [ZKI Information 78], 2. Akademie der Wissenschaften der DDR, Zentralinstitut für Kybernetik und Informationsprozesse, Berlin, 1978. 136 pp. (Editors) 824:90002
- bability

 Seminaire de Probabilités, Rennes 1979. (French) [Seminar on Probability, Rennes 1979] Université de Rennes, Rennes, 1979. 96 pp. (not consecutively paged). (Editors) 82a:60005 60-06 consecutively paged). (Editors) 82a:60005
 - ★ Séminaire de Probabilités. XV. (French) [Seminar on Probability. XV] Held at the University of Strasbourg, Strasbourg, 1979/1980. With a general index to the papers from the Seminars, 1966/67-1978/79. Edited by Jacques Azema and Marc Yor. Lecture Notes in Mathematics, 850. Springer-Verlag, Berlin-New York, 1981. iv+704 pp. ISBN 3-540-10689-8 (Editors) 821:60008 60-06
- Queen's, Curves The Curves Seminar at Queen's. Vol. I. Held at Queen's University, Kingston, Ont., 1979-1980. Edited by Anthony V. Geramita. Queen's Papers in Pure and Applied Mathematics, 58. Queen's University, Kingston, Ont., 1981. 148 pp. (not consecutively paged). (Editors) 82m:14015 14H20 (14-06)
- gaspore, Mathematical *Proceedings of the Mathematical Seminar: Singapore 1980.

 Held in Singapore, June 24–27, 1980. Edited by K. N. Cheng and C. T. Chong. National University of Singapore, Department of Mathematics, Singapore; Singap Mathematical Society, Singapore, Separation of Mathematical Society, Singapore, 1980. iii + 54 pp. (Editors) 82e:00010 0 gularities of Surfaces ★Séminaire sur les Singularités des Surfaces. (French)
- [Seminar on the Singularities of Surfaces]. Held at the Centre de Mathématiques de l'École Polytechnique, Palaiseau, 1976-1977. Edited by Michel Demazure, Henry Charles Pinkham and Bernard Teissier. Lecture Notes in Mathematics, 777. Springer-Verlag, Berlin-New York, 1980. viii + 339 pp. ISBN 3-540-09746-5 (I. Dolgachev) 82d:14021 14J17 (14B05, 14H20)
- SK₁ of Division Algebras $\bigstar SK_1$ von Schiefkörpern. (German) $[SK_1$ of division Algebras | Seminar held at Bielefeld and Göttingen, 1976. Edited by Peter Draxl and Martin Kneser. Lecture Notes in Mathematics, 778. Springer-Verlag, Berlin-New York, 1980. 124 pp. ISBN 3-540-09747-3 (Chr. U. Jensen) 82b:16014
- miotics and information science *Ссмиотика и информатика. Вып. 15. (Russian) [Semiotics and information science. No. 15] Edited by A. I. Mihailov. Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1980. 168 pp. (loose errata). (Editors) 82a:68007 68-06 (03-06, 68Gxx)
- ★Семнотика и информатика. Выт. 16. (Russian) [Semiotics and information science. No. 16] Edited by A. I. Mihailov. Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii, Moscow, 1981. 164 pp. (errata insert). (Editors) 82k:03004 (68-06)

- Problems in Elastic Vibrations, Stability and Related Topics *Problems of elastic stability and vibrations. Proceedings of the Special Session on Problems in Elastic Vibrations, Stability and Related Topics held at the 786th Meeting of the American Mathematical Society, Duquesne University, Pittsburgh, Pa., May 15-16, 1981. Edited by Vadim Komkov. Contemporary Mathematics, 4. American Mathe Society, Providence, R.I., 1981. x + 137 pp. ISBN 0-8218-5005-9 (Editors) 82k:73003 73-06 (73D30, 73H05, 73H10)
- pe theory and geometric topology *Shape theory and geometric topology. Proceedings of the Second Conference held at the Inter-University Centre of Postgraduate Studies, Dubrovnik, January 19–30, 1981. Edited by Sibe Mardešić and Jack Segal. Lecture Notes in Mathematics, 870. Springer-Verlag, Berlin-New York, 1981. iii + 265 pp. ISBN 3-540-10846-7 (Editors) 82m:55003 55-06 (54-06, 57-06)
- rbrooke, Que. ★Fixed point theory. Proceedings of a Conference held at the Université de Sherbrooke, Sherbrooke, Que., June 2-21, 1980. Edited by Edward Fadell and Gilles
- Fournier. Lecture Notes in Mathematics, 886. Springer-Verlag, Berlin-New York, 1981. xii + 511 pp. 15BN 3-540-11152-2 (Editors) 82m:55002 55-06 (47-06, 54-06) sshenskoe ★Коуровская тетрадъ: перешениые задачи теории групп. (Russian) [Kourovka notebook: unsolved problems in group theory] Seventh edition. Including problems from the Seventh All-Union Symposium on Group Theory held at Shushenskoe, 1980. Edited by V. D. Mazurov, Ju. I. Merzljakov and V. A. Čurkin. Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1980. 115 pp. (Editor's review (Ju.I.M.)) 82f:20005 20-06
- al processing: theories and applications *\Signal processing: theories and applications. Proceedings of the First European Signal Processing Conference (EUSIPCO-80) held in Lausanne, September 16–18, 1980. Edited by M. Kunt and F. de Coulon. North-Holland Publishing Co., Amsterdam-New York, 1980. xiii + 797 pp. ISBN 0-444-86050-9 (Editors) 94-06 (68Gxx, 92-06, 93E11, 94Axx)
- gapore *Proceedings of the Mathematical Seminar: Singapore 1980. Held in Singapore, June 24-27, 1980. Edited by K. N. Cheng and C. T. Chong. National University of Singapore, Department of Mathematics, Singapore: Singapore Mathematical Society, Singapore, 1980. iii + 54 pp. (Editors) 82e:00010 00A10
- dary value problems *Singularities in boundary value problems. arities in b Proceedings of the NATO Advanced Study Institute held in Maratea, Septem 22-October 3, 1980. Edited by H. G. Garnir. NATO Advanced Study Institute Series. Ser. C: Mathematical and Physical Sciences, 65. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xvi+377 pp. ISBN 90-277-1240-9 (Editors) 82k35005
- gularities of differentiable mappings *Singularities of differentiable mappings.

 (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 9-11, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 403 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i−ii and 1-111. (Editors) 82c:58001 58-06 gularities of surfaces ★Seminaire sur les Singularités des Surfaces. (French) [Seminar on
- the Singularities of Surfaces] Held at the Centre de Mathématiques de l'École Polytechnique, Palaiseau, 1976-1977. Edited by Michel Demazure, Henry Charles Pinkham and Bernard Teissier. Lecture Notes in Mathematics, 777. Springer-Verlag,

- Berlin-New York, 1980. viii+339 pp. ISBN 3-540-09746-5 (I. Dolgachev) 824:14021
- *Systems far from equilibrium. Papers from the Sitges Conference on Statistical Mechanics held in Sitges and Barcelona, June 1980. Edited by Luis Garrido. Lecture Notes in Physics, 132. Springer-Verlag, Berlin-New York, 1980. xv+403 pp.
- ISBN 3-540-10251-5 (Editors) 82g-82004 82-06 (58-06, 76F99, 82A35, 82A70)

 SK, of division algebras ★ SK, von Schiefkörpern. (German) [SK₁ of division algebras]

 Seminar held at Bielefeld and Göttingen, 1976. Edited by Peter Draxl and Martin Kneser.
- Lecture Notes in Mathematics, 778. Springer-Verlag, Berlin-New York, 1980. 124 pp. ISBN 3-540-09747-3 (Chr. U. Jensen) 82b:16014 16A39 (12A80)

 Skew polynomial rings, group rings and related topics

 Skew polynomial rings, group rings and related topics. Mathematical Sciences, Kyoto University, Kyoto, June 11-13, 1981. Sûrikaisekikenkyûsho Kôkyûroku No. 438 (1981). Kyoto University, Research Institute for
- Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-79. (Editors) 82k:16001 16-06 denice *Measuring and modelling of the cardiac electrical field. Proceedings of the International Conference held at Smolenice, June 14-17, 1976. Edited by Peter Kneppo. VEDA, Vydavateľ stvo Slovenskej Akadémie Vied, Bratislava, 1980. 303 pp. (Editors) 92A07 (92-06)
- Social sciences *Mathematical models as a tool for the social sciences. Edited by Bruce J. ial sciences ★ Mathematical invocus as a No. 1980. v + 120 pp.

 West. Gordon & Breach Science Publishers, New York, 1980. v + 120 pp.

 ISBN 0-677-10390-5 (A. Rapoport) 82g:92002 92-02 (90-02, 92A15, 92A20)
 - ★ Mathematical frontiers of the social and policy sciences. Edited by Loren Cobb and Robert M. Thrall. AAAS Selected Symposia Series, 54. Westview Press, Boulder, Colo.; for the American Association for the Advancement of Science, Washington, D.C.,
- 1981. xiv+186 pp. ISBN 0-89158-953-8 (Editors) 82c:92005a 92-06 (60H10)

 Social statistics ★1978 Proceedings of the Social Statistics Section, American Statistical Association. Papers presented at the Annual Meeting held in San Diego, Calif., August 14-17, 1978. American Statistical Association, Washington, D.C., 1978. xii+806 pp. (Editors) 82c:62004a 62-06 (65U05, 90A19)
 - ★1979 Proceedings of the Social Statistics Section, American Statistical Association. Papers presented at the Annual Meeting held in Washington, D.C., August 13-16, 1979. in Statistical Association, Washington, D.C., 1979. xii + 690 pp. (Editors) 82c:62004d 62-06 (90A19)
- ftware science *Mathematical methods in software science and engineering. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 10-12, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 363 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. d 1-291. (Editors) 82a:68005 68-06
- ★Mathematical methods in software science and engineering. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 9-11, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 396 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-354. (Editors) 82c:68004 68-06
- (Eattors) 25-0809 08-06 (Eattors) 25-08 (Eatto
- Physics, 17. Springer-Verlag, Berlin-New York, 1980. xviii + 389 pp. ISBN 3-540-09962-X 35-02 (01A55, 01A60, 35Q20, 76-02, 81-02) (George Leibbrandt) 82m:35001
- (George Leibbrandt) 82m:35001 32-02 (UIA2), UIA20, 32420, 70-02, 01-02) wable and simple infinite groups **Paperunaue u procrate 6exconewnae rpymma. (Russian) [Solvable and simple infinite groups] Translated from the English and the German and edited by Ju. I. Merzljakov. Mareматика: Honoe в Зарубежной Науке [Mathematics: Recent Publications in Foreign Science], 21. "Mir", Moscow, 1981.
- Proceedings of the Thirteenth Symposium on Mathematical Questions in biology.

 Proceedings of the Thirteenth Symposium on Mathematical Biology held in Houston, Tex., January 4, 1979. Edited by Simon A. Levin. Lectures on Mathematics in the Life Sciences, 12. American Mathematical Society, Providence, R. I., 1979. ix + 218 pp. ISBN 0-8218-1162-2 (Editors) 82i:92001 92-06
- ★Some mathematical questions in biology. Proceedings of the Fourteenth Symposium held in San Francisco, Calif., January 7, 1980. Edited by George F. Oster. Lectures on Mathematics in the Life Sciences, 13. American Mathematical Society, Providence, R.I., 1980. vi + 274 pp. ISBN 0-8218-1163-0 (Editors) 82b:92002
- ★Some mathematical questions in biology. Proceedings of the 15th Symposium Mathematical Biology held in Toronto, Ont., January 8, 1981. Edited by Stephen Childress. Lectures on Mathematics in the Life Sciences, 14. American Mathematical Society, Providence, R.I., 1981. x+214 pp. ISBN 0-8218-1164-9 (Editors) 82i:92002 92-06
- ne problems of multidimensional complex analysis *Некоторые вопросы многомерного комплексного анализа. (Russian) [Some problems of multidir complex analysis] Edited by A. M. Kytmanov. Akad. Nauk SSSR Sibirsk. Otdel., Inst. 32-06 Fiz., Krasnoyarsk, 1980. 280 pp. (Editors) 82f:32003
- пе questions of the optimal realization of algorithms **Hexoropae вопросы оптимальной реализации адгоритыов. (Russian) [Some questions of the optimal realization of algorithms Edited by V. A. Kośevaja. Преприят 79 [Preprint 79], 34. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kieo., 1979. 55 pp. (Publisher's description)
- stions of the qualitative theory of differential equations and the theory of the control of motion *Некоторые вопросы каческтвенной теории дифференциальных уравнений и теории управления движением. (Russian) [Some questions of the alitative theory of differential equations and the theory of the control of motion] Edited by E. V. Voskresenskii. Mordov. Gos. Univ., Saransk, 1980. 170 pp. (Editors) 34-06
- se strangeness in the proportion *Some strangeness in the proportion. A Centennial Symposium to celebrate the achievements of Albert Einstein. Lectures presented at the Einstein Centennial Symposium held at the Institute for Advanced Study, Princeton, N.J., March 4-9, 1979. Edited by Harry Woolf. Addison-Wesley Publishing Co., Reading Mass., 1980. xxxi+539 pp. ISBN 0-201-09924-1 (Lawrence Sklar) 824:83002 (00A89, 01-06)

Sopron *Optimization of design and computation of control networks. Proceedings of the International Symposium held at Sopron, July 4–10, 1977. Edited by F. Halmos and J. Somogyi. Akademiai Kiado (Publishing House of the Hungarian Academy of Sciences), Budanest, 1979, 733 no. ISBN 963-08-116-7 (Editors) 82-90026

Somogyi. Akadėmiai Kiadō (Publishing House of the Hungarian Academy of Sciences), Budupest, 1979. 733 pp. 18BN 963-05-1716-7 (Editors) 82c:90026 90Bxx (86A30) Source material for the history of natural science and technology **Prameny k dējinām přirodních věd a techniky v pražských archivech, 1918–1945. (Czech) [Source material for the history of natural science and technology in Prague archives, 1918–1945] Compiled by Jiří Beran. Práce z Dějin Přirodních Věd [Works in the History of Natural Sciences], 8. Českoulocenské Akademie Věd (ČSAV), Prague, 1976. 225 pp. 82e:01006a 01A05 **Prameny k dějinām přirodních věd a techniky. II. Archivy středočeského,

#Prameny k dejnam přírodních věd a techniky. II. Archivy středočeského, jihočeského a západočeského kraje, 1918–1945. (Czech) (Source material for the history of natural science and technology. II. Archives of central, southern and western Bohemia, 1918–1945] Compiled by Oldřich Sládek and Pavel Rafaj. Práce z Dějin Přírodních Věd (Works in the History of Natural Sciences), 9. Československé Akademie Věd (ČSAV), Prague, 1978. 109 pp. \$2e-01006b | 01A05

Spatial sciences ★Statistical applications in the spatial sciences. Edited by Neil Wrigley.
Pion Ltd., London, 1979. iv+310 pp. ISBN 0-85086-075-X (Editors) 821:90003
90-06
(62P99, 86A99, 90A19, 92A20)

Special issue:

Huzurbazar felicitation volume

★Professor Huzurbazar felicitation volume. Edited by S. R. Adke. J. Indian Statist. Assoc. 17 (1979). Indian Statistical Association, Poona,

S. R. Adke. J. Indian Statust. Assoc. 17 (1979). Indian Statistical Association, Proma, 1979. pp. i-iv and 1-209. (Editors) 82ac62008 62-06

Machtey, Michael * (Special issue dedicated to Michael Machtey). Papers presented at the Twentieth Annual Symposium on the Foundations of Computer Science held in San Juan, Puerto Rico, October 29-31, 1979. Edited by S. Rao Kosaraju and Albert R. Meyer. J. Comput. System Sci. 22 (1981), no. 3,261-470. Academic Press, Inc. [Harcourt Brace Jovanocich, Publishers], New York-London, 1981. pp. 261-471. (Editors) 82ic68005 68-06

Orlicz, Władysław & Special issue dedicated to Władysław Orlicz on the occasion of his seventy-fifth birthday. Comment. Math. Special Issue 2 (1979). Państwowe Wydawnictwo Naukowe (PWN), Warsaw, 1979. pp. i-vi and 1-347. (Editors) 82h:00005 00A10 (46-06)

Analysis of variance with unbalanced data

★Special issue on analysis of variance with
unbalanced data. Edited by R. R. Hocking and F. M. Speed. Comm. Statist.

A—Theory Methods 9 (1980), no. 2. Marcel Dekker, Inc., New York-Basel, 1980.
pp. 117-241. (Editors) 824c62122 62110

Computer vision \$\perp \text{Special volume on computer vision. Edited by Michael Brady.} Artificial Intelligence 17 (1981), no. 1-3. North-Holland Publishing Co.,
Amsterdam-New York, 1981, pp. i-v and 1-508. (From the introduction) 82j:68093
68G10 (68-02, 92A-27, 92A-90)

Conditionals Special issue on conditionals. J. Philos. Logic 10 (1981), no. 2,127–289.

D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. pp. 127–291. (Editors) 82e(03009 03–06 (03A05, 03B45)

Editorial reflections on the development of fluid mechanics ★25th anniversary issue: editorial reflections on the development of fluid mechanics. Edited by G. K. Batchelor and H. K. Moffatt. J. Fluid Mech. 106 (1981). Cambridge University Press, Cambridge-New York, 1981. pp. i-vi and 1-357. (Editors) 82g:76002 76-06 (76-XX)

Millennium of the birth of Ibn Sinā ★ (Special issue on the millennium of the birth of Ibn Sinā). (Russian) Edited by R. B. Baratov, Izv. Akad. Nauk Tadžik, SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk 1980, no. 3(77). "Doniš", Dushanbe, 1980. pp. 1–104. (Editors) 82b:01010 01A30

Time series in m dimensions ★Special issue on time series in m dimensions. Comm. Statist. B—Simulation Comput. 9 (1980), no. 5. Marcel Dekker, Inc., New York-Basel, 1980. pp. 453–562. (Brian D. Ripley) 82e:62150 62M10

Spectral analysis ★Nonlinear methods of spectral analysis. Edited by Simon Haykin.

Topics in Applied Physics, 34. Springer-Verlag, Berlin-New York, 1979. xi+247 pp.

ISBN 3-540-09351-6 (Melvin Hinich) 82j:62069 62M15 (93E10, 94A05)

Spectral analysis of differential operators ★Cnexтральный анализ лифференциальных операторов. (Russian) [Spectral analysis of differential operators] Edited by Ju. M. Berezanskii. Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1980. 136 pp. (Editors) 828-47003 47-06

Spectral theory of differential operators. ★Spectral theory of differential operators.

Proceedings of the Conference held at the University of Alabama, Birmingham, Ala., March 26–28, 1981. Edited by Ian W. Knowles and Roger T. Lewis. North-Holland Mathematics Studies, 55. North-Holland Publishing Co., Amsterdam-New York, 1981. xv+384 pp. ISBN 0-444-86277-3 (Editors) 82k-34002 34–06 (47–06)

Spectral theory of operators ★Cuexrpamanar reopus oneparopon. Buni. 3. (Russian)
[Spectral theory of operators. No. 3] Edited by F. G. Maksudov. "Elm", Baku, 1980.
260 pp. (Editors) 82b:47002 47-06 (47Axx, 47E05)

Stability **Mccnegonarms no устойчивости в теории колебаний. (Russian) [Studies in stability and the theory of oscillations] Edited by Ju. S. Kolesov. Jaroslav. Gos. Univ., Yaroslav!, 1980. 148 pp. (Editors) 82e:34029 34Cxx

**Nonlinear differential equations. Invariance, stability, and bifurcation.

★ Nonlinear differential equations. Invariance, stability, and bifurcation.

Proceedings of an International Conference held in Trento, May 25–30, 1980. Edited by Piero de Mottoni and Luigi Salvadori. Academic Press, Inc. [Harcourt Brace Jocanovich, Publishers], New York-London, 1981. xi+357 pp. ISBN 0-12-508780-2 (Editors) 824-3409.

34-06.

Stable theories *Groupe d'Étude Théories Stables (Bruno Poizat). 2e année: 1978/79. (French) (Study Group on Stable Theories (Bruno Poizat). Second year: 1978/79]
Secrétariat Mathématique, Paris, 1981. ii + 115 pp. (not consecutively paged).
ISBN 2-85926-274-1 (Editors) 821-63028 03C45 (03-06)

Stanford, Calif. ★Seventh International Conference on Numerical Methods in Fluid Dynamics. Proceedings of the Conference held at Stanford University, Stanford, Calif., and at the NASA/Ames Research Center, Moffett Field, Calif., June 23-27, 1980. Edited by William Craig Reynolds and Robert William MacCormack. Lecture Notes in Physics, 141. Springer-Verlag, Berlin-New York, 1981. viii +485 pp. ISBN 3-540-10694-4 (Editors) 82h:76002 76-06 (65-06, 76A60)

Statistical analysis * Алгоритыяческое и программное обеспечение прикладного статистического анализа. (Russian) [Algorithms and software for applied statistical analysis] Edited by T. V. Rjabuškin. Učen. Zap. Statist. **36** (1980). "*Nauka*", *Moscow*, 1980. pp. 1-421. (Editors) **32d:62004** 62-04

Statistical analysis of the data in bioscience and mathematical models

**Statistical analysis of the data in bioscience and mathematical models. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 27–28, 1980. Sürkisekikenkyüsho Kökyüroku No. 384 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1–182. (Editors) 82e:62169 62P10

Statistical applications in the spatial sciences
*\Statistical applications in the spatial sciences. Edited by Neil Wrigley. Pion Ltd., London, 1979. iv + 310 pp.

15BN 0-85086-075-X (Editors) 821:90003 90-06 (62P99, 86A99, 90A19, 92A20)

Statistical and coherent methods of investigation of physical systems ** Статистические и потерентивые методы исследования физических систем. (Russian) [Statistical and coherent methods of investigation of physical systems] Edited by M. M. Suščinskii. Trudy Fiz. Inst. Lebedev. 124 (1980). "Nauka", Moscow, 1980. pp. 1–142. (Editors) 82m:82004 82–06

Statistical computing ★1978 Proceedings of the Statistical Computing Section, American Statistical Association. Papers presented at the Annual Meeting held in San Diego, Calif., August 14-17, 1978. American Statistical Association, Washington, D.C., 1978. viii+425 pp. (Editors) 82c652064b 62-06 (65U05, 90A19, 90Cxx)

★1979 Proceedings of the Statistical Computing Section, American Statistical
Association. Papers presented at the Annual Meeting held in Washington, D.C., August
13-16, 1979. American Statistical Association, Washington, D.C., 1979. viii+412 pp.
(Felicen), \$20€\$20046.

(Editors) 82-652004 62-06 (65U05, 90A19, 90Cxx)

Statistical estimation ★Statistical estimation. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, January 24-26, 1980. Sürikaisekikenkyűsho Kökyűroku No. 380 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-161. (Editors) 82-62009 62-06

Statistical mechanics ★Stochastic processes and statistical mechanics in open systems. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 17–19, 1979 Sărikaisekikenkýůsho Kôkyûroku No. 367 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979, pp. i-iii and 1–293. (Editors) 82f:60010 60–06 (60H10, 60J60, 60K35, 82-06)

★Stochastic processes and statistical mechanics in open systems. II. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 13–15, 1980. Sürikaisekikenkyûsho Kökyûroku No. 405 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i–iii and 1–294. (Editors) 82560011 60–06 (82–06)

(1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980.

pp. i-iii and 1-294. (Editors) 82t:60011 60-06 (82-06)

★Fundamental problems in statistical mechanics. V. Proceedings of the Fifth International Summer School held in Enschede, June 23-July 5, 1980. Edited by E. G. D. Cohen. North-Holland Publishing Co., Amsterdam-New York, 1980. ix + 387 pp.

ISBN 0-444-86137-8 (Editors) 82g:82002 82-06 (82-XX)

★Systems far from equilibrium. Papers from the Sitges Conference on Statistical Mechanics held in Sitges and Barcelona, June 1980. Edited by Luis Garrido. Lecture Notes in Physics, 132. Springer-Verlag, Berlin-New York, 1980. xv+403 pp. 1SBN 3-540-10251-5 (Editors) 82e:82004 82-06 (58-06, 76F99, 82A35, 82A70)

★Statphys 14. Proceedings of the 14th International Conference on Thermodynamics and Statistical Mechanics held at the University of Alberta, Edmonton, Alta., August 17–22, 1980. Edited by John Stephenson. Phys. A 106 (1981), no. 1-2. North-Holland Publishing Co., Amsterdam-New York, 1981. pp. i−viii and 1-368. (Editors) 82±82003 82−06 (80−06)

Statistical methods in control ★Статистические методы в управлении. (Russian)
[Statistical methods in control] Edited by T. V. Rjabuškin. Učen. Zap. Statist. 37 (1980).

"Nauka", Moscow, 1980. pp. 1–320. (Editors) 82k:90004 90Axx (01–06, 93–06)

Statistical physics * Field theory, quantization and statistical physics. In memory of Bernard Jouvet. Edited by E. Tirapegui. Mathematical Physics and Applied Mathematics, 6. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xxii + 322 pp. ISBN 90-277-1128-3 (Editors) 82b:81004 81-06 (82-06, 83-06)

★Вопросы квантовой теории поля и статистической физики. 2. (Russian) [Questions in quantum field theory and statistical physics. 2] Edited by P. P. Kuliš and V. N. Popov. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 101 (1981). "Nauka" Leningrad. Otdel., Leningrad. 1981. pp. 1-209. (Editors) 32g:81004 81-06

*Nauka" Leningrad. Ordel., Leningrad, 1981. pp. 1-209. (Editors) 82g:81004 81-06

★Perspectives in statistical physics. M. S. Green memorial volume. Edited by H. J. Raveché. Studies in Statistical Mechanics, IX. North-Holland Publishing Co., Amsterdam-New York, 1981. xxviii+367 pp. 1SBN 0-444-86026-6 (Editors) 82h:82001 82-06 (ed. 100)

82-06 (01-06)

Statistical theory ★Symposia Mathematica. Vol. XXV. Conference on Statistical Theory of Decisions held at the Istituto Nazionale di Alta Matematica Francesco Severi (INDAM), Rome, June 4-7, 1979. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1980. 204 pp. (Editors) 82e:62015 62C99

Statistics ★Essays in probability and statistics. A volume in honor of Professor Junjiro Ogawa. Edited by Sadao Ikeda, Takesi Hayakawa, Hirosi Hudimoto, Masashi Okamoto, Minoru Siotani and Sumiyasu Yamanoto. Published by the Editorial Committee for Publication of Essays in Probability and Statistics; distributed by Shinko Tsusho Co. Ltd., Tokyo, 1976. xix+716 pp. (1 plate). (Editors) 82a:62005

Tokyo, 1976. xx+16 pp. (1 piate). (Editors) 82ac2005

★Proceedings of the 41st Session of the International Statistical Institute. Vol. 1.

Held in New Delhi, December 5–15, 1977. Bull. Inst. Internat. Statist. 47 (1977), no. 1.

Indian Statistical Institute, Calcutta, 1977. pp. i–viii and 1–717. (Editors) 82dc62006a
62–06

★Proceedings of the 41st Session of the International Statistical Institute. Vol. 2. Held in New Delhi, December 5–15, 1977. Bull. Inst. Internat. Statist. 47 (1977), no. 2. Indian Statistical Institute, Calcutta, 1977. pp. i–v and 1–558. (Editors) 82d-62006b 62–06

★Proceedings of the 41st Session of the International Statistical Institute. Vol. 3. Held in New Delhi, December 5-15, 1977. Bull. Inst. Internat. Statist. 47 (1977), no. 3. Indian Statistical Institute, Calcutta, 1977. pp. i-v and 1-533. (Editors) 82d:62006c 62-06

- ★Mathematical statistics. Selecta Statistica Canadiana, V. University Press of ada, Toronto, Ont., 1979. 150 pp. ISBN 0-920788-04-1 (Editors) 82a:62006
- ★Séminaire de Statistique Mathématique. (French) [Seminar on Mathematical Statistics] Publ. U.E.R. Math. Pures Appl. IRMA 1 (1979), no. 4. Université de Sciences et Techniques de Lille, Villeneuve d'Ascq, 1979. 106 pp. (not consecutively paged). (Editors) 82c:62005 62-06
- ★Statistique non paramétrique asymptotique. (French) [Nonparametric asymptotic statistics] Proceedings of the Conference on Statistics held at Rouen, June 13–14, 1979. Edited by Jean-Pierre Raoult. Lecture Notes in Mathematics, 821. Springer-Verlag, Berlin-New York, 1980. vi + 175 pp. ISBN 3-540-10239-6 (Editors) 82a:62007
- ★Динамическое распознавание случаных процессов и последовательностей. (Russian) [Dynamical recognition of random processes and sequences] Edited by E. K. Špilevskii. Statist. Problemy Upravlenija—Trudy Sem. Processy Optimal. Upravlenija V Sekcija No. 47 (1980). Akad. Nauk Litovsk. SSR, Inst. Mat. i Kibernet., Vilnius, 1980. pp. 1–117. (Editors) 82d:62146 62M99
- ★Bayesian analysis in econometrics and statistics. Essays in honor of Harold Jeffreys. Edited by Arnold Zellner. Studies in Bayesian Econometrics, 1. North-Hollan Publishing Co., Amsterdam-New York, 1980. xi+474 pp. ISBN 0-444-85270-0 (J. M. 62P20 (62A15) Bernardo) 82d:62170
- Statphys \$\psi \text{Statphys 14. Proceedings of the 14th International Conference on Thermodynamics and Statistical Mechanics held at the University of Alberta, Edmonton, Alta., August 17-22, 1980. Edited by John Stephenson. Phys. A 106 (1981), no. 1-2. North-Holland Publishing Co., Amsterdam-New York, 1981. pp. i-viii and 1-368. (Editors) 82-06 (80-06)
- chastic differential equa aifolds *Stochastic differential equations on manifolds. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 22-26, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 391 (1980). Kyoto University, Research Institute for tical Sciences, Kyoto, 1980. pp. i-ii and 1-135. (Editors) 82a:60006
- Stochastic differential systems ★Stochastic differential systems. Filtering and control.

 Proceedings of the IFIP-WG 7/1 Working Conference held in Vilnius, August 28-September 2, 1978. Edited by Bronius Grigelionis. Lecture Notes in Control and The second series of the serie
- chastic geometry ★Комбинаторные принципы в стохастической геометри (Russian) [Combinatory principles in stochastic geometry] Edited by R. V. Ambarcumjan. Akad. Nauk Armjan. SSR, Erevan, 1980. 174 pp. (M. Zähle) 82k:60027
- chastic integrals ★Stochastic integrals. Proceedings of the LMS Durham Symposium held at the University of Durham, Durham, July 7–17, 1980. Edited by David Williams. Lecture Notes in Mathematics, 851. Springer-Verlag, Berlin-New York, 1981. ix +540 pp.
- ISBN 3-540-10690-1 (Editors) 821:60009 60-06 (60Нхх, 601хх)

 Stochastic methods in problems of optimization ★Стохастические методы в задачах оптимизации. (Russian) [Stochastic methods in problems of optimization] Edited by E. N. Stepanenko. Препринт 80 [Preprint 80], 20. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. 62 pp. (Editors) 82d:90003 90-06 (65-06)

 ⇔hpoблемы устойчивости стохастических моделей. (Russian)
- [Problems of stability of stochastic models] Proceedings of the Fourth All-Union Seminar held in Palanga, April 1979. Edited by V. M. Zolotarev and V. V. Kalašnikov. Vsesojuz, Nauč.-Issled, Inst. Sistem, Issled., Moscow, 1980, 124 pp. (loose errata).
- chastic processes and statistical mechanics in open systems *Stochastic processes and statistical mechanics in open systems. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 17-19, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 367 (1979). Kyoto University Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-iii and 1-293. (Editors) 60-06 (60H10, 60J60, 60K35, 82-06)
 - ★Stochastic processes and statistical mechanics in open systems. II. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 13-15, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 405 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-294. (Editors) 82f:60011 60-06 (82-06)
- ochastic programming *Методы решения задач негладкой оптимизации и стохастического программирования. (Russian) [Methods of solution of problems of nonsmooth optimization and stochastic programming] Edited by V. A. Koševaji Preprint 79-75. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1979. 36 pp. (Editors) 90Cxx
- Stony Brook, N.Y. *Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference. Held at the State University of New York, Stony Brook, N.Y., June 5-9, 1978. Edited by Irwin Kra and Bernard Maskit. Annals of Mathematics Studies, 97. Princeton University Press, Princeton, N.J.; University of Tokyo Press, Tokyo, 1981. ix+517 pp. ISBN 0-691-08264-2 (Editors) 82f:32002 32-06 (30Fxx, 32G15)
- ★Logic Year 1979-80. Proceedings of Seminars and of the Conference on Mathematical Logic held at the University of Connecticut, Storrs, Conn., November 11-13, 1979. Edited by Manuel Lerman, James Henry Schmerl and Robert Irving Soare. Lecture Notes in Mathematics, 859. Springer-Verlag, Berlin-New York, 1981. viii + 326 pp. ISBN 3-540-10708-8 (Editors) 82e:03007 03-06
- range attractors *Crpannue arrpaxropы. (Russian) [Strange attractors] Articles translated from the English. Edited by Ja. G. Sinai and L. P. Šil'nikov. Maremariusa: Honoe в Зарубежной Науке [Mathematics: Recent Publications in Foreign Science], 22. 'Mir", Moscow, 1981. 255 pp. (Editors) 82f:58065 58F13 (76Fxx, 82A05)
- asbourg *Seminaire de Probabilités. XV. (French) [Seminar on Probability. XV] Held at the University of Strasbourg, Strasbourg, 1979/1980. With a general index to the papers from the Seminars, 1966/67-1978/79. Edited by Jacques Azèma and Marc Yor. Lecture Notes in Mathematics, 850. Springer-Verlag, Berlin-New York, 1981. iv + 704 pp.
- ISBN 3-540-10689-8 (Editors) 82f:60008 60-06
 nuctural control Structural control. Proceedings of the International IUTAM Symposium held at the University of Waterloo, Waterloo, Ont., June 4-7, 1979. Edited

- by H. H. E. Leipholz. North-Holland Publishing Co., Amsterdam-New York, 1980.
- xv+810 pp. ISBN 0-444-85485-1 (Hassan K. Khalil) 822-93003 93-06 (49-06)

 Structure and classification of low-dimensional manifolds **Structure* and classification of low-dimensional manifolds. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, September 1-3, 1980. Sürikaisekikenkyüsho Kökyüroku No. 417 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-141. (Editors) 82g:57001 57-06
- ucture of three-dimensional manifolds and placement problems *Structure of three-dimensional manifolds and placement problems. (Japanese) Proceedings of a Structure of three-di Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, September 3-5, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 369 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-iii and 1-207.
- uctured computer vision *Structured computer vision. Machine perception through hierarchical computation structures. Edited by Steven L. Tanimoto and Allen Klinger. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1980. xi+234 pp. ISBN 0-12-683280-3 (From the preface) 82m:68009 92-06, 92A25)
- uctures *The role of coherent structures in modelling turbulence and mixing.

 Proceedings of the International Conference held in Madrid, June 25-27, 1980. Edited by Javier Jimenez. Lecture Notes in Physics, 136. Springer-Verlag, Berlin-New York, 1981. xiii+393 pp. ISBN 3-540-10289-2 (Editors) 82c:76062 76Fxx (76-06, 80A25)
- dies on computational complexities and related topics *Studies on computational complexities and related topics. (Japanese) Proceedings of a Symposium held at the complexities and related topics. dexities and related topics *Studies on computational Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 5-7, 1980. Sürikaisekikenkyüsho Kökyüroku No. 381 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iv and 1-275. (Editors) 82h:68072
- 68C25 (03D15, 68-06, 94Cxx)

 Studies in geometry and algebra *Носледования по геометрии и алгебре. (Russian)

 [Studies in geometry and algebra] Edited by V. D. Fedorov. Kirgiz. Gas. Univ., Frunze,
- 1978. 147 pp. (Editors) 82b:53004 53-06 dies in the history of probability and statistics See Stigler, Stephen M., 82c:01032; Good, Irving J., 82c:01049 and Holgate, Philip, 82m:01040
- Studies on Christiaan Huygens ★Studies on Christiaan Huygens. Invited papers from the Symposium on the Life and Work of Christiaan Huygens held in Amsterdam, August 22-25, 1979. Edited by H. J. M. Bos, M. J. S. Rudwick, H. A. M. Snelders and R. P. W. Visser. C. V. Swets & Zeitlinger, Lisse, 1980. v+321 pp. (30 plates). ISBN 90-265-0333-4 (P. Bockstaele) 82m:01036 01A45 (70-03, 78-03, 85-03, 86-03)
- lies in logical methodology *Логико-методологические исследон [Studies in logical methodology] Edited by A. A. Starčenko. Moskov. Gos. Univ.,
- Moscow, 1980. 375 pp. (loose errata). (Editors) 82с:63003 03-06

 Studies in mathematical statistics ★Исследования по математической статистикс. V. (Russian) [Studies in mathematical statistics. V] Edited by I. A. Ibragimov and M. S. Nikulin. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 168 (1981). 'Nauka" Leningrad. Otdel., Leningrad, 1981. pp. 1-200. (Editors) 82i:62002
- Studies of Ju. A. Mitropol'skii on the theory of nonlinear oscillations and nonlinear differential ns The studies of Ju. A. Mitropol'skii in the field of the theory of nonlinear oscillations and the theory of nonlinear differential equations. (Russian) Problems of the asymptotic theory of nonlinear oscillations (Russian), pp. 7-14, 275, "Naukova Dumka", Kiev, 1977. (From the summary) 821:01175 01A70 (34-03)
- dies in number theory *Исследования по теории чисел. 7. (Russian) [Studies in number theory. 7] Edited by A. V. Malyšev. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 106 (1981). "Nauka" Leningrad. Otdel., Leningrad, 1981. pp. 1-172. (Editors) 82g:10005 10-06
- dies on numerical algorithms *Studies on numerical algorithms. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, November 13-15, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 422 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-171. (Editors) 82g:65006 65-06
- Studies in the qualitative theory of differential equations and its app якисної теориї диферев льних ривняль та їх застосувания. (Ukrainian) [Studies in the qualitative theory of differential equations and its applications] Edited by V. Ja. Skorobogat'ko. Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev., 1978. 76 pp. (Editors) 00A10
- 82d:00007 00A10

 dies in stability and the theory of oscillations

 ★Исследования по устойчивости и теории колебаний. (Russian) [Studies in stability and the theory of oscillations] Edited

 100 (Editor) 80d 2000 by Ju. S. Kolesov. Jaroslav. Gos. Univ., Yaroslavl', 1980. 148 pp. (Editors) 82e:34029
- Studies in the theory of differentiable functions of several variables and its application ★Исследования по теория дифференцируемых функций миютих переменных и ее приложениям. VIII. (Russian) [Studies in the theory of differentiable functions of several variables and its applications. VIII] Edited by S. M. Nikol'skii. Trudy Mat. Inst. Steklov. 156 (1980). "Nauka", Mascow. 1980. pp. 1–264. (Editors) 82e:46004 46–00 dy of algorithms of numerical calculation Study of algorithms of numerical calculation
- (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, January 24-26, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 382 (1980). Kyoto University, Research Institute for Math Sciences, Kyoto, 1980. pp. i-iii and 1-198. (Editors) 82a:65007
 - o Poizat) *Groupe d'Étude Théories Stables (Bruno Poizat). 2e année: 1978/79. (French) [Study Group on Stable Theories (Bruno Poizat). Second year: 1978/79] Secrétariat Mathématique, Paris, 1981. ii+115 pp. (not consecutively paged). ISBN 2-85926-274-1 (Editors) 82f:03028 03C45 (03-06)
 - ametric Analysis *Groupe d'Étude d'Analyse Ultramétrique. 7e-8e années: 1979-1981. (French) [Study Group on Ultrametric Analysis. 7th-8th years: 1979-1981] Edited by Y. Amice, G. Christol and P. Robba. Secretario e, Paris, 1981. 148 pp. (not consecutively paged). ISBN 2-85926-277-6 (Editors) 82g:12019 12B40

972

group structure of finite groups: **Honrpymonoe crpoenne koncunax rpym. (Russian) [Subgroup structure of finite groups] Proceedings of the Gomel' Algebraic Seminar held in Gomel', 1977–80. Edited by V. S. Monahov. "Nauka i Tehnika", Minsk, 1981. 232 pp.

(Editors) 822-20004 20-06

manifolds ★ Differential geometry of submanifolds. (Japanese) Proceedings of a

Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Synto, October 6–9, 1980. Sürikaisekikenkyüsho Kökyüroku No. 408 (1980). Kyoto University, Research Institute, for Mathematical Sciences, Kyoto, 1980. pp. i–ii and 1–155. (Editors) 824:53001 53–06 (53C40)

aff, Particles and Fields ★Particles and fields. Proceedings of the Banff Summer Institute held in Banff, Alta., August 25-September 3, 1977. Edited by David H. Boal and Abdul N. Kamal. Plenum Press, New York-London, 1978. viii + 462 pp. ISBN 0-306-31147-X (Editors) 82e-81002 81-06 Research Institute:

American Mathematical Society *Algebraic geometry, Arcata 1974. Proceedings of the Symposium in Pure Mathematics of the American Mathematical Society (Twenty-First Annual Summer Research Institute) held at Humboldt State University, Arcata, Calif., July 29-August 16, 1974. Edited by Robin Hartshorne. Corrected reprint of the 1975 original. Proceedings of Symposia in Pure Mathematics, XXIX. American Mathematical Society, Providence, R. I., 1979. xiv+642 pp. ISBN 0-8218-1429-X (Editors) 82e:14003

CISM, Information Theory Approach to Communications *The information theory approach to communications. Lectures presented at CISM Summer Schools of 1976 and 1977. Edited by Giuseppe Longo. CISM Courses and Lectures, 229. Springer-Verlag, Vienna, 1978. viii + 432 pp. ISBN 3-211-81484-1 (I. Vajda)

1994024 94A15 (94-06, 94A40)

astorial Optimization ★Combinatorial optimization. Lectures presented at the nmer School held in Urbino, May 30-June 11, 1977. Edited by Nicos Christofides, Aristide Mingozzi, Paolo Toth and Claudio Sandi. A Wiley-Interscience

Publication. John Wiley & Sons, Ltd., Chichester, 1979. x+425 pp.

ISBN 0-471-99749-8 (L. E. Trotter, Jr.) 82a-90099

90C10 (05-06, 68E99, 90-06)

★Convergence Structures and Applications to Analysis

★Convergence structures and applications to analysis. of the International Summer School held in Frankfurt a.d. Oder, May 8-12, 1978. Abhandlungen der Akademie der Wissenschaften der DDR, Abteilung Mathematik, vissenschaften, Technik, 1979 [Transactions of the Academy of Sciences of the DDR, Section for Mathematics, Sciences and Technology, 1979], 4. Akademie-Verlag, Berlin, 1980. 175 pp. (Editors) 82d:46001

damental Problems in Statistical Mechanics

**Fundamental problems in statistical

mechanics. V. Proceedings of the Fifth International Summer School held in Enschede, June 23–July 5, 1980. Edited by E. G. D. Cohen. North-Holland Publishing Co., Amsterdam-New York, 1980. ix + 387 pp. ISBN 0-444-86137-8 (Editors)

82g:82002 82-06 (82-XX)

dern Potential Theory as a Foun tion for the Inverse Problem in Geophysics *Die moderne Potentialtheorie als Grundlage des inversen Problems in der Geophysik. (German) [Modern potential theory as a foundation for the inverse problem in geophysics] Laplace-Gleichung, Wärmeleitungsgleichung, Wellengleichung und Bipotentialgleichung. [Laplace equation, heat equation, wave equation and bipotential equation]. Summer School of the KAPG Working Group 5.2 held in Freiberg, June 5-16, 1978. Geodätische und Geophysikalische Veröffentlichungen, Reihe III [Geodetic and Geophysical Publications, Series III], 45. Akademie der Wissenschaften der DDR, Nationalkomitee für Geodäsie und Geophysik, Berlin, 1980.

271 pp. (V. M. Isakov) 82g:31001 31-02 (31-06, 86-06)

• Developments in Semiconductor Physics ★New developments in semiconductor physics. Proceedings of the International Summer School held at the University of New Developments in Semicor Szeged, Szeged, July 1-6, 1979. Edited by Ferenc Beleznay, György Ferenczi and János Giber. Lecture Notes in Physics, 122. Springer-Verlag, Berlin-New York, 1980.

ii + 276 pp. ISBN 3-540-09988-3 (Editors) 82f:82004 82-06

alysis *Nonlinear analysis. Theory and applications. Proceedings of the Seventh International Summer School held in Berlin, August 27-31, 1979. Edited by Reinhard Kluge. Abhandlungen der Akademie der Wissenschaften der DDR, Abteilung Mathematik, Naturwissenschaften und Technik, 1981 [Transactions of the Academy of Sciences of the DDR, Section for Mathematics, Sciences and Technology, 1981], 2. Akademie-Verlag, Berlin, 1981. 439 pp. (Editors) 82k:49004

Saint Flour, Probability *École d'Été de Probabilités de Saint-Flour IX-1979. (French) [Ninth Saint Flour Probability Summer School—1979] Held at Saint Flour, August 19-September 5, 1979. Edited by Paul-Louis Hennequin. Lecture Notes in natics, 876. Springer-Verlag, Berlin-New York, 1981. ix + 280 pp.

ISBN 3-540-10860-2 (Editors) 82k:60006 60-06

ng-Mills Equations ★Proceedings of the Summer School on Yang-Mills Equations.

Bereich Geometrie. [Geometry section] Held at Kagel, June 25-29, 1979. Seminarberichte [Seminar Reports], 25. Humboldt Universität, Sektion Mathematik, Berlin, 1980. i+246 pp. (M. Schneider) 82j:53062 53C05 (14F05, 53-02, 58E20,

AMS-NASA-NATO, Algebraic and Geometric Methods in Linear Systems Theory *Algebraic and geometric methods in linear systems theory. Papers presented at the AMS-NASA-NATO Summer Seminar held at Harvard University, Cambridge, Mass., June 1979. Edited by Christopher I. Byrnes and Clyde F. Martin. Lectures in Mass, June 1979. Edited by Christopher I. Byrines and Society, Providence, R. I., 1980. Applied Mathematics, 18. American Mathematical Society, Providence, R. I., 1980. ar: (cont

Applied Mathematics *Mathematical aspects of physiology. Proceedings of the Twelfth Summer Seminar on Applied Mathematics held at the University of Utah, Salt Lake City, Utah, June 15–27, 1980. Edited by Frank C. Hoppensteadt. Lectures in Applied Mathematics, 19. American Mathe tical Society, Providence, R.I., 1981. 394 pp. ISBN 0-8218-1119-3 (Editors) 82f:92003 92-06 (34-06, 35-06, 76-06)

rfaces algébriques

Surfaces algébriques. (French) [Algebraic surfaces] Seminar on Algebraic Geometry held in Orsay, 1976–78. Edited by Jean Giraud, Luc Illusie and Michel Raynaud. Lecture Notes in Mathematics, 868. Springer-Verlag, Berlin-New York, 1981. ii + 314 pp. ISBN 3-540-10842-4 (Editors) 82j:10052 10D21 (14J25)

*Numerical methods in fracture mechanics. Proceedings of the First International Conference held at University College, Swansea, January 9-13, 1978. Edited by A. R. Luxmoore and D. R. J. Owen. University College of Swansea, Swansea, 1978. vii + 836 pp. (Editors) 82i:73003 73-06

al methods in thermal problems. Proceedings of the First International Conference held at University College, Swansea, July 2-6, 1979. Edited by R. W. Lewis and K. Morgan. Pineridge Press Ltd., Swansea, 1979. xi+1155 pp. ISBN 0-906674-01-8 80-06 (65-06)

★Numerical methods in fracture mechanics. Proceedings of the Second International Conference held at University College, Swansea, July 7–11, 1980. Edited by D. R. J. Owen and A. R. Luxmoore. Pineridge Press Ltd., Swansea, 1980. vi + 801 pp. ISBN 0-906674-08-5 (Editors) 82c:73005 73-06 (73M05)

★Combinatorics. Proceedings of the Eighth British Combinatorial Conference held at University College, Swansea, July 20-24, 1981. Edited by H. N. V. Temperley. London Mathematical Society Lecture Note Series, 52. Cambridge University Press. Cambridge-New York, 1981. iii + 190 pp. ISBN 0-521-28514-3 (Editors) 82i:05001 05-06

nposia Mat tica *Symposia Mathematica. Vol. XXV. Conference on Statistical Theory of Decisions held at the Istituto Nazionale di Alta Matematica Francesco Severi (INDAM), Rome, June 4-7, 1979. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1980. 204 pp. (Editors) 82e:62015 62C99

★Symposia Mathematica. Vol. XXIV. International Symposium on Algebraic Geometry held at the Istituto Nazionale di Alta Matematica Francesco Severi (INDAM), Rome, April 9-14, 1979. In the centenary of the birth of Francesco Severi. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1981. xv+356 pp. (1 plate). (Editors) 82e:14005 14-06

Chern, Differential Geometry *The Chern Symposium 1979. Proceedings of the International Symposium on Differential Geometry in honor of S. S. Chern held in Berkeley, Calif., June 1979. Edited by W. Y. Hsiang, S. Kobayashi [Shoshicki Kobayashi], I. M. Singer, A. Weinstein, J. Wolf and H. H. Wu. Springer-Verlag, New York-Berlin, 1980. ii + 259 pp. ISBN 0-387-90537-5 (Editors) 82c:58002 58-06

Centenary Symposium held at Ahmedabad, January 29-February 3, 1979. Edited by A. R. Prasanna, J. V. Narlikar and C. V. Vishveshwara. A Halsted Press Book. John Wiley & Sons, Inc., New York, 1980. xiv+326 pp. (1 plate). ISBN 0-470-27007-1 (Editors) 82d:83005 83-06 (81-06, 85-06)

stein Centennial *Some strangeness in the proportion. A Centennial Symposium to celebrate the achievements of Albert Einstein. Lectures presented at the Einstein Centennial Symposium held at the Institute for Advanced Study, Princeton, N.J., March 4-9, 1979. Edited by Harry Woolf. Addison-Wesley Publishing Co., Reading, Mass., 1980. xxxi+539 pp. ISBN 0-201-09924-1 (Lawrence Sklar) 82d:83002 83-03 (00A89, 01-06)

Huygens, Christiaan
Studies on Christiaan Huygens. Invited papers from the Symposium on the Life and Work of Christiaan Huygens held in Amsterdam, August 22-25, 1979. Edited by H. J. M. Bos, M. J. S. Rudwick, H. A. M. Snelders and R. P. W. Visser. C. V. Swets & Zeitlinger, Lisse, 1980. v+321 pp. (30 plates). ISBN 90-265-0333-4 (P. Bockstaele) 82m:01036 01A45 (70-03,

ski *Proceedings of the Tarski Symposium. Held at the University of California, Berkeley, Calif., June 23-30, 1971. Edited by Leon Henkin, John Addison, William Craig, C. C. Chang [Chen Chung Chang], Dana Scott and Robert Vaught. Corrected reprint of the 1974 original. Proceedings of Symposia in Pure Mathematics, XXV. American Mathematical Society, Providence, R. I., 1979, xx + 498 pp.

ISBN 0-8218-1425-7 (Editors) 82h:03006 03-06 (01A70)

Vito Volterra, Mathematical Models in Biology

→ Vito Volterra Symposium on Mathematical Models in Biology. Proceedings of a Conference held in Rome, December 17-21, 1979. Edited by Claudio Barigozzi. Lecture Notes in Biomathematics, 39. Springer-Verlag, Berlin-New York, 1980. vi+417 pp. ISBN 3-540-10279-5 (Editors) 82j:92003 92-06 (92A17)

Wittgenstein *Language, logic, and philosophy. Proceedings of the Fourth International Wittgenstein Symposium held in Kirchberg am Wechsel, August 27-September 2, 1979. Edited by Rudolf Haller and Wolfgang Grassl. Schriftenreihe der Wittgenstein-Gesellschaft. [Wittgenstein Society Publications Series] Hölder-Pichler-Tempsky, Vienna, 1980. 617 pp. ISBN 3-209-00249-5 (Editors) 82e:03006 03-06 (03A05)

Acoustic, Electromagnetic and Elastic Wave Scattering-Focus on the T-Matrix Approach ★Acoustic, electromagnetic and elastic wave scattering—focus on the T-matrix approach. Proceedings of the International Symposium held at Ohio State University, Columbus, Ohio, June 25-27, 1979. Edited by Vijay K. Varadan and Vasundara V. Varadan. Pergamon Press, Oxford-New York, 1980. xii + 693 pp. ISBN 0-08-025096-3 (Editors) 82h:78002 78-06 (73-06, 76-06, 78A45)
Algebra ★Algebra Symposium. Papers presented at the Symposium held at

Potchefstroom University for Christian Higher Education, Potchefstroom, August 20-21, 1979. Potchefstroom University for Christian Higher Education, Department of Mathematics and Applied Mathematics, Potchefstroom, 1980. iii + 111 pp. (From the preface) 82i:16002 16-06

erican Mathematical Heritage *American mathematical heritage: algebra as applied mathematics. Papers from the Third American Mathematical Heritage

Symposium: (continued

Symposium on the History of Algebra held at the University of Texas, El Paso, Tex., November 15, 1975 and from the Fourth American Mathematical Heritage Symposium on the History of Applied Mathematics held at the University of Texas, Arlington, Tex., October 2, 1976. Edited by J. Dalton Tarwater, John T. White, Carl Hall and Marion E. Moore. Mathematics Series, 13. Texas Tech University, Department of Mathematics, Lubbock, Tex., 1981. iii + 127 pp. (Editors) 82k:01002

*American mathematical heritage: algebra and applied mathematics. Papers from the Third American Mathematical Heritage Symposium on the History of Algebra held at the University of Texas, El Paso, Tex., November 15, 1975 and from the Fourth American Mathematical Heritage Symposium on the History of Applied Mathematics held at the University of Texas, Arlington, Tex., October 2, 1976. Edited by J. Dalton Tarwater, John T. White, Carl Hall and Marion E. Moore. Mathematics Series, 13. Texas Tech University, Department of Mathematics, Lubbock, Tex., 1981. iii + 127 pp. (Editors) 82k:01002 01-06

Tex., 1981. iii+127 pp. (Editors) 82k:01002 01-06

Analytic Number Theory ★Théorie analytique des nombres. (French) [Analytic number theory] Proceedings of the Mathematical Symposium held in Tokyo, November 30, 1980. Edited by Tikao Tatuzawa and Jean-Loup Mauclaire. Monographies Scientifiques de la Maison Franco-Japonaise [Scientific Monographs of the Maison Franco-Japonaise]. 3. Maison Franco-Japonaise, Tokyo, 1981. i+151 pp. (Editors) 82k:10004 10-06

Applications of Commutative Rings to Algebraic Geometry ★Applications of commutative rings to algebraic geometry. Proceedings of a Symposium held at the Research institute for Mathematical Sciences, Kyoto University, Kyoto, May 26–27, 1980. Sürikaisekikenkyüsho Kökyüroku No. 400 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1–98. (Editors) 824:13001 13–06 (14–06)

Applications of Partial Differential Equations and Numerical Analysis. ★ Applications of partial differential equations and numerical analysis. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 12–14, 1981. Sûrikaisekikenkyûsho Kôkyûroku No. 430 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1–158. (Editors) 82g:35003 35–06 (65–06, 76–06)

pp. 1-11 and 1-108. (Editors) 84g:35003 35-06 (63-06, 16-06)
Applied Analysis for Partial Differential Equations in Applied Sciences ★Applied analysis for partial differential equations in applied sciences. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 12-15, 1980. Sărikaisekikenkyûsho Kôkyûroku No. 386 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-301. (Editors) 82d:35005 35-06 (73-06.76-06)

pp. i-iii and 1-301. (Editors) 82d:35005

Applied Combinatorial Theory and Algorithms

Applied combinatorial Theory and Algorithms

Applied combinatorial theory and algorithms

Applied combinatorial theory and algorithms

Applied combinatorial theory and algorithms

Applied combinatorial theory and algorithms

Applied combinatorial theory and algorithms

Applied combinatorial theory and algorithms

Applied combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory and algorithms

Applied Combinatorial theory

ISBN 3-211-81607-0 (Editors) 82b:81006 81-06 (60-06, 82-06)

Chaotic Phenomena in Deterministic Systems and Dynamical System Theory ★Chaotic phenomena in deterministic systems and dynamical system theory. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 14-17, 1980. Sürikaisekikenkyüsho Kökyüroku No. 413 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-166. (Editors) 82h:58015 58Fxx (28Dxx, 54H20, 70Kxx)

Classification of Algebraic Varieties (Toward the 1980s) ★Classification of algebraic varieties (toward the 1980s). (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 29-31, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 392 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-73. (Editors) 82a:14002 14-06 (32-06)

Combinatorial Structures of Configurations
Combinatorial structures of Configurations. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 16–18, 1981. Sürikaisekikenkyüsho Kökyüroku No. 429 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ix and 1-122. (Editors) 82g:05002 05-06 (05Bxx, 51Exx)

Complex Analysis of Singularities ★Complex analysis of singularities. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, September 10–12, 1980. Sűrikaisekikenkyűsho Kőkyűroku No. 415 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto,

415 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i−ii and 1-225. (Editors) 82g:14002 14-06 (32-06, 58C27)

Computer-Assisted Analysis and Model Simplification ★Computer-assisted analysis and model simplification Proceedings of the First Symposium held at the University of Colorado, Boulder, Colo, March 24-28, 1980. Edited by Harvey J. Greenberg and John S. Maybee. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xiii + 522 pp. 158N 0-12-299680-1 (A. A. Mullin) 82g:00016 00A69 (05C99, 68B15, 68I10, 90-06, 92A20)

Data Analysis and Informatics *Data analysis and informatics. Proceedings of the Second International Symposium held in Versailles, October 17–19, 1979. Edited by E. Diday, L. Lebart, J. P. Pagès and R. Tomassone. North-Holland Publishing Co., Amsterdam-New York, 1980. viii + 790 pp. ISBN 0-444-86005-3 (Editors) 821-62004 62–02

Decision Making Processes and Related Fields ★Decision making processes and related fields. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 15–17, 1979. Strikaisekikenkyűsho Kökyűröku No. 358 (1979). Kyoto University, Research

Symposium: (continued)

Institute for Mathematical Sciences, Kyoto, 1979. pp. i-ii and 1-238. (Editors) 82a:90003 90-06 (62L15)

- Deformation Theory of Linear Differential Equations and a New Viewpoint for Extension of Abelian Function Theory *Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 17–20, 1980. Sürikaisekikenkyüsho Kökyüroku No. 388 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. 1–4 and i–iii and 1–204. (Editors) 82h:58001 58–06 (14–06. 34–06. 35–06)
- Differential Geometry of Submanifolds ★Differential geometry of submanifolds (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, October 6–9, 1980.

 Sürikaisekikenkyüsho Kökyüroku No. 408 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1–155. (Editors) 82d:53001 53–06 (53C40)

Division of Mathematics of the Taniguchi Foundation ★Nonlinear problems in geometry. Proceedings of the Sixth International Symposium of the Division of Mathematics of the Taniguchi Foundation. Conference on Nonlinear Problems in Geometry held in Katata, September 3-8, 1979. Tohoku University, Department of Mathematics. Sendai, 1979. y+23 pp. (Editors) 823-58001 58-06 (35-06, 53-06)

Mathematics, Sendai, 1979, v+23 pp. (Editors) 82j:58001 58-06 (33-06).

Einstein Centennial, Fundamental Physics ★Proceedings of the Einstein Centennial Symposium on Fundamental Physics. Held at the Universidad de los Andes, Bogotá, July 30-August 5, 1979. Edited by Steven M. Moore, A. M. Rodríguez-Vargas, A. Rueda and G. Violini. Universidad de los Andes, Bogotá, 1981. xiv+667 pp. (Editors) 82h:81005 81-06 (83-06)

Equations of State in Engineering and Research
Equations of State in Engineering and Research
Equations of State in engineering and research. Based on a Symposium held at the 176th Meeting of the American Chemical Society, Miami Beach, Fla., September 11-14, 1978. Edited by Kwang Chu Chao and Robert L. Robinson, Jr. Advances in Chemistry Series, 182. American Chemical Society, Washington, D.C., 1979. x + 466 pp. (Editors) 821:82003 82-06 (80-06)

Estimation of Time Series Analysis—Theory and Applications ★Estimation of time series analysis—theory and applications. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, November 27-29, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 418 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-162. (Editors) 82i-62005 62-06 (60-06, 60F05)

Evaluation of Mathematical Softwares ★Evaluation of mathematical softwares.

Evaluation of Mathematical Softwares ★Evaluation of mathematical softwares.

(Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 22-24, 1979.

Sürikaisekikenkyüsho Kökyüroku No. 359 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-iii and 1-215. (Editors) 82h:68001 68-06 (68Bxx)

Finite Group Theory and Neighboring Areas ★Finite group theory and neighboring areas. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, December 18-20, 1980.
Sürikaisekikenkyüsho Kökyüroku No. 424 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-136. (Editors) 82g:20001 20-06 (058xx, 20Dxx)

Finite Simple Groups ★ Finite simple groups. II. Proceedings of the Symposium held at the University of Durham, Durham, July 31-August 10, 1978. Edited by Michael J. Collins. Academic Press, Inc. [Harcourt Brace Jocanovich, Publishers], London-New York, 1980. xv+345 pp. ISBN 0-12-181480-7 (Stephen D. Smith) 82h:20021 20D05 (20C15, 20C20, 20D08)

Formula Manipulation and its Applications for Mathematical Studies ★Formula manipulation and its applications for mathematical studies. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, September 4–6, 1980. Sûrikaisekikenkŷāsho Kôkŷûroku No. 406 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-vi and 1–134. (Editors) 82e:68035 68C20 (68–06)

Poundations of Computer Science ★(Special issue dedicated to Michael Machtey).

Papers presented at the Twentieth Annual Symposium on the Foundations of Computer Science held in San Juan, Puerto Rico, October 29–31, 1979. Edited by S. Rao Kosaraju and Albert R. Meyer. J. Comput. System Sci. 22 (1981), no. 3,261–470.

Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981, oc. 3,261,471. [Editors). 876.0008.

Academic Press, Inc. [Harcourt Brace Josanovich, Publishers], New York-London, 1981. pp. 261–471. [Editors] 82i:68005 68–06

Fractional Calculus and its Applications *On fractional calculus and its applications. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, October 20–24, 1980. Sürikaisekikenkyüshö Kökyűröku No. 412 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i and 1–80. (Editors) 82h-26003 26–06 (26A33, 35C99)

Functional-Differential Equations ★Functional-differential equations. (Japanese)
Proceedings of a Symposium held at the Research Institute for Mathematical
Sciences, Kyoto University, Kyoto, January 31.—February 2, 1980.
Sürikaisekikenkyüsho Kökyüroku No. 379 (1980). Kyoto University, Research
Institute for Mathematical Sciences, Kyoto, 1980. pp. i—ii and 1—117. (Editors)
82-3-4001 34—05

82a:34001 34-06

Fundamental Theories and Applications of Mathematical Information Science

★ Fundamental theories and applications of mathematical information science.

(Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 2-4, 1981.

Sarikaisekikenkyūsho Kōkyūroku No. 421 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-iv and 1-283. (Editors)

82a:e8004 68-06 (68Dxx)

Graphs and Combinatorics. ★Graphs and combinatorics. III. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, December 24–25, 1979. Sürikaisekikenkyüsho Köhyüroku No. 397 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto,

1980. pp. i-ii and 1-248. (Editors) 82h:05003 05-06 (05Cxx)
rmonic Analysis in Homogeneous Spaces *Harmonic analysis in homogeneous
spaces. (Japanese) Proceedings of a Symposium held at the Research Institute for
Mathematical Sciences, Kyoto University, Kyoto, February 19-21, 1981.
Sürikaisekikenkyüsho Kökyüroku No. 426 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-115. (Editors) 82c43001 43-06

hory of Algebra *American mathematical heritage: algebra and applied mathematics. Papers from the Third American Mathematical Heritage Symposium on the History of Algebra held at the University of Texas, El Paso, Tex., November 15, 1975 and from the Fourth American Mathematical Heritage Symposium on the History of Algebra *American mathe 15, 1975 and from the Fourth American Mathematical Heritage Symposium on the History of Applied Mathematics held at the University of Texas, Arlington, Tex., October 2, 1976. Edited by J. Dalton Tarwater, John T. White, Carl Hall and Marion E. Moore. Mathematics Series, 13. Texas Tech University, Department of Mathematics, Lubbock, Tex., 1981. iii+127 pp. (Editors) 82k:01002 01-06 History of Applied Mathematics. ★ American mathematical heritage: algebra and applied mathematics. Papers from the Third American Mathematical Heritage. Symposium on the History of Algebra held at the University of Texas. El Paper Texas.

Symposium on the History of Algebra held at the University of Texas, El Paso, Tex., November 15, 1975 and from the Fourth American Mathematical Heritage Symposium on the History of Applied Mathematics held at the University of Texas, Arlington, Tex., October 2, 1976. Edited by J. Dalton Tarwater, John T. White, Carl Hall and Marion E. Moore. Mathematics Series, 13. Texas Tech University, Department of Mathematics, Lubbock, Tex., 1981. iii + 127 pp. (Editors) 82k:01002

erfunctions and Linear Differential Equations ★Hyperfunctions and linear differential equations. VI. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 5-8, 1978. Sûrikaisekikenkyûsho Kôkyûroku No. 341 (1978). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1978. pp. i-iii and 1-195. (Editors) 82£35009 35-06 (32-06, 46-06)

IMACS-GI, Parallel Computers—Parallel Mathematics **Parallel computers—parallel mathematics: Proceedings of the IMACS-GI Symposium held at the Technical University of Munich, Munich, March 14–16, 1977. Edited by M. Feilmeier. University of Munich, Marich 14–16, 1977. Edited by M. Fellmeier.

North-Holland Publishing Co., Amsterdam-New York, 1977. xii+331 pp.

1SBN 0-444-85042-2 (Editors) 824:68003 68–06 (68B20)

tability of Flows and Turbulence ★Instability of flows and turbulence. (Japanese)

Proceedings of a Symposium held at the Research Institute for Mathematical

Sciences, Kyoto University, Kyoto, January 21–23, 1980. Sürikaisekikenkyühön Kökyüroku No. 390 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1–211. (Editors) 824:76001 76–06 (76Exx.

IUTAM, Structural Control *Structural control. Proceedings of the International IUTAM Symposium held at the University of Waterloo, Waterloo, Ont., June 4-7, 1979. Edited by H. H. E. Leipholz. North-Holland Publishing Co., Amsterdam-New York, 1980. xv+810 pp. ISBN 0-444-85485-1 (Hassan K. Khalii) 82g:93063 93-06 (49-06)

stakem Einstein Centennial, Gauge Theories and Unification of Physical Forces *To fulfill a vision. Jerusalem Einstein Centennial Symposium on Gauge Theories and

Unification of Physical Forces held in Jerusalem, March 14–23, 1979. Edited by Yuval Ne'eman. Addison-Wesley Publishing Co., Reading, Mass., 1981. xxxi + 279 pp. 1SBN 0-201-05289-X (Editors) 82d-83003 83–03 (01−06, 81G20) poldina, Singularities ★Leopoldina-Symposion: Singularitien—Singularities. [Leopoldina Symposium: Singularities] Held in Thuringen, May 3–7, 1978. Nova Acta Leopoldina (N.F.) 52 (1981), no. 240, 1−185. Johann Ambrosius Barth, Leipzig,

1981. pp. 1–190. (Editors) 82k:14002 14–06
Algebras, Algebraic Groups and Related Topics ★ Lie algebras, algebraic groups and related topics. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 29-June 2, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 394 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-259. (Editors) 82a:17001 17-06 (16-06, 20Gxx)

ear and Nonlinear Partial Differential Equations *Linear and nonlinear partial differential equations. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 17-19, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 402 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-162. (Editors) 82d:35010 35-06

ear Operators Related to Normal Operators *Linear operators related to normal operators. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 28-August 1, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 399 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-160. (Editors) 47-06

thematical Biology *Some mathematical questions in biology. Proceedings of the Thirteenth Symposium on Mathematical Biology held in Houston, Tex., January 4, 1979. Edited by Simon A. Levin. Lectures on Mathematics in the Life Sciences, 12. atical Society, Providence, R.I., 1979. ix+218 pp.

American mannenatural society, 1700/ann.

↑ 158/N 0-8218-1162-2 (Editors) 82:92001 92-06

★Some mathematical questions in biology. Proceedings of the Fourteenth Symposium held in San Francisco, Calif., January 7, 1980. Edited by George F. Oster. Lectures on Mathematics in the Life Sciences, 13. American Mathe Society, Providence, R. I., 1980. vi + 274 pp. ISBN 0-8218-1163-0 (Editors) 82b:92002

★Some mathematical questions in biology. Proceedings of the 15th Symposium on Mathematical Biology held in Toronto, Ont., January 8, 1981. Edited by Stephen Childress. Lectures on Mathematics in the Life Sciences, 14. America Mathematical Society, Providence, R.I., 1981. x+214 pp. ISBN 0-8218-1164-9 (Editors) 82i:92002 92-06

Mathematical Methods in Software Science and Engineering ★Mathematical methods in software science and engineering. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 10-12, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 363 (1979). Kyoto University, Research thematical Sciences, Kyoto, 1979. pp. i-ii and 1-291. (Editors) 68-06

★ Mathematical methods in software science and engineering. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 9-11, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 396 (1980). Kyoto University. Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-354. (Editors) 82::68004 68-06

thematical Problems in the Quantum Theory of Irreversible Processes

* Mathematical problems in the quantum theory of irreversible processes Proceedings of a Symposium held at the Laboratorio di Cibernetica del CNR di Arco Felice, Naples, March 13-17, 1978. Edited by L. Accardi, V. Gorini and G. Parravicini. Labo ratorio di Cibernetica del CNR, Naples, 1978. ii + 224 pp. (Editors)

82;82003 82-06 (46L60)
thematical Topics in Biology ★Mathematical topics in biology. (Japanese)
Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, December 11-13, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 420 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-172. (Editors) 82g:92003 92-06

crofunctions and Linear Differential Equations *Microfunctions and linear differential equations. VII. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 24-26, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 410 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-153. (Editors) 82d:46002 46-06 (35-06, 46F15, 58-06) ced Boundary Value Problems in Fluid Mechanics ★Mixed boundary value

problems in fluid mechanics. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 10-12, 1978. Sûrikaisekikenkyûsho Kôkyûroku No. 360 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-ii and 1-242. (Editors) 82d:76003 76-06

dinear Dynamics and the Beam-Beam Interaction *Nonlinear dynamics and the beam-beam interaction. Papers from the Symposium held at Brookhaven National Laboratory, N.Y., March 19-21, 1979. Edited by Melvin Month and John C. Herrera. AIP Conference Proceedings, 57. American Institute of Physics, New York, 1980. viii + 340 pp. ISBN 0-88318-156-8 (Editors) 82g.78001 78-06 (58F13,

llinear Functional Analysis ★Nonlinear functional analysis. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, October 13-15, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 428 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-168. (Editors) 82g:35004 35-06 (47-06, 76-06)

ear Waves: Classical Theory and Quantum Theory *Nonlinear waves: classical theory and quantum theory. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kvoto University, Kvoto, September 24-27, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 414 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-iii and 1-278. 35-06 (81-06, 83-06) (Editors) 82h:35002

stationary Problems in Fluid Mechanics Nonstationary problems in fluid mechanics. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 12-14, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 393 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-214. (Editors) 824:76004 76-06

Notion of Time and Cybernetics See Mairlot, Fernand E.; et al., 82h:93002

Number Theory *Number theory. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, December 5-8, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 378 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-122.

(Editors) 82a:10002 | 10-06 (12-06)
erations Research | \psi V. Symposium on Operations Research. Part I. Held at the University of Cologne, Cologne, August 25–27, 1980. Edited by Rainer E. Burkard and Theodor Ellinger. Methods of Operations Research, 40. Verlagsgruppe Athenäum/Hain/Scriptor/Hanstein, Königstein/Ts.: Oelgeschlager, Gunn & Hain Publishers, Inc., Cambridge, Mass., 1981. 450 pp. ISBN 3-445-02110-4 (Editors) 82k:90002a 90-06

★V. Symposium on Operations Research. Part II. Held at the University of Cologne, Cologne, August 25-27, 1980. Edited by Rainer E. Burkard and Theodor Ellinger. Methods of Operations Research, 41. Verlagsgruppe Athenäum/Hain/Scriptor/Hanstein, Königstein/Ts.; Oelgeschlager, Gunn & Hain Publishers, Inc., Cambridge, Mass., 1981. 402 pp. ISBN 3-445-02168-6 (Editors) 82k:90002b 90-06

Operator Algebras and their Applications *Operator algebras and their applications. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 2-4, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 398 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-174. (Editors) 46-06 (46Lxx, 47A15)

Optimization of Design and Computation of Control № works *Optimization of design and computation of control networks. Proceedings of the International Symposium held at Sopron, July 4-10, 1977. Edited by F. Halmos and J. Somogyi. Akadémiai Kiadó (Publishing House of the Hungarian Academy of Sciences), Budapest, 1979. 733 pp. ISBN 963-05-1716-7 (Editors) 82c:90026 90Bxx (86A30)

p-adic L-Functions and Algebraic Number Theory *p-adic L-functions and algebraic number theory. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, October 20–24, 1980.

Symposium: (continued)

1982

Sûrikaisekikenkyûsho Kôkyûroku No. 411 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-iii and 1-224. (Editors) 82h:12001 12-06 (12A35)

Pannonian, Mathematical Statistics

The First Pannonian Symposium on Mathematical Statistics.

Mathematical Statistics.

Held at Bad Tatzmannsdorf, September 16–21, 1979.

Edited by Pål Revesz, Leopold Schmetterer and V. M. Zolotarev. Lecture Notes in Statistics, 8. Springer-Verlag, New York-Berlin, 1981. vi+308 pp. 158N 0-387-90583-9 (Editors) 82162005 62–02 (60–02)

Problems in Nonlinear Analysis in Geometry and Mechanics

Nonlinear problems of analysis in geometry and mechanics.

Proceedings of the Symposium held at the Lipiusgeith Paul Solvier, Toulouse April 4-6, 1979. Edited by M. Attier, D. Pageoli, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited by M. Attier, 1979. Edited

Problems in Nonlinear Analysis in Geometry and Mechanics ★Nonlinear problems of analysis in geometry and mechanics. Proceedings of the Symposium held at the Université Paul Sabatier, Toulouse, April 4-6, 1979. Edited by M. Atteia, D. Bancel and I. Gumowski. Research Notes in Mathematics, 46. Pitman (Advanced Publishing Program), Boston, Mass-London, 1981. iii+208 pp. ISBN 0-273-08493-3 (Editors) 824:00005 58-06 (00A10)

Qualitative Theory of Solutions in Functional-Differential Equations ★Qualitative theory of solutions in functional-differential equations. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, May 11–13, 1981. Sûrikaisekikenkyûsho Kôkyûroku No. 432 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1–114. (Editors) 82k-34001 34–06 (34K15)

Quasiconformal Mappings and Riemann Surfaces

★Quasiconformal mappings and Riemann surfaces.

★Quasiconformal mappings and Riemann surfaces.

★Quasiconformal mappings and Riemann surfaces.

↑Quasiconformal mappings and Riemann surfaces.

↑Quasiconformal mappings and Riemann surfaces.

↑Quasiconformal mappings and Riemann surfaces.

↑Quasiconformal mappings and Riemann surfaces.

↑Quasiconformal mappings and Riemann surfaces.

↑Quasiconformal mappings and Riemann surfaces.

↑Quasiconformal mappings and Riemann surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Surfaces.

↑Quasiconformal mappings and Riemann Riema

82a:30001 30-06 (30C60, 30F99)

Queueing Theory and its Applications ★Queueing theory and its applications.

(Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, January 22-24, 1981.

Sūrikaisekikenkyūsho Kökyūroku No. 425 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-161. (Editors) 82z;60004 60-06 (60K25)

Random Systems and Dynamical Systems

Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, January 7−9, 1981. Sürikaisekikenkyüshö Kõkyûroku No. 439 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i−ii and 1−137. (Editors) 82k:58039

58Fxx (60160, 70K50, 76F99, 82−06, 82A05)

Recent Developments in the Theory of Numbers * Theory of numbers. Proceedings of the Symposium in Pure Mathematics of the American Mathematical Society held at the California Institute of Technology, Pasadena, Calif., November 21–22, 1963. Edited by Albert Leon Whiteman. Corrected reprint of the 1965 original. Proceedings of Symposia in Pure Mathematics, VIII. American Mathematical Society, Providence, R.I., 1979. vii+216 pp. ISBN 0-8218-1408-7 (Editors) 82d:10006 10-06

Recent Progress in Analytic Number Theory Recent progress in analytic number theory. Vol. 1. Papers from the Symposium held at Durham University, Durham, July 22-August 1, 1979. Edited by H. Halberstam and C. Hooley. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1981. xii + 348 pp. ISBN 0-12-318201-8 (Editors) 82k:10005a 10-06

★Recent progress in analytic number theory. Vol. 2. Papers from the Symposium held at Durham University, Durham, July 22-August 1, 1979. Edited by H. Halberstam and C. Hooley. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], London-New York, 1981. xii+280 pp. ISBN 0-12-318202-6 (Editors) 82k:100055 10-06

Recent Topics in Algebraic Geometry

★ Recent topics in algebraic geometry. (Japanese)

Proceedings of a Symposium held at the Research Institute for Mathematical
Sciences, Kyoto University, Kyoto, October 6–8, 1980. Sûrikaisekikenkyûsho

Kôkyûroku No. 409 (1980). Kyoto University, Research Institute for Mathematical
Sciences, Kyoto, 1980. pp. i–ii and 1–152. (Editors) 82d:14001 14–06

Recursive Function Theory ★Recursive function theory. Proceedings of the Fifth Symposium in Pure Mathematics of the American Mathematical Society held in New York, April 6-7, 1961. Edited by J. C. E. Dekker. Corrected reprint of the 1962 original. Proceedings of Symposia in Pure Mathematics, V. American Mathematical Society, Providence, R. I., 1979. vii + 247 pp. ISBN 0-8218-1405-2 (Editors) 826:03065 03Dxx (03-06)

Regular Semigroups ★Proceedings of a Symposium on Regular Semigroups. Held at Northern Illinois University, DeKalb, Ill., April 20-21, 1979. Northern Illinois University, Department of Mathematical Sciences, DeKalb, Ill., 1979. iv+192 pp. (G. J. Lallement) 82;20120 20M10 (20-06)

Ring Theory ★Proceedings of the 14th Symposium on Ring Theory. Held at Shinshu University, Matsumoto, July 30-August 1, 1981. Edited by Hisao Tominaga. Okayama Mathematical Lectures. Okayama University, Department of Mathematics, Okayama, 1981. ii+115 pp. (Editors) 82;16001 16-06

Semigroups ★Proceedings of the 4th Symposium on Semigroups. Semigroup theory and its related fields. Held at Yamaguchi University, Yamaguchi, October 6–8, 1980. Edited by Kentaro Murata. Yamaguchi University, Yamaguchi, 1980. v+131 pp. (Editors) 821:20008 20-06 (20Mxx)

(Editors) 82f:20008 20-06 (20Mxx)

Semigroups and Related Topics ★Semigroups and related topics. (Japanese)

Proceedings of a Symposium held at the Research Institute for Mathematical
Sciences, Kyoto University, Kyoto, May 15-17, 1980. Sürikaisekikenkyüsho

Kökyüroku No. 395 (1980). Kyoto University, Research Institute for Mathematical
Sciences, Kyoto, 1980. pp. i-iii and 1-137. (Editors) 82a:20002 20-06 (16-06,
20Mxx)

Singularities of Differentiable Mappings ★Singularities of differentiable mappings.

(Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 9–11, 1980.

Sürikaisekikenkyüsho Kökyüroku No. 403 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1–111. (Editors)

82c:58001 58–06

Symposium: (continued)

Skew Polynomial Rings, Group Rings and Related Topics ★Skew polynomial rings, group rings and related topics. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 11-13, 1981. Sûrikaisekikenkyûsho Kôkyûroku No. 438 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-79. (Editors) 82k:16001 16-06

Soviet-American, Soliton Theory ★Soliton theory. Proceedings of the Soviet-American Symposium held in Kiev, September 4–16, 1979. Edited by S. V. Manakov and V. E. Zakharov [V. E. Zaharov]. Phys. D 3 (1981), no. 1-2. North-Holland Publishing Co., Amsterdam-New York, 1981. pp. i-xiv and 1–438. (Editors) 82k:81002 81–06 (35–06, 35020, 76B25)

Statistical Analysis of the Data in Bioscience and Mathematical Models
**Statistical analysis of the data in bioscience and mathematical models. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 27–28, 1980. Sürikaisekikenkyüsho Kökyüroku No. 384 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1–182. (Editors) 82e:62169 62P10

Statistical Estimation *Statistical estimation. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, January 24–26, 1980. Sürikaisekikenkyüsho Kökyüroku No. 380 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and

1-161. (Editors) 82a:62009 62-06

Stochastic Differential Equations on Manifolds ★Stochastic differential equations on manifolds (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 22-26, 1980.

Sûrikaisekikenkyûsho Kôkyûroku No. 391 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-135. (Editors) 82a:60006 60-06 (58/G32)

Rac60006 60-06 (58G32)

Stochastic Integrals ★Stochastic integrals. Proceedings of the LMS Durham

Symposium held at the University of Durham, Durham, July 7-17, 1980. Edited by

David Williams. Lecture Notes in Mathematics, 851. Springer-Verlag, Berlin-New

York, 1981. ix+540 pp. ISBN 3-540-10690-1 (Editors) 821:60009 60-06 (60Hxx,

Stochastic Processes and Statistical Mechanics in Open Systems ★Stochastic processes and statistical mechanics in open systems. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 17–19, 1979. Szirkaisekikenkyűsho Kökyűroku No. 367 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i–iii and 1–293. (Editors) 82:60010 60–06 (60H10, 60J60, 60K35, 82–06)

★Stochastic processes and statistical mechanics in open systems. II. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, March 13–15, 1980. Sûrikaisekikenkyûsho Kökyûroku No. 405 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1–294. (Editors) 82f:60011 60–06 (82–06)

Structure and Classification of Low-Dimensional Manifolds ★Structure and classification of low-dimensional manifolds. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, September 1–3, 1980. Sürikaisekikenkyüsho Kökyüroku No. 417 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i–ii and 1–141. (Editiors) 82g:57001 37–06

Structure of Three-Dimensional Manifolds and Placement Problems ★Structure of three-dimensional manifolds and placement problems. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, September 3-5, 1979. Sūrikaisekinekyūsho Kökyūroku No. 369 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-iii and 1-207. (Editors) 82a:57002 57-06

Studies on Computational Complexities and Related Topics

Studies on Computational Complexities and Related Topics

Clapanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 5–7, 1980. Sürikaisekikenkyüshö Kökyüröku No. 381 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iv and 1–275. (Editors) 82hc68072 68C25 (03D15, 68–06, 94Cxx)

Studies on Numerical Algorithms *Studies on numerical algorithms. (Japanese)

Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, November 13–15, 1980. Sürikaisekikenkyüsho Kökyüroku No. 422 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii. and 1–171. (Editors) 82g:65006 65–06

Study of Algorithms of Numerical Calculation **Study of algorithms of numerical calculation. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, January 24–26, 1980. Sürikaisekikenkyüsho Kökyüröku No. 382 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i–iii and 1–198. (Editors) 82ac65007 65–06

Study of Hardy Spaces and Several Variable Fourier Analysis by Real Analytical Methods

*The study of Hardy spaces and several variable Fourier analysis by real analytical
methods. (Japanese) Proceedings of a Symposium held at the Research Institute for
Mathematical Sciences. Kyoto University, Kyoto, February 12-14, 1980.

Sürikaisekikenkyüsho Kökyüroku No. 383 (1980). Kyoto University, Research
Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-139. (Editors)
820-45013. 42-06.

82a-42003 42-06
Styrian Mathematical ★12. Steiermärkisches Mathematisches Symposium. (German)
[Twelfith Styrian Mathematical Symposium] Held in Graz, September 22-25, 1980.
Bericht [Report], 140-150. Forschungszentrum Graz, Mathematisch-Statistische Sektion, Graz, 1980. 178 pp. (not consecutively paged). (Editors) 82i:52003 52-06
(51-06)

Symergetics *Pattern formation by dynamic systems and pattern recognition.

Proceedings of the International Symposium on Symergetics held at
Garmisch-Partenkirchen, April 30-May 5, 1979. Edited by Hermann Haken.

Springer Series in Symergetics, 5. Springer-Verlag, Berlin-New York, 1979.

viii+305 pp. ISBN 3-540-09770-8 (J. S. Joel) 82k:00028 00A69 (58E07, 68G10, 76Rxx, 81K05, 92-XX)

*Dynamics of synergetic systems. Proceedings of the International Symposium on Synergetics held at Bielefeld, September 24–29, 1979. Edited by Hermann Haken. Springer Series in Synergetics, 6. Springer-Verlag, Berlin-New York, 1980. viii+271 pp. ISBN 3-540-09918-2 (Editors) 22m-00030 00A69

on memory storage and use of information. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 18-20, 1981. Sürikaisekikenkyüsho Kôkyüroku No. 423 (1981). Kyoto

University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i.-iv and 1-343. (Editors) 822-68008 68-06 (68B15, 68H05) are Chapterimental Layouts and its Applications Theory of experimental layouts and its Applications. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto, July 14-16, 1980. Sürikaisekikenkyüsho Kökyüroku

No. 404 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-xii and 1-162. (Editors) 82≥65006 05-06 (05B05, 05B30, 05C99) ispol, General Topology and its Applications ★IV Тираспольский Симполнум по Общей Топологии и ее Приложениям. (Russian) [Fourth Tiraspol Symposium on Obugui Tonoaorum n ee Lipanoaeruman (Russian) [Fourth Haspon symposium on General Topology and its Applications] Held in Tiraspol, August 20–21, 1979. Edited by P. K. Osmateku. "Silinca", Kishineo, 1979. 183 pp. (Editors) 82b:54001 54-06 (55-06)

54-06 (35-06)
bies in Homotopy Theory and Cohomology Theory *Topics in homotopy theory and cohomology theory. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, October 27-29, 1980.
Sürikaisekikenkyühö Kökyüroku No. 419 (1981) Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-70. (Editors) 82g:55002 55-06

ics Related with Prehomogeneous Vector Spaces *Topics related with prehomogeneous vector spaces. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 21-28, ics Related with Preb 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 416 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-ii and 1-107. (Editors) 32-06 (20Gxx) 82::32003

ology and Economics *Topology and economics. (Japanese) Proceedis Symposium held at the Research Institute for Mathematical Sciences, Kyoto ics *Topology and economics. (Japanese) Proceedings of a University, Kyoto, June 26-30, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 407 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1–89. (Editors) 824-90004 90Axx

pp.1-11 and 1-09. [Cathors) accessions

**Topology of Infinite Loop Spaces **Topology of infinite loop spaces. (Japanese)

Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 25-28, 1980. Sürikaisekikenkyüsho Kökyűroku No. 389 (1980). Kyoto University, Research Institute for Mathem Sciences, Kyoto, 1980. pp. i-ii and 1-142. (Editors) 82a:55001 55-06 (5 55-06 (57-06.

Traffic and Control *Traffic and control. Papers presented at the Symposium held in Delft, November 4, 1980. Dedicated to the scientific work of Professor L. Kosten on the occasion of his retirement. Delft Progr. Rep. 5 (1980), no. 3. Delft University

Transition and Turbulence ★Transition and turbulence. Proceedings of a Symposium held at the Mathematics Research Center, University of Wisconsin, Madison, Wis., October 13-15, 1980. Edited by Richard E. Meyer. Publication of the Mathematics Research Center, University of Wisconsin, 46. Academic Press, Inc. [Harcourt Brace Jocanovich, Publishers], New York-London, 1981. ix+245 pp. ISBN 0-12-493240-1

(Editors) 82k:76002 76-06 (58F13, 76Exx, 76Fxx)

UNESCO, Impact of Modern Scientific Ideas on Society ★The impact of modern scientific ideas on society. In commemoration of Einstein. Papers presented at the UNESCO Symposium held in Munich and in Ulm, September 18-20, 1978. Edited by Colette M. Kinnon, A. N. Kholodilin and J. G. Richardson. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xiv + 203 pp. ISBN 90-277-1238-7 (Editors) 82k:01046 01A80 (00A69, 01-06)

rious Problems on Analytic Varieties *Various problems on analytic varieties (Japanese) Proceedings of a Symposium held at the Research Iastitute for Mathematical Sciences, Kyoto University, Kyoto, February 4-7, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 387 (1980). Kyoto University, Research Institute for Mathe tical Sciences, Kyoto, 1980. pp. i-ii and 1-131. (Editors) 82b:32001 32-06

Various Problems for Nonlinear Circuits in Dynamical Systems ★Various problems for nonlinear circuits in dynamical systems. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 11-14, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 370 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-ii and 1-183. (Editors) 821-94044 94Cvv (54H)0. 59Clm 94Cxx (54H20, 58C10)

Synergetics *Pattern formation by dynamic systems and pattern recognition. Proceedings of the International Symposium on Synergetics held at Garmisch-Partenkirchen, April 30-May 5, 1979. Edited by Hermann Haken. Springer Series in Synergetics, 5.

36-may 3, 1979. Euliced by refinant Hanch. Springer series in Synergerics, 3.
Springer-Verlag, Berlin-New York, 1979. viii + 305 pp. ISBN 3-540-09770-8 (J. S. Joel)
821:-00028 00A69 (58E07, 68G10, 76Rxx, 81K05, 92–XX)

★Dynamics of synergetic systems. Proceedings of the International Symposium on Synergetics held at Bielefeld, September 24–29, 1979. Edited by Hermann Haken. Springer Series in Synergetics, 6. Springer-Verlag, Berlin-New York, 1980. viii + 271 pp. ISBN 3-540-09918-2 (Editors) 82m:00030 00A69

tem dynamics ★Elements of the system dynamics method. Edited by Jørgen Randers.
MIT Press/Wright-Allen Series in Systems Dynamics. MIT Press, Cambridge, Mass.-London, 1980. xxiv + 320 pp. ISBN 0-262-18092-8 (A. A. Piontkovskii) 82e:90030 90A17

★Асимитотические методы в динамике систем. (Russian) [Asymptotic methods in stem dynamics] Edited by S. V. Eliseev. "Nauka" Sibirsk. Otdel., Novosibirsk, 1980.

193 pp. (Editors) 82k76001 76-06 (76B20, 76Gxx)

★System dynamics. Edited by Augusto A. Legasto, Jr., Jay W. Forrester and James

M. Lyneis. Studies in the Management Sciences, 14. North-Holland Publishing Co.,

sterdam-New York, 1980. ix + 282 pp. ISBN 0-444-85491-6 (J. S. Joel) 82j:90021 90A30 (92A20)

*Analyse et contrôle de systèmes. (English) [Analysis and control of systems] Papers from the Seminar organized by the Institut de Recherche d'Informatique et d'Automatique (IRIA) held at Rocquencourt, February-October 1979. Institut National de Recherche en Informatique et en Automatique (INRIA), Rocquencourt, 1980. 121 pp. ISBN 2-7261-0237-9 (Editors) 821:60004 60-06 (49-06)

*Fourteenth Asilomar Conference on Circuits, Systems & Computers. Held in Pacific Grove, Calif., November 17–19, 1980. Edited by Donald E. Kirk. *IEEE Computer Society, New York*, 1981. viii + 520 pp. (Editors) 824:93001 93–06

Systems for control of networks — Кастемы управления сетвия. (Russian) [Systems for control of networks] Edited by O. V. Šamfarova. Автоматы и Управление. [Automata and Control] "Nauka", Moscow, 1980. 140 pp. (Editors) 82d:94048 94Cxx (94-06)

teems far from equilibrium *\(\frac{\pmathbf{X}}{\pmathbf{X}}\) from the Sitges and Barcelona, June 1980. Edited by Luis Garrido. Lecture Notes in Physics, 132. Springer-Verlag, Berlin-New York, 1980. xv+403 pp. ISBN 3-540-10251-5 (Editors) 82g-82004

82-06 (58-06, 76F99, 82A35, 82A70)

vization *Systems modelling and optimization. Edited by Peter Nash. IEE Control Engineering Series, 16. Peter Peregrinus, Ltd., Steve behalf of the Institution of Electrical Engineers (IEE), London, 1981. xii + 201 pp. ISBN 0-906048-63-X (Editors) 82m:90002 90-06 (49-06, 93-06) us, Ltd., Stevenage; on

tems theory *Rompoca Monemposames CROXERIX CHICTEM. (Russian) [Questions of modeling complex systems] Edited by T. P. Mar'janovič and T. K. Kuhta. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev., 1980. 80 pp. (Editors) 82:93088a 93E12 (35R60,

czyrk *Proceedings of the Conference on Convergence. Held in Szczyrk, October 22-27, 1979. Edited by Czesław Kliś. Polska Akademia Nauk, Oddział w Katowicach, atyczno-Fizyczna, Katowice, 1980. ii + 112 pp. (Editors) 82k:54001 54-06 (46-06)

Szegod *New developments in semiconductor physics. Proceedings of the International Summer School held at the University of Szeged, Szeged, July 1-6, 1979. Edited by Ferenc Beleznay, György Ferenczi and János Giber. Lecture Notes in Physics, 122. Springer-Verlag, Berlin-New York, 1980. ii + 276 pp. ISBN 3-540-09988-3 (Editors) 821-82004 82-06

#Algebraic methods in graph theory. Vol. I, II. Papers from the Conference held in Szeged, August 24–31, 1978. Edited by L. Lovász and Vera T. Sos. Colloquia Mathematica Societatis János Bolyai, 25. North-Holland Publishing Co., Amsterdam-New York, 1981. 847 pp. ISBN 0-444-85442-8 (Editors) 82k-05002 05–06 (05Cxx)

Astronomical See Kennedy, E. S., 82h:01014

nensions, indices, and branching rules for representations of simple Lie algebras See McKay, W. G.; et al., 82i:17008

Mathematical statistics See Neff, Norman D.; et al., 82a:62157 Normal tolerance limits, sampling plans, and screening See Odeh, Robert E.; et al.,

ce *Séminaire de Théorie de Nombres, 1980-1981. (French) [Seminar on Number Theory, 1980-1981] Held at the Université de Bordeaux I, Talence, during the academic year 1980-1981. Université de Bordeaux I, U.E.R. de Mathématiques et d'Informatique, Laboratoire de Théorie des Nombres, Talence, 1981. 264 pp. (not consecutively paged). 10-06 (12-06) (Editors) 82m:10006

Teaching of mathematics *Rassegna di matematica. (Italian) [Mathematics review] Logica matematica. Matematica applicata. Didattica della matematica. [Mathematical logic. Applied mathematics. Teaching of mathematics]. Edited by Marco Borga, Paolo Freguglia and Dario Palladino. Casa Editrice Tilgher, Genoa, 1980. 100 pp. (Editors)

rees of mini- and micromputers *Технические средства м микро-ЭВМ. (Russian) [Technical resources of mini- and micro-computers] Edited by B. N. Malinovskii and E. T. Makovenko. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1980. 102 pp. (Editors) 82f:68007 68-06

eoretical applications of the methods of mathematical logic *Теоретические применения методов математической логики. III. (Russian) [Theoretical applications of the methods of mathematical logic. III] Edited by D. Ju. Grigor'ev and V. P. Orevkov. Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 105 (1981). "Nauka"

Leningrad. Otdel., Leningrad, 1981. pp. 1-200. (Editors) 82g:03007 03-06 oretical and applied mechanics Theoretical and applied mechanics. Proceedings of the ional Congress held at the University of Toronto, Toronto, Ont., August 17-23, 1980. Edited by F. P. J. Rimrott and B. Tabarrok. North-Holland Publishing Co., Amsterdam-New York, 1980. xxxi+457 pp. ISBN 0-444-85411-8 (Editors) 824:00008 70-06 (00A10, 73-06, 76-06)

★Theoretical and applied mechanics. Vol. 29. Proceedings of the 29th Japan National Congress for Applied Mechanics held in Tokyo, November 20-22, 1979. University of Tokyo Press, Tokyo, 1981. ix + 487 pp. ISBN 0-86008-282-2 (Editors) 73-06 (76-06)

Theoretical cybernetics ★Теоретическая кибернетика. (Russian) [Theoretical cybernetics] Edited by V. E. Žukovin. "Mecniereba", Tbilisi, 1980. 180 pp. (Editors) 82f:90004 90-06 (68Gxx)

★Теорня вероятностей. Математическая статистика. Теоретическая кибернетика. Том 18. (Russian) [Probability theory. Mathematical statistics. Theoretical cybernetics. Vol. 18] Edited by R. V. Gamkrelidze. Итоги Науки и Техники. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informac Moscow, 1981. 188 pp. (errata insert). (Editors) 821:60003 60-02 (60K25, 60K35)

oretical physics *Proceedings of the Third Workshop on Lie-Admissible Formulations. Part B. Theoretical physics. Held at the University of Massachusetts, Boston, Mass., August 4-9, 1980. Hadronic J. 4 (1980/81), no. 3. Hadronic Press, Inc., Nonantum, Mass., 1981. pp. 608-1165. (Editors) 82f:81002b 81-06 (17-06)

poretical studies on memory storage and use of information *Theoretical studies on memory storage and use of information. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 18-20, 1981. Sûrikaisekikenkyûsho Kôkyûroku No. 423 (1981). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1981. pp. i-iv and 1-343. (Editors) 68-06 (68B15, 68H05)

Theoria cum praxi: on the relationship of theory and praxis in the seventeenth and eighteenth centuries ★Theoria cum praxi: zum Verhältnis von Theorie und Praxis im 17. und 18. Jahrhundert. Band I. (German) [Theoria cum praxi: on the relationship of theory and praxis in the seventeenth and eighteenth centuries. Vol. Il Theorie und Praxis. Politik. praxis in the seveneema and eighteent occurrence. Vol. 1 Income and Fraxis, Pointa, Rechts- und Staatsphilosophie. [Theory and praxis, politics, philosophy of law and state] Proceedings of the Third International Leibniz Congress held in Hannover, November 12-17, 1977. Edited by Albert Heinekamp and Reinhard Finster. Studia Leibnitiana Supplementa, XIX. Franz Steiner Verlag GmbH, Wiesbaden, 1980. vii + 284 pp. 1SBN 3-515-03419-6 (Editors) 82h:01003 01-06 (01A45, 01A50)

oretical and systems programming ★Теоретическое и системное программирование. (Russian) [Theoretical and systems programming] Edited by E. L. Juščenko [K. L. Juščenko] and V. V. Križanovskii. Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev, 1979.

115 pp. (Editors) 82a:68008 68-06 (68E05)

113 pp. (Editors) accessors on 00-00 (000203)

offa cum praxi: zum Verhältnis von Theorie und Praxis im 17. und 18. Jahrhundert

★Theoria cum praxi: zum Verhältnis von Theorie und Praxis im 17. und 18. Jahrhundert. Band I. (German) [Theoria cum praxi: on the relationship of theory and praxis in the seventeenth and eighteenth centuries. Vol. I] Theorie und Praxis, Politik, Rechts- und Staatsphilosophie. [Theory and praxis, politics, philosophy of law and state] Proceedings of the Third International Leibniz Congress held in Hannover, November 12–17, 1977. Edited by Albert Heinekamp and Reinhard Finster. Studia Leibnitiana Supplementa, XIX. Franz Steiner Verlag GmbH, Wiesbaden, 1980. vii + 284 pp. ISBN 3-515-03419-6 (Editors) 82h:01003 01-06 (01A45, 01A50)

Théorie analytique des nombres ★Théorie analytique des nombres. (French) [Analytic number theory] Proceedings of the Mathematical Symposium held in Tokyo, November 30, 1980. Edited by Tikao Tatuzawa and Jean-Loup Mauclaire. Monographies Scientifiques de la Maison Franco-Japonaise (Scientific Monographs of the Maison Franco-Japonaise), 3. Maison Franco-Japonaise, Tokyo, 1981. i+151 pp. (Editors)

10-06

eory of analytic functions and harmonic analysis *Теория аналитических функций и гармонический анализ. (Russian) [Theory of analytic functions and harmonic analysis] Edited by B. V. Hvedelidze. Trudy Tbiliss. Mat. Inst. Razmadze Akad. Nauk Gruzin. SSR 66 (1980). "Mecniereba", Tbilisi, 1980. pp. 1-117. (Editors) 82d:00009

ory and applications of graphs ★The theory and applications of graphs. Proceedings of the Fourth International Conference held at Western Michigan University, Kalamazoo, Mich., May 6-9, 1980. Edited by Gary Chartrand, Yousef Alavi, Donald L. Goldsmith, Linda Lesniak-Foster and Don R. Lick. John Wiley & Sons, Inc., New York, 1981.

xvi+611 pp. ISBN 0-471-08473-5 (Editors) 82:05002 05-06

cory change, ascient axiomatics, and Galileo's methodology Proceedings of the 1978

Pisa Conference on the History and Philosophy of Science. Vol. I. Theory change, ancient axiomatics, and Galileo's methodology. Second International Conference held at Pisa, September 4-8, 1978. Edited by Jaakko Hintikka, David Gruender and Evandro Agazzi. Synthese Library, 145. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xiv+354 pp. ISBN 90-277-1126-7 (Editors) 82f:01001a 01-06 (03-06)

то сubature formulas and the application of functional analysis to problematical physics: ★Теория кубатурных формуя и приложения функционального анализа к задачам математческой физики. (Russian) [Theory of cubature formulas and the application of functional analysis to problems of mathematical physics] Edited by S. V. Uspenskii. Tpymu Cemmapa C. Jl. Coconena, No. 1 [Proceedings of the S. L. Sobolev Seminar, No. 1], 1980. Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1980. 152 pp. (Editors) 82j:65001

eory of cubature formulas and numerical mathematics *Теория кубатурных формул и вычислитьная математика. (Russian) [Theory of cubature formulas and numerical mathematics] Proceedings of a Conference on Differential Equations and Numerical Mathematics held in Novosibirsk, 1978. Edited by S. L. Sobolev. "Nauka" Sibirsk.

Otdel., Novosibirsk, 1980. 258 pp. (loose errata). (Editors) 82d:65003 65-06

Theory of experimental layouts and its applications ★Theory of experimental layouts and its applications. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto, July 14-16, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 404 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-xii and 1-162. (Editors) 82d:05006 05-06 (05B05, 05B30, 05C99)

pp. 1-Xii and 1-102. (Editions) of actives on the copy of functions *Marcharture(extit analysis reopsis dynktinii. (Russian) [Mathematical analysis and the theory of functions] Edited by I. I. Bavrin. Moskov. Oblast. Ped. Inst., Moscow, 1980. 164 pp. (Editors) 82g:32001 32-06 (30-06)

mbers *Theory of numbers. Proceedings of the Symposium in Pure Mathematics of the American Mathematical Society held at the California Institute of Technology, Pasadena, Calif., November 21–22, 1963. Edited by Albert Leon Whiteman. Corrected reprint of the 1965 original. Proceedings of Symposia in Pure Mathematics, VIII. American Mathematical Society, Providence, R. I., 1979. vii + 216 pp. ISBN 0-8218-1408-7 (Editors) 824:10006 10-06

cory of oscillations * McCaraonanna по устойчивости и теории колебаний. (Russian) [Studies in stability and the theory of oscillations] Edited by Ju. S. Kolesov. Jaroslav. Gos. Univ., Yaroslavl', 1980. 148 pp. (Editors) 82e:34029 34Cxx

Theory of random processes ★Teopus cryvanimux mponeccon. Burn. 9. (Russian) [Theory of random processes. No. 9] Edited by I. I. Gihman. "Naukova Dumka", Kiev., 1981.

136 pp. (Editors) 82i:60003 60-06 (49-06)

ory of symmetry *Вессовзявый Симпозиум по Теории Симметрии и ее Обобщениям. (Russian) [All-Union Symposium on the Theory of Symmetry and its Generalizations] Theory of symmetry Тезисы докладов. [Abstracts of papers]. Edited by A. M. Zamorzaev. Kišinev. Gos. Univ., Kishinev, 1980. 132 pp. 82g:51020 51F15 (20-06, 51M99) rmodynamics ★Statphys 14. Proceedings of the 14th International Conference on

Thermodynamics and Statistical Mechanics held at the University of Alberta, Edmonton, Alta., August 17-22, 1980. Edited by John Stephenson. Phys. A 106 (1981), no. 1-2. North-Holland Publishing Co., Amsterdam-New York, 1981. pp. i-viii and 1-368. (Editors) 82-06 (80-06)

ional manifolds *Structure of three-dimensional manifolds and placement problems. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, September 3-5, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 369 (1979). Kyoto University, Research Institute for

Mathematical Sciences, Kyoto, 1979. pp. i-iii and 1-207. (Editors) 82a:57002

Thüringen ★Leopoldina-Symposion: Singularitäten—Singularities. [Leopoldina

Symposium: Singularities] Held in Thüringen, May 3-7, 1978. Nova Acta Leopoldina (N.F.) 52 (1981), no. 240, 1-185. Johann Ambrosius Barth, Leipzig, 1981. pp. 1-190. (Editors) 82k:14002 14-06

e series analysis *Directions in time series. Proceedings of the IMS Special Topics Meeting on Time Series Analysis held at Iowa State University, Ames, Iowa, May 1-3, 1978. Edited by David R. Brillinger and George C. Tiao. Institute of Mathematical Statistics, Hayward, Calif., 1980. iv+302 pp. (Editors) 821:62174 62M10

★Time series analysis. Proceedings of the Third International Conference (ITSM) held in Houston, Tex., August 14–15, 1980. Edited by Oliver D. Anderson and Marlin Ray Perryman. North-Holland Publishing Co., Amsterdam-New York, 1981. ix+661 pp. ISBN 0-444-81677-7 (Editors) 82k:62005 62-06 (62M10)

ne series in m dimensions * Special issue on time series in m dimensions. Comm. Statist.

B—Simulation Comput. 9 (1980), no. 5. Marcel Dekker, Inc., New York-Basel, 1980.

pp. 453-562. (Brian D. Ripley) 82e:62150 62M10

ol ★IV Тираспольский Симпозиум по Общей Топологии и ее Приложениим (Russian) [Fourth Tiraspol Symposium on General Topology and its Applications] Held in Tiraspol, August 20-21, 1979. Edited by P. K. Osmatesku. "Štiinca", Kishinev, 1979.

183 pp. (Editors) 82k-54001 54-06 (55-06)

To fulfill a vision ★To fulfill a vision. Jerusalem Einstein Centennial Symposium on Gauge
Theories and Unification of Physical Forces held in Jerusalem, March 14-23, 1979. Edited by Yuval Ne'eman. Addison-Wesley Publishing Co., Reading, Mass., 1981. xxxi+279 pp. ISBN 0-201-05289-X (Editors) 824:83003 83-03 (01-06, 81G20)

Tokyo ★1979 International Symposium on Circuits and Systems. Held in Tokyo, July 17-19, 1979. IEEE Computer Society, New York, 1979. xxi+1091 pp. (Editors)

94-06 (65-06, 90-06, 93-06)

★Theoretical and applied mechanics. Vol. 29. Proceedings of the 29th Japan National Congress for Applied Mechanics held in Tokyo, November 20–22, 1979. University of Tokyo Press, Tokyo, 1981. ix +487 pp. ISBN 0-86008-282-2 (Editors) 73-06 (76-06)

★Théorie analytique des nombres. (French) [Analytic number theory] Proceedings of the Mathematical Symposium held in Tokyo, November 30, 1980. Edited by Tikao Tatuzawa and Jean-Loup Mauclaire. Monographies Scientifiques de la Maison Franco-Japonaise [Scientific Monographs of the Maison Franco-Japonaise], 3. Maiso Franco-Japonaise, Tokyo, 1981. i+151 pp. (Editors) 82h:10004 10-06

ics in homotopy theory and cohomology theory *Topics in homotopy theory and cohomology theory. Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, October 27–29, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 419 (1981). Kyoto University, Research Institute for

Mathematical Sciences, Kyoto, 1981. pp. 1—ii and 1−70. (Editors) 82g:55002 55-06

Topics in operator theory ★Topics in operator theory. Edited by Carl Pearcy. Corrected reprint of the 1974 original. Mathematical Surveys, 13. American Mathematical Society, widence, R.I., 1979. ix + 235 pp. ISBN 0-8218-1513-X (Editors) 82c:47001 47-02 (47-06)

Topics related with prehomogeneous vector spaces ★Topics related with prehomogeneous vector spaces. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 21–28, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 416 (1981). Kyoto University, Research Institute for thematical Sciences, Kyoto, 1981. pp. i-ii and 1-107. (Editors) 82g:32003

(20Gxx)

Тороlogy ★IV Тираспольский Симпознум по Общей Топологии и ее Приложениям.

(Russian) [Fourth Tiraspol Symposium on General Topology and its Applications] Held in Tiraspol, August 20-21, 1979. Edited by P. K. Osmatesku. "Štiinca", Kishinev., 1979.

183 pp. (Editors) 82h:54001 54-06 (55-06)
★Proceedings of the Colloquium on Geometry and Topology. (Romanian) Held in Cluj-Napoca, September 22–24, 1978. Universitatea "Babez-Bolyai", Facultatea de Matematica, Cluj-Napoca, 1979. 290 pp. (Editors) 82lt:53003 53–06

*Proceedings of the Conference on Integration, Topology, and Geometry in Linear aces. Held at the University of North Carolina, Chapel Hill, N.C., May 17-19, 1979. Edited by William H. Graves. Contemporary Mathematics, 2. American Mathematical Society, Providence, R.I., 1980. ix + 269 pp. ISBN 0-8218-5002-4 (Editors) 82e:46003

★Алгебра. Топология. Геометрия. Том. 18. (Russian) [Algebra. Topology. Geometry. Vol. 18] Edited by R. V. Gamkrelidze. Итоги Науки и Техняки. [Progress in Science and Technology] Akad. Nauk SSSR, Vsesojuz. Inst. Naučn. i Tehn. Informacii.

Moscow, 1981. 214 pp. (Editors) 824:00002 00A10

★General topology and modern analysis. Proceedings of the Conference held at the University of California, Riverside, Calif., May 28-31, 1980. In honor of the retirement of Professor F. Burton Jones. Edited by L. F. McAuley and M. M. Rao. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xv+514 pp. ISBN 0-12-481820-X (Editors) 82e:54001 54-06

*Proceedings of the Meeting on General Topology. Held at the University of Trieste, Trieste, September 4-8, 1978. Università degli Studi di Trieste, Istituto di Matematica Applicata, Trieste, 1981. 163 pp. (Editors) 82f:54001 54-06 ★The Proceedings of the 1980 Topology Conference. Held at the University of

Alabama, Birmingham, Ala., 1980. Edited by Włodzimierz Kuperberg, G. M. Reed and Phillip Zenor. Topology Proc. 5 (1980), (1981). Auburn University, Mathematics Department, Auburn, Ala., 1981. pp. 1-264. (Editors) 82f:54002

Topology and economics *Topology and economics. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, June 26-30, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 407 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-89. (Editors) 82d:90004 90Axx

Topology of infinite loop spaces ★Topology of infinite loop spaces. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 25-28, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 389 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1-142. (Editors) 82a:55001 55-06 (57-06, 58-06)

ogy and order structures *Topology and order structures. Part 1. Papers presented at a Workshop on Topology and Linear Orderings held at Texas Tech University, Lubbock, Tex., August 1980. Edited by H. R. Bennett and D. J. Lutzer. Mathematical Centre Tracts, 142. Mathematisch Centrum, Amsterdam, 1981. iii + 184 pp. ISBN 90-6196-228-5 (Editors) 82h:54001 54-06 (06F30, 54F05)

★Some mati me mathematical questions in biology. Proceedings of the 15th Symposium ematical Biology held in Toronto, Ont., January 8, 1981. Edited by Stephen Childress. Lectures on Mathematics in the Life Sciences, 14. America Mathematical Society, Providence, R.I., 1981. x+214 pp. ISBN 0-8218-1164-9 (Editors) 82j-92002 92-06

House Advances in data base theory. Vol. I. Proceedings of the Workshop on Formal Bases for Data Bases held in Toulouse, December 12-14, 1979. Edited by Hervé Gallaire, Jack Minker and Jean-Marie Nicolas. Plenum Press, New York-London, 1981. viii +432 pp. ISBN 0-306-40629-2 (Editors) 82xc68040 68B15 (68-06)

*Nonlinear problems of analysis in geometry and mechanics. Proceedings of the Symposium held at the Université Paul Sabatier, Toulouse, April 4–6, 1979. Edited by M. Atteia, D. Bancel and I. Gumowski. Research Notes in Mathematics, 46. Pitms (Advanced Publishing Program), Baston, Mass.-London, 1981. iii+208 pp. ISBN 0-273-08493-3 (Editors) 824-0005 58-06 (00A10)

#Medical informatics, Europe 81. Proceedings of the Third Congress of the European Federation of Medical Informatics held in Toulouse, March 9-13, 1981. Edited by F. Gremy, P. Degoulet, B. Barber and R. Salamon. Lecture Notes in Medical Informatics. 11. Springer-Verlag, Berlin-New York, 1981. xxiiii + 975 pp. ISBN 3-540-10568-9 (Editors) 82m-92004a 92-06

Traffic and control *Traffic and control. Papers presented at the Symposium held in Delft, November 4, 1980. Dedicated to the scientific work of Professor L. Kosten on the occasion of his retirement. Delft Progr. Rep. 5 (1980), no. 3. Delft University Press, Delft, 1980. pp. 154–212. (Editors) 82a:90099 90B20 (90–06)

Traité d'Electricité See Mange, Daniel, 82f:94027; Kunt, Murat, 82j:94004 and Zahnd,

Conference of Army Mathematicians ★Transactions of the Twenty-seventh Conference of Army Mathematicians. Held in West Point, N.Y., June 10-12, 1981. ARO Report 82, 1. U. S. Army Research Office, Research Triangle Park, N.C., 1982. xv+765 pp.

(Editors) 82k:0010 00A10 (65-06, 73-06, 76-06, 80-06)

nsactions of the Moscow Mathematical Society *Transactions of the Moscow

Mathematical Society, 1981, Issue 1. A translation of Trudy Moskov. Mat. Obšč. 39

(1979). Trans. Moscow Math. Soc. 1981, no. 1. American Mathematical Society,

Providence, R.I., 1981. pp. i-v and 1-250. (Editors) 82e:00011 00A10

★Transactions of the Moscow Mathematical Society, 1981, Issue 2. A translation of Trudy Moskov. Mat. Obšč. 40 (1979). Trans. Moscow Math. Soc. 1981, no. 2. (1982). American Mathematical Society, Providence, R.I., 1982. pp. i-iv and 1-284. (Editors) 00A10

nce *Transition and turbulence. Proceedings of a Symposium held at the Mathematics Research Center, University of Wisconsin, Madison, Wis., October 13-15, 1980. Edited by Richard E. Meyer. Publication of the Mathematics Research Center, University of Wisconsin, 46. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. ix + 245 pp. ISBN 0-12-493240-1 (Editors) 76-06 (58F13, 76Exx, 76Fxx) 82k:76002

SAE: 100-10 (30г 13, 10г 23).

— Mareматические методы в управлении городскием транспортивми системами. (Russian) [Mathematical methods in control of urban transportation systems] Edited by O. G. Fajans. "Nauka" Leningrad. Otdel., Leningrad, 1979. 152 pp. (Editors) 82e-90045 90В20

— waux de Thurston sur les surfaces ★Travaux de Thurston sur les surfaces. (French) [The Control of

works of Thurston on surfaces] Seminaire Orsay. With an English summary. Astérisque, 66-67. Société Mathématique de France, Paris, 1979. 284 pp. (William Harvey) 82m:57003 57M99 (32G15, 58F99)

ng ★Les arbres en algèbre et en programmation. (French) amming] Proceedings of the Fifth Lille Colloquium held in Trees in algebra and pro Trees in algebra and programs Lille, February 21-23, 1980. Université de Lille I, U.E.R., I.E.E.A., Lille, 1980.

iv+268 pp. (Editors) 82e-68004 68-06

Trends in information processing systems. ★Trends in information processing systems.

Proceedings of the Third Conference of the European Cooperation in Informatics held in Munich, October 20-22, 1981. Edited by A. J. W. Duijvestijn and P. C. Locken Lecture Notes in Computer Science, 123. Springer-Verlag, Berlin-New York, 1981. xi+348 pp. ISBN 3-540-10885-8 (Editors) 82k:68004 68-06 (68B15, 68B20)

nlinear differential equations. Invariance, stability, and bifurcation. Proceedings of an International Conference held in Trento, May 25-30, 1980. Edited by Piero de Mottoni and Luigi Salvadori. Academic Press, Inc. [Harcourt Brace Jovanovich, thers], New York-London, 1981. xi+357 pp. ISBN 0-12-508780-2 (Editors) 824-34003 34-06

Trieste ★Proceedings of the Meeting on General Topology. Held at the University of Trieste, Trieste, September 4–8, 1978. Università degli Studi di Trieste, Istituto di Matematica Applicata, Trieste, 1981. 163 pp. (Editors) 821:54001 54–06 tica Applicata, Trieste, 1981. 163 pp. (Editors) 82f:54001

★Recent advances in differential equations. Proceedings of the International Conference held in Trieste, August 24–26, 1978. Edited by Roberto Conti. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1981. xi+447 pp. ISBN 0-12-186280-1 (Editors) 82m:34003 34-06 Press, Inc. [Harcourt Brace Jova

Tucson, Ariz. New frontiers in transport theory. Selected papers from the Sixth Conference held at the University of Arizona, Tucson, Ariz., April 1979. Edited by B. D. Ganapol. Ann. Nuclear Energy 7 (1980), no. 4-5. Pergamon Press, Oxford-New York, 1980. pp. 198-312. (Editors) 82k:82001 82-06 (76-06, 82A70)

*Instability of flows and turbulence. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, January 21-23, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 390 (1980). Kyoto University, earch Institute for Mathematical Sciences, Kyoto, 1980. pp. i-iii and 1-211. (Editors) 82d:76001 76-06 (76Exx, 76Fxx)

★The role of coherent structures in modelling turbulence and mixing. Proceedings of the International Conference held in Madrid, June 25–27, 1980. Edited by Javier Jimenez, Lecture Notes in Physics, 136. Springer-Verlag, Berlin-New York, 1981. xiii+393 pp. ISBN 3-540-10289-2 (Editors) **32c:76962** 76Fxx (76–06, 80A25)

Twistor theory ★Advances in twistor theory. Edited by L. P. Hughston and Richard Samuel Ward. Research Notes in Mathematics, 37. Pitman (Advanced Publishing Program), San Francisco, Calif.-London, 1979. vii + 335 pp. ISBN 0-8224-8448-X (G. M. 83-06 (32Lxx, 53C55, 81D25, 81E99) Henkin) 82e:83002

Two decades of mathematics in the Netherlands, 1920-1940 *Two decades of mathematics in the Netherlands. 1920-1940. A retrospection on the occasion of the bicentennial of the Wiskundig Genootschap. Part I, II. Edited by E. M. J. Bertin, H. J. M. Bos and A. W. Grootendorst. Mathematical Centre, Amsterdam, 1978. xxiv + 379 pp. (Editors) 82h:01040 01A60 (01-06)

ex random pro ses *Processus aléatoires à deux indices. (French) [Two-index random processes) Papers from the E.N.S.T.-C.N.E.T. Colloquium held in Paris, June 30-July 1, 1980. Edited by Hayri Körezlioğlu, Gerald Mazziotto and Jacques Szpirglas. Lecture Notes in Mathematics, 863. Springer-Verlag, Berlin-New York, 1981. ii + 274 pp. ISBN 3-540-10832-7 (Editors) 82:60004 60-06 (60Gxx)

Ulm The impact of modern scientific ideas on society. In commemoration of Einstein.

Papers presented at the UNESCO Symposium held in Munich and in Ulm, September 18-20, 1978. Edited by Colette M. Kinnon, A. N. Kholodilin and J. G. Richardson. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981. xiv+203 pp. ISBN 90-277-1238-7 (Editors) 82k:01046 01A80 (00A69, 01-06)

Urbino *Combinatorial optimization. Lectures presented at the Summer School held in Urbino, May 30-June 11, 1977. Edited by Nicos Christofides, Aristide Mingozzi, Paolo Toth and Claudio Sandi. A Wiley-Interscience Publication. John Wiley & Sons, Ltd., Chichester, 1979. x+425 pp. ISBN 0-471-99749-8 (L. E. Trotter, Jr.) 82a:90099 90C10 (05-06, 68E99, 90-06)

ncia *Bayesian statistics. Proceedings of the First International Meeting held in Valencia, May 28-June 2, 1979. Edited by J. M. Bernardo, M. H. DeGroot, D. V. Lindley and A. F. M. Smith. University Press, Valencia, 1980. 647 pp. ISBN 84-370-0172-2 (Editors) 82k:62003 62-06 (62C10, 92A25)

★Problems in the foundations of physics. Proceedings of the International School of Physics "Enrico Fermi", Course LXXII, held at Varenna, 25th July-6th August 1977. Edited by G. Toraldo di Francia. North-Holland Publishing Co., Amsterdam-New York, 1979. xii + 497 pp. (1 plate). ISBN 0-444-85285-9 (Editors) 82m:81003

ious problems on analytic varieties

Various problems on analytic varieties. (Japanese)
Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, February 4-7, 1980. Sûrikaisekikenkyûsho Kôkyûroku No. 387 (1980). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1980. pp. i-ii and 1–131. (Editors) 82b:32001 32–06

near circuits in dynamical systems *Various problems for ious problems for non nonlinear circuits in dynamical systems. (Japanese) Proceedings of a Symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, July 11-14, 1979. Sûrikaisekikenkyûsho Kôkyûroku No. 370 (1979). Kyoto University, Research Institute for Mathematical Sciences, Kyoto, 1979. pp. i-ii and 1-183. (Editors) 82b:94034 94Cxx (54H20, 58C10)

Vector spaces *Probability theory on vector spaces. II. Proceedings of the Second International Conference held at Błażejewko, September 17-23, 1979. Edited by Aleksander Weron. Lecture Notes in Mathematics, 828. Springer-Verlag, Berlin-New York, 1980. xiii+324 pp. ISBN 3-540-10253-1 (Editors) 82d:60004 60-06 (46-06,

Vector-valued Ljapunov functions and their construction ★Вектор-функции Ляпунова и их построение. (Russian) [Vector-valued Ljapunov functions and their construction] na incaprenie. (russian) [vector-values 1_japunov functions and their construction] Edited by V. M. Matrosov and L. Ju. Anapol'skii. "Nauka" Sibirsk. Otdel., Novosibirsk, 1980. 288 pp. (Editors) 82d:65004 65–06 (93–06)

Versailles ★Analysis and optimization of systems. Proceedings of the Fourth International Conference held in Versailles, December 16–19, 1980. Edited by A. Bensoussan and J.-L. Lions. Lecture Notes in Control and Information Sciences, 28. Springer-Verlag, Berlin-New York, 1980. xiv + 999 pp. ISBN 3-540-10472-0 (Editors) 82b:49002 (90-06, 93-06)

★Data analysis and informatics. Proceedings of the Second International Symposium held in Versailles, October 17-19, 1979. Edited by E. Diday, L. Lebart, J. P. Pages and R. Tomassone. North-Holland Publishing Co., Amsterdam-New York, 1980. viii + 790 pp. ISBN 0-444-86005-3 (Editors) 821:62004 62-02

na *Models and decision making in national economies. Proceedings of the Second International Conference on Dynamic Modelling and Control of National Economies held in Vienna, January 24-27, 1977. Edited by J. M. L. Janssen, L. F. Pau and A. Straszak. North-Holland Publishing Co., Amsterdam-New York, 1979. ix + 425 pp. ISBN 0-444-85280-8 (Editors) 82m:90001 90-06

Vilnius ★Stochastic differential systems. Filtering and control. Proceedings of the IFIP-WG 7/1 Working Conference held in Vilnius, August 28-September 2, 1978. Edited by Bronius Grigelionis. Lecture Notes in Control and Information Sciences, 25. Springer-Verlag, Berlin-New York, 1980. ix + 363 pp. ISBN 3-540-10498-4 (Editors) 82b:60002 60-06 (60Hxx, 93Exx)

★Operációs rendszerek elmélete. [Operating systems theory] Papers from the Sixth Visegråd Winter School held in Visegråd, 1980. Tanulmånyok—MTA Számitástech. Automat. Kutató Int. Budapest No. 113 (1980). MTA Számitástechn. Automat. Kutató Intézet, Budapest, 1980. pp. 1-327. (Editors) 82g:68006

Visiting scholars' lectures ★Visiting scholars' lectures—1980. Lectures from the Visiting Mathematician Program held at Texas Tech University, Lubbock, Tex., 1980. atics Series, 14. Texas Tech University, Department of Mathematics, Lubbock,

Tex., 1981. ii+139 pp. (Editors) 82k:00011 00A10

e ★6. Konferenz "Mathematische Methoden in der Ökonomie". (German) [Sixth Vitte #6. Konferenz Conference on Mathematical Methods in Economics] Papers presented at the Conference held in Vitte, September 28-October 3, 1980. Edited by K. Lommatzsch. Seminarberichte [Seminar Reports], 29. Humboldt Universität, Sektion Mathematik, Berlin, 1980. 79 pp. (Editors) 82a:90002 90-06

VLSI systems and co utations *VLSI systems and computations. Papers presented at SI systems and computations #VLSI systems and computations in the Conference held at Carnegie-Mellon University, Pittsburgh, Pa., October 19–21, 1981. Edited by H. T. Kung, Robert F. Sproull and Guy Steele, Jr. Computer Science Press, Rockville, Md., 1981. xi+415 pp. ISBN 0-914894-35-8 (Editors) 82i:68006

- Vraona ★Proceedings of the 1980 CERN School of Computing. Held in Vraona, September 14–27, 1980. Edited by C. Verkerk. CERN 81, 3. CERN—Organisation Européenne pour la Recherche Nucléaire, Geneva, 1981. vii+408 pp. (Editors) 82d:68003 68-06
- Washington, D.C. ★1979 Proceedings of the Statistical Computing Section, American Statistical Association. Papers presented at the Annual Meeting held in Washington, D.C., August 13-16, 1979. American Statistical Association, Washington, D.C., 1979. viii + 412 pp. (Editors) 82c:62004c 62-06 (65U05, 90A19, 90Cxx)

★1979 Proceedings of the Social Statistics Section, American Statistical Association. Papers presented at the Annual Meeting held in Washington, D.C., August 13-16, 1979. American Statistical Association, Washington, D.C., 1979. xii + 690 pp. (Editors)

62-06 (90A19)

1982

★1979 Proceedings of the Business and Economic Statistics Section, American Statistical Association. Papers presented at the Annual Meeting held in Washington, D.C., August 13-16, 1979. American Statistical Association, Washington, D.C., 1979.

62-06 (90A19) x+614 pp. (Editors) 82c:62004e

★Mathematical methods and applications of scattering theory. Proceedings of a Conference held at Catholic University, Washington, D.C., May 21–25, 1979. Edited by John A. DeSanto, Albert W. Sáenz and Woodford W. Zachary. Lecture Notes in Physics, 130. Springer-Verlag, Berlin-New York, 1980. xiii + 331 pp. 1SBN 3-540-10023-7 (Editors)
82k81117 81Fxx (35P25, 73D99, 78Ads. 81–06) 81Fxx (35P25, 73D99, 78A45, 81-06) 82h:81117 81Fxx (35P25, 73D99, 78A45, 81-06)
aterioo, Ont. ★Structural control. Proceedings of the International IUTAM Sympos

held at the University of Waterloo, Waterloo, Ont., June 4-7, 1979. Edited by H. H. E. Leipholz. North-Holland Publishing Co., Amsterdam-New York, 1980. xv+810 pp. ISBN 0-444-85485-1 (Hassan K. Khalil) 82g:93003 93-06 (49-06)

Wave scattering *Acoustic, electromagnetic and elastic wave scattering-focus on the T-matrix approach. Proceedings of the International Symposium held at Ohio State University, Columbus, Ohio, June 25-27, 1979. Edited by Vijay K. Varadan and

University, Columbus, Ohio, June 25-27, 1979. Edited by Vijay K. Varadan and Vasundara V. Varadan. Pergamon Press, Oxford-New York, 1980. xii+693 pp. ISBN 0-08-025096-3 (Editors) 82h:78002 78-06 (73-06, 76-06, 78A45)

Webs and quasigroups ★Тканя в квазвгруппы. (Russian) [Webs and quasigroups] Edited by A. M. Selehov. Kalinin. Gos. Univ., Kalinin, 1981. 170 pp. (Editors) 82k:53003

53-06 (20-06, 20Nxx)

Weißig *Vorträge aus dem Problemseminar: Hybridrechentechnik. (German) [Lectures from the Problem Seminar: Hybrid Computing Held in Weißig, March 26-30, 1979. Weiterbildungszentrum für Mathematische Kybernetik und Rechentechnik, Informationsverarbeitung [Center for Continuing Education for Mathematical Cybernetics, Computing Technique and Information Processing], 41. Technische Universität Dresden, Dresden, 1980. 121 pp. (Editors) 82c:68064 68K05

West Point, N.Y. *Transactions of the Twenty-seventh Conference of Army Mathematicians. Held in West Point, N.Y., June 10-12, 1981. ARO Report 82, 1. U. S. Army Research Office, Research Triangle Park, N.C., 1982. xv+765 pp. (Editors)

82x:00010 00A10 (65-06, 73-06, 76-06, 80-06)

Winnipeg, Man. ★Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing. Vol. I. Held at the University of Manitoba, Winnipeg, Man., October 1-4, 1980. Edited by D. S. Meek and H. C. Williams. Congr. Numer. 30 (1981). Utilitas Mathematica Publishing, Inc., Winnipeg, Man., 1981. pp. 1-317. (Editors) 82j:00010 00A10 (65-06, 68-06)

*Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing, Vol. II. Held at the University of Manitoba, Winnipeg, Man., October 1-4, 1980. Edited by D. S. Meek and H. C. Williams. Congr. Numer. 31 (1981). Utilitas Mathematica Publishing, Inc., Winnipeg, Man., 1981. pp. 1-313. (Editors) 82j:00011

00A10 (65-06, 68-06) Winter School:

Operating Systems Theory *Operaciós rendszerek elmélete. [Operating systems theory]
Papers from the Sixth Visegrád Winter School held in Visegrád, 1980. Tanulmányok -MTA Számitástech. Automat. Kutató Int. Budapest No. 113 (1980). MTA Számitástechn. Automat. Kutató Intézet, Budapest, 1980. pp. 1-327. (Editors) 82g:68006 68-06 (68B20)

coretical Physics *Mathematical aspects of quantum field theory. Part I. Papers from the XVth Winter School of Theoretical Physics held in Karpacz, Febru 20-March 4, 1978. Edited by Andrzej Pękalski and Tadeusz Paszkiewicz. ACTA

20-March 4, 1978. Edited by Andrzej Pękalski and Tadeusz Paszkiewicz. ACTA Universitatis Wratislaviensis, 519. Wydawnictwa Universitati Wratislaviensis, 519. Wydawnictwa Universitati Wratislaviensis, 519. Wydawnictwa Universitati Wratislaviensis, 519. Papers from the XVth Winter School of Theoretical Physics held in Karpacz, February 20-March 4, 1978. Edited by Andrzej Pękalski. ACTA Universitatis Wratislaviensis, 519. Wydawnictwa Winter School Wratislaviensis, 519. Wydawnictwa

Uniwersytetu Wrocławskiego, Wrocław, 1979. 329 pp. (Editors) 82i:81004b 81-06
The works of Thurston on surfaces ★Travaux de Thurston sur les surfaces. (French) [The works of Thurston on surfaces] Séminaire Orsay. With an English summary. Astérisque, 66-67. Société Mathématique de France, Paris, 1979. 284 pp. (William Harvey) 82m:57003 57M99 (32G15, 58F99)

eximation Theory and Applications *Approximation theory and applications. Proceedings of a Workshop held at the Technion—Israel Institute of Technology, Haifa, May 5-June 25, 1980. Edited by Zvi Ziegler. Academic Press, Inc. [Harcourt wich, Publishers], New York-London, 1981. xi+358 pp.

ISBN 0-12-780650-4 (Editors) 82d:41001 41-06 (65-06)

mputer Scheduling of Public Transport ★Computer scheduling of public transport. Urban passenger vehicle and crew scheduling. Papers based on presentations at the International Workshop held at the University of Leeds, Leeds, July 16-18, 1980. Edited by Anthony Wren. North-Holland Publishing Co., Amsterdam-New York, 1981. viii + 359 pp. ISBN 0-444-86170-X (Editors) 82f:90053 90B35

viii + 359 pp. ISBN 0-444-86170-X (Editors) \$21:90053 90B35

Control Theory Applied to Renewable Resource Management and Ecology *Renewable resource management. Proceedings of a Workshop on Control Theory Applied to Renewable Resource Management and Ecology held at the University of Canterbury, Christchurch, January 7-11, 1980. Edited by Thomas L. Vincent and Janisław M. Skowrónski. Lecture Notes in Biomathematics, 40. Springer-Verlag, Berlin-New York, 1981. xii + 236 pp. ISBN 3-540-10566-2 (Editors) 82k-90001 90-06 (92-06) isions in Small Groups #Entscheidungen in kleinen Gruppen. (German) [Decisions

in small groups] Papers presented at a Workshop held in Jungholz, October 1977. Edited by Wulf Albers, Günter Bamberg and Reinhard Selten. Mathematical Systems in Economics, 45. Verlag Anton Hain, Königstein/Ts., 1979. 230 pp ISBN 3-445-01961-4 (Milan Mareš) 82e:90130 90D45 (90A05 90A07)

Extended Model Theory **Morkshop on Extended Model Theory. Held in Berlin, November 1980. Edited by Heinrich Herre. Report MATH 1981, 3. Akademie der Wissenschaften der DDR, Institut für Mathematik, Berlin, 1981. ii+160 pp. (Editors) 82m:03006 03-06

Formal Bases for Data Bases ★Advances in data base theory. Vol. I. Proceedings of the Workshop on Formal Bases for Data Bases held in Toulouse, December 12-14, 1979. Edited by Hervé Gallaire, Jack Minker and Jean-Marie Nicolas. Plenum Press, New York-London, 1981. viii + 432 pp. ISBN 0-306-40629-2 (Editors) 82a:68040

Functional Differential Equat actional Differential Equations and Nonlinear Semigroups *Abstract Cauchy problems and functional differential equations. Proceedings of the Workshop on Functional Differential Equations and Nonlinear Semigroups held in Leibnitz, June 25-30, 1979. Edited by F. Kappel and W. Schappacher. Research Notes in Mathematics, 48. Pitman (Advanced Publishing Program), Boston, Mass.-London, 1981. vii + 238 pp. ISBN 0-273-08494-1 (Editors) 824:34001 34-06 (34Kxx)

Graphtheoretic Concepts in Computer Science ★Graph-theoretic concepts in computer science. Proceedings of the Sixth International Workshop WG 80 held in Bad Honnef, June 15-18, 1980. Edited by Hartmut Noltemeier. Lecture Notes in

Computer Science, 100. Springer-Verlag, Berlin-New York, 1981. x+403 pp.
ISBN 3-540-10291-4 (Editors) 82gc68005 68-06 (68E10)
-Admissible Formulations *Proceedings of the Third Workshop on Lie-Admissible Formulations. Part A. Mathematics. Held at the University of Massachusetts, Lie-Admissible Formu Boston, Mass., August 4-9, 1980. Hadronic J. 4 (1980/81), no. 2. Hadronic Press, Inc., Nonantum, Mass., 1981. pp. 183-607. (Editors) 82f:81002a 81-06 (17-06)

★Proceedings of the Third Workshop on Lie-Admissible Formulations. Part B.

Theoretical physics. Held at the University of Massachusetts, Boston, Mass., August 4-9, 1980. Hadronic J. 4 (1980/81), no. 3. Hadronic Press, Inc., Nonantum, Mass.,

1981. pp. 608-1165. (Editors) 82f:81002b 81-06 (17-06)

*Proceedings of the Third Workshop on Lie-Admissible Formulations. Part C. Experimental physics and bibliography. Held at the University of Massachusetts, Boston, Mass., August 7-9, 1980. Hadronic J. 4 (1980/81), no. 4. Hadronic Press,

Inc., Nonantum, Mass., 1981. pp. 1166–1625. (Editors) 821:81002c 81–06 (17–06)

Mathematics and the Real World *Mathematics and the real world. Proceedings of an International Workshop held at the Roskilde University Centre, Roskilde, August 1978. Edited by Bernhelm Booss and Mogens Niss. Interdisciplinary Systems earch, 68. Birkhäuser Verlag, Basel-Boston, Mass., 1979. 136 pp ISBN 3-7643-1079-0 (K. E. Hirst) 82j:00018 00A25

inear and Turbulent Processes in Physics *Nonlinear and turbulent processes in physics. Proceedings of the International Workshop held in Kiev, September 4-16, 1979. Edited by V. D. Shapiro [V. D. Šapiro] and V. I. Shevchenko [V. I. Ševčenko]. Phys. D 2 (1981), no. 1. North-Holland Publishing Co., Amsterdam-New York, 1981. pp. i-ix and 1-243. (Editors) 82c:82002 82-06 (58Fxx, 76-06)

tern Recognition in Practice ★Pattern recognition in practice. Proceedings of an International Workshop held in Amsterdam, May 21-23, 1980. Edited by Edzard S. Gelsema and Laveen N. Kanal. North-Holland Publishing Co., Amsterdam-New York, 1980. xii + 552 pp. ISBN 0-444-86115-7 (Editors) 824:68053 68G10

sent Trends in Representation Theory Representation theory. I. Proceedings of the Workshop on the Present Trends in Representation Theory held at Carleton University, Ottawa, Ont., August 13-18, 1979. Edited by Vlastimil Dlab and Peter Gabriel. Lecture Notes in Mathematics, 831. Springer-Verlag, Berlin-New York, 1980. xiv+373 pp. ISBN 3-540-10263-9 (Editors) 82a:16002a 16-06 (16A64)

Topology and Linear Orderings ★Topology and order structures. Part 1. Papers presented at a Workshop on Topology and Linear Orderings held at Texas Tech University, Lubbock, Tex., August 1980. Edited by H. R. Bennett and D. J. Lutzer. Mathematical Centre Tracts, 142. Mathematisch Centrum, Amsterdam, 1981 iii + 184 pp. ISBN 90-6196-228-5 (Editors) 82h:54001 54-06 (06F30, 54 54-06 (06F30, 54F05)

11NAM, Gauge Theories ★Proceedings of the UNAM Workshop on Gauge Theories.

Held at the Universidad Nacional Autónoma de Mexico, Mexico City, December 10-14, 1979. Edited by S. Hojman, L. Jacobs, M. Rosenbaum and M. P. Ryan. Hadronic J. 4 (1980/81), no. 1. Hadronic Press, Inc., Nonantum, Mass., 1980. pp. 1–182. (Editors) 82d:81005 81–06 (81E99, 83E99)

World directory of historians of mathematics * World directory of historians of mathematics. Second edition. Edited by Kenneth O. May and Laura Roebuck. With a preface by Roebuck. University of Toronto, Commission on History of Mathematics, Toronto, Ont., 1978. iv+92 pp. (Editors) 82e:00018 00A20

Writings of Leonard Jimmie Savage—a memorial selection ★The writings of Leonard Jimmie Savage—a memorial selection. American Statistical Association, Washington, D.C.; Institute of Mathematical Statistics, Hayward, Calif., 1981. 739 pp. (Editors) 82k:01044 01A75 (62-06)

Xian ★Proceedings of the Annual Meeting of the Shaanxi Provincial Mathematical Society. (Chinese) Held in Xian, 1979. Shaanxi Provincial Mathematical Society, Shaanxi, 1980. 148 pp. (Editors) 82f:00005 00A10

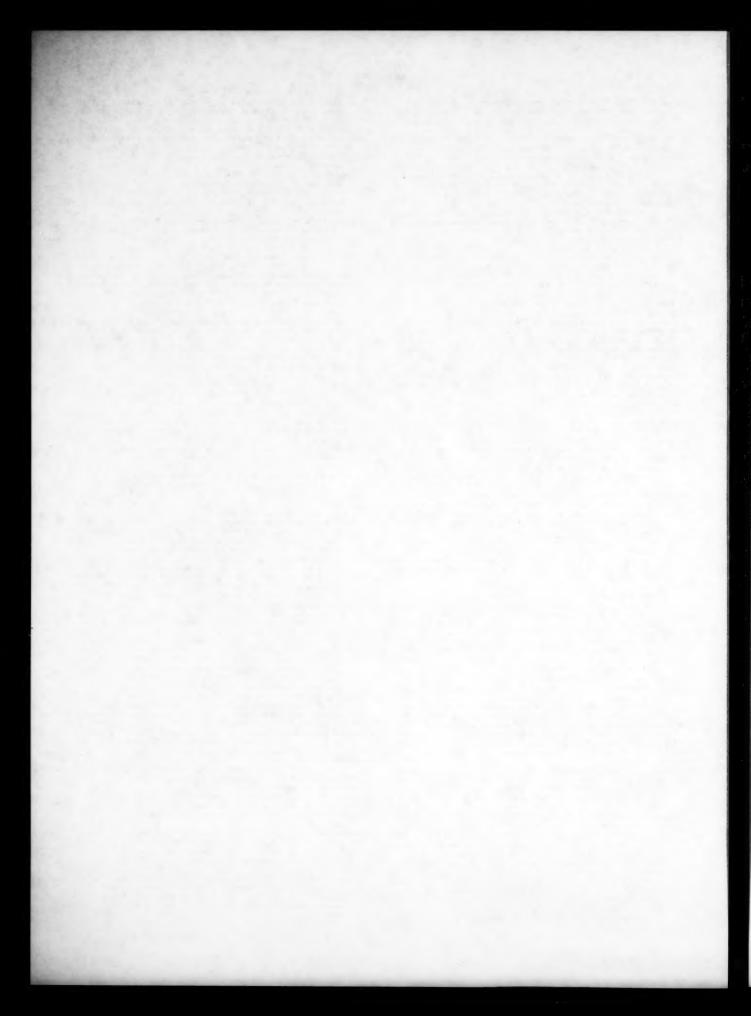
naguchi ★Proceedings of the 4th Symposium on Semigroups. Semigroup theory and its related fields. Held at Yamaguchi University, Yamaguchi, October 6-8, 1980. Edited by Kentaro Murata. Yamaguchi University, Yamaguchi, 1980. v+131 pp. (Editors) 82f:20008 20-06 (20Mxx)

ng-Mills equations *Proceedings of the Summer School on Yang-Mills Equations.

Bereich Geometrie. (Geometry section] Held at Kagel, June 25–29, 1979. Seminarberichte [Seminar Reports], 25. Humboldt Universität, Sektion Mathematik, Berlin, 1980.

i + 246 pp. (M. Schneider) 82;53062 53C05 (14F05, 53–02, 58E20, 81E10)

matics *Jahrbuch Überblicke Mathematik 1980. (German) [Yearbook: Surveys of mathematics 1980] Edited by S. D. Chatterji, Benno Fuchssteiner, Ulrich Kulisch, Detlef Laugwitz and Roman Liedl. Bibliographisches Institut, Mannheim, 1980. 214 pp. ISBN 3-411-01577-2 (Editors) 82e:00012



ABBREVIATIONS OF NAMES OF SERIALS

This list gives the form of references used in MATHEMATICAL REVIEWS and the complete title. The place of publication, the date of the first journal issue reviewed by MR (if 1976 or later) and other pertinent information are given in parentheses when desirable for clarity. An asterisk (*) indicates that the journal has not previously been listed. A paragraph symbol (¶) indicates a bibliographic journal. A dagger (†) indicates a monographic series. This list reflects the change in Cyrillic transliteration by MATHEMATICAL REVIEWS. We cross-reference items from the pre-1983 transliteration.

Starting in 1983, MR will use the Cyrillic transliteration in use by ANSI, LC, Zbl, ISI, and others. A table showing the details is at the end of the Author/Key Index.

† AAAS Sel. Sympos. Ser. AAAS Selected Symposia Series. Westview, Boulder, Colo.

Abacus Abacus. The Journal of The Mathematical Association of Nigeria. (Ikeja) † Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1978 Abhandlungen der Akademie der Wissenschaften der DDR, Abteilung Mathematik, Naturwissenschaften, Technik, 1978. [Transactions of the Academy of Sciences of the DDR, Section for Mathematics, Sciences and Technology] Akademie-Verlag, Berlin. (Formerly: Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1977)

† Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1979 Abhandlungen der Akademie der Wissenschaften der DDR, Abteilung Mathematik, Naturwissenschaften, Technik, 1979. [Transactions of the Academy of Sciences of the DDR, Section for Mathematics,

Sciences and Technology, 1979] Akademie-Verlag, Berlin.

† Abh. Akad. Wiss. DDR, Abt. Math. Naturwiss. Tech., 1981 Abhandlungen der Akademie der Wissenschaften der DDR, Abteilung Mathematik, Naturwissenschaften und Technik, 1981. [Transactions of the Academy of Sciences of the DDR, Section for Mathematics, Sciences and Technology, 1981] Akademie-Verlag, Bertin.

Abh. Braunschweig. Wiss. Ges. Abhandlungen der Braunschweigischen Wissenschaftlichen Gesellschaft. (Göttingen)

Abh. Math. Sem. Univ. Hamburg Abhandlungen aus dem Mathematischen Seminar der Universität Hamburg. (Göttingen)

† Abh. Philos. Ges. Abhandlungen zur Philosophie und ihrer Geschichte. [Transactions on Philosophy and its History] Olms, Hildesheim.

Abh. Sächs. Akad. Wiss. Leipzig Math.-Natur. Kl. Abhandlungen der Sächsischen Akademie der Wissenschaften zu Leipzig. Mathematisch-Naturwissenschaftliche Klasse. (Berlin)

Abstracts Amer. Math. Soc. Abstracts of Papers Presented to the American Mathematical Society. (Providence, R.I.) See Notices Amer. Math. Soc. (Beginning with the January, 1980 issue contains abstracts of papers presented at a meeting of the Society.) 1- 1980-

Abstracts Bulgar. Sci. Lit. Math. Phys. Sci. Bulgarian Academy of Sciences. Scientific Information Centre. Abstracts of Bulgarian Scientific Literature. Mathematical and Physical Sciences. (Sofia) 28- 1979/80-

Acad. Roy. Belg. Bull. Cl. Sci. (5) Académie Royale de Belgique. Bulletin de la Classe des Sciences. Koninklijke Belgische Académie. Mededelingen van de Klasse der Wetenschappen. 5e Série. (Brussels)

Acad. Roy. Belg. Cl. Sci. Mém. Collect. 8° (2) Académie Royale de Belgique. Classe des Sciences. Mémoires. Collection in-8°. Koninklijke Belgische Academie. Klasse der Wetenschappen. Verhandelingen. Verzameling in-8°. 2e Série. (Brussels)

Acad Serbe Sci. Arts Glas. Académie Serbe des Sciences et des Arts. Glas. Classe des

Sciences Mathématiques et Naturelles. Nouvelle Série. (Belgrade)

ACM Trans. Database Systems Association for Computing Machinery. Transactions on Database Systems. (New York) 6- 1981-ACM Trans. Math. Software Association for Computing Machinery. Transactions on

ACM Trans. Math. Software Association for Computing Machinery. Transactions on Mathematical Software. (New York)

Acta Acad. Åbo. Ser. B. Acta Academiae Åboensis. Ser. B. Mathematica et Physica. Matematik-Naturvetenskaper-Teknik. (Åbo=Turku)

Acta Arith. Polska Akademia Nauk. Instytut Matematyczny. Acta Arithmetica.

m. Sinica Acta Astronomica Sinica. Tianwen Xuebao. (Beijing) (Trans-Acta Astron lated as: Chinese Astronom. Astrophys.)

Acta Astrophys. Sinica Acta Astrophysica Sinica. Tianti Wuli Xuebao. (Beijing) (Translated as: Chinese Astronom. Astrophys.) 1- 1981-

Acta Automat. Sinica Acta Automatica Sinica. Zidonghua Xuebao. (Beijing) 6-1980-

Acta Cienc. Indica Acta Ciencia Indica. (Meerut) (Continued as: Acta Cienc. Indica Chem. and Acta Cienc. Indica Math.)

Acta Cienc. Indica Chem. Acta Ciencia Indica. Chemistry. (Meerut) (Formerly: Acta Cienc. Indica) (Mathematical Reviews does not review this series.)

*Acta Cienc. Indica Math. Acta Ciencia Indica. Mathematics. (Meerut) (Formerly: Acta Cienc. Indica) 7- 1981-

Acta Cient. Compostelana Acta Científica Compostelana. (Santiago de Compostela) Acta Cient, Venezolana Acta Científica Venezolana. Asociación Venezolana para el Avance de la Ciencia. (Caracas)

Acta Cryst. Sect. A Acta Crystallographica. Section A. Crystal Physics, Diffraction, Theoretical and General Crystallography. (Copenhagen) 34- 1978-

Acta Cybernet. Acta Cybernetica. (Szeged) † Acta Hist. Rerum Nat. Necnon. Tech. Special Issue Acta Historiae Rerum Naturalium Necnon Technicarum Special Issue. CSAV, Prague.

Acta Human. Sci. Univ. Sangio Kyotien. Natur. Sci. Ser. Acta Humanistica et Scientifica Universitatis Sangio Kyotiensis. Natural Science Series. (Kyoto) No. 8- 1978-Acta Inform. Acta Informatica. (Berlin)

Acta Math. Acta Mathematica. (Djursholm)

Acta Math. Acad. Sci. Hungar. Acta Mathematica Academiae Scientiarum Hungaricae. (Budapest)

Acta Math. Appl. Sinica Acta Mathematicae Applagatae Sinica. Yingyong Shuxue Xuebao. (Beijing) 1- 1978-

Acta Math. Sci. Acta Mathematica Scientia. Shuxue Wuli Xuebao. (Wuhan) 1-1981_

Acta Math. Sinica Acta Mathematica Sinica Shuxue Xuebao. (Beijing)

Acta Math. Univ. Comenian. Acta Mathematica Universitatis Comenianae.

(Bratislava) 39- 1980-

Acta Math. Vietnam. Acta Mathematica Vietnamica. (Hanoi)

Acta Mech. Acta Mechanica. (Vienna) Acta Mech. Sinica (Beijing) Acta Mechanica Sinica. Lixue Xuebao. (Beijing)

Acta Mexicana Cienc. Tecn. Instituto Politécnico Nacional. Acta Mexicana de Ciencia y Tecnologia. (Mexico City)

Acta Philos. Fenn. Acta Philosophica Fennica. (Amsterdam)

Acta Phys. Acad. Sci. Hungar. Acta Physica Academiae Scientiarum Hungaricae. (Budapest)

Acta Phys. Austriaca Acta Physica Austriaca. (Vienna)

† Acta Phys. Austriaca Suppl. Acta Physica Austriaca Supplement. Springer, Vienna. Acta Phys. Polon. A Polska Akademia Nauk. Instytut Fizyki. Acta Physica Polonica. A. (Warsaw)

Acta Phys. Polon. B Polska Akademia Nauk. Instytut Fizyki. Acta Physica Polonica. B. (Warsaw)

Acta Phys. Sinica Acta Physica Sinica. Wuli Xuebao. (Beijing)

Acta Phys. Slovaca Acta Physica Slovaca. (Bratislava)

Acta Polytech. Práce ČVUT (4) Acta Polytechnica Práce ČVUT v Praze. (Prague) 1977, no. 2-

Acta Polytech. Scand. Math. Comput. Sci. Ser. Acta Polytechnica Scandinavica. Mathematics and Computer Science Series. (Helsinki) Acta Sci. Math. (Szeged) Acta Universitatis Szegediensis. Acta Scientiarum Mathema-

ticarum. (Szeged)

Acta Sci. Natur. Univ. Fudan See Fudan Daxue Xuebao

Acta Sci. Natur. Univ. Pekinensis See Beijing Daxue Xuebao

Acta Tech. Acad. Sci. Hungar. Acta Technica Academiae Scientiarum Hungaricae. (Budanest)

Acta Tech. ČSAV Acta Technica. Československá Akademie Věd. (Prague)

Acta Univ. Carolin.-Math. Phys. Acta Universitatis Carolinae. Mathematica et Physica. (Prague)

Acta Univ. Oulu. Ser. A Sci. Rerum Natur. Math. Acta Universitatis Ouluensis. Series A. Scientiae Rerum Naturalium. Mathematica. (Oulu)

Acta Univ. Tamper. Ser. A Acta Universitatis Tamperensis. Series A. (Tampere)
ACTA Univ. Wratislav. ACTA Universitatis Wratislaviensis. Wydawn. Uniw.

† ACTA Unio. Wrocław., Wrocław.

Acta Univ. Wratislav. Mat. Fiz. Astronom. Acta Universitatis Wratislaviensis. Matematyka, Fizyka, Astronomia. (Wrocław)

† Actualités Sci. Indust. Actualités Scientifiques et Industrielles. [Current Scientific and Industrial Topics] Hermann, Paris.

Acustica Acustica. International Journal of Acoustics. (Stuttgart)

Adapt. Sistemy Automat. Upravlenija Kievskii Politehničeskii Institut. Adaptivnye Sistemy Avtomatičeskogo Upravlenija. (Kiev) (Continued as: Adapt. Sistemy

Avtomat. Upravleniya) No. 2- 1974*Adapt. Sistemy Avtomat. Upravleniya Kievski Politekhnicheskii Institut. Adaptivnye Sistemy Avtomaticheskogo Upravleniya. (Kiev) (Formerly: Adapt. Sistemy Avtomat. Upravlenija) No. 2- 1974-

† Addison-Wesley Ser. Comput. Sci. Inform. Process. Addison-Wesley Series in Computer Science and Information Processing. Addison-Wesley, Reading, Mass.

Adv. in Appl. Math. Advances in Applied Mathematics. (New York) 1- 1980-

Adv. in Appl. Probab. Advances in Applied Probability. (Sheffield)

Adv. in Math. Advances in Mathematics. (New York)

† Adv. in Math. Suppl. Stud. Advances in Mathematics, Supplementary Studies. Academic Press, New York.

Adv. in Mech. Advances in Mechanics. (Warsaw) 1- 1978-

† Adv. Probab. Related Topics Advances in Probability and Related Topics. Dekker, New York.

† Advanced Textbooks in Econom. Advanced Textbooks in Economics. North-Holland, Amsterdam.

† Advances in Chem. Ser. Advances in Chemistry Series. Amer. Chem. Soc., Washington, D.C. †AE€L AECL. Atomic Energy of Canada, Chalk River, Ont.

Aequationes Mathematicae. (Basel)

Aequationes Math. Aequationes Mathematicae. (Basel)
† Afd. Inform. Afdeling Informatica. [Department of Computer Science] Math. Centre,

Afdeling Mathematische Besliskunde. [Department of Operations Math. Centre, Amsterdam.

† Afd. Math. Statist. Afdeling Mathematische Statistiek. [Department of Mathematical Statistics] Math. Centre, Amsterdam.

† Afd. Numer. Wisk. Afdeling Numericke Wiskunde. [Department of Numerical Mathematics] Math. Centre, Amsterdam.

† Afd. Toegepaste Wisk. Afdeling Toegepaste Wiskunde. [Department of Applied atics] Math. Centrum, Amsterdam.

† Afd. Zuiv. Wisk. Afdeling Zuivere Wiskunde. [Department of Pure Mathematics] Math. Centre, Amsterda

† AFIPS Conf. Proc. AFIPS Conference Proceedings. AFIPS Press, Arlington, Va. Afrika Mat. Afrika Matematika. The First Pan-African Mathematical Journal. (Paris) 1- 1978-

† Agora Math. Agora Mathematica. Gauthier-Villars, Paris.

AIAA J. American Institute of Aeronautics and Astronautics. Journal. (New York) AIChE J. The American Institute of Chemical Engineers. Journal. (New York) AIIE Trans. American Institute of Industrial Engineers. Transactions. (Norcross, Ga.)

† AIP Conf. Proc. AIP Conference Proceedings. Amer. Inst. Physics, New York. Ajatus Ajatus. Suomen Filosofisen Yhdistyksen Vuosikirja. Yearbook of the Philosophical Society of Finland. (Helsinki)

Akad. Nauk Armjan. SSR Dokl. Akademija Nauk Armjanskoi SSR. Doklady. (Erevan) (Continued as: Akad. Nauk Armyan. SSR Dokl.)

* Akad. Nauk Armyan. SSR Dokl. Akademiya Nauk Armyanskoi SSR. Doklady. (Erevan) (Formerly: Akad. Nauk Armjan. SSR Dokl.)

Akad. Nauk Azerbaidžan. SSR Dokl. Akademija Nauk Azerbaidžanskoi SSR. Doklady. (Baku) (Continued as: Akad. Nauk Azerbaidžhan, SSR Dokl.)

*Akad. Nauk Azerbaidzhan. SSR Dokl. Akademiya Nauk Azerbaidzhanskoi SSR. Doklady. (Baku) (Formerly: Akad. Nauk Azerbaĭdžan. SSR Dokl.)

uk Kazah. SSR Trudy Astrofiz. Inst. Akademija Nauk Kazahskoi SSR. Trudy Astrofizičeskogo Instituta. (Alma-Ata) (Continued as: Akad. Nauk Kazakh. SSR Trudy Astrofiz. Inst.)

*Akad. Nauk Kazakh. SSR Trudy Astrofiz. Inst. Akademiya Nauk Kazakhskoi SSR. Trudy Astrofizicheskogo Instituta. (Alma-Ata) (Formerly: Akad. Nauk Kazah. SSR Trudy Astrofiz. Inst.)

Akad. Nauk SSSR Inst. Prikl. Mat. Preprint Akademiya Nauk SSSR. Institut Prikladnoi

Matematiki. Preprint. (Moscow) No. 61- 1977*Akad. Nauk SSSR Sibirsk. Otdel. Vychisl. Tsentr Preprint Akademiya Nauk SSSR. Sibirskoe Otdelenie. Vychislitel'nyi Tsentr. Preprint. (Novosibirsk) (Formerly: Akad. Nauk SSSR Sibirsk. Otdel. Vyčisl. Centr Preprint) No. 3- 1976-

Akad. Nauk SSSR Sibirsk. Otdel. Vyčisl. Centr Preprint Akademija Nauk SSSR. Sibirskoe Otdelenie. Vyčislitelnyi Centr. Preprint. (Novosibirsk) (Continued as: Akad. Nauk SSSR Sibirsk. Otdel. Vychisl. Tsentr Preprint) No. 3- 1976-

Akad. Nauk Ukrain. SSR Inst. Mat. Preprint Akademiya Nauk Ukrainskoi SSR. Institut Matematiki. Preprint. (Kiev)

Akad. Nauka Umjet. Bosne Hercegov. Rad. Odjelj. Prirod. Mat. Nauka Akademija Nauka i Umjetnosti Bosne i Hercegovine. Radovi. Odjeljenje Prirodnih i Matematičkih Nauka. (Sarajevo)

Akad. Nauka Umjet. Bosne Hercegov. Rad. Odjelj. Tehn. Nauka Akademija Nauka i Umjetnosti Bosne i Hercegovine. Radovi. Odjeljenje Tehničkih Nauka. (Sarajevo)

† Akad. Wiss. Lit. Mainz. Abh. Math.-Naturwiss. Kl. 1981 Akademie der Wissenschaften und der Literatur in Mainz. Abhandlungen der Mathematisch-Naturwissenschaftlichen Klasse 1981. [Academy of Sciences and Literature in Mainz. Transactions of the Mathematical-Scientific Section 1981] Akad. Wiss. Mainz, Mainz.

Akust. Ž. Akademija Nauk SSSR. Akustičeskii Žurnal. (Moscow) (Translated as: Soviet Phys. Acoust.) (Continued as: Akust. Zh.)

*Akust. Zh. Akademiya Nauk SSSR. Akusticheskii Zhurnal. (Moscow) (Translated as: Soviet Phys. Acoust.) (Formerly: Akust. Ž.)

Algebra and Logic Algebra and Logic. (New York) (Translation of Algebra i Logika) 1968

Algebra i Logika Akademiya Nauk SSSR. Sibirskoe Otdelenie. Institut Matematiki. Algebra i Logika. (Novosibirsk) (Translated as: Algebra and Logic)

Algebra Universalis Algebra Universalis. (Basel)

Aligarh Bull. Math. The Aligarh Bulletin of Mathematics. (Aligarh)

* Aligarh J. Statist. The Aligarh Journal of Statistics. (Aligarh) 1-

Alkalmaz. Mat. Lapok Alkalmazott Matematikai Lapok. (Budapest)
† Alt- Neuindische Stud. Alt- und Neuindische Studien. [Old and New Indian Studies] Steiner, Wiesbaden.

† Álxebra Álxebra. [Algebra] Univ. Santiago de Compostela, Santiago de Compostela. † AMD AMD. Amer. Soc. Mech. Engrs. (ASME), New York.

Amer. J. Math. American Journal of Mathematics. (Baltimore, Md.)

Amer. J. Math. Management Sci. American Journal of Mathematical and Management Sciences. (Columbus, Ohio) 1- 1981-

Amer. J. Phys. American Journal of Physics. (New York)

Amer. Math. Monthly The American Mathematical Monthly. (Washington, D.C.)

† Amer. Math. Soc. Colloq. Publ. American Mathematical Society Colloquium Publications. Amer. Math. Soc., Providence, R.I.

† Amer. Math. Soc. Transl. American Mathematical Society Translations, Series 2. Amer. Math. Soc., Providence, R.I.

Amer. Natur. The American Naturalist. (Chicago, Ill.) 113- 1979-

† Amer. Philos. Quart. Monograph Ser. American Philosophical Quarterly Monograph Series. Blackwell, Oxford.

Amer. Sci. American Scientist. (New Haven, Conn.)

† Amer. Sci. Press Ser. Math. Management Sci. American Sciences Press Series in

Mathematical and Management Sciences. Amer. Sci. Press, Columbus, Ohio.

Amer. Statist. The American Statistician. (Washington, D.C.)

¶AMR Applied Mechanics Reviews. (New York) See Appl. Mech. Rev

An. Acad. Brasil. Ciênc. Anais da Academia Brasileira de Ciências. (Rio de Janeiro) An. Fac. Ciênc. Univ. Porto Anais de Faculdade de Ciências. Universidade do Porto. (Porto)

An. Inst. Mat. Univ. Nac. Autónoma México Anales del Instituto de Matemáticas. Universidad Nacional Autónoma de México. (Mexico City)

An. Stiint. Univ. "Al. I. Cuza" Iași Sect. I a Mat. (N.S.) Analele Științifice ale Universității "Al. I. Cuza" din Iași. Seria Nouă. Secțiunea I a Matematică.

An. Științ. Univ. "Al. I. Cuza" Iași Secț. I b Fiz. (N.S.) Universității "Al. I. Cuza" din Iași. Analele Stiințifice. Secțiunea I b. Fizica. Seria Nouă. (Iași)

An. Unio. București Fiz. Analele Universității București. Fizica. (Bucharest)
An. Unio. București Mat. Analele Universității București. Matematica. (Bucharest)

An. Univ. Craiova Mat. Fiz.-Chim. Universității din Craiova. Analele. Matematică, Fizică-Chimie. (Craiova)

An. Univ. Timișoara Ser. Științ. Fiz.-Chim. Analele Universității din Timișoara. Seria

Ştiinţe Fizice-Chimice. (Timişoara)

An. Univ. Timişoara Ser. Ştiinţ. Mat. Analele Universităţii din Timişoara. Seria Ştiinţe Matematice. (Timișoara)

Anal. Math. Analysis Mathematica. (Budapest)

Anal. Numér. Théor. Approx. L'Analyse Numérique et la Théorie de L'Approximation. (Clui-Napoca)

Analysis Analysis. International Journal of Analysis and its Application. (Wiesbaden) 1- 1981-

† Angew. Statist. Ökonometrie Angewandte Statistik und Ökonometrie. [Applied Statistics and Econometrics] Vandenhoeck & Ruprecht, Göttingen.

Ann. Acad. Sci. Fenn. Ser. A I Math. Suomalaisen Tiedeakatemian Toimituksia. Sarja A. Annales Academiae Scientiarum Fennicae, Series A I. Mathematica, (Helsinki) Ann. Acad. Sci. Fenn. Ser. A I Math. Dissertationes Annales Academiae Scientiarum

Fennicae. Series A I. Mathematica Dissertationes. (Helsinki) Ann. Acad. Sci. Fenn. Ser. A VI Phys. Suomalaisen Tiedeakatemian Toimituksia. Sarja A. Annales Academiae Scientiarum Fennicae. Series A VI. Physica. (Helsinki)

† Ann. Discrete Math. Annals of Discrete Mathematics. North-Holland, Amsterdam. Ann. École Nat. Sup. Méc. Nantes Annales. École Nationale Supérieure de Mécanique. (Nantes)

Ann. Fac. Sci. Toulouse Math. (5) Toulouse. Faculté des Sciences. Annales. Mathématiques. Série 5. (Toulouse) 1-1979-

Ann. Fac. Sci. Univ. Nat. Zaïre (Kinshasa) Sect. Math.-Phys. Université Nationale du Zaïre. Faculté des Sciences. Annales. Section Mathématique-Physique. (Kinshasa) Ann. Gifu College Ed. Gifu College of Education. The Annals. (Gifu) No. 3- 1976-

Ann. Hist. Comput. Annals of the History of Computing. (Arlington, Va.) 1- 1979-Ann. Human Genetics Annals of Human Genetics. (Cambridge)

Ann. I.N.S. É. É. Ministère de l'Économie et des Finances. Institut National de la Statistique et des Études Économiques. Annales. (Paris)

Ann. Inst. Fourier (Grenoble) Université de Grenoble. Annales de l'Institut Fourier. (Grenoble)

Ann. Inst. H. Poincaré Sect. A (N.S.) Annales de l'Institut Henri Poincaré. Section A. Physique Théorique. Nouvelle Série. (Paris)

Ann. Inst. H. Poincaré Sect. B (N.S.) Annales de l'Institut Henri Poincaré. Section B. Calcul des Probabilités et Statistique. Nouvelle Série. (Paris)

Ann. Inst. Statist. Math. Annals of the Institute of Statistical Mathematics. † Ann. Israel Phys. Soc. Annals of the Israel Physical Society. Amer. Inst. Physics, New York.

Ann. Japan Assoc. Philos. Sci. Annals of the Japan Association for Philosophy of Science. (Tokyo)

Ann. Mat. Pura Appl. (4) Annali di Matematica Pura ed Applicata. Serie Quarta.

Ann. Math. Logic Annals of Mathematical Logic. (Amsterdam)

† Ann. New York Acad. Sci. Annals of the New York Academy of Sciences. New York Acad. Sci., New York.

† Ann. of Math. Stud. Annals of Mathematics Studies. Princeton Univ. Press, Princeton, N.J.

Ann. of Math. (2) Annals of Mathematics. Second Series. (Princeton, N.J.)

Ann. of Sci. Annals of Science. (London)
Ann. Physics Annals of Physics. (New York)

Ann. Physik (7) Annalen der Physik. 7. Folge. (Leipzig)

Ann. Polon. Math. Polska Akademia Nauk. Annales Polonici Mathematici. (Warsaw) Ann. Probab. The Annals of Probability. (Hayward, Calif.)

Ann. Sci. École Norm. Sup. (4) Annales Scientifiques de l'École Normale Supérieure. Quatrième Série. (Paris)

Ann. Sci. Kanazawa Univ. Kanazawa University. College of Liberal Arts. Annals of Science. (Kanazawa) 14- 1977-

Ann. Sci. Math. Québec Les Annales des Sciences Mathématiques du Québec. (Montreal, Que.) 1- 1977-

Ann. Sci. Univ. Besançon Math. (3) Annales Scientifiques de l'Université de Besançon. Mathématiques. 3e Série. (Besançon)

Ann. Sci. Univ. Besançon Méc. Phys. Théor. (3) Annales Scientifiques de l'Université de Besançon. Mécanique et Physique Théorique. 3ème Série. (Besançon)

Ann. Sci. Univ. Besançon Phys. Université de Besançon. Annales Scientifiques. Physique. (Besançon)

*Ann. Sci. Univ. Clermont-Ferrand II Math. Annales Scientifiques de l'Université de Clermont-Ferrand II. Mathématiques. (Aubière) (Formerly: Ann. Sci. Univ. Clermont Math.) No. 19- 1981-

Ann. Sci. Univ. Clermont Math. Annales Scientifiques de l'Université de Clermont Série Mathématique. (Aubière) (Continued as: Ann. Sci. Univ. Clermont-Ferrand II Math.)

Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4) Annali della Scuola Normale Superiore di Pisa. Classe di Scienze. Serie IV. (Pisa)

Ann. Soc. Math. Polon. Ser. I Comment. Math. Prace Mat. See Comment. Math. Prace

Ann. Soc. Math. Polon. Ser. II Wiadom. Mat. See Wiadom. Mat.

Ann. Soc. Math. Polon. Ser. III Mat. Stos. See Mat. Stos.

Ann. Soc. Math. Polon. Ser. IV Fund. Inform. See Fund. Inform.

Ann. Soc. Sci. Bruxelles Sér. I Annales de la Societé Scientifique de Bruxelles. Série I. Sciences Mathématiques, Astronomiques et Physiques. (Namur) Ann. Statist. The Annals of Statistics. (Hayward, Calif.)

† Ann. Systems Res. Annals of Systems Research. Stenfert Kroese, Leiden.

Ann. Univ. Ferrara Sez. VII (N.S.) Annali dell'Università di Ferrara. Nuovo Serie. Sezione VII. Scienze Matematiche. (Ferrara)

Ann. Univ. Mariae Curie-Skłodowska Sect. A Annales Universitatis Mariae Curie Skłodowska. Sectio A. Mathematica. (Lublin) Ann. Univ. Sarav. Math.-Natur. Fak. Annales Universitatis Saraviensis.

Mathematisch-Naturwissenshaftliche Fakultät. (Berlin)

Ann. Univ. Sci. Budapest. Eötvös Sect. Math. Annales Universitatis Scientiarum Budapestinensis de Rolando Eötvös Nominatae. Sectio Mathematica. (Budapest)

Ann. Univ. Sci. Budapest. Sect. Comput. Annales Universitatis Scientiarum Budapestinensis de Rolando Eötvös Nominatae. Sectio Computatorica. (Budapest) 1-

Ann. Univ. Turku. Ser. A I Annales Universitatis Turkuensis. Series A. I. Astronomica-Chemica-Physica-Mathematica. (Turku)

Annuaire Univ. Sofia Fac. Math. Méc. Godishnik na Sofiskiya Universitet. Fakultet po Matematika i Mekhanika. Annuaire l'Université de Sofia. Faculté de Sofia. Faculté de Mathématiques et Mécanique. (Sofia) (Also listed as: Godishnik Sofiïsk. Univ. Fak. Mat. Meh.)

Annuaire Univ. Sofia Fac. Phys. Godishnik na Sofiskiya Universitet. Fizicheski Fakultet. Annuaire de l'Université de Sofia. Faculté de Physique. (Sofia) (Also listed as:

Godishnik Sofiisk. Univ. Fiz. Fak.)
Annual Rep. Fac. Ed. Iwate Univ. Iwate University. Faculty of Education. Annual Report. (Morioka) 36- 1976-

Anz. Österreich. Akad. Wiss. Math.-Natur. Kl. Österreichische Akademie der Wissen-

schaften. Mathematisch-Naturwissenschaftliche Klasse. Anzeiger. (Vienna) Apl. Mat. Československá Akademie Věd. Aplikace Matematiky. (Prague)

† Appl. Comput. Sci. Applied Computer Science. Berichte zur Praktischen Informatik. [Applied Computer Science. Reports on Practical Information Science] Hanser, Munich.

† Appl. Math. Applications of Mathematics. Springer, New York.

Appl. Math. Comput. Applied Mathematics and Computation. (New York)

† Appl. Math. Comput. Applied Mathematics and Computation. Addison-Wesley, Reading, Mass.

Appl. Math. Mech. Applied Mathematics and Mechanics. Yingyong Shuxue He Lixue. (Chongqing) (Translated as: Appl. Math. Mech. (English Ed.)) 1- 1980-

Appl. Math. Mech. (English Ed.) Applied Mathematics and Mechanics. English Edition. (Hong Kong) (Translation of Appl. Math. Mech.) 1-1980-

Appl. Math. Modelling Applied Mathematical Modelling. (Guildford) 1- 1976-

Appl. Math. Notes Applied Mathematics Notes. (Ottawa, Ont.)

Appl. Math. Optim. Applied Mathematics and Optimization. An International Journal. (New York)

† Appl. Math. Sci. Applied Mathematical Sciences. Springer, New York.

Appl. Mech. Rev. Applied Mechanics Reviews. (New York) (Usually abbreviated as AMR in the text of Math. Rev.)

Appl. Sci. Res. Applied Scientific Research. An International Journal on Thermal, Mechanical, and Electromagnetic Phenomena in Continua. (The Hague)

Applicable Anal. Applicable Analysis. An International Journal. (New York) † Approaches to Semiotics Approaches to Semiotics. Mouton, The Hague.

Arab J. Math. The Arab Journal of Mathematics. (Baghdad) 1- 1980-

Arabian J. Sci. Engrg. Arabian Journal for Science and Engineering. (Chichester) 1-1975/76-

† Arbeiten Angew. Statist. Arbeiten zur Angewandten Statistik. [Papers on Applied Statistics] Physica, Würzburg.

† Arbeiten Niedersächs. Staats- u. Universitätsbibl. Göttingen Arbeiten aus der Niedersächsischen Staats- und Universitätsbibliothek Göttingen. [Publications of the Lower Saxony State and University Library in Göttingen] Vandenhoeck & Ruprecht, Göttingen.

† Arbeitsber. Inst. Math. Masch. Datenverarb., Band 14 Arbeitsberichte des Instituts für Mathematische Maschinen und Datenverarbeitung, Band 14. [Reports of the Institute for Mathematical Machines and Data Processing, Vol. 14] Friedrich-Alexander-Univ., Erlangen.

† Arbeitsber. Inst. Math. Masch. Datenverarb., Band 15 Arbeitsberichte des Instituts für Mathematische Maschinen und Datenverarbeitung, Band 15. [Reports of the Institut for Mathematical Machines and Data Processing, Vol. 15] Friedrich-Alexander-Univ., Erlangen.

† Arbeitsber, Rechenzentrum Arbeitsberichte des Rechenzentrums, [Reports of the Computer Center] Ruhr-Univ., Bochum.

† Arbeitsbericht Arbeitsbericht. [Report] Ruhr-Univ., Bochum.

Arbok Univ. Bergen Mat.-Natur. Ser. Arbok for Universitetet i Bergen. Matematisk-

Naturvidenskapelig Serie. (Bergen)

† Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe A: Abhandlungen. [Arbor Scientiarum: Beiträge Wissenschienter] tiarum: Contributions to the History of Science, Series A: Proceedings] Gerstenberg,

† Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe B: Texte Arbor Scientiarum: Beiträge zur Wissenschaftsgeschichte, Reihe B: Texte. [Arbor Scientiarum: Contributions to the History of Science, Series B: Texts] Gerstenberg, Hildesheim.

† Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe C: Bibliographien Arbor Scientiarum: Beiträge Wissenschaftsgeschichte, Reihe C: Bibliographien. [Arbor Scientiarum: Contributions to the History of Science, Series C: Bibliographies] Gerstenberg, Hildesheim.

Arch. Automat. Telemech. Polska Akademia Nauk. Komitet Automatyki i Cybernetyki Technicznej. Archiwum Automatyki i Telemechaniki. (Warsaw)

Arch. Elektrotech. Polska Akademia Nauk. Komitet Elektrotechniki. Komitet Elektroniki i Telekommunikacji. Archiwum Elektrotechniki. (Warsaw) Arch. Hist. Exact Sci. Archive for History of Exact Sciences. (Berlin)

Arch. Internat. Hist. Sci. Archives Internationales d'Histoire des Sciences. (Wiesbaden)

Arch. Math. (Basel) Archiv der Mathematik. Archives of Mathematics. Archives Mathématiques. (Basel)

Arch. Math. (Brno) Spisy Přírodovědecké Fakulty University J. E. Purkyně v Brně. Archivum Mathematicum. (Brno)

Arch. Math. Logik Grundlag. Archiv für Mathematische Logik und Grundlagen-

forschung. (Stuttgart) Arch. Mech. (Arch. Mech. Stos.) Polish Academy of Sciences. Institute of Fundamental

Technical Research. Archives of Mechanics (Archiwum Mechaniki Stosowanej). (Warsaw)

Arch. Rational Mech. Anal. Archive for Rational Mechanics and Analysis. (Berlin)

Archaeoastronomy Archaeoastronomy. (Chalfont St. Giles) No. 1- 1979-Archimede Archimede. Rivista per gli Insegnanti e i Cultori di Matematiche Pure e Applicate. (Florence)

Ark. Mat. Arkiv för Matematik. (Djursholm)

Arkhimedes Arkhimedes. Suomen Fyysikkoseura-Finlands Fysikerforening r.y. Suomen Matemaattinen Yhdistys-Finlands Matematiska Förening r.y. (Helsinki)

† ARO Rep. 79 ARO Report 79. U. S. Army Res. Office, Research Triangle Park, N.C. † ARO Rep. 80 ARO Report 80. U. S. Army Res. Office, Research Triangle Park, N.C.

ARO Rep. 81 ARO Report 81. U. S. Army Res. Office, Research Triangle Park, N.C. † ARO Rep. 82 ARO Report 82. U. S. Army Res. Office, Research Triangle Park, N.C.

Ars Combin. Ars Combinatoria. (Waterloo, Ont.) 1- 1976-Artificial Intelligence Artificial Intelligence. An International Journal. (Amsterdam)

† Artificial Intelligence Ser. Artificial Intelligence Series. North-Holland, New York. † Asoc. Mat. Española Asociación Matemática Española. [Spanish Mathematical Association] Asoc. Mat. Española, Madrid.

† Aspects of Math. E Aspects of Mathematics E. Vieweg, Braunschweig.

† Astérisque Astérisque. Soc. Math. France, Paris.

Astin Bull. The Astin Bulletin. International Journal for Actuarial Studies in Non-Life Insurance and Risk Theory. (Leiden) 10- 1978-

† Astro Astro. Max-Planck-Inst. Phys. Astrophys., Munich.

Astrofizika Akademiya Nauk Armyanskoi SSR. Astrofizika. (Erevan) (Translated as: Astrophysics)

Astrometr. i Astrofiz. Akademiya Nauk Ukrainskoï SSR. Glavnaya Astronomicheskaya Observatoriya, Astrometriya i Astrofizika. (Kiev)

Astronom. and Astrophys. Astronomy and Astrophysics. (Berlin)
† Astronom. Astrophys. Ser. Astronomy and Astrophysics Series. Pachart, Tucson, Ariz. Astronom. Astrophys. Suppl. Ser. Astronomy & Astrophysics. Supplement Series.

Astronom. J. The Astronomical Journal. (New York)
Astronom. Nachr. Astronomische Nachrichten. (Berlin)

Astronom. Ž. Akademija Nauk SSSR. Astronomičeskii Žurnal. (Moscow) (Translated as: Soviet Astronom.) (Continued as: Astronom. Zh.)

* Astronom. Zh. Akademiya Nauk SSSR. Astronomicheskii Zhurnal. (Moscow) (Translated as: Soviet Astronom.) (Formerly: Astronom. Ž.)

Astrophys. and Space Sci. Astrophysics and Space Science. (Dordrecht) Astrophys. J. The Astrophysical Journal. (Chicago, Ill.)

Astrophys. J. Suppl. Astrophysical Journal. Supplement Series. (Chicago, Ill.)

† Astrophys. Space Sci. Lib. Astrophysics and Space Science Library. Reidel, Dordrecht. Astrophysics Astrophysics. A translation of Astrofizika of the Academy of Sciences of the Armenian SSR. (New York) (Translation of Astrofizika) 1965-

† Athenaum Taschenbücher Athenaum Taschenbücher. [Athenaeum Paperbacks] Athenaum Verlag, Königstein/Ts.

Atti Accad. Ligure Sci. Lett. Atti della Accademia Ligure di Scienze e Lettere. (Genoa) Atti Accad. Naz. Lincei Mem. Cl. Sci. Fis. Mat. Natur. Sez. Ia (8) Atti della Accademia Nazionale dei Lincei. Memorie. Classe di Scienze Fisiche, Matematiche e Naturali. Sezione Ia. Matematica, Meccanica, Astronomia, Geodesia e Geofisica. Serie VIII. (Rome)

Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) Atti della Accademia Nazionale dei Lincei. Rendiconti. Classe di Scienze Fisiche, Matematiche e Naturali.

Serie VIII. (Rome) Atti Accad. Peloritana Pericolanti Cl. Sci. Fis. Mat. Natur. Accademia Peloritana dei Pericolanti. Classe Scienze, Fisiche, Matematiche e Naturali. Atti. (Messina)

Atti Accad. Sci. Istit. Bologna Cl. Sci. Fis. Rend. (13) Atti della Accademia delle Scienze dell'Istituto di Bologna. Classe di Scienze Fisiche. Rendiconti. Serie XIII. (Bologna)

Atti Accad. Sci. Lett. Arti Palermo Parte I (4) Atti della Accademia di Scienze Lettere e

Arti di Palermo. Parte Prima. Scienze. Serie Quarta. (Palermo)

Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur. Atti della Accademia delle Scienze di
Torino. Classe di Scienze Fisiche, Matematiche e Naturali. (Turin)

† Atti Convegni Lincei Atti dei Convegni Lincei. [Acts of the Lincei Conferences] Accad. Naz. Lincei, Rome.

Atti Sem. Mat. Fis. Univ. Modena Atti del Seminario Matematico e Fisico dell'Universita di Modena. (Modena) Atti Soc. Peloritana Sci. Fis. Mat. Natur. Atti della Società Peloritana di Scienze Fisiche

Austral. Comput. J. The Australian Computer Society. The Australian Computer Journal. (Chippendale)

Austral. J. Phys. Australian Journal of Physics. (Melbourne)

Austral. J. Statist. The Australian Journal of Statistics. (Canberra)

Austral. Math. Soc. Gaz. The Australian Mathematical Society. Gazette. (St. Lucia)

Auswahl Auswahl [Selection] Schroedel, Hanover.

Automat. Control Comput. Sci. Automatic Control and Computer Sciences. (New York) (Translation of Automat. i Vychisl. Tekhn. (Riga)) 1969-

at. Control Theory Appl. Automatic Control Theory and Applications. (Calgary,

at. and Math. Linguistics Automatic Documentation and Mathematical Linguistics. (New York) (Translation of Nauchn.-Tekhn. Informatsiya (VINITI) Ser. 2 Informatsionnye Protsessy i Sistemy) 1967–
Automat. Remote Control Automation and Remote Control. A translation of Avtomatika

i Telemekhanika, a publication of the Academy of Sciences of the USSR. (New York) (Translation of Automat. i Telemekh.) 1958-

tica-J. IFAC Automatica. The Journal of IFAC. The International Federation of Automatic Control. (Oxford)

Ach. Norske Vid.-Akad. Oslo I (N.S.) Avhandlinger Utgitt av det Norske Videnskaps-Akademi i Oslo I. Mat.-Naturv. Klasse. Ny Serie. (Oslo)

Avtomat. i Telemeh. Akademija Nauk SSSR. Avtomatika i Telemehanika. (Moscow)

(Translated as: Automat. Remote Control) (Continued as: Automat. i Telemekh.)
Automat. i Telemekh. Akademiya Nauk SSSR. Avtomatika i Telemekhanika.
(Moscow) (Translated as: Automat. Remote Control) (Formerly: Automat. i Telemeh.)

t. i Vychisl. Tekhn. (Minsk) Minskii Radiotekhnicheskii Institut. Avton Vychislitel'naya Tekhnika. (Minsk) (Formerly: Avtomat. i Vyčisl. Tehnika (Minsk))

at. i Vychisl. Tekhn. (Riga) Akademiya Nauk Latviiskoi SSR. Avtomatika i Vychislitel naya Tekhnika. (Riga) (Translated as: Automat. Control Comput. Sci.) (Formerly: Automat. i Vyčisl. Tehn. (Riga))

Actomat. i Vyčisi. Tehn. (Riga) Akademija Nauk Latvišskoi SSR. Avtomatika i Vyčisliteľnaja Tehnika. (Riga) (Translated as: Automat. Control Comput. Sci.) (Continued as: Automat. i Vychisl. Tekhn. (Riga))

mat. i Vyčisl. Tehnika (Minsk) Minskii Radiotehničeskii Institut. Avtomatika i Vyčislitel'naja Tehnika. (Minsk) (Continued as: Automat. i Vychisl. Tekhn. (Minsk))
Automat. Izchisl. Tekhn. Avtomatika i Izchislitelna Tekhnika. (Sofia) (Formerly:

Avtomat. Izčisl. Tehn. Avtomatika i Izčislitelna Tehnika. (Sofia) (Continued as: Avtomat. Izchisl. Tekhn.)

Avtomat. Sistemy Upravlenija i Pribory Avtomat. Avtomatizirovannye Sistemy Upravlenija i Pribory Avtomatiki. (Kharkov) (Continued as: Avtomat. Sistemy Upraoleniya i Pribory Automat.)

*Automat. Sistemy Upravleniya i Pribory Automat. Avtomatizirovannye Sistemy Upravleniya i Pribory Avtomatiki. (Kharkov) (Formerly: Avtomat. Sistemy Up ravlenija i Pribory Avtomat.)

mat. Upravl. i Vyčisl. Tehnika Avtomatičeskoe Upravlenie i Vyčislitel'naja Tehnika.

(Moscow) (Continued as: Automat. Upravlenie i Vychisl. Tekhn.) utomat. Upravlenie i Vychisl. Tekhn. Avtomaticheskoe Upravlenie i Vychislitel'naya Tekhnika. (Moscow) (Formerly: Avtomat. Upravl. i Vyčisl. Tehnika)

Avtomatika Avtomatika (Kiev) (Translated as: Soviet Automat. Control)

Azerbaidžan. Gos. Univ. Učen. Zap. Azerbaidžanskii Gosudarstvennyi Universitet imeni M. Kirova. Učenye Zapiski. (Baku) (Continued as: Azerbaizhan. Gos. Univ. Uchen. Zap.)

*Azerbaïzhan. Gos. Univ. Uchen. Zap. Azerbaïzhanskii Gosudarstvennyi Universitet imeni M. Kirova. Uchenye Zapiski. (Baku) (Formerly: Azerbaïdżan. Gos. Univ. Učen. Zap.)

† Banach Center Publ. Banach Center Publications. PWN, Warsaw.

Bayer. Akad. Wiss. Math.-Natur. Kl. Abh. (N.F.) Bayerische Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. Abhandlungen. Neue Folge. (Munich)

Bayer. Akad. Wiss. Math.-Natur. Kl. Sitzungsber. Bayerische Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. Sitzungsberichte. (Munich) Bayreuth. Math. Schr. Bayreuther Mathematische Schriften. (Bayreuth) No. 1-

Behavioral Sci. Behavioral Science. Journal of the Society for General Systems Research. (Louisville, Ky.) 25- 1980-

† Beihefte Elem. Math. Beihefte zur Zeitschrift Elemente der Mathematik. [Supplements to the Journal Elements of Mathematics] Birkhäuser, Boston, Mass.

Beijing Daxue Xuebao Beijing Daxue Xuebao. Ziran Kexue Ban. Beijing University Journal, Natural Sciences. (Beijing) 1978, no. 1-† Beitr. Datenverarb. Unternehmensforsch. Beiträge Datenverarbeitung und Unternehmensforsch.

mensforschung. [Contributions to Data Processing and Marketing Research] Hain, Königstein/Ts.

† Beitr. Forschungstech. Beiträge zur Forschungstechnologie. [Contributions to Research Technology] Akademie-Verlag, Berlin.

Beiträge Algebra Geom. Beiträge zur Algebra und Geometrie. (Halle) 9- 1980-

Beiträge Anal. Beiträge zur Analysis. (Berlin)

Beiträge Numer. Math. Beiträge zur Numerischen Mathematik. (Berlin)

Bell J. Econom. The Bell Journal of Economics. (New York)

Bell System Tech. J. The Bell System Technical Journal. (Murray Hill, N.J.)

† Benchmark Papers Electrical Engrg. Comput. Sci. Benchmark Papers in Electrical Engineering and Computer Science. Academic Press, New York.

† Ber. ATWD Bericht ATWD. [Report ATWD] Phys.-Techn. Bundesanstalt,

† Ber. Gesellsch. Math. Datenverarb. Berichte der Gesellschaft für Mathematik und Datenverarbeitung. [Reports of the Society for Mathematics and Data Processing] Oldenbourg, Munich

* Ber. Wiss.-Gesch. Berichte zur Wissenschaftsgeschichte. (Wiesbaden) 3- 1980-

† Bericht Bericht. [Report] Forschungszentrum Graz, Graz.

† Bericht Bericht. [Report] Univ. Hamburg, Hamburg.

Bericht Bericht. [Report] Univ. Karlsruhe, Karlsruh

† Bericht Bericht [Report] Kernforschungsanlage Jülich, Jülich. † B. I. Hochschultaschenbücher B.I. Hochschultaschenbücher. [B.I. University Paperbacks] Bibliographisches Inst., Mannheim.

† Bib. Int. Oprogram. Biblioteka Inżynierii Oprogramowania. [Library for Programmers] m, Wrocław.

† Bibl. Arch. Roman., Ser. II: Linguistica Biblioteca dell' "Archivum Romanicum", Serie II: Linguistica. [Library of the "Archivum Romanicum", Series II: Linguistics] Olschki, Florence

† Bibl. Automat. Библиотека по Автоматике. [Library of Automation] Energoizdat. Moscow

† Bibl. Dedalo Biblioteca Dedalo. [Dedalo Library] Dedalo, Bari.

† Bibl. "Kvant" Библиотечка "Квант". [Library "Kvant"] "Nauka", Moscow.

† Bibl. Mat. Biblioteka Matematyczna. [Mathematics Library] PWN, Warsaw. † Bibl. Mat. Biblioteczka Matematyczna. [Mathematics Library] Wydawn. Szkolne i Pedagog., Warsaw.

Bibl. Math. Bibliotheca Mathematica. [Mathematics Library] Wolters-Noordhoff, Groningen

Bibl. Problem. Biblioteka Problemów. [Problems Library] PWN, Warsaw.

¶ Biblio. France Bibliographie de la France. (Paris)

† Biblioteka Programmmista Библиотека Программиста. [Library for the Programmer] "Nauka", Moscow.

Biographien Heroorragender Naturwissenschaftler, Techniker und Mediziner Biographien Hervorragender Naturwissenschaftler, Techniker und Mediziner. [Biographies of Distinguished Scientists, Technologists and Physicians] Teubner, Leipzig.

Biol. Cybernet. Biological Cybernetics. (Berlin) Biomathematics Biomathematics. Springer, Berlin.

Biometrical J. Biometrical Journal. (Berlin) 19- 1977-

Biometrics Biometrics. Journal of the Biometric Society. (Washington, D.C.)

Biometrika Biometrika (London)

BIT BIT; Nordisk Tidskrift for Informationsbehandling (BIT). (Copenhagen)

Biul. Lubel. Towarz. Nauk. Mat. Fiz. Chem. Biuletyn Lubelskiego Towarzystwa Naukowego. Matematyka. Fizyka. Chemia. (Warsaw)

Bjull. Inst. Teoret. Astronom. Akademija Nauk Sojuza Sovetskih Socialističeskih Respublik. Bjulleten' Instituta Teoretičeskoi Astronomii. (Moscow) (Continued as: Byull. Inst. Teoret. Astronom.)

Bol. Mat. Boletin de Matemáticas. (Bogotá)

Bol. Soc. Brasil. Mat. Boletim da Sociedade Brasileira de Matemática. (Rio de Janeiro) Bol. Soc. Mat. Mexicana (2) Boletin de la Sociedad Matemática Mexicana. Segunda Serie. (Mexico City)

Bol. Soc. Paran. Mat. (2) Boletim da Sociedade Paranaense de Matemática. 2ª Série. (Paraná) 1- 1980-Boll. Storia Sci. Mat. Bollettino di Storia delle Scienze Matematiche. (Florence) 1,

no. 2-Boll. Un. Mat. Ital. A (5) Unione Matematica Italiana. Bollettino. A. Serie V.

(Bologna) (Continued as: Boll. Un. Mat. Ital. A (6)) * Boll. Un. Mat. Ital. A (6) Unione Matematica Italiana. Bollettino. A. Serie VI.

(Bologna) (Formerly: Boll. Un. Mat. Ital. A (5)) 1- 1982-Boll. Un. Mat. Ital. B (5) Unione Matematica Italiana. Bollettino. B. Serie V.

(Bologna) (Continued as: Boll. Un. Mat. Ital. B (6)) *Boll. Un. Mat. Ital. B (6) Unione Matematica Italiana. Bollettino. B. Serie VI. (Bologna) (Formerly: Boll. Un. Mat. Ital. B (5)) 1- 1982-

Boll. Un. Mat. Ital. C (5) Unione Matematica Italiana. Bollettino. C. Serie V. Analisi Funzionale e Applicazioni. (Bologna) 18– 1981–

Boll. Un. Mat. Ital. Suppl. Unione Matematica Italiana. Bollettino. Supplemento. (Bologna) 1- 1981-

Bonner Math. Schriften Bonner Mathematische Schriften. [Bonn Mathematical Publications] Univ. Bonn, Bonn.

† Books in Library and Information Sci. Books in Library and Information Science. Dekker, New York.

† Boston Stud. Philos. Sci. Boston Studies in the Philosophy of Science. Reidel, Dordrecht.

British J. Hist. Sci. British Society for the History of Science. British Journal for the History of Science. (Chalfont St. Giles)

British J. Math. Statist. Psych. The British Journal of Mathematical and Statistical Psychology. (Leicester)

British J. Philos. Sci. The British Journal for the Philosophy of Science. (Aberdeen)

¶ British Nat. Biblio. British National Bibliography. (London) ¶ BS110 Centre National de la Recherche Scientifique. Bulletin Signalétique 110. Informatique. Automatique. Recherche Opérationnelle. Gestion. (Paris) See Bull. Sig-

† Buchreihe Atomkernenergie Buchreihe der Atomkernenergie. [Book Series on Nuclear Energy] Thiemig, Munich.

Bul. Inst. Politehn. București Ser. Chim.-Metal. Institutului Politehnic "Gheorghe Gheorghiu-Dej" București. Buletinul. Seria Chimie-Metalurgie. (Bucharest) 39-1977-

Bul. Inst. Politehn. Bucureşti Ser. Electrotehn. Institutului Politehnic "Gheorghe Gheorghiu-Dej" București. Buletinul. Seria Electrotehnică. (Bucharest) 39- 1977-Bul. Inst. Politehn. București Ser. Mec. Institutului Politehnic "Gheorghe Gheorghiu-Dej" Bucuresti. Buletinul. Seria Mecanică. (Bucharest) 39- 1977Bul. Inst. Politehn. Iași Secț. I Institutului Politehnic din Iași. Buletinul. Secția I. Matematică. Mecanică Teoretică. Fizică. (Iași)

Bul. Ştiinţ. Inst. Politehn. Cluj-Napoca Ser. Arhitect.-Construc. Al Institutului Politehnic Cluj-Napoca. Buletinul Științific. Seria Arhitectură-Construcții. (Cluj-Napoca) (Mathematical Reviews does not review this seria.)

Bul. Ştiinţ. Inst. Politehn. Chij-Napoca Ser. Chim. Metal. Al Institutului Politehnic Cluj-Napoca. Buletinul Științific. Seria Chimie-Metalurgie. (Cluj-Napoca) 20-1977-

Bul. Ştiinş. Inst. Politehn. Chij-Napoca Ser. Construc. Maş. Al Institutului Politehnic Cluj-Napoca. Buletinul Ştiinţific. Seria Construcţii de Maşini. (Cluj-Napoca) (Mathematical Reviews does not review this seria.)

Bul. Ştiinţ. Inst. Politehn. Chij-Napoca Ser. Electrotehn.-Energet.-Inform. Al Institutului Politehnic Cluj-Napoca. Buletinul Științific. Seria Electrotehnică-Energetică-Informatică. (Cluj-Napoca) 20- 1977-

Bul. Ştiinţ. Inst. Politehn. Cluj-Napoca Ser. Mat.-Fiz.-Mec. Apl. Al Institutului Politehnic Cluj-Napoca. Buletinul Științific. Seria Matematică-Fizică-Mecanică Aplicată. (Cluj-Napoca) 20- 1977-

Bul. Ştiinţ. Tehn. Inst. Politehn. "Traian Vuia" Timişoara Institutului Politehnic

"Traian Vuia" Timișoara. Buletinul Științific și Tehnic. (Timișoara)
Bul. Univ. Brașov Ser. C Universitățea din Brașov. Buletinul. Seria C. (Brașov) Bul. Univ. Galați Fasc. II Mat. Fiz. Mec. Teoret. Universitatea din Galați. Buletinul. Fascicula II. Matematică, Fizică, Mecanică Teoretică. (Galați) 1- 1978-Bulgar. J. Phys. Bulgarian Journal of Physics. (Sofia)

† Bulgar. Math. Monographs Bulgarian Mathematical Monographs. Bulgar. Acad. Sci., Sofia.

Bull. Acad. Polon. Sci. Sér. Sci. Math. L'Académie Polonaise des Sciences. Bulletin. Série des Sciences Mathématiques. (Warsaw)

Bull. Acad. Polon. Sci. Sér. Sci. Phys. Astronom. L'Académie Polonaise des Sciences. Bulletin. Série des Sciences Physiques et Astronomiques. (Warsaw)

Bull. Acad. Polon. Sci. Sér. Sci. Tech. Bulletin de l'Académie Polonaise des Sciences. Série des Sciences Techniques. (Warsaw)

Bull. Acad. Serbe Sci. Arts Cl. Sci. Math. Natur. (N.S.) Académie Serbe des Sciences et des Arts. Classe des Sciences Mathématiques et Naturelles. Bulletin. Nouvelle Série.

(Belgrade) No. 10- 1979-Bull. Aichi Univ. Ed. Natur. Sci. Bulletin of Aichi University of Education. Natural Science. (Kariya) 29- 1980-

Bull. Amer. Math. Soc. (N.S.) American Mathematical Society. Bulletin. New Series. (Providence, R.I.)

Bull. Astronom. Inst. Czechoslovakia Astronomical Institutes of Czechoslovakia. Bulletin. (Prague) 30- 1979-

Bull. Austral. Math. Soc. Bulletin of the Australian Mathematical Society. (St. Lucia) Bull. Calcutta Math. Soc. Bulletin of the Calcutta Mathematical Society. (Calcutta) Bull. College Sci. Univ. Ryukyus University of the Ryukyus. College of Science. Bulle-

tin. (Naha) Bull. Dept. Gen. Ed. College Sci. Tech. Nihon Univ. Bulletin of Department of General

Education. College of Science and Technology. Nihon University. (Narashino) Bull. Direction Études Rech. Sér. C Math. Inform. Électricité de France. Bulletin de la Direction des Études et Recherches. Série C. Mathématiques. Informatique. (Grenoble)

Bull. Fac. Ed. Kagoshima Univ. Natur. Sci. Bulletin of the Faculty of Education. Kagoshima University. Natural Science. (Kagoshima) 32- 1980-

Bull. Fac. Ed. Utsunomiya Univ. Sect. 2 Utsunomiya University. Faculty of Education. Section 2. Bulletin. (Utsunomiya)

Bull. Fac. Ed. Wakayama Univ. Natur. Sci. Wakayama University. Faculty of Education. Bulletin. Natural Science. (Wakayama) No. 26–1977–
Bull. Fac. Engrg. Miyazaki Univ. Bulletin of the Faculty of Engineering, Miyazaki

University. (Miyazaki)

Bull. Fac. Gen. Ed. Gifu Univ. Gifu University. Faculty of General Education. Bulletin. (Gifu) No. 13- 1977-

Bull. Fac. Liberal Arts Nagasaki Univ. Bulletin of the Faculty of Liberal Arts. Nagasaki Univesity. Natural Science. (Nagasaki) 21- 1981-

Bull. Fac. School Ed. Hiroshima Univ. Part II Bulletin of the Faculty of School Education. Hiroshima University. Part II. (Hiroshima) 3- 1980-

Bull. Fac. Sci. Assiut Univ. Assiut University. Bulletin of the Faculty of Science. (Assiut) 1- 1972-

Bull. Fac. Sci. Engrg. Chuo Univ.
 Chuo University, Faculty of Science and Engineering, Bulletin. (Tokyo)
 Bull. Fac. Sci. Ibaraki Univ. Ser. A
 Bulletin of the Faculty of Science. Ibaraki University.

sity. Series A. Mathematics. (Mito)

Bull. Fac. Sci. King Abdul Aziz Univ. Bulletin of the Faculty of Science. King Abdul Aziz University. (Jeddah) 1- 1977-

Bull. Fukuoka Univ. Ed. III Bulletin of Fukuoka University of Education. Part III. Natural Sciences. (Fukuoka)

* Bull. Gen. Ed. Dokkyo Univ. School Medicine Bulletin of General Education. Dokkyo University. School of Medicine. Dokkyo Ika Daigaku Kyoyo Iggaka Kiyo. (Mibu) 1- 1978-

Bull. Géodésique Bulletin Géodésique. (Paris)

Bull. Inst. Internat. Statist. Bulletin de l'Institut International de Statistique. (Calcutta) Bull. Inst. Math. Acad. Sinica Bulletin of the Institute of Mathematics. Academia Sinica. (Taipei)

Bull. Inst. Math. Appl. Bulletin of the Institute of Mathematics and its Applications. (Southend-on-Sea)

Bull. Iranian Math. Soc. Iranian Mathematical Society. Bulletin. (Tehran) No. 8-1978-

Bull. JSME Bulletin of the Japan Society of Mechanical Engineers. (Tokyo) Bull. Korean Math. Soc. Bulletin of the Korean Mathematical Society. (Seoul) 18Bull. Kyoto Univ. Ed. Ser. B Bulletin of the Kyoto University of Education. Series B. Mathematics and Natural Science. (Kyoto)

Bull. Kyushu Inst. Tech. Math. Natur. Sci. Bulletin of the Kyushu Institute of Technol-

ogy. Mathematics, Natural Science. (Tobata)

Bull. London Math. Soc. The Bulletin of the London Mathematical Society. (London) Bull. Malaysian Math. Soc. (2) Malaysian Mathematical Society. Bulletin. Second Series. (Kuala Lumpur) 1- 1978-

Bull. Math. George O. Okikiolu. Bulletin of Mathematics. (London) 1981, no. 1-Bull. Math. Assoc. India Bulletin of the Mathematical Association of India. (Kanpur) 10- 1978-

Bull. Math. Biol. Bulletin of Mathematical Biology. (Elmsford, N.Y.)

Bull. Math. Soc. Sci. Math. R. S. Roumanie (N.S.) Bulletin Mathématique de la Société des Sciences Mathématiques de la République Socialiste de Roumanie. Nouvelle Série. (Bucharest)

Bull. Math. Statist. Bulletin of Mathematical Statistics. (Fukuoka)

Bull. Nagoya Inst. Tech. Bulletin of Nagoya Institute of Technology. (Nagoya)
Bull. Nara Unio. Ed. Natur. Sci. Bulletin of Nara University of Education. Natural Science. (Nara)

Bull. Osaka Prefect. Tech. College Bulletin of Osaka Prefectural Technical College. (Osaka) 13- 1979-

Bull. Sci. Engrg. Res. Lab. Waseda Univ. Bulletin of Science and Engineering Research Laboratory, Waseda University, (Tokyo)

Bull. Sci. Math. (2) Bulletin des Sciences Mathématiques. 2e Série. (Paris)

Bull. Seismol. Soc. Amer. Bulletin of the Seismological Society of America. (Berkeley, Calif.) 71- 1981-

¶ Bull. Signal. 110 Centre National de la Recherche Scientifique. Bulletin Signalétique 110. Informatique. Automatique. Recherche Opérationnelle. Gestion. (Paris) (Usually abbreviated as BS110 in the text of Math. Rev.)

Bull. Soc. Franco-Japon. Sci. Pures Appl. Bulletin de la Société Franco-Japonaise des Sciences Pures et Appliquées. (Tokyo) No. 33- 1981-

Bull. Soc. Math. Belg. Sér. A Bulletin de la Société Mathématique de Belgique. Série A. (Brussels) 29- 1977-

Bull. Soc. Math. Belg. Sér. B Bulletin de la Société Mathématique de Belgique. Série B. (Brussels) 29- 1977-

Bull. Soc. Math. France Bulletin de la Société Mathématique de France. (Paris) Bull. Soc. Math. Grèce (N.S.) Bulletin de la Société Mathématique de Grèce. Nouvelle Série. (Athens)

Bull. Soc. Roy. Sci. Liège Bulletin de la Société Royale des Sciences de Liège. (Liège)
Bull. Soc. Sci. Lett. Łódź Bulletin de la Société des Sciences et des Lettres de Łódź. (Łódź)

Bull. Tokyo Gakugei Univ. (4) Bulletin of Tokyo Gakugei University. Series IV. (Tokyo)

Bull. Univ. Osaka Prefect. Ser. A Bulletin of University of Osaka Prefecture. Series A. Engineering and Natural Sciences. (Sakai)

Bull. Yamagata Univ. Natur. Sci. Bulletin of the Yamagata University. Natural Science. (Yamagata)

Burg Monographs in Sci. Burg Monographs in Science. Burg, Basel.

Butl. Sec. Mat. Soc. Catalana Ciènc. Fis. Quim. Mat. Butlletí de la Secció de Matemà tiques de la Societat Catalana de Ciències Físiques, Químiques i Matemàtiques. (Barcelona) No. 5- 1980-

Butl. Soc. Catalana Ciènc. Fís. Quim. Mat. (2) Butlleti de la Societat Catalana de Ciències Fisiques, Químiques i Matemàtiques. Segona època. (Barcelona) 1, no. 4-

* Byull. Inst. Teoret. Astronom. Akademiya Nauk Soyuza Sovetskikh Sotsialisticheskikh Respublik. Byulleten' Instituta Teoreticheskoi Astronomii. (Moscow) (Formerly: Biull. Inst. Teoret. Astronom.) C. R. Acad. Bulgare Sci. Doklady Bolgarskoi Akademii Nauk. Comptes Rendus de

l'Académie Bulgare des Sciences. (Sofia) C. R. Acad. Sci. Paris Sér. I Math. Comptes Rendus des Séances de l'Académie des

Sciences, Série I. Mathématique. (Paris) 292- 1981-C. R. Acad. Sci. Paris Sér. II Méc. Phys. Chim. Sci. Univers Sci. Terre. Comptes Rendus des Séances de l'Académie des Sciences. Série II. Mécanique, Physique, Chimie, Sciences de l'Univers, Sciences de la Terre. (Paris) 292- 1981-

C. R. Acad. Sci. Paris Sér. III Sci. Vie Comptes Rendus des Séances de l'Académie des Sciences. Série III. Sciences de la Vie. (Paris) 292- 1981-

C. R. Acad. Sci. Paris Vie Académique Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences. Vie Académique. (Paris)

C. R. Math. Rep. Acad. Sci. Canada La Société Royale du Canada. L'Academie des Sciences. Comptes Rendus Mathématiques. (Mathematical Reports). (Toronto/Waterloo) 1- 1978/79-

† CAD of Electron. Circuits CAD of Electronic Circuits. Elsevier, Amsterdam.

Cahiers Centre Études Rech. Opér. Cahiers du Centre d'Études de Recherche Opérationnelle. (Brussels)

† Cahiers Math. Montpellier Cahiers Mathématiques Montpellier. [Montpellier Mathematical Reports] Univ. Sci. Tech. Languedoc, Montpellier.

Cahiers Scientifiques. [Scientific Reports] Gauthier-Villars, Paris. † Cahiers Sci. Cahiers Topologie Géom. Différentielle Cahiers de Topologie et Géométrie Différe-

ntielle. (Amiens) Calcolo Calcolo. (Pisa)

Calcutta Statist. Assoc. Bull. Calcutta Statistical Association Bulletin. (Calcutta) † Cambridge Comput. Sci. Texts Cambridge Computer Science Texts. Cambridge Univ. Press, New York.

† Cambridge Monographs Math. Phys. Cambridge Monographs on Mathematical Physics. Cambridge Univ. Press, New York.

† Cambridge Monographs Mech. Appl. Math. Cambridge Monographs on Mechanics and Applied Mathematics. Cambridge Univ. Press, New York.

Univ. Press, Cambridge.

† Cambridge Tracts in Math. Cambridge Tracts in Mathematics. Cambridge Univ. Press, Cambridge

Canad. J. Math. Canadian Journal of Mathematics. Journal Canadien de Mathématiques. (Ottawa, Ont.)

d. J. Phys. Canadian Journal of Physics. (Ottawa, Ont.)

Canad. J. Statist. The Canadian Journal of Statistics. (Montreal, Que.)

Canad. Math. Bull. Canadian Mathematical Bulletin. (Ottawa, Ont.)

* Caribbean J. Math. Caribbean Journal of Mathematics. (Bridgetown) 1- 1982-

† Carolina Lecture Ser. Carolina Lecture Series. Univ. North Carolina, Chapel Hill,

† Carus Math. Monographs Carus Mathematical Monographs. Math. Assoc. America, Washington, D.C. Časopis Pēst. Mat. Československá Akademie Věd. Časopis Pro Pěstování Matematiky.

(Prague)

† CBMS-NSF Regional Conf. Ser. in Appl. Math. CBMS-NSF Regional Conference Series in Applied Mathematics. SIAM, Philadelphia, Pa.

† CBMS Regional Conf. Ser. in Math. CBMS Regional Conference Series in Mathematics. Amer. Math. Soc., Providence, R.I.

¶CCA Computer and Control Abstracts. (New York) See Comput. Control Abstracts Celestial Mech. Celestial Mechanics. (Dordrecht) Centaurus Centaurus. (Copenhagen)

† Centre Math. CNRS Centre de Mathématiques Équipe de Recherche Associée au CNRS. [Mathematics Center, CNRS Research Group] École Norm. Sup., Paris. † CERN 80 CERN 80. CERN, Geneva. (Formerly: CERN) † CERN 81 CERN 81. CERN, Geneva.

† Cesta k Vědění Cesta k Vědění. [Path to Knowledge] Academia, Prague.

Chem. Engrg. J. The Chemical Engineering Journal. An International Journal of Research and Development. (Lausanne)

Chem. Phys. Chemical Physics. (Amsterdam) 19- 1977-

Chem. Phys. Lett. Chemical Physics Letters. (Amsterdam)

* China Sci. Tech. Abstracts Ser. I Math. Astronom. Phys. China Science & Technology Abstracts. Series I. Mathematics, Astronomy, Physics. (Hong Kong) 3- 1982-Chinese Ann. Math. Chinese Annals of Mathematics. Shuxue Niankan. (Shanghai)

Chinese Astronom. Astrophys. Chinese Astronomy and Astrophysics. (Oxford) (Selected translation of Acta Astronom. Sinica and Acta Astrophys. Sinica) 5- 1981-

Chinese J. Math. Chinese Journal of Mathematics. (Taipei) * Chinese Phys. Chinese Physics. (New York) (Selected translations of Chinese physics

and astronomy journals) 1- 1981-*Chisl. Metody Mekh. Sploshn. Sredy Akademiya Nauk SSSR. Sibirskoe Otdelenie. Vychislitel'nyi Tsentr. Chislennye Metody Mekhaniki Sploshnoi Sredy. (Novosibirsk)

(Formerly: Čisl. Metody Meh. Splošn. Sredy)

* Chittagong Univ. Stud. Part II Sci. Chittagong University Studies. Part II: Science.

(Chittagong) 2- 1978-Cho-sŏn In-min Kong-hwa-kuk Kwa-hak-wŏn T'ong-bo (Academy of Science of the People's Republic of Korea. Bulletin) Cho-son Min-ju-ju-ŭi In-min Kong-hwa-kuk Kwa-hak-won. Tong-bo. (Pyongyang)

Cienc. Mat. (Havana) Ciencias Matemáticas. (Havana) 1 - 1980-

Cienc. Tecn. Ciencia y Tecnología. (San José) 1- 1977-

Čisl. Metody Meh. Spłożn. Sredy Akademija Nauk SSSR. Sibirskoe Otdelenie. Vyčisli-teľ nyĭ Centr. Čislennye Metody Mehaniki Splošnoĭ Sredy. (Novosibirsk) (Continued as: Chisl. Metody Mekh. Sploshn. Sredy)

† CISM Courses and Lectures CISM Courses and Lectures. Springer, Vienna

CL & CL-Comput. Linguist. Comput. Lang. Computational Linguistics and Computer Languages. (Budapest) Clustering Phenom. Nuclei Clustering Phenomena in Nuclei. Vieweg, Braunschweig.

Colec. Monograf. Mem. Mat. Colección de Monografías y Memorias de Matemáticas. [Collection of Monographs and Memoirs in Mathematics] Inst. "Jorge Juan" Mat., Madrid

† Coll. Sci. Mat. Collana di Scienze Matematiche. [Collection of the Mathematical Sciences] Pàtron, Bologna.

† Collect. Dir. Études Rech. Elec. France Collection de la Direction des Études et Recherches d'Électricité de France. [Collection of the Department of Studies and Research of Électricité de France] Eyrolles, Paris.

† Collect. École Norm. Sup. Jeunes Filles Collection de l'École Normale Supérieure de Jeunes Filles. [Collection of the École Normale Supérieure de Jeunes Filles] École Norm. Sup. Jeunes Filles, Paris.

Collect. Écologie Collection d'Écologie. [Ecology Collection] Masson, Paris.

† Collect. Enseignement Sci. Collection Enseignement des Sciences. [Collection: The Teaching of Science | Hermann, Paris.

† Collect. I. M. E. Collection de l'I.M.E. Sirey, Paris.

Collect. Math. Consejo Superior de Investigaciones Científicas. Universidad de Barcelona. Collectanea Mathematica. Seminario Matemático de Barcelona. (Barcelona)

Collect. Phenom. Collective Phenomena. An International Journal of Discussion and Speculation. (London)

† Collect. "Programmation": Rech. Opér. Appl. Collection "Programmation": Recherche Opérationnelle Appliquée. [Collection "Programming": Applied Operational Research] Gauthier-Villars, Paris.

† Collect. Sém. INRIA Collection Séminaires INRIA. INRIA, Rocquencourt.

† Collect. Studies Ser. Collected Studies Series. Variorum, London.

† Collect. Travaux Acad. Internat. Hist. Sci. Collection des Travaux de l'Académie Internationale d'Histoire des Sciences. [Collection of the Transactions of the International Academy of the History of Science] Steiner, Wiesbaden.

oridge Stud. Math. Biol. Cambridge Studies in Mathematical Biology. Cambridge † Colloq. Internat. CNRS Colloques Internationaux du Centre National de la Recherche Scientifique. [International Colloquia of the CNRS] CNRS, Paris.

Colloq. Math. Colloquium Mathematicum. (Warsaw)

† Colloq. Math. Soc. János Bolyai Colloquia Mathematica Societatis János Bolyai. North-Holland, Amsterdam.

† Colloq. Nat. CNRS Colloques Nationaux du Centre National de la Recherche Scientifique. [National Colloquia of the CNRS] CNRS, Paris.

Combinatória Combinatória. Estudos e Pesquisas. (São Paulo)

Combinatorica Combinatorica. An International Journal of the János Bolvai Mathematical Society. (Budapest/Amsterdam) 1- 1981-

Comm. ACM Communications of the Association for Computing Machinery. (New

Comm. Algebra Communications in Algebra. (New York)

Comm. Dublin Inst. Adv. Stud. Ser. A Communications of the Dublin Institute for Advanced Studies. Series A. (Dublin)

Comm. Fac. Sci. Univ. Ankara Sér. A. Math. Université d'Ankara. Faculté des Scien-

ces. Communications. Série A₁. Mathématiques. (Ankara) Comm. Fac. Sci. Univ. Ankara Sér. A₂ Phys. Université d'Ankara. Faculté des Sciences. Communications. Série A2. Physique. (Ankara)

Comm. Fac. Sci. Univ. Ankara Sér. A3 Astronom. Université d'Ankara. Faculté des Sciences. Communications. Série A₃. Astronomie. (Ankara)

Comm. Math. Phys. Communications in Mathematical Physics.

Comm. Partial Differential Equations Communications in Partial Differential Equations. (New York)

Comm. Pure Appl. Math. Communications on Pure and Applied Mathematics. (New York)

Comm. Roy. Soc. Edinburgh Phys. Sci. The Royal Society of Edinburgh. Communications Physical Sciences. (Edinburgh) No. 1- 1975-

Comm. Statist. A-Theory Methods Communications in Statistics. A. Theory and Methods. (New York)

Comm. Statist. B-Simulation Comput. Communications in Statistics. B. Simulation and Computation. (New York)

Comm. Statist.-Econometric Rev. Communications in Statistics. Econometric Reviews. (New York) 1- 1982-

Comm. Statist.-Sequential Anal. Communications in Statistics. Sequential Analysis. (New York) 1-1982-

Comment. Math. Helv. Commentarii Mathematici Helvetici. (Basel)

Comment. Math. Prace Mat. Roczniki Polskiego Towarzystwa Matematycznego. Seria I. Commentationes Mathematicae. Prace Matematyczne. (Warsaw)

Comment. Math. Special Issue Commentationes Mathematicae. Special Issue. (Warsaw) 1- 1978-

nent. Math. Univ. Carolin. Commentationes Mathematicae Universitatis Carolinae. (Prague)

Comment, Math. Univ. St. Paul. Commentarii Mathematici Universitatis Sancti Pauli. (Tokyo)

Comment. Phys.-Math. See Soc. Sci. Fenn. Comment. Phys.-Math.

Comment. Phys.-Math. Dissertationes See Soc. Sci. Fenn. Comment. Phys.-Math.

mun. and Cybernet. Communication and Cybernetics. Springer, Berlin.

Commun. Math. Inst. Rijksuniv. Utrecht Communications of the Mathematical Institute Riiksuniversiteit Utrecht. Riiksuniv. Utrecht. Utrecht. Compositio Math. Compositio Mathematica. (Dordrecht)

Comprendre et Appliquer Comprendre et Appliquer. [Comprehension and Application] Masson, Paris.

Comput. & Fluids Computers & Fluids. An International Journal. (Elmsford, N.Y.) nut. & Structures Computers & Structures. An International Journal. (Elmsford, N.Y.)

Comput. Appl. Computers and their Applications. Horwood, Chichester.

Comput. Control Abstracts Computer and Control Abstracts. (London) (Usually abbreviated as CCA in the text of Math. Rev.)

Comput. Electr. Engrg. Computers & Electrical Engineering. An International Journal. (Elmsford, N.Y.) 6– 1979–

† Comput. Engrg. Ser. Computer Engineering Series. Crane Russak, New York.

Comput. J. The Computer Journal. (London)

Comput. Math. Appl. Computers & Mathematics with Applications. An International Journal. (Elmsford, N.Y.)

Comput. Methods Appl. Mech. Engrg. Computer Methods in Applied Mechanics and Engineering. (Amsterdam)

Comput. Networks Computer Networks. International Journal of Distributed Informatique. (Amsterdam) 1- 1976-

Comput. Phys. Comm. Computer Physics Communications. An International Journal Devoted to Computational Physics and Computer Programs in Physics. (Amsterdam) 22- 1981-

¶ Comput. Rev. Computing Reviews. (New York) (Usually abbreviated as CR in the text of Math. Rev.)

Comput. Sci. Appl. Math. Computer Science and Applied Mathematics. Academic Press, New York.

† Comput. Sci. Monographs Computer Science Monographs. Inst. Statist. Math., Tokyo. † Comput. Suppl. Computing Supplementum. Springer, Vienna.

Comput. Surveys Computing Surveys. ACM. Association for Computing Machinery.

Computing Computing. Archiv für Informatik und Numerik. (Vienna)

Conceptus Conceptus. Zeitschrift für Philosophie. (Innsbruck)

† Conf. e Studi Accad. Polacca Sci., Bibl. Centro Studi Roma Conferenze e Studi Accademia Polacca delle Scienze, Biblioteca e Centro di Studi a Roma, [Lectures and Courses of the Polish Academy of Sciences, Library and Study Center of Rome] Ossolineum, Wrocław.

Confer, Sem. Mat. Univ. Bari Conferenze del Seminario di Matematica dell'Università di Bari. (Bari)

Congr. Numer. Congressus Numerantium. (Winnipeg, Man.) 28- 1980-

† Congress. Numer. Congressus Numerantium. Utilitas Math., Winnipeg, Man

† Contemp. Concepts Phys. Contemporary Concepts in Physics. Harwood Academic, Chur.

† Contemp. Math. Contemporary Mathematics. Amer. Math. Soc., Providence, R.I. † Contrib. Centro Linceo Interdisc. Sci. Mat. Appl. Contributi del Centro Linceo Interdisc

ciplinare di Scienze Matematiche e loro Applicazioni. [Contributions of the Linceo Interdisciplinary Center for Mathematical Sciences and their Applications] Accad. Naz. Lincei, Rome.

† Contrib. Econom. Anal. Contributions to Economic Analysis. North-Holland, Amsterdam.

Control Cybernet. Polish Academy of Sciences. Institute of Applied Cybernetics. Control and Cybernetics. (Warsaw)

† Control Systems Theory Control and Systems Theory. Dekker, New York.

† Cowles Foundation Monographs Cowles Foundation Monographs. Yale Univ. Press, New Haven, Conn.

¶ CR Computing Reviews. (New York) See Comput. Rev.

Cryptologia Cryptologia. (Albion, Mich.) 2- 1978-

† CTHS: Bull. Sec. Sci. Comité des Travaux Historiques et Scientifiques (CTHS): Bulletin de la Section des Sciences. [Committee for Historical and Scientific Works: Bulletin of the Science Section] Bib. Nat., Paris.
† CTHS: Mém. Sec. Sci. Comité des Travaux Historiques et Scientifiques (CTHS):

Mémoires de la Section des Sciences [Committee for Historical and Scientific Works: Memoirs of the Science Section] Bib. Nat., Paris.

† Cuadern. Inst. Mat. Beppo Levi Cuadernos del Instituto de Matemática "Beppo Levi". [Notes of the Beppo Levi Institute of Mathematics] Univ. Nac. Rosario, Rosario.

† Cuadern. Teorema Cuadernos Teorema. [Teorema Notes] Univ. Valencia, Valencia. Current Math. Publ. Current Mathematical Publications. (Providence, R.I.)

† Cursos Congr. Univ. Santiago de Compostela Cursos y Congresos de la Universidad de Santiago de Compostela. [Courses and Conferences of the University of Santiago de Compostela] Univ. Santiago de Compostela, Santiago de Compostela.

Sem. Tesis PEAM Cursos, Seminarios y Tesis del PEAM. [Courses, Seminars and Theses of PEAM] Univ. Zulia, Maracaibo.

Cuttington Res. J. Cuttington Research Journal. (Monrovia) 1- 1982-

Cybernet. Systems Cybernetics and Systems. An International Journal. (Washington, D.C.) 11- 1980-

† Cybernet. Systems Ser. Cybernetics and Systems Series. Abacus, Tunbridge Wells.

Cybernetica Cybernetica. (Namur)

Cybernetics Cybernetics. (New York) (Translation of Kibernetika (Kiev)) 1965— Czechoslovak J. Phys. B Čehoslovackaja Akademija Nauk. Čehoslovackii Fizičeskii Žurnal. Czechoslovak Academy of Sciences. Czechoslovak Journal of Physics. B. (Prague)

Czechoslovak Math. J. Čehoslovackaja Akademija Nauk. Čehoslovackii Matematičeskii Žurnal. Czechoslovak Mathematical Journal. (Prague)

† de Gruyter Stud, Math. de Gruyter Studies in Mathematics. de Gruyter, Berlin.

Defence Sci. J. Defence Science Journal. (Delhi)

Delft Progr. Rep. Delft Progress Report. (Delft)

Demonstratio Math. Demonstratio Mathematica. (Warsaw)

Denshi Tsushin Gakkai Ronbunshi Sect. A-D See Electron. Comm. Japan

† Dept. Math., No. 1978 Department of Mathematics, No. 1978. Chalmers Univ. Tech., Göteborg

Deutsch, Biblio, Wöchentl, Verzeich, Amtsblatt Deutsch, Bibliothek Ser, B. Deutsche Bibliographie. Wöchentliches Verzeichnis. Amtsblatt der Deutschen Bibliothek. Reihe B. (Frankfurt)

Deutsch. Biblio. Wöchentl. Verzeich. Amtsblatt Deutsch. Bibliothek Ser. A Deutsche Bibliographie. Wöchentliches Verzeichnis. Amtsblatt der Deutschen Bibliothek. Reihe A. (Frankfurt)

Deutsch, Biblio, Wöchentl, Verzeich, Ser, C Deutsche Bibliographie, Wöchentliches Verzeichnis. Reihe C. (Frankfurt)

¶ Deutsch. Nationalbiblio. Reihe A. Deutsche Nationalbibliographie. Reihe A. Neu-

erscheinungen des Buchhandels. (Leipzig)

¶ Deutsch. Nationalbiblio. Reihe B Deutsche Nationalbibliographie. Reihe B. Neuerscheinungen Ausserhalb des Buchhandels. (Leipzig)

† Deutsch-Taschenbücher Deutsch-Taschenbücher. [Deutsch Paperbacks] Deutsch, Thun.

† Develop. in Cell Biology Developments in Cell Biology. Elsevier/North-Holland Biomed. Press, Amsterdam.

† Develop. in Mech. Developments in Mechanics. Kansas St. Univ., Manhattan, Kan. Dialectica Dialectica. International Review of Philosophy of Knowledge. (Bienne) 32- 1978-

Dialogue Dialogue. Canadian Philosophical Review. Revue Canadienne de Philosophie. (Ottawa, Ont.)

Differencial'nye Uravnenija Differencial'nye Uravnenija. (Minsk) (Translated as: Differential Equations) (Continued as: Differentsial' nye Uravneniya)

Differencial'nye Uravnenija i Primenen.-Trudy Sem. Processy Optimal. Upravlenija I Sekcija Institut Fiziki i Matematiki Akademii Nauk Litovskoi SSR. Differencial'nye Uravnenija i ih Primenenie. Trudy Respublikanskogo Naučnogo Seminara "Processy Optimal'nogo Upravlenija". I Sekcija. (Vilnius) (Continued as: Differentsial'nye Uravneniya i Primenen.-Trudy Sem. Protsessy Optimal. Upravleniya I Sektsiya)

Differencial'nye Uravnenija (Ryazan) Rjazan. Gosudarstvennyi Pedagogičeskii Institut. Matematičesky Kafedr. Sbornik Trudov. Differencial'nye Uravnenija. (Ryazan) (Continued as: Differentsial'nye Uravneniya (Ryazan))

Differential Equations Differential Equations. (New York) (Translation of Differentsial'nye Uravneniya) 1965-

* Differentsial' nye Uravneniya Differentsial' nye Uravneniya. (Minsk) (Formerly: Differencial'nye Uravnenija)

* Differentsial'nye Uravneniya i Primenen.—Trudy Sem. Protsessy Optimal. Upravleniya I Sektsiya Institut Fiziki i Matematiki Akademii Nauk Litovskoi SSR. Differentsial'nye Uravneniya i ikh Primenenie. Trudy Respublikanskogo Nauchnogo Seminara "Protsessy Optimal'nogo Upravleniya". I Sektsiya. (Vilnius) (Formerly: Differencial'nye Uravnenija i Primenen.-Trudy Sem. Processy Optimal. Upravlenija I Sekcija)

* Differentsial'nye Uravneniya (Ryazan) Ryazanskii Gosudarstvennyi Institut. Sbornik Trudov Matematicheskikh Kafedr Pedinstitutov RSFSR. (Ryazan) (Formerly: Differencial'nye Uravnenija (Ryazan))

Digital Process. Digital Processes. An International Journal on the Theory and Design

of Digital Systems. (St. Saphorin) * Dinamika i Prochnost' Mashin Dinamika i Prochnost' Mashin. (Khar'kov)

(Formerly: Dinamika i Pročnosť Mašin) No. 31- 1980-Dinamika i Pročnosť Mašin Dinamika i Pročnosť Mašin. (Har'kov) (Continued as:

Dinamika i Prochnost' Mashin) No. 31- 1980-

* Dinamika Sploshn. Sredy Institut Gidrodinamiki Sibirskogo Otdeleniya Akademii Nauk SSSR. Dinamika Sploshnoï Sredy. (Novosibirsk) (Formerly: Dinamika Splošn. Sredy) No. 31- 1980-

Dinamika Splošn. Sredy Institut Gidrodinamiki Sibirskogo Otdelenija Akademii Nauk SSSR. Dinamika Splošnoĭ Sredy. (Novosibirsk) (Continued as: Dinamika Sploshn. Sredy) No. 31- 1980-

Dirāsāt Res. J. Natur. Sci. Dirāsāt. A Research Journal, Natural Sciences. (Amman) 2- 1975-

Discrete Appl. Math. Discrete Applied Mathematics. (Amsterdam) 1- 1979-

Discrete Math. Discrete Mathematics. (Amsterdam)

Discussion Papers Discussion Papers. London School Econom., London.

† Disquis. Math. Hungar. Disquisitiones Mathematicae Hungaricae. [Hungarian Mathematics Investigations] Akad. Kiadó, Budapest.

† Diss. ETH Diss. ETH. Juris, Zurich.

† Diss. Johannes-Kepler-Univ. Linz Dissertationen der Johannes-Kepler-Universität Linz. [Dissertations of the Johannes Kepler University of Linz] VWGÖ, Vienna

† Diss. Techn. Univ. Wien Dissertationen der Technischen Universität Wien. [Dissertations of the Technical University of Vienna] VWGÖ, Vienna. Dissertationes Math. (Rozprawy Mat.) Polska Akademia Nauk. Instytut Matematyczny.

Dissertationes Mathematicae. Rozprawy Matematyczny. (Warsaw)

† Djela Djela [Monographs] Akad. Nauk. i Umjetnost. Bosne i Hercegovine, Sarajevo. † DM 77 DM 77. Karl Marx Univ. Econom., Budapest.

† DM 78 DM 78. Karl Marx Univ. Econom., Budapest.

DM 79 DM 79. Karl Marx Univ. Econom., Budapest.

DM 80 DM 80. Karl Marx Univ. Econom., Budapest. † DM 81 DM 81. Karl Marx Univ. Econom., Budapest.

† DMV Sem. DMV Seminar. Birkhäuser, Boston, Mass.

† Doc. Sci. XVe Siècle Documents Scientifiques du XVe Siècle. [15th Century Scientific Documents] Slatkine, Geneva.

† Doc. Travail Document de Travail. [Research Report] Univ. Franche-Comté, Besançon.

Dokl. Akad. Nauk BSSR Doklady Akademii Nauk BSSR. (Minsk)

Dokl. Akad. Nauk SSSR Doklady Akademii Nauk SSSR. (Moscow) (Mathematics section translated as: Soviet Math. Dokl.)

* Dokl. Akad. Nauk Tadzhik. SSR Doklady Akademii Nauk Tadzhikskoï SSR. (Dushanbe) (Formerly: Dokl. Akad. Nauk Tadžik. SSR)

Dokl. Akad. Nauk Tadžik. SSR Doklady Akademii Nauk Tadžikskoi SSR. (Dushanbe) (Continued as: Dokl. Akad. Nauk Tadzhik. SSR)

Dokl. Akad. Nauk Ukrain. SSR Ser. A. Akademiya Nauk Ukrainskoi SSR. Doklady. Seriya A. Fiziko-Matematicheskie i Tekhnicheskie Nauki. (Kiev) (Ukrainian version: Dopovidi Akad. Nauk Ukraïn. RSR Ser. A.)

Dokl. Akad. Nauk UzSSR Doklady Akademii Nauk UzSSR. (Tashkent)

† Dolciani Math. Exp. The Dolciani Mathematical Expositions. Math. Assoc. America, Washington, D.C.

Dopovidi Akad. Nauk Ukrain. RSR Ser. A. Dopovidi Akademii Nauk Ukrains'koi RSR. Seriya A. (Kiev) (Russian version: Dokl. Akad. Nauk Ukrain. SSR Ser. A) Duke Math. J. Duke Mathematical Journal. (Durham, N.C.)

† Duke Univ. Math. Ser. Duke University Mathematics Series. Duke Univ., Durham, N.C.

DVT-Dějiny Věd Tech. Dějiny Věd a Techniky. Společnost pro Dějiny Věd a Techniky. (Prague)

† Dynamic Econom. Theory and Appl. Dynamic Economics: Theory and Applications. North-Holland, New York.

Econom. Comput. Econom. Cybernet. Stud. Res. Economic Computation and Economic Cybernetics Studies and Research. (Bucharest)

Econom. Lett. Economics Letters. (Amsterdam) 1- 1978-

† Econom. Theory Econometrics Math. Econom. Economic Theory, Econometrics, and Mathematical Economics. Academic Press, New York.

Econometrica Econometrica. Journal of the Econometric Society. (Chicago, Ill.)

Ed. Stud. Math. Educational Studies in Mathematics. (Dordrecht)

Eesti NSV Tead. Akad. Füüs. Inst. Uurim. NSV Teaduste Akadeemia. Füüsika Instituudi Uurimused. Eesti. Akademia Nauk Estonskoi SSR. Institut Fiziki. Trudy. (Tartu) Eesti NSV Tead. Akad. Toimetised Füüs.-Mat. Eesti NSV Teaduste Akadeemia Toime tised. Füüsika-Matemaatika. Izvestiya Akademii Nauk Estonskoi SSR. Seriya Fizika-Matematika. (Tallin)

Egyptian Statist. J. The Egyptian Statistical Journal. (Giza/Cairo) 20- 1976-EIR-Ber. EIR-Bericht. [EIR Report] Eidgenössische Inst. für Reaktorforschung, Würenlingen.

Èkonom. i Mat. Metody Ékonomika i Matematicheskie Metody. (Moscow) Ekonom.-Mat. Obzor Československá Akademie Věd. Ekonomicko-Matematický Ob-

zor. (Prague)

† Elec. Engrg. Electron. Electrical Engineering and Electronics. Dekker, New York.

Electron. Comm. Japan Electronics and Communications in Japan. The Transactions of the Institute of Electronics and Communication Engineers of Japan. (Washington, D.C.) (Partial translation of Denshi Tsushin Gakkai Ronbunshi Sect. A-D) (See also Systems-Comput.-Controls) 1963† Electron. Electric. Engin. Res. Stud.: Control Theory Appl. Stud. Ser. Electronic &

Electrical Engineering Research Studies: Control Theory and Applications Studies

Series. Research Stud., Chichester.

† Electron. Electric. Engin. Res. Stud.: Pattern Recog. Image Process. Ser. Electronic & Electrical Engineering Research Studies: Pattern Recognition & Image Processing Series. Research Stud., Chichester.

Electron. Lett. Electronics Letters. (London)

perarb. Kybernet. Elektronische Informationsverarbeitung Kybernetik. (Berlin)

† Elektron. Rechnen Regeln Elektronisches Rechnen und Regeln. [Electronic Computing and Control] Akademie-Verlag, Berlin.

† Elektron. Rechnen Regeln Sonderband Elektronisches Rechnen und Regeln, Son band. [Electronic Computing and Control, Special Issue] Akademie-Verlag, Berlin. Èlektronnoe Modelirova ie Elektronnoe Modelirovanie. (Kiev) 1979, no. 2

Elem. Math. Elemente der Mathematik. Revue de Mathématiques Élémentaires. Rivista de Matematica Elementare. (Basel)

† Elem. Math. vom Höheren Standpunkt aus Elemente der Mathematik vom Höheren Standpunkt aus. [Elements of Mathematics from a Higher Viewpoint] Birkhäuser,

Eleutheria Eleutheria Liberty; Mathematical Journal of the Seminar of P. Zervos. (Athens) 1978-

† Ellis Horwood Ser. Comput. Appl. Ellis Horwood Series in Computers and their Applications. Horwood, Chichester.

† Ellis Horwood Ser.: Math. Appl. Ellis Horwood Series: Mathematics and its Applications. Horwood, Chichester.

† Elsevier Oceanogr. Ser. Elsevier Oceanography Series. Elsevier, Amsterdam.

Encyclia Encyclia. Utah Academy of Sciences, Arts, and Letters. Journal. (Salt Lake City, Utah) 55- 1978-

† Encyclopedia Math. Appl. Encyclopedia of Mathematics and its Applications. Addison-Wesley, Reading, Mass.

Engrg. Cybernetics Engineering Cybernetics. English Edition of Tekhnicheskaya Kibernetika. (Silver Spring, Md.) (Translation of Izv. Akad. Nauk SSSR Tekhn. Kibernet.) 1963-

Enseign. Math. (2) L'Enseignement Mathématique. Revue Internationale. Ile Série. (Geneva)

al Sci. Appl. Environmental Sciences and Applications. Internat. Soc. Ecological Modelling.

ne Episteme. Reidel, Dordrecht. † Episten

Erevan. Gos. Univ. Učen. Zap. Estesto. Nauki Erevanskii Gosudarstvennyi Universitet. Učenve Zapiski, Estestvennye Nauki, (Erevan) (Continued as: Erevan, Gos. Univ. Uchen. Zap. Estestv. Nauki)

* Erevan. Gos. Univ. Uchen. Zap. Estestv. Nauki Erevanskii Gosudarstvennyi Universitet. Uchenye Zapiski. Estestvennye Nauki. (Erevan) (Formerly: Erevan. Gos. Univ. Učen. Zap. Estestv. Nauki)

† Erfahrung und Denken Erfahrung und Denken. [Experience and Thought] Duncker & lot, Berlin. † Ergeb. Math. Grenzgeb. Ergebnisse der Mathematik und ihrer Grenzgebiete. [Results in

Mathematics and Related Areas Springer, Berlin.

Ergodic Theory Dynamical Systems Ergodic Theory and Dynamical Systems. (New

York) 1-1981-† Erträge der Forschung Erträge der Forschung. [Research Results] Wissensch. Buchge-

sellschaft, Darmstadt. † ESE ESE. École Sup. Électricité, Gif-sur-Yvette.

† Esquisses Math. Esquisses Mathématiques. [Mathematical Sketches] Univ. Amiens, Amiens

Estadist. Española Instituto Nacional de Estadística. Estadística Española. (Madrid) Estadistica Inter-American Statistical Institute. Estadistica. (Washington, D.C.)

† ESZK ESZK. Comp. Center Universities, Budapest.

† Ettore Majorana Internat. Sci. Ser.: Phys. Sci. Ettore Majorana International Science Series: Physical Sciences. Plenum, New York. Euclides (Groningen) Euclides. Maandblad voor de Didactiek van de Wiskunde.

(Groningen)

† Europäische Hochschulschriften Europäische Hochschulschriften. [European University Publications] Lang, Frankfurt.

European J. Combin. European Journal of Combinatorics. (London) 1- 1980-European J. Oper. Res. European Journal of Operational Research. (Amsterdam) 1-1977-

European J. Phys. European Journal of Physics. (London) 1- 1980-

† Excursions Rec. Math. Ser. Excursions in Recreational Mathematics Series. Baywood, Farmingdale, N.Y.

† Exempla Logica Exempla Logica. Francke, Munich.

Fasc. Math. Politechnika Poznańska. Instituta Matematyca. Fasciculi Mathematici. (Poznań)

Fibonacci Quart. The Fibonacci Quarterly. Official Organ of the Fibonacci Association. (Santa Clara, Calif.)

† Filos. Voprosy Fiz. Философские Вопросы Физики. [Philosophical Problems in Physics] Leningrad. Univ., Leningrad.

Fiz. Elementar. Castic i Atom. Jadra Ob"edinennyi Institut Jadernyh Issledovanii. Dubna. Fizika Elementarnyh Častic i Atomnogo Jadra. (Moscow) (Translated as: Soviet J. Particles and Nuclei) (Continued as: Fiz. Elementar. Chastits i Atom. Yadra) * Fiz. Elementar. Chastits i Atom. Yadra Ob"edinennyi Institut Yadernykh Issledovanii. Dubna. Fizika Elementarnykh Chastits i Atomnogo Yadra. (Moscow) (Translated

as: Soviet J. Particles and Nuclei) (Formerly: Fiz. Elementar. Častic i Atom. Jadra)
Fiz.-Mat. Spis. B"lgar. Akad. Nauk. B"lgarska Akademiya na Naukite Fizicheski Institut. Matematicheski Institut. Fiziko-Matematichesko Spisanie. (Sofia)

Fiz. Mekh. Физическая Механика. [Physical Mechanics] Leningrad. Univ.,

Fluid Dynamics Fluid Dynamics. (New York) (Translation of Izv. Akad. Nauk SSSR Mekh. Zhidk. Gaza) 1966-

Fluid Mech. - Soviet Res. Fluid Mechanics. Soviet Research. (Silver Spring, Md.)

† FMDA Abt. II: Monographien Forschungen und Materialien zur Deutschen Aufklärung (FMDA), Abteilung II: Monographien. [Research and Materials on the German Enlightenment, Division II: Monographs] Frommann-Holzboog, Stuttgart.

† FOA Rep., Vol. 12 FOA Reports, Vol. 12. Försvarets Forskningsanstalt, Stockholm.

Formosan Sci. Formosan Science. (Taipei)

Forsch. Ber. Evangel. Studiengemeinsch. Forschungen und Berichte der Evangelischen Studiengemeinschaft. [Research and Reports of the Evangelical Study Society] Klett, Stuttgart.

Forschungs- und Seminarber. Bereich Mech. Univ. Hannover F79 Forschungs- und Seminarberichte aus dem Bereich der Mechanik der Universität Hannover F79. [Research and Seminar Reports in Mechanics of the University of Hanover F791 Bereich Mech., Univ. Hannover, Hannover.

ingsber. des Landes Nordrhein-Westfalen Forschungsberichte des Landes Nordrhein-Westfalen. [Research Reports of the State of North Rhine-Westphalia] Westdeutscher Verlag, Opladen.

Forschungsber, Fachbereich Bauwesen Forschungsbericht aus dem Fachbereich Bauwesen. [Research Reports of the Department of Construction Engineering] Univ. Essen, Essen.

† Fortschr.-Ber. VDI Zeitschr., Reihe 11 Fortschritt-Berichte der VDI Zeitschriften, Reihe 11. [Progress Reports of the VDI Journals, Series 11] VDI, Düsseldorf.

† Fortschr.-Ber. VDI Zeitschr., Reihe 8 Fortschritt-Berichte der VDI Zeitschriften, Reihe 8: Mess-, Steuerungs- und Regelungstechnik. [Progress Reports of the VDI Journals, Series 8: Measure, Control and Regulation Technique] VDI, Düsseldorf.

Fortschr. Phys. Fortschritte der Physik. (Berlin) Found. Control Engrg. Technical University of Poznań. Institute of Control Engineering. Foundations of Control Engineering. (Poznań)

Found. Lang. International Journal of Language and Philosophy. Foundations of Language. (Dordrecht) (Continued as: Stud. Lang.) Found. Phys. Foundations of Physics. (New York)

† Freiberger Forschungshefte D Freiberger Forschungshefte D. [Freiberg Research Notes D] Deutscher Verlag für Grundstoffindustrie, Leipzig.

† Freiburger Intervall-Berichte Freiburger Intervall-Berichte. [Freiburg Interval Reports] Univ. Freiburg, Freiburg im Breisgau

ann's Studientexte Frommann's Studientexte. [Frommann's Textbooks] Frommann-Holzboog, Stuttgart.

Frontiers in Phys. Frontiers in Physics. Benjamin/Cummings, Reading, Mass Frontiers in Systems Res. Frontiers in Systems Research. Nijhoff, Leiden.

*Fudan Daxue Xuebao Fudan Daxue Xuebao. Ziran Kexue Ban. Fudan University. Journal. Natural Sciences. (Shanghai) 20- 1981-

Funct. Approx. Comment. Math. Uniwersytet im. Adama Mickiewicza w Poznańiu Instytut Matematiyki. Functiones et Approximatio Commentarii Mathematici. (Poznań)

Functional Anal. Appl. Functional Analysis and its Applications. (New York) (Translation of Funktsional. Anal. i Prilozhen.) 1967-

Roczniki Polskiego Towarzystwa Matematycznego. Seria IV. Fund. Inform. Fundamenta Informaticae. (Warsaw) 1- 1977-

Fund. Math. Polska Akademia Nauk. Fundamenta Mathematicae. (Warsaw)

Fund. Sci. Fundamenta Scientiae. (Oxford) 1- 1980-

Funkcial. Ekvac. Fako de l'Funkcialaj Ekvacioj Japana Matematika Societo. Funkcialaj Ekvaciog. Serio Internacia. (Kobe) Funkcional. Anal. i Priložen. Akademija Nauk SSSR. Funkcional'nyi Analiz i ego

Priloženija. (Moscow) (Translated as: Functional Anal. Appl.) (Continued as: Funktsional. Anal. i Prilozhen.)

Funktsional. Anal. i Prilozhen. Akademiya Nauk SSSR. Funktsional'nyi Analiz i ego Prilozheniya. (Moscow) (Translated as: Functional Anal. Appl.) (Formerly: Funkcional, Anal, i Priložen.)

* Fuzzy Math. Fuzzy Mathematics. Mohu Shuxue. (Wuhan) 1- 1981-Fuzzy Sets and Systems Fuzzy Sets and Systems. (Amsterdam) 1-

Gaceta Mat. (1) (Madrid) Gaceta Matemática. Primera Serie. (Madrid)

* Ganit Ganit. Journal of Bangladesh Mathematical Society. (Dacca) 1- 1981-

Ganita Ganita Bharat Ganita Parisad. (Lucknow)
Ganita Bhāratī Ganita Bhāratī. Indian Society for History of Mathematics. Bulletin.

(Ranchi) 1- 1979-

Gaodeng Xuexiao Jisuan Shuxue Xuebao See Numer. Math. J. Chinese Univ.

Gaoneng Wuli Yu He Wuli See Phys. Energi. Fort. Phys. Nuclear.

Garyounis Sci. Bull. Garyounis Scientific Bulletin. (Benghazi) 2, no. 3– 1980–
Gauss-Ges. Göttingen Mitt. Gauss-Gesellschaft e. V. Göttingen. Mitteilungen. (Göttingen) No. 14– 1977–

Gaz. Mat. (Bucharest) Gazeta Matematică. Publicație Lunară Pentru Tineret.

* Gaz. Mat. Mat. Inform. Gazeta Matematică. Perfecționare Metodică și Metodologică in Matematică și Informatică. (Bucharest) 1, no. 3- 1980-

† Gazodinam. i Teploobmen Газодинамика и Теплообмен. [Gas Dynamics and Heat Transfer] Leningrad. Univ., Leningrad.

Gen. Relativity Gravitation General Relativity and Gravitation. (New York) † Gendai Sügaku Gendai Sügaku. [Modern Mathematics] Iwanami Shoten, Tokyo. † Gendai Sügaku Enshū Sösho Gendai Sügaku Enshū Sösho. [Modern Mathematics Exercise Series] Iwanami Shoten, Tokyo

Genetics Genetics. A Periodical Record of Investigations Bearing on Heredity and Variation. (Austin, Tex.)

Geod. Inst. Medd. Geodaetisk Institut. Meddelelse. (Copenhagen) † Geodät. Geophys. Veröffentlichungen, Reihe III Geodätische und Geophysikalische Veröffentlichungen, Reihe III. [Geodetic and Geophysical Publications, Series III] Akad Wiss DDR Berlin

Geom. Dedicata Geometriae Dedicata. (Dordrecht)

† Gesellschaft, Recht, Wirtschaft Gesellschaft, Recht, Wirtschaft. [Society, Law, Economy] Bibliographisches Inst., Mannheim.

* Gibridnye Vychisl. Mashiny i Kompleksy Gibridnye Vychislitel'nye Mashiny i Komp

clorianye vychisi. Mashiny i Kompleksy Chorlanye vychishitel nye Mashiny i Kompleksy. (Kiev) (Formerly: Gibridnye Vyčisl. Mašiny i Kompleksy) 1979, no. 2–Gibridnye Vyčisl. Mašiny i Kompleksy. (Kiev) (Continued as: Gibridnye Vychisl. Mashiny i Kompleksy) 1979, no. 2–Gidromeh. (Kiev) Akademija Nauk Ukrainskoi SSR. Institut Gidromehaniki. Gidromehanika. (Kiev) (Continued as: Gidromekh. (Kiev))

Gidromekh. (Kiev) Akademiya Nauk Ukrainskoi SSR. Institut Gidromekhaniki. Gidromekhanika. (Kiev) (Formerly: Gidromeh. (Kiev))

Glas. Mat. Ser. III Drušstvo Matematičara i Fizičara S. R. Hrvatske. Glasnik Matematički. Serija III. (Zagreb)

Glasgow Math. J. Glasgow Mathematical Journal. (Edinburgh)

† Global Anal. Pure Appl. Adv. Global Analysis Pure and Applied: Advanced. Addison-Wesley, Reading, Mass.

† GMD-Stud. GMD-Studien. [GMD Studies] Gesellsch. Math. Datenverarbeitung,

Godishnik Sofiisk. Univ. Fak. Mat. Meh. See Annuaire Univ. Sofia Fac. Math. Méc.

Godishnik Sofiisk. Univ. Fiz. Fak. See Annuaire Univ. Sofia Fac. Phys. * Godishnik Vissh. Inzh.-Stroitel. Inst. Godishnik na Visshiya Inzherno-Stroitelniya Institut. (Sofia) (Formerly: Godišnik Visš. Inž.-Stroitel. Inst.)

Godishnik Vissh. Khimikotekhn. Inst. (Burgas) Godishnik Visshiya Khimikotekhnologicheski Institut. Burgas. (Sofia) (Formerly: Godišnik Visš. Himikotehn. Inst.

(Burgas)) * Godishnik Vissh. Ped. Inst. Shumen Prirod.-Mat. Fak. Godishnik na Visshiya Pedago gicheski Institut v Shumen. Prirodo-Matematicheski Fakultet. (Sofia) (Formerly:

Godišnik Visš. Ped. Inst. Šumen Prirod.-Mat. Fak.) Godishnik Vissh. Uchebn. Zaved. Prilozhna Mat. Godishnik na Visshite Uchebni Zavedeniya. Prilozhna Matematika. (Sofia) (Formerly: Godišnik Visš. Učebn. Zaved.

Priložna Mat.) * Godishnik Vissh. Uchebn. Zaved. Tekhn. Fiz. Godishnik na Visshite Uchebni Zavedeniya. Tekhnicheski Fizika. (Sofia) (Formerly: Godišnik Visš. Učebn. Zaved. Tehn.

Fiz.) * Godishnik Vissh. Uchebn. Zaved. Tekhn. Mekh. Godishnik na Visshite Uchebni Zavedeniya. Tekhnicheski Mekhanika. (Sofia) (Formerly: Godišnik Visš. Učebn. Zaved.

Tehn. Meh.) Godišnik Visš. Himikotehn. Inst. (Burgas) Godišnik Visšija Himikotehnologičeski Institut. Burgas. (Sofia) (Continued as: Godishnik Vissh. Khimikotekhn. Inst. (Burgas)) Godišnik Visš. Inž.-Stroitel. Inst. Godišnik na Visšija Inžerno-Stroitelnija Institut.

(Sofia) (Continued as: Godishnik Vissh. Inzh.-Stroitel. Inst.)

Godišnik Visš. Ped. Inst. Šumen Prirod.-Mat. Fak. Godišnik na Visšija Pedagogičeski Institut v Šumen. Prirodo-Matematičeski Fakultet. (Sofia) (Continued as: Godishnik Vissh. Ped. Inst. Shumen Prirod.-Mat. Fak.) 4— 1979—Godišnik Visš. Učebn. Zaved. Priložna Mat. Godišnik na Visšie Učebni Zavedenija.

Priložna Matematika. (Sofia) (Continued as: Godishnik Vissh. Uchebn. Zaved. Prilozhna Mat.)

Godišnik Visš. Učebn. Zaved. Tehn. Fiz. Godišnik na Visšite Učebni Zavedenija. Tehničeski Fizika. (Sofia) (Continued as: Godishnik Vissh. Uchebn. Zaved. Tekhn. Fiz.)

Godišnik Visš. Učebn. Zaved. Tehn. Meh. Godišnik na Visšite Učebni Zavedenija. Tehničeski Mehanika. (Sofia) (Continued as: Godishnik Vissh. Uchebn. Zaved. Tekhn. Mekh.)

Gor'kov. Gos. Univ. Učen. Zap. Gor'kovskii Gosudarstvennyi Universitet. Učenye

Zapiski. (Gorki) (Continued as: Gor'kov. Gos. Univ. Uchen. Zap.)
Gor'kov. Gos. Univ. Uchen. Zap. Gor'kovskii Gosudarstvennyi Universitet. Uchenye Zapiski. (Gorki) (Formerly: Gor'kov. Gos. Univ. Učen. Zap.)

† Göttinger Wirtsch. Sozialwissensch. Stud. Göttinger Wirtschafts- und Sozialwissenschaftliche Studien. [Göttingen Studies in Economics and Social Sciences] Schwartz, Göttingen.

Gradjevin. Fak. Sarajevo Rad. Sarajevo. Gradjevinski Fakultet. Radovi. (Sarajevo) † Graduate Texts in Math. Graduate Texts in Mathematics. Springer, New York.

Gravitacija i Teor. Otnositel'nosti Kazanskii Gosudarstvennyi Universitet. Gravitacija i Teorija Otnositel'nosti. (Kazan) (Continued as: Gravitatsiya i Teor. Otnositel'nosti) * Gravitatsiya i Teor. Otnositel'nosti Kazanskii Gosudarstvennyi Universitet. Gravitatsiya

i Teoriya Otnositel'nosti. (Kazan) (Formerly: Gravitacija i Teor. Otnositel'nosti)
† Griffin's Statist. Monograph Ser. Griffin's Statistical Monograph Series. Griffin,

London. † Grundkurs Math. Grundkurs Mathematik. [Foundational Course in Mathematics] Vieweg, Braunschweig.

† Grundkurs Phys. Grundkurs Physik. [Fundamentals of Physics] Steinkopff, Darmstadt

† Grundlagen Math. Inform. Grundlagen der Mathematik und Informatik. [Foundations of Mathematics and Information Science] Rheinisch-Westfälische Tech. Hochschule,

† Grundlehren Math. Wiss. Grundlehren der Mathematischen Wissenschaften. [Fundamental Principles of Mathematical Sciences] Springer, Berlin.

† Grundwissen Math. Grundwissen Mathematik: Programm zur Wiederholung von

Grundbegriffen und Verfahren. [Basic Knowledge of Mathematics: Refresher Course in the Basic Principles and Procedures] Herder, Freiburg.

Gujarat Statist. Rev. Gujarat Statistical Review. (Ahmedabad) Hadronic J. Hadronic Journal. (Nonantum, Mass.) 1- 1978-

Hak-sul Chi Kön'guk Taehakkyo, Haksul Yön'guwon. Hak-sul Chi. (Kön'guk University. Research Institute. Research Journal). (Seoul)

† Handbook Appl. Math. Guidebook Handbook of Applicable Mathematics Guidebook. Wiley, Chichester.

† Handbook of Statistics Handbook of Statistics, North-Holland, Amsterdam

Handbooks in Economi. Handbooks in Economics. North-Holland, Amsterdam.

Hardy-Ramanujan J. Hardy-Ramanujan Journal. (Bombay) 1- 1978-

† Harvester Readings Hist. Sci. Philos. Harvester Readings in the History of Science and Philosophy. Harvester, Brighton.

† Heidelberger Taschenbücher Heidelberger Taschenbücher. [Heidelberg Paperbacks] Springer, Berlin.

Helv. Phys. Acta Helvetica Physica Acta. Societatis Physicae Helveticae Commentaria Publica. (Basel)

† Heubner Foundation Monograph Ser. S.S. Heubner Foundation Monograph Series. Univ. Pennsylvania, Philadelphia, Pa.

† Hindu Astronom, Math. Text Ser. Hindu Astronomical and Mathematical Text Series. Lucknow Univ., Lucknow.

Hiroshima Math. J. Hiroshima Mathematical Journal. (Hiroshima)

† Hist. Learn. Sci. Finland History of Learning and Science in Finland. Soc. Sci. Fennica, Helsinki.

Hist. of Sci. History of Science. An Annual Review of Literature, Research, and Teaching. (Chalfont St. Giles)

* Hist. Philos. Logic History and Philosophy of Logic. (London) 2- 1981-Historia Mathematica. (New York) Historia Math.

Historia Sci. Historia Scientiarum. International Journal of the History of Science Society of Japan. (Tokyo) No. 19- 1980-

Hitotsubashi J. Arts Sci. Hitotsubashi Journal of Arts & Sciences. Hitotsubashi University. (Tokyo)

† Hochschulbücher für Math. Hochschulbücher für Mathematik. [University Books for Mathematics] Deutscher Verlag Wissensch., Berlin.

† Hochschulbücher für Phys. Hochschulbücher für Physik. [University Books for Physics] Deutscher Verlag Wissensch., Berlin.

† HochschulSammlung Ingenieurwiss. Datenverarbeitung HochschulSammlung Ingenieurwissenschaft Datenverarbeitung. [Hochschul Collection: Engineering Science and Data Processing] HochschulVerlag, Stuttgart.

† HochschulSammlung Naturwiss. Informat. HochschulSammlung Naturwissenschaft Informatik. [Hochschul Collection: Natural Science and Information Sciences] HochschulVerlag, Stuttgart.

† Hochschul Sammlung Naturwiss. Math. Hochschul Sammlung Naturwissenschaft Mathematik. [Hochschul Collection: Natural Science and Mathematics] Hochschul-Verlag, Stuttgart.

† Hochschultext Hochschultext. [University Textbooks] Springer, Berlin.

Hokkaido Math. J. Hokkaido Mathematical Journal. (Sapporo) Houston J. Math. Houston Journal of Mathematics. (Houston, Tex.)

Huazhong Gongxueyuan Xuebao See J. Huazhong Inst. Tech.

IAPAR Transactions. Journal of the Indian Association for Productiv-* IAPAR Trans. ity, Quality & Reliability. (Calcutta) 5- 1980-

IBM J. Res. Develop. International Business Machines Corporation. Journal of Re-search and Development. (Armonk, N.Y.)

IBM Systems J. International Business Machines Corporation. Systems Journal. (Armonk, N.Y.)

IEE Control Engrg. Ser. IEE Control Engineering Series. Peregrinus, Stevenage. † IEE Electromagnetic Waves Ser. IEE Electromagnetic Waves Series. Peregrinus,

IEEE Trans. Acoust. Speech Signal Process. Institute of Electrical and Electronics

Engineers. Transactions on Acoustics, Speech, and Signal Processing. (New York) IEEE Trans. Aerospace Electron. Systems Institute of Electrical and Electronics En-

gineers. Transactions on Aerospace and Electronic Systems. (New York) IEEE Trans. Antennas and Propagation Institute of Electrical and Electronics Engineers. Transactions on Antennas and Propagation. (New York)

IEEE Trans. Automat. Control Institute of Electrical and Electronics Engineers. Transactions on Automatic Control. (New York)

IEEE Trans. Circuits and Systems Institute of Electrical and Electronics Engineers. Transactions on Circuits and Systems. (New York)

IEEE Trans. Comm. Institute of Electrical and Electronics Engineers. Transactions on Communications. (New York)

IEEE Trans. Comput. Institute of Electrical and Electronics Engineers. Transactions on Computers. (New York)

IEEE Trans. Geosci. Remote Sensing Institute of Electrical and Electronics Engineers.

Transactions on Geoscience and Remote Sensing. (New York) 18- 1980-IEEE Trans. Inform. Theory Institute of Electrical and Electronics Engineers. Transactions on Information Theory. (New York)

IEEE Trans. Microwave Theory Tech. Institute of Electrical and Electronics Engineers.

Transactions on Microwave Theory and Techniques. (New York)

IEEE Trans. Plasma Sci. Institute of Electrical and Electronic Engineers. Transactions on Plasma Science. (New York)

IEEE Trans. Software Engrg. Institute of Electrical and Electronics Engineers. Transactions on Software Engineering. (New York)

IEEE Trans. Systems Man Cybernet. Institute of Electrical and Electronic Engineers. Transactions on Systems, Man, and Cybernetics. (New York)

† IFIP Congress Ser. IFIP Congress Series. North-Holland, Amsterdam.

† IHS-Studies IHS-Studies. Physica, Würzburg.

† IIASA Proc. Ser. IIASA Proceedings Series. Pergamon, Oxford.

Illinois J. Math. Illinois Journal of Mathematics. (Urbana, III.)

IMA J. Appl. Math. IMA (Institute of Mathematics and its Applications). Journal of Applied Mathematics. (London) 27-1981-

IMA J. Numer. Anal. IMA (Institute of Mathematics and its Applications). Journal of Numerical Analysis. (London) 1- 1981-

nology Series. Dekker, New York. ology Ser. Imm

Indag. Math. See Nederl. Akad. Wetensch. Indag. Math.

Indian J. Hist. Sci. Indian Journal of History of Science. National Institute of Sciences of India. (New Delhi)

an J. Math. Indian Journal of Mathematics. (Allahaba

Indian J. Mech. Math. Indian Journal of Mechanics and Mathematics. (Calcutta) Indian J. Pure Appl. Math. Indian Journal of Pure and Applied Mathematics. (New Delhi)

Indian J. Pure Appl. Phys. Indian Journal of Pure and Applied Physics. (New Delhi) na Univ. Math. J. Indiana University Mathematics Journal. (Bloomington, Ind.) † Indust. Engineering Industrial Engineering. Dekker, New York.

Indust. Math. Industrial Mathematics. (Detroit, Mich.)

INFOR-Canad. J. Oper. Res. Inform. Process. INFOR. Canadian Journal of Operational Research and Information Processing. (Guelph, Ont.)
Inform. and Control Information and Control. (New York)

† Inform. Kybernet. Rechentech. Informatik. Kybernetik. Rechentechnik. [Information. Cybernetics. Computing] Akademie-Verlag, Berlin.

Inform. Process. Lett. Information Processing Letters. (Amsterdam)

Inform. Process. Mach. Information Processing Machines. (Prague) Inform. Sci. Information Sciences. An International Journal. (New York)

† Inform. Sci. Humaines Informatique et Sciences Humaines. [Information and Social Sciences] Inst. Sci. Humaines Appl., Paris.

Inform. Tech. Ser. Information Technology Series. AFIPS Press, Arlington, Va.

† Informatik-Ber. Informatik-Berichte. [Reports on Information Science] Univ. Bonn, Bonn.

† Informatik-Fachber. Informatik-Fachberichte. [Technical Reports on Information Sciencel Springer, Berlin.

† Informatika Информатика. [Information Science] Akad. Nauk SSSR, Vsesoyuz. Inst. Nauchn. i Tekhn. Informatsii, Moscow.

† Inst. Élie Cartan Institut Élie Cartan. Univ. Nancy, Nancy.

Inst. Hautes Études Sci. Publ. Math. Institut des Hautes Études Scientifiques. Publications Mathématiques. (Paris)

Inst. Math. Statist. Bull. Institute of Mathematical Statistics. Bulletin. (Hayward,

nes Math. Institutiones Mathematicae. [Mathematical Methods] Academic Press. London

*Insurance Math. Econom. Insurance: Mathematics & Economics. (Amsterdam) 1-1982-

Integral Equations Operator Theory Integral Equations and Operator Theory. (Basel)

† Interdisciplinary Math. Interdisciplinary Mathematics. Math Sci Press, Brookline, Mass

† Interdisciplinary Systems Res. Interdisciplinary Systems Research. Birkhäuser, Basel. Internat. Econom. Rev. International Economic Review. (Osaka/Philadelphia, Pa.) Internat. J. Bio-Med. Comput. International Journal of Bio-Medical Computing. (Barking)

Internat. J. Circuit Theory Appl. International Journal of Circuit Theory and Applications. (Chichester) 8- 1980-

Internat. J. Comput. Inform. Sci. International Journal of Computer and Information

Sciences (New York) Internat. J. Comput. Math. International Journal of Computer Mathematics. Section A. Programming Theory and Methods. Section B. Computational Methods. (London)

Internat. J. Control International Journal of Control. (London) Internat. J. Electron. International Journal of Electronics. (London)

Internat. J. Engrg. Sci. International Journal of Engineering Science. (Oxford)

Internat. J. Fracture International Journal of Fracture. (Dordrecht)

Internat. J. Game Theory International Journal of Game Theory. (Vienna)

Internat. J. Gen. Systems International Journal of General Systems. Methodology, Applications, Education. (New York)

at. J. Math. Ed. Sci. Tech. International Journal of Mathematical Education in Science and Technology. (London)
Internat. J. Math. Math. Sci. International Journal of Mathematics and Mathematical

Sciences. (Greenville, N.C.) 1- 1978-

Internat. J. Non-Linear Mech. International Journal of Non-Linear Mechanics. (Elmsford, N.Y.)

Internat. J. Numer. Analyt. Methods Geomech. International Journal for Numerical and Analytical Methods in Geomechanics. (Chichester) 4– 1980–

Internat. J. Numer. Methods Engrg. International Journal for Numerical Methods in Engineering. (Chichester) 4- 1980-

at. J. Numer. Methods Fluids International Journal for Numerical Methods in Fluids. (Chichester) 1- 1981-

Internat. J. Policy Anal. Inform. Systems International Journal of Policy Analysis and Information Systems. (New York) 4— 1980—

Internat. J. Solids and Structures International Journal of Solids and Structures. (Elmsford, N.Y.)

Internat. J. Systems Sci. International Journal of Systems Science. (London)

Internat. J. Theoret. Phys. International Journal of Theoretical Physics. (New York) Internat. Logic Rev. International Logic Review. Rassegna Internazionale di Logica. (Bologna)

¶ Internat. Math. News International Mathematical News. (Vienna) No. 112- 1976-

at. Schriftenreihe Numer. Math. Internationale Schriftenreihe zur Numerischen Mail .matik. [International Series of Numerical Mathematics] Birkhäuser, Basel.

† Internat. Ser. Appl. Systems Anal. International Series on Applied Systems Analysis. Wiley, Chichester,

† Internat. Ser. Mod. Appl. Math. Comput. Sci. International Series in Modern Applied Mathematics and Computer Science. Pergamon, Elmsford, N.Y.

† Internat. Ser. Monographs in Natural Philos. International Series of Monographs in Natural Philosophy. Pergamon, Elmsford, N.Y.

† Internat. Ser. Monographs Pure Appl. Math. International Series of Monographs in Pure and Applied Mathematics. Pergamon, Elmsford, N.Y.

† Internat. Ser. Nonlinear Math.: Theory, Methods Appl. International Series in Nonlinear Mathematics: Theory, Methods and Applications. Pergamon, Elmsford, N.Y.

† Internat. Ser. Numer. Math. International Series of Numerical Mathematics. Birkhäuser, Boston, Mass.

† Internat. Ser. Pure Appl. Math. International Series in Pure and Applied Mathematics. Pergamon, Elmsford, N.Y.

Internat. Statist. Rev. International Statistical Review. Revue International de Statistique. (Edinburgh)

Invent. Math. Inventiones Mathematicae. (Berlin)

Investigación Oper. Investigación Operacional. (Havana) No. 25- 1978-

Inž.-Fiz. Ž. Inženerno-Fizičeskii Žurnal. (Minsk) (Translated as: J. Engrg. Phys.) (Continued as: Inzh.-Fiz. Zh.)

* Inzh.-Fiz. Zh. Inzhenerno-Fizicheskii Zhurnal. (Minsk) (Translated as: J. Engrg. Phys.) (Formerly: Inž.-Fiz. Ž.)

Iraqi J. Sci. Iraqi Journal of Science. (Baghdad)

† ISD Ber. ISD Bericht. [ISD Report] Inst. Statik & Dynamik Luft- und Raumfahrtkonst Univ Stuttgart London

† ISI Lecture Notes ISI Lecture Notes. Macmillan of India, New Delhi.

Isis Isis. An International Review Devoted to the History of Science and Civilization. (Philadelphia, Pa.)

Islamabad J. Sci. Islamabad Journal of Sciences. Journal of Mathematics and Sciences. (Islamabad) 2- 1975-

Israel J. Math. Israel Journal of Mathematics. (Jerusalem)

Israel J. Tech. Israel Journal of Technology. (Jerusalem)

Issled. Operacii i ASU Kievskii Gosudarstvennyi Universitet. Issledovanie Operacii i ASU. (Kiev) (Continued as: Issled. Operatsii i ASU)

* Issled. Operatsii i ASU Kievskii Gosudarstvennyi Universitet. Issledovanie Operatsii i ASU. (Kiev) (Formerly: Issled. Operacii i ASU)

Issled. Prikl. Mat. Kazanskii Universitet. Issledovaniya po Prikladnoi Matematike. (Kazan)

Issled. Teor. Plastin i Oboloček Kazanskii Universitet. Issledovanija po Teorii Plastin i Oboloček. (Kazan) (Continued as: Issled. Teor. Plastin i Obolochek)

* Issled. Teor. Plastin i Obolochek Kazanskii Universitet. Issledovaniya po Teorii Plastin i Obolochek. (Kazan) (Formerly: Issled. Teor. Plastin i Oboloček) İstanbul Tek. Üniv. Bül. İstanbul Teknik Üniversitesi Bülteni. Bulletin of the Technical

University of Istanbul. (Istanbul)

İstanbul Üniv. Fen Fak. Mecm. Ser. A İstanbul Üniversitesi Fen Fakültesi Mecmuasi. A Serisi. Sirfi ve Tatbiki Matematik. Revue de la Faculté des Sciences de l'Université d'Istanbul. Série A. Mathématiques Pures et Appliquées. (Istanbul)

Istit. Lombardo Accad. Sci. Lett. Rend. A Istituto Lombardo. Accademia di Scienze e Lettere. Rendiconti. Scienze Matematiche, Fisiche, Chimiche e Geologiche. A. (Milan) Istit. Veneto Sci. Lett. Arti Atti Cl. Sci. Mat. Natur. Istituto Veneto di Scienze, Lettere ed Arti. Venezia. Atti. Classe de Scienze Matematiche e Naturali. (Venice)

Istor.-Astronom. Issled. Istoriko-Astronomicheskie Issledovaniya. (Moscow) Istor.-Mat. Issled. Istoriko-Matematicheskie Issledovaniya. (Moscow)

Itogi Nauki-Serija "Matematika" (Progress in Science-Mathematical Series) Itogi Nauki-Serija "Matematika" (Progress in Science-Mathematical Series). (Moscow) (Translated as: J. Soviet Math.) (Continued as: Itogi Nauki-Seriya "Matematika" (Progress in Science-Mathematical Series))

* Itogi Nauki-Seriya "Matematika" (Progress in Science-Mathematical Series) Itogi Nauki-Seriya "Matematika" (Progress in Science-Mathematical Series). (Moscow) (Translated as: J. Soviet Math.) (Formerly: Itogi Nauki-Serija "Matematika" (Progress in Science-Mathematical Series))

Izv. Acad. Sci. USSR Atmospher. Ocean. Phys. Izvestiya Academy of Sciences USSR. Atmospheric and Oceanic Physics. (Washington, D.C.) (Translation of Izv. Akad.

Nauk SSSR Ser. Fiz. Atmosfer. i Okeana) 1965-Izv. Acad. Sci. USSR Phys. Solid Earth Izvestiya Academy of Sciences USSR. Physics of the Solid Earth. (Washington, D.C.) (Translation of Izv. Akad. Nauk SSSR Ser. Fiz. Zemli) 1965-

Izv. Akad. Nauk Armjan. SSR Ser. Fiz. Izvestija Akademii Nauk Armjanskoi SSR. Serija Fizika. (Erevan) (Continued as: Izv. Akad. Nauk Armyan. SSR Ser. Fiz.)

Izv. Akad. Nauk Armjan. SSR Ser. Mat. Izvestija Akademii Nauk Armjanskoi SSR. Serija Matematika. (Erevan) (Translated as: Soviet J. Contemporary Math. Anal.) (Continued as: Izv. Akad. Nauk Armyan. SSR Ser. Mat.)

Izv. Akad. Nauk Armjan. SSR Ser. Meh. Izvestija Akademii Nauk Armjanskoi SSR. Serija Mehanika. (Erevan) (Continued as: Izv. Akad. Nauk Armyan. SSR Ser.

Izv. Akad. Nauk Armjan. SSR Ser. Tehn. Nauk Izvestija Akademii Nauk Armjanskoi SSR Serija Tehničeskih Nauk. (Erevan) (Continued as: Izv. Akad. Nauk Armyan. SSR Ser. Tekhn. Nauk) 33, no. 2- 1980-

* Izv. Akad. Nauk Armyan. SSR Ser. Fiz. Izvestiya Akademii Nauk Armyanskoi SSR. Seriya Fizika. (Erevan) (Formerly: Izv. Akad. Nauk Armjan. SSR Ser. Fiz.)

* Izv. Akad. Nauk Armyan. SSR Ser. Mat. Izvestiya Akademii Nauk Armyanskoi SSR. Seriya Matematika. (Erevan) (Translated as: Soviet J. Contemporary Math. Anal.) (Formerly: Izv. Akad. Nauk Armjan. SSR Ser. Mat.)
* Izv. Akad. Nauk Armyan. SSR Ser. Mekh. Izvestiya Akademii Nauk Armyanskoi SSR.

Seriya Mekhanika. (Erevan) (Formerly: Izv. Akad. Nauk Armjan. SSR Ser. Meh.)

* Izv. Akad. Nauk Armyan. SSR Ser. Tekhn. Nauk | Izvestiya Akademii Nauk Armyanskoi SSR. Seriya Tekhnicheskikh Nauk. (Erevan) (Formerly: Izv. Akad. Nauk Armjan. SSR Ser. Tehn. Nauk) 33, no. 2-1980-

Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk Izvestija Akademii Nauk Azerbaĭdžanskoĭ SSR. Serija Fiziko-Tehničeskih i Matematičeskih Nauk. (Baku) (Continued as: Izv. Akad. Nauk Azerbaidzhan SSR Ser. Fiz.-Tekhn Mat. Nauk)

* Izv. Akad. Nauk Azerbaidzhan SSR Ser. Fiz.-Tekhn Mat. Nauk Izvestiya Akademii Nauk Azerbaĭdzhanskoĭ SSR. Seriya Fiziko-Tekhnicheskikh i Matematicheskikh Nauk. (Baku) (Formerly: Izv. Akad. Nauk Azerbaidžan. SSR Ser. Fiz.-Tehn. Mat. Nauk)

Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. Izvestija Akademii Nauk Kazahskoi SSR. Serija Fiziko-Matematičeskaja. (Alma-Ata) (Continued as: Izv. Akad. Nauk Kazakh, SSR Ser, Fiz.-Mat.)

* Izv. Akad. Nauk Kazakh. SSR Ser. Fiz.-Mat. Izvestiya Akademii Nauk Kazakhskoï SSR. Seriya Fiziko-Matematicheskaya. (Alma-Ata) (Formerly: Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat.)

Izv. Akad. Nauk Kirgiz. SSR Izvestiya Akademii Nauk Kirgizskoi SSR. (Frunze) Izv. Akad. Nauk Moldav. SSR Ser. Fiz.-Tehn. Mat. Nauk Izvestija Akademii Nauk Moldavskoï SSR Serija Fiziko-Tehničeskih i Matematičeskih Nauk. (Kishinev) (Continued as: Izv. Akad. Nauk Moldav. SSR Ser. Fiz.-Tekhn. Mat. Nauk)

* Izv. Akad. Nauk Moldav. SSR Ser. Fiz.-Tekhn. Mat. Nauk Izvestiya Akademii Nauk Moldavskoi SSR. Seriya Fiziko-Tekhnicheskikh i Matematicheskikh Nauk. (Kishinev) (Formerly: Izv. Akad. Nauk Moldav. SSR Ser. Fiz.-Tehn. Mat. Nauk)

Izv. Akad. Nauk SSSR Meh. Toerd. Tela Izvestija Akademii Nauk SSSR. Mehanika Tverdogo Tela. (Moscow) (Translated as: Mech. Solids) (Continued as: Izv. Akad. Nauk SSSR Mekh. Tverd. Tela) (Formerly: and Inž. Ž. Meh. Tverd. Tela)

Izv. Akad. Nauk SSSR Meh. Židk. Gaza Akademija Nauk SSSR. Izvestija Akademii Nauk SSSR. Mehanika Židkosti i Gaza. (Moscow) (Translated as: Fluid Dynamics) (Continued as: Izv. Akad. Nauk SSSR Mekh. Zhidk. Gaza)

* Izv. Akad. Nauk SSSR Mekh. Tverd. Tela Izvestiya Akademii Nauk SSSR. Mekhanika Tverdogo Tela. (Moscow) (Translated as: Mech. Solids) (Formerly: Izv. Akad. Nauk SSSR Meh. Toerd. Tela)

* Izv. Akad. Nauk SSSR Mekh. Zhidk. Gaza Izvestiya Akademii Nauk SSSR. Mekhanika Zhidkosti i Gaza. (Moscow) (Translated as: Fluid Dynamics) (Formerly: Izv. Akad. Nauk SSSR Meh. Židk. Gaza)

Izv. Akad. Nauk SSSR Ser. Fiz. Atmosfer. i Okeana Izvestiya Akademii Nauk SSSR. Seriya Fizika Atmosfery i Okeana. (Moscow) (Translated as: Izv. Acad. Sci. USSR Atmospher. Ocean. Phys.)

Izv. Akad. Nauk SSSR Ser. Fiz. Zemli Izvestiva Akademii Nauk SSSR Seriva Fizika Zemli. (Moscow) (Translated as: Izv. Acad. Sci. USSR Phys. Solid Earth)

Izv. Akad. Nauk SSSR Ser. Mat. Izvestiya Akademii Nauk SSSR. Seriya Matematicheskaya. (Moscow) (Translated as: Math. USSR-Izv.)

Izv. Akad. Nauk SSSR Tehn. Kibernet. Izvestija Akademii Nauk SSSR. Tehničeskaja Kibernetika. (Moscow) (Translated as: Engrg. Cybernetics) (Continued as: Izv. Akad. Nauk SSSR Tekhn. Kibernet.)

*Izv. Akad. Nauk SSSR Tekhn. Kibernet. Izvestiya Akademii Nauk SSSR.

Tekhnicheskaya Kibernetika. (Moscow) (Translated as: Engrg. Cybernetics) (Formerly: Izv. Akad. Nauk SSSR Tehn. Kibernet.)

* Izv. Akad. Nauk Tadzhik. SSR Otdel. Fiz.-Mat. Khim. i Geol. Nauk Izvestiya Akademii Nauk Tadzhikskoĭ SSR. Otdelenie Fiziko-Matematicheskikh, Khimicheskikh i Geologicheskikh Nauk. (Dushanbe) (Formerly: Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk)

Izv. Akad. Nauk Tadžik. SSR Otdel. Fiz.-Mat. i Geolog.-Him. Nauk Izvestija Akademii Nauk Tadžikskoĭ SSR. Otdelenie Fiziko-Matematičeskih i Geologo-Himičeskih Nauk. (Dushanbe) (Continued as: Izv. Akad. Nauk Tadzhik. SSR Otdel. Fiz.-Mat. Khim. i Geol. Nauk)

Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk Izvestija Akademii Nauk Turkmenskoi SSR. Serija Fiziko-Tehničeskih, Himičeskih i Geologičeskih Nauk. (Ashkhabad) (Continued as: Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tekhn. Khim. Geol. Nauk)

* Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tekhn. Khim. Geol. Nauk Izvestiya Akademii Nauk Turkmenskoï SSR. Seriya Fiziko-Tekhnicheskikh, Khimicheskikh i Geologicheskikh Nauk. (Ashkhabad) (Formerly: Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tehn. Him. Geol. Nauk)

Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk Izvestiya Akademii Nauk UzSSR. Seriya Fiziko-Matematicheskikh Nauk. UzSSR Fanlar Akademiyasining Akhboroti. Fizika-Matematika Fanlari Seriyasi. (Tashkent)

* Izv. Severo-Kavkaz. Nauchn. Tsentra Vyssh. Shkoly Ser. Estestv. Nauk. Izvestiya Severo-Kavkazskogo Nauchnogo Tsentra Vysshei Shkoly Estestvennye Nauki. (Rostov-on-Don) (Formerly: Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estesto. Nauk.)

* Izv. Severo-Kavkaz. Nauchn. Tsentra Vyssh. Shkoly Ser. Tekhn. Nauk. Izvestiya Severo-Kavkazskogo Nauchnogo Tsentra Vysshei Shkoly. Seriya Tekhnicheskie Nauki. (Rostov-on-Don) (Formerly: Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Tehn. Nauk.)

Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Estestv. Nauk. Izvestija Severo-Kavkazskogo Naučnogo Centra Vysšei Školy Estestvennye Nauki. (Rostov-on-Don) (Continued as: Izv. Severo-Kavkaz. Nauchn. Tsentra Vyssh. Shkoly Ser. Estestv. Nauk.) Izv. Severo-Kavkaz. Naučn. Centra Vysš. Školy Ser. Tehn. Nauk. Izvestija. Severo-

Kavkazskogo Naučnogo Centr Vysšei Školy. Serija Tehničeskie Nauki. (Rostov-on-Don) (Continued as: Izv. Severo-Kavkaz. Nauchn. Tsentra Vyssh. Shkoly Ser. Tekhn.

* Izv. Sibirsk, Otdel. Akad. Nauk SSSR Ser. Tekhn. Nauk Izvestiva Sibirskozo Otde. U. Siorrak. Otaer. Akad. Nauk SSSR Ser. Jekhn. Nauk. Izvestya stottskogo otue-leniya. Akademiya Nauk SSSR. Seriya Tekhnicheskikh Nauk. (Novosibirsk) (Formerly: Izv. Sibirsk. Otdel. Akad. Nauk SSSR Ser. Tehn. Nauk)

Izv. Tomsk. Politehn. Inst. Izvestija Tomskogo Ordena Trudovogo Krasnogo Znameni Politehničeskogo Instituta im. S. M. Kirova. (Tomsk) (Continued as: Izv. Tomsk.

Politekhn. Inst.)

* Izv. Tomsk. Politekhn. Inst. Izvestiya Tomskogo Ordena Trudovogo Krasnogo Znameni Politekhnicheskogo Instituta imeni S. M. Kirova. (Tomsk) (Formerly: Izv. Tomsk. Politehn. Inst.)

Izv. Voronež. Gos. Ped. Inst. Izvestija Voronežskogo Gosudarstvennogo Pedagogičeskogo Instituta. (Voronezh) (Continued as: Izv. Voronezh. Gos. Ped. Inst.) 189- 1978-

* Izv. Voronezh. Gos. Ped. Inst. Izvestiya Voronezhskogo Gosudarstvennogo Pedagogicheskogo Instituta. (Voronezh) (Formerly: Izv. Voronež. Gos. Ped. Inst.) 1891

Izv. Vysš. Učebn. Zaved. Aviacion. Tehn. Izvestija Vysših Učebnyh Zavedenii. Aviaconnaja Tehnika. (Kazan) (Translated as: Soviet Aeronaut.) (Continued as: Izv. Vyssh. Uchebn. Zaved. Aviatsion. Tekhn.)

Izv. Vysš. Učebn. Zaved. Fizika Izvestija Vysših Učebnyh Zavedenii Fizika. (Tomsk) (Translated as: Soviet Phys. J.) (Continued as: Izv. Vyssh. Uchebn. Zaved. Fiz.)

Izv. Vysš. Učebn. Zaved. Matematika Izvestija Vysših Učebnyh Zavedenii Matematika. (Kazan) (Translated as: Soviet Math. (Iz. VUZ)) (Continued as: Izv. Vyssh. Uchebn. Zaved. Mat.)

Izv. Vysš. Učebn. Zaved. Radiofizika Izvestija Vysših Učebnyh Zavedenii. Radiofizika. (Gorki) (Translated as: Radiophys. and Quantum Electronics) (Continued as: Izv. Vyssh, Uchebn, Zaped, Radiofiz.)

* Izv. Vyssh. Uchebn. Zaved. Aviatsion. Tekhn. Izvestiya Vysshikh Uchebnykh Zavedenii. Aviatsionnaya Tekhnika. (Kazan) (Translated as: Soviet Aeronaut.) (Formerly: Izv. Vyssi. Uchebn. Zaved. Aviacion. Tehn.)

*Izv. Vyssh. Uchebn. Zaved. Fiz. Izvestiya Vysshikh Uchebnykh Zavedenii. Fizika.

(Tomsk) (Translated as: Soviet Phys. J.) (Formerly: Izv. Vysš. Učebn. Zaved. Fizika)

* Izv. Vyssh. Uchebn. Zaved. Mat. Izvestiya Vysshikh Uchebnykh Zavedenii. Matematika. (Kazan) (Translated as: Soviet Math. (Iz. VUZ)) (Formerly: Izv. Vysš. Učebn. Zaved. Matematika)

* Izv. Vyssh. Uchebn. Zaved. Radiofiz. Izvestiya Vysshikh Uchebnkh Zavedenii. Radiofizika. (Gorki) (Translated as: Radiophys. and Quantum Electronics) (Formerly: Izv. Vysš. Učebn. Zaved. Radiofizika)

*J. A-Quart. J. Automat. Control Journal A. Quarterly Journal of Automatic Control. (Antwerp) 21- 1981-

J. Acoust. Soc. Amer. Acoustical Society of America. Journal. (New York) 60-1976-

J. Algebra Journal of Algebra. (New York)

J. Algorithms Journal of Algorithms. (New York) 1- 1980-J. Amer. Statist. Assoc. Journal of the American Statistical Association. (Washington,

J. Analyse Math. Journal d'Analyse Mathématique. (Jerusalem)

J. Animal Ecology The Journal of Animal Ecology. (Oxford) 48- 1979-J. Appl. Math. Mech. Journal of Applied Mathematics and Mechanics. Translation of the Soviet journal Prikladnaya Matematika i Mekhanika. (Oxford) (Translation of Prikl. Mat. Mekh.) 1958-

J. Appl. Mech. Tech. Phys. Journal of Applied Mechanics and Technical Physics. (New York) (Translation of Zh. Prikl. Mekh. i Tekhn. Fiz.) 1965-

J. Appl. Probab. Journal of Applied Probability. (Sheffield)

J. Approx. Theory Journal of Approximation Theory. (New York)
*J. Asahikawa Technical College. (Asahikawa)

J. Assoc. Comput. Mach. Journal of the Association for Computing Machinery. (New

J. Astronaut. Sci. American Astronautical Society. Journal of the Astronautical Sciences. (Alexandria, Va.)

J. Atmospheric Sci. Journal of the Atmospheric Sciences. (Boston, Mass.)

J. Austral. Math. Soc. Ser. A Australian Mathematical Society. Journal. Series A. (St. Lucia)

J. Austral. Math. Soc. Ser. B Australian Mathematical Society. Journal. Series B. Applied Mathematics. (St. Lucia)

J. Chekiang Univ. See Zhejiang Daxue Xuebao

J. Chem. Phys. The Journal of Chemical Physics. (New York)

J. Chinese Inst. Engrs. Chinese Institute of Engineers. Journal. (Taipei) 1- 1978-J. College Engrg. Nihon Univ. Ser. B Nihon University. College of Engineering. Jour-

nal. Series B. (Koriyama) 17- 1976*J. College Sci. Univ. Riyadh Journal of the College of Science. University of Riyadh. (Riyadh) (Formerly: J. Fac. Sci. Riyad Univ.) 11- 1980-

J. Combin. Inform. System Sci. Journal of Combinatorics, Information & System Sciences. (Delhi) 1- 1976-

J. Combin. Theory Ser. A Journal of Combinatorial Theory. Series A. (New York)
J. Combin. Theory Ser. B Journal of Combinatorial Theory. Series B. (New York)

Comput. Appl. Math. Journal of Computational and Applied Mathematics.

(Antwerp)

J. Comput. Chem. Journal of Computational Chemistry. (New York) 1- 1980-J. Comput. Phys. Journal of Computational Physics. (New York)

J. Comput. System Sci. Journal of Computer and System Sciences.

Cuneiform Stud. Journal of Cuneiform Studies. (New Haven, Conn.) J. Differential Equations Journal of Differential Equations. (New York)

J. Differential Geom. Journal of Differential Geometry. (Bethlehem, Pa.)

J. Digital Systems Journal of Digital Systems. (Rockville, Md.) 4- 1980-

J. Econom. Behavior Organization Journal of Economic Behavior & Organization. (Amsterdam) 1- 1980-

- m. Dyr nics Control Journal of Economic Dynamics & Control. (Amsterdam) 1- 1979-
- J. Econom. Theory Journal of Economic Theory. (New York)
- J. Econometrics Journal of Econometrics. (Lausanne) 3- 1975-J. Elasticity Journal of Elasticity. (Dordrecht)
- J. Elisha Mitchell Sci. Soc. Journal of the Elisha Mitchell Scientific Society. (Chapel Hill, N.C.)
- J. Engrg. Math. Journal of Engineering Mathematics. (Dordrecht)
 J. Engrg. Phys. Journal of Engineering Physics. (New York) (Translation of Inzh. Fiz. Zh.) 1965-
- *J. Fac. Ed. Saga Univ. Journal of the Faculty of Education. Saga University. (Saga) (Formerly: J. Fac. Ed. Saga Univ. Part I) 28- 1980-
- J. Fac. Ed. Saga Univ. Part I Saga University. Faculty of Education. Journal. Part I. (Saga) (Continued as: J. Fac. Ed. Saga Univ.) No. 26- 1978-
- J. Fac. Engrg. Univ. Tokyo Ser. B Journal of the Faculty of Engineering. University of Tokyo, Series B. (Tokyo)
- *J. Fac. Liberal Arts Yamaguchi Univ. Journal of the Faculty of Liberal Arts. Yamaguchi University. (Yamaguchi) (Continued as: J. Fac. Liberal Arts Yamaguchi Univ. Natur. Sci.) 10- 1976-
- *J. Fac. Liberal Arts Yamaguchi Univ. Natur. Sci. Journal of the Faculty of Liberal Arts. Yamaguchi University. (Natural Science). (Yamaguchi) (Formerly: J. Fac. Liberal Arts Yamaguchi Univ.) 12- 1978-
- J. Fac. Sci. Karadeniz Tech. Univ. Karadeniż Teknik Universitesi Temel. Bilimler Fakültesi. Dergisi. (Karadeniz Technical University. Faculty of Sciences. Journal.) Series MA: Mathematics. (Trabzon) 1- 1977-
- J. Fac. Sci. Riyad Univ. Riyad University. Faculty of Science. Journal. (Riyad) (Continued as: J. College Sci. Univ. Riyadh) 10- 1979J. Fac. Sci. Shinshu Univ. Journal of the Faculty of Science. Shinshu University.
- J. Fac. Sci. Univ. Tokyo Sect. IA Math. Journal of the Faculty of Science. University of Tokyo. Section IA. Mathematics. (Tokyo)
- J. Finance The Journal of Finance. (New York) 34- 1979-
- J. Fluid Mech. Journal of Fluid Mechanics. (Cambridge)
- J. Franklin Inst. Journal of the Franklin Institute. (Oxford)
- J. Funct. Anal. Journal of Functional Analysis. (New York)
- I. Geom. Journal of Geometry. (Basel)
- J. Graph Theory Journal of Graph Theory. (New York) 1- 1977-J. Guidance Control Journal of Guidance and Control. (New York) (Continued as: J. Guidance Control Dynamics) 2- 1979-
- *J. Guidance Control Dynamics Journal of Guidance, Control, and Dynamics. (New York) (Formerly: J. Guidance Control) 5- 1982-
- J. Hist. Arabic Sci. Journal for the History of Arabic Science. (Aleppo) 1– 1977– J. Hist. Astronom. Journal for the History of Astronomy. (Chalfont St. Giles) J. Hokkaido Univ. Ed. Sect. II A Journal of Hokkaido University of Education. Section
- II A. (Sapporo)
- J. Huazhong Inst. Tech. Journal of Huazhong Institute of Technology. Huazhong Gongxueyuan Xuebao (Zhongguo Kexue Shuxue Zhuanji). (Wuhan) (Translated as: J. Huazhong Inst. Tech. (English Ed.)) 6- 1980-
- J. Huazhong Inst. Tech. (English Ed.) Journal of Huazhong Institute of Technology. English Edition. (Wuhan) (Selected translation of J. Huazhong Inst. Tech.) (Continued as: J. Huazhong Univ. Sci. Tech. (English Ed.)) 1- 1979-
- "J. Huazhong Univ. Sci. Tech. (English Ed.) Journal of Huazhong (Central China) University of Science and Technology. English Edition. (Wuhan) (Selected translation of J. Huazhong Inst. Tech.) (Formerly: J. Huazhong Inst. Tech. (English Ed.))
- Indian Acad. Math. Indian Academy of Mathematics. Journal. (Indore) 1-1979-
- J. Indian Inst. Sci. Indian Institute of Science. Journal. Sections A-C. (Bangalore)
- J. Indian Math. Soc. (N.S.) The Journal of the Indian Mathematical Society. New Series (Delhi)
- J. Indian Soc. Statist. Oper. Res. Journal of the Indian Society of Statistics and Operations Research. (Aligarh) 1- 1980-
- J. Indian Statist. Assoc. Journal of the Indian Statistical Association. (Poona)
- J. Inform. Optim. Sci. Journal of Information & Optimization Sciences. (Delhi) 1-
- J. Inform. Process. Journal of Information Processing. (Tokyo)
- J. Integral Equations Journal of Integral Equations. (New York) 1, no. 2-
- J. Internat. Assoc. Math. Geol. Journal of the International Association for Mathematical Geology. (New York)
- J. Japan Statist. Soc. Journal of the Japan Statistical Society (Nihon Tôkei Gakkai Kaihô). (Tokyo)
- J. Karnatak Univ. Sci. Journal of the Karnatak University. Science. (Dharwar)
- J. Korean Math. Soc. Journal of the Korean Mathematical Society. (Seoul)
- *J. Korean Statist. Soc. Journal of the Korean Statistical Society. (Seoul) 10- 1981-J. London Math. Soc. (2) The Journal of the London Mathematical Society. Second Series. (London)
- J. Madurai Kamaraj Univ. Madurai Kamaraj University. Journal. (Madurai) 7, no. 2- 1978-
- J. Math. Anal. Appl. Journal of Mathematical Analysis and Applications. (New York)
- J. Math. Biol. Journal of Mathematical Biology. (New York)
- J. Math. Econom. Journal of Mathematical Economics. (Amsterdam)
- J. Math. Kyoto Univ. Journal of Mathematics of Kyoto University. (Kyoto)
- J. Math. Phys. Journal of Mathematical Physics. (New York)
- J. Math. Phys. Sci. Journal of Mathematical and Physical Sciences. (Madras)
- J. Math. Psych. Journal of Mathematical Psychology. (New York)
 J. Math. Pures Appl. (9) Journal de Mathématiques Pures et Appliquées. Neuvième Série. (Paris)

- J. Math. Res. Exposition Journal of Mathematical Research & Exposition. Shuxue
- Yanjiu Yu Pinglun. (Wuhan) 1981, First Issue— J. Math. Sci. Journal of Mathematical Sciences. The Society of Mathematical Sciences.
- J. Math. Soc. Japan Journal of the Mathematical Society of Japan. (Tokyo)
- J. Math. Sociol. The Journal of Mathematical Sociology. (London)
 J. Math. Tokushima Univ. Journal of Mathematics. Tokushima University. (Tokushima)
- *J. Math. (Wuhan) Journal of Mathematics. Shuxue Zazhi. (Wuhan) 1- 1981-
- J. Maulana Azad College Tech. Maulana Azad College of Technology. Journal. (Bhopal) 11- 1978-
- J. Méc. Appl. Journal de Mécanique Appliquée. (Paris) (Continued as: J. Méc. Théor. Appl.) 1- 1977-Appl.)
- *J. Méc. Théor. Appl. Journal de Mécanique Théorique et Appliquée. Journal of Theoretical and Applied Mechanics. (Paris) (Formerly: J. Méc. Appl. and J. Mécanique) 1982-
- J. Mécanique Journal de Mécanique. (Paris) (Continued as: J. Méc. Thèor. Appl.)
 J. Mech. Phys. Solids Journal of the Mechanics and Physics of Solids. (Oxford)
 J. Multivariate Anal. Journal of Multivariate Analysis. (New York)
- J. Nanjing Univ. See Nanjing Daxue Xuebao
- J. Nat. Chiao Tung Univ. National Chiao Tung University. Journal. (Hsinchu) 1-
- J. Natur. Sci. Math. The Journal of Natural Sciences and Mathematics. (Lahore)
- J. Number Theory Journal of Number Theory. (New York)
 J. Oper. Res. Soc. Operational Research Society Journal. (Oxford)
- J. Oper. Res. Soc. Japan Journal of the Operations Research Society of Japan. (Tokyo)
- J. Operator Theory Journal of Operator Theory. (Bucharest) 1- 1979-J. Opt. Soc. Amer. Journal of the Optical Society of America. (New York)
- J. Optim. Theory Appl. Journal of Optimization Theory and Applications. (New York)
- *J. Orissa Math. Soc. Journal of Orissa Mathematical Society. (Bhubaneswar) 1-1982-
- J. Philos. Logic Journal of Philosophical Logic. (Dordrecht)
- J. Phys. A Journal of Physics. A. Mathematical and General. (Bristol)
- J. Phys. B Journal of Physics. B. Atomic and Molecular Physics.
- J. Phys. Soc. Japan Journal of the Physical Society of Japan. (Tokyo)
- J. Physique Le Journal de Physique. (Orsay)
 J. Proc. Roy. Soc. New South Wales Royal Society of New South Wales. Journal and Proceedings. (Sydney)
- J. Pure Appl. Algebra Journal of Pure and Applied Algebra. (Amsterdam)
- J. Pure Appl. Sci. Middle East Technical University. Journal of Pure and Applied Sciences. Orta Doğu Teknik Üniversitesi. Temel ve Uygulamali Bilimler Dergisi. (Ankara)
- J. Recreational Math. Journal of Recreational Mathematics. (Farmingdale, N.Y.)
- J. Reine Angew. Math. Journal für die Reine und Angewandte Mathematik. (Berlin)
- J. Res. Nat. Bur. Standards National Bureau of Standards. Journal of Research. (Washington, D.C.)
- J. Rheol. Journal of Rheology. (New York)
- J. Roy. Statist. Soc. Ser. A Journal of the Royal Statistical Society. Series A. General. (London)
- J. Roy. Statist. Soc. Ser. B Journal of the Royal Statistical Society. Series B. Methodological. (London)
- J. Roy. Statist. Soc. Ser. C Journal of the Royal Statistical Society. Series C. Applied Statistics. (London)
- J. Saitama Univ. Fac. Ed. Math. Natur. Sci. Saitama University. Faculty of Education. Journal. Mathematics and Natural Science. (Urawa)
- J. Sci. Res. Journal of Scientific Research. (Bhopal) 3- 1981-
- J. Shanghai Chaiotung Univ. See J. Shanghai Jiaotong Univ.
- * J. Shanghai Jiaotong Univ. Journal of Shanghai Jiaotong University. Shanghai Jiaotong Daxue Xuebao. (Shanghai) 1982. no. 1-
- J. Shivaji Univ. (Sci.) Shivaji University. Journal. (Science). (Kolhapur) J. Sound Vibration Journal of Sound and Vibration. (London) 74- 1981-
- J. Soviet Math. Journal of Soviet Mathematics. (New York) (Translation of Itogi Nauki-Seriya "Matematika" (Progress in Science-Mathematical Series), Problemy Matematicheskogo Analiza (Problems in Mathematical Analysis), and Zap. Nauchn.
- Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)) 1973-J. Statist. Comput. Simulation Journal of Statistical Computation and Simulation. (New York)
- J. Statist. Phys. Journal of Statistical Physics. (New York)
- J. Statist. Plann. Inference Journal of Statistical Planning Inference. (Amsterdam) 1- 1977-
- J. Statist. Res. Journal of Statistical Research. (Dacca)
- J. Structural Mech. Journal of Structural Mechanics. (New York) 8- 1980-
- J. Symbolic Logic The Journal of Symbolic Logic. (Providence, R.I.)
- J. Systems Software The Journal of Systems and Software. (New York) 1- 1979-
- J. Tech. Bengal Engrg. College Journal of Technology. Bengal Engineering College. (Howrah)
- J. Tech. Phys. Polish Academy of Sciences. Institute of Fundamental Technological Research. Journal of Technical Physics. (Warsaw)
- J. Theoret. Biol. Journal of Theoretical Biology. (London)
- J. Time Ser. Anal. Journal of Time Series Analysis. (Clevedon) 1- 1980-
- J. Tsuda College Journal of Tsuda College. (Tokyo)
- J. Univ. Bombay (N.S.) Journal of the University of Bombay. New Series. (Bombay)
- J. Univ. Kuwait Sci. The Journal of the University of Kuwait. Science. (Kuwait) J. Univ. Poona University of Poona. Journal. (Poona) No. 46- 1974-
- J. Warburg Courtauld Inst. Journal of the Warburg and Courtauld Institutes. (London)
 Jadernaja Fiz. Akademija Nauk SSSR. Jadernaja Fizika. (Moscow) (Translated as:

Soviet J. Nuclear Phys.) (Continued as: Yadernaya Fiz.)

Jahresber. Deutsch. Math.-Verein. Jahresbericht der Deutschen Mathematiker-Vereinigung. (Stuttgart)

Janus. Revue Internationale de l'Histoire des Sciences, de la Médecine, de la Pharmacie et de la Technique. (Amsterdam)

Japan. J. Math. (N.S.) Science Council of Japan. Japanese Journal of Mathematics. New Series. (Tokyo)

Jbuch. Heidelberger Akad. Wiss. Heidelberger Akademie der Wissenschaften. Jahrbuch. (Heidelberg) 1977-

Jisuan Shuxue See Math. Numer. Sinica

Jñānabha Jñānabha. The Vijnana Parishad of India. Bundelkhand University. (Orai) 7- 1977-

† Johns Hopkins Ser. in Math. Sci. Johns Hopkins Series in the Mathematical Sciences. Johns Hopkins Univ. Press, Baltimore, Md.

† JPL Publ. 78 JPL Publication 78. California Inst. Tech., Pasadena, Calif.

Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur Kaliningradskogo Gosudarstvennogo Universitet. Differencial'naja Geometrija Mnogoobrazii Figur. (Kaliningrad) (Continued as: Kaliningrad. Gos. Univ. Differentsial' naya Geom. Mnogoobraz. Figur)

Kaliningrad. Gos. Univ. Differentsial'naya Geom. Mnogoobraz. Figur Kaliningradskii Gosudarstvennyi Universitet. Differentsial'naya Geometriya Mnogoobrazii Figur. (Kaliningrad) (Formerly: Kaliningrad. Gos. Univ. Differencial'naja Geom. Mnogoobraz. Figur)

† Kanô Memorial Lectures Kanô Memorial Lectures. Princeton Univ. Press, Princeton, NJ

Karachi Math. Assoc. Riazi (Souvenir) Riazi. Souvenir of the Karachi Mathematics Association. (Karachi) 1978-

Karachi Univ. J. Sci. Karachi University. Journal of Science. (Karachi) 5- 1977-Keio Engrg. Rep. Keio Engineering Reports. (Yokohama) (Continued as: Keio Sci. Tech. Rep.)

Keio Math. Sem. Rep. Keio Mathematical Seminar Reports. (Yokohama)

* Keio Sci. Tech. Rep. Keio Science and Technology Reports. (Yokohama) (Formerly: *Latv. Mat. Ezhegodnik Latviiskii Gosudarstvennyi Universitet imeni P. Stuchki. Latvii-Keio Engrg. Rep.) 34—1981—

**Skii Matematicheskii Ezhegodnik. (Riga) (Formerly: Latv. Mat. Eżegodnik)

Kenkyû Kiyê -Gakushûin Kôtôka Memoirs of Gakushûin High School. (Tokyo) Kexue Tongbao (Chinese) Chinese Academy of Science. Kexue Tongbao (Science Bulletin). (Beijing) (Translated as: Kexue Tongbao (English))

Kexue Tongbao (English) Chinese Academy of Science. Kexue Tongbao (Science Bulletin). A Monthly Journal of Science. (Beijing) (Translation of Kexue Tongbao (Chinese)) 25-1980-

* Kibernet. i Vychisl. Tekhn. Akademiya Nauk Ukrainskoi SSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika. (Kiev) (Formerly: Kibernet. i Vyčisl. Tehn.) Kibernet. i Vyčisl. Tehn. Akademija Nauk Ukrainskoi SSR. Institut Kibernetiki Kibernetika i Vyčislitel'naja Tehnika. (Kiev) (Continued as: Kibernet. i Vychisl. Tekhn.)

Kibernetika (Kiev) Otdelenie Matematiki, Mekhaniki i Kibernetiki Akademii Nauk Ukrainskoi SSR. Kibernetika. (Kiev) (Translated as: Cybernetics)

† Kinokuniya Sûgaku Sōsho Kinokuniya Sûgaku Sōsho. [Kinokuniya Mathematics Collection] Kinokuniya Book Store, Tokyo.

† Kleine Ergänzungsreihe Hochschulbüchern Math. Kleine Ergänzungsreihe zu den Hochschulbüchern für Mathematik. [Brief Supplemental Series to University Books for Mathematics] Deutscher Verlag Wissensch., Berlin.

† Kleine Naturwiss. Bibliothek Kleine Naturwissenschaftliche Bibliothek. [Little Scientific Library] Teubner, Leipzig.

"Knizhnaya Letopis' Knizhnaya Letopis'. (Moscow) (Formerly: Knižnaja Letopis)

**Mizhnaya Letopis' Dopl. Vyp. Knizhnaya Letopis' Dopolnitel'nyi Vypusk. (Moscow)

(Formerly: Knižnaja Letopis' Dopl. Vyp.) 1978
*¶ Knizhnaya Letopis' Ukazatel' Ser. Izdanii Knizhnaya Letopis' Ukazatel' Seriinykh

Izdanii. (Moscow) (Formerly: Knižnaja Letopis' Ukazatel' Seriinyh Izdanii) ¶ Knižnaja Letopis Knižnaja Letopis. (Moscow) (Continued as: Knizhnaya Letopis')

¶ Knižnaja Letopis' Dopl. Vyp. Knižnaja Letopis' Dopolnitel'nyi Vypusk. (Moscow) (Continued as: Knizhnaya Letopis' Dopl. Vyp.) 1978-¶ Knižnaja Letopis' Ukazatel' Seriinyh Izdanii Knižnaja Letopis' Ukazatel' Seriinyh

Izdanii. (Moscow) (Continued as: Knizhnaya Letopis' Ukazatel' Ser. Izdanii)

Knižnice Odborn. Věd. Spisů Vysoké. Učení Tech. v Brně A Knižnice Odbornych a Vědeckých Spisů Vysokého Učení Technického v Brně. Vysoké Učení Technické v Brně. A. (Brno) 10- 1976-

Knižnice Odborn. Věd. Spisů Vysoké. Učení Tech. v Brně B Knižnice Odborných a Vědeckých Spisů Vysokého Učení Technického v Brně. Vysoké Učení Technické v Brně. B. (Brno) 62- 1975-

† Knjiž. Sigma Knjižica Sigma. [Sigma Library] Univ. Ljubljana, Ljubljana.

Knowledge Practice Math. Knowledge and Practice of Mathematics. Shuxuede Shijian Yu Renshi. (Beijing) No. 1- 1978-

Kodai Math. J. Kodai Mathematical Journal. (Tokyo)

Kongress Tagungsber. See Wiss. Beitr. Martin-Luther-Univ. Halle-Wittenberg M † Konzepte Zeitgemäss. Physikunterrichts Konzepte eines Zeitgemässen Physikunterrichts.

[Concepts of Current Teaching Methods of Physics] Schroedel, Hanover. Közl.-MTA Számítástech. Automat. Kutató Int. Budapest Közlemények. MTA Számitástechnikai és Automatizálási Kutató Intézet Budapest. (Budapest)

Kristallografija See Soviet Phys. Cryst. (Continued as: Kristallografiya) * Kristallografiya See Soviet Phys. Cryst. (Formerly: Kristallografija)

Kumamoto J. Sci. (Math.) Kumamoto Journal of Science. (Mathematics). (Kumamoto)

† Kurs Vysšeř Mat. i Mat. Fiz. Курс Высшей Математики и Математической Физики [Course in Higher Mathematics and Mathematical Physics] "Nauka", Moscow. (Continued as: Kurs Vysshei Mat. i Mat. Fiz.)

† Kurs Vysshei Mat. i Mat. Fiz. Курс Высшей Математики и Математической Физики.

[Course in Higher Mathematics and Mathematical Physics] "Nauka", Moscow. (Formerly: Kurs Vysšei Mat. i Mat. Fiz.)

Kvantovaja Elektronika Kvantovaja Elektronika. (Kiev) (Continued as: Kvantovaya Èlektronika)

* Kvantovaya Elektronika Kvantovaya Elektronika. (Kiev) (Formerly: Kvantovaja Èlektronika)

Kwansei Gakuin Univ. Annual Stud. Kwansei Gakuin University. Annual Studies. (Nishinomiya) 25- 1976-

Kwart. Hist. Nauk. Tech. Polska Akademia Nauk. Zakład Historii Nauki i Techniki. Kwartalnik Historii Nauki i Techniki. (Warsaw)

Kybernetes Kybernetes. An International Journal of Cybernetics and General Systems. (Blackburn)

Kybernetika (Prague) Kybernetika. (Prague)

Kybernetika (Prague) Suppl. Kybernetika. Supplement. (Prague)

Kyungpook Math. J. Kyungpook National University. Kyungpook Mathematical Journal. (Taegu)

† La Società e la Scienza La Società e la Scienza. [Society and Science] Liguori, Naples. Lab. Math. Pures Marseille CNRS Laboratoire de Mathématiques Pures de Marseille associé au CNRS. [Marseille Laboratory of Pure Mathematics in Association with the CNRSI Univ. Aix-Marseille I. Marseille.

† LAFI ЛАФИ. [LAFI] Akad. Nauk Latv. SSR, Inst. Fiz., Salaspils.

Large Scale Systems Large Scale Systems. Theory and Applications. (Amsterdam)

Lato. Gos. Univ. Učen. Zap. Latvíľskií Gosudarstvennyi Universitet im. Petra Stučki. Učenye Zapiski. (Riga) (Also listed as: Latvijas Valsts Univ. Zinātņ. Raksti) (Continued as: Latv. Gos. Univ. Uchen. Zap.)

Lato. Gos. Univ. Uchen. Zap. Latviiskii Gosudarstvennyi Universitet imeni Petra Stuchki. Uchenye Zapiski. (Riga) (Also listed as: Latvijas Valsts Univ. Zinātņ. Raksti) (Formerly: Latv. Gos. Univ. Učen. Zap.)

Lato. Mat. Ežegodnik Latvilskii Gosudarstvennyi Universitet imeni P. Stučki. Latvilskii Matematičeskii Ežegodnik. (Riga) (Continued as: Latv. Mat. Ezhegodnik)

Latvijas PSR Zinātņ. Akad. Vēstis Latvijas PSR Zinātņu Akadēmijas Vēstis. Izvestiya Akademii Nauk Latviiskoi SSR. (Riga)

Latvijas PSR Zinātņ. Akad. Vēstis Fiz. Tehn. Zinātņ. Sēr. Latvijas PSR Zinātņu Akadēmijas Vēstis. Fizikas un Tehnisko Zinātņu Sērija. Izvestiya Akademii Nauk Latviiskoi SSR. Seriya Fizicheskikh i Tekhnicheskikh Nauk. (Riga)

Latvijas Valsts Univ. Zinātņ. Raksti PSRS Augstākās Izglītības Ministrija. Pētera Stučkas Latvijas Valsts Universitate. Zinātņiskie Raksti. Ministerstvo Vysshego Obrazovaniya. Latviiskii Gosudarstvennyi Universitet im. Petra Stuchki. Uchenye Zapiski. (Riga) (See also: Latv. Gos. Univ. Uchen. Zap.)

† Le Mathématicien Le Mathématicien. [The Mathematician] Presses Univ. France, Paris

† Le Psychologue Le Psychologue. [The Psychologist] Presses Univ. France, Paris. † Lecture Notes Lecture Notes. Univ. Copenhagen, Copenhagen. † Lecture Notes Univ. Delaware, Newark, Del.

† Lecture Notes and Suppl. in Phys. Lecture Notes and Supplements in Physics. Benjamin/Cummings, Reading, Mass.

† Lecture Notes in Biomath. Lecture Notes in Biomathematics. Springer, Berlin. Lecture Notes in Chem. Lecture Notes in Chemistry. Springer, Berlin.

† Lecture Notes in Comput. Sci. Lecture Notes in Computer Science. Springer, Berlin. † Lecture Notes in Control and Information Sci. Lecture Notes in Control and Information Sciences. Springer, Berlin.

† Lecture Notes in Econom. and Math. Systems Lecture Notes in Economics and Mathematical Systems. Springer, Berlin.

† Lecture Notes in Math. Lecture Notes in Mathematics. Springer, Berlin.

† Lecture Notes in Med. Inform. Lecture Notes in Medical Informatics. Springer, Berlin. Lecture Notes in Phys. Lecture Notes in Physics. Springer, Berlin.

† Lecture Notes in Pure and Appl. Math. Lecture Notes in Pure and Applied Mathematics. Dekker, New York.

† Lecture Notes in Statist. Lecture Notes in Statistics. Dekker, New York

Lecture Notes in Statist. Lecture Notes in Statistics. Springer, New York.

† Lecture Notes Ser. Lecture Notes Series. Aarhus Univ., Aarhus

† Lectures in Appl. Math. Lectures in Applied Mathematics. Amer. Math. Soc., Providence, R.I.

† Lectures in Math. Lectures in Mathematics. Kinokuniya Book Store, Tokyo.

† Lectures Math. Life Sci. Lectures on Mathematics in the Life Sciences. Amer. Math. Soc., Providence, R.I.

† Lehr- Handbücher Ingenieurwiss. Lehr- und Handbücher der Ingenieurwissenschaften. [Textbooks and Manuals for the Engineering Sciences] Birkhäuser, Basel.

† Lehrbücher Monograph. Geb. Exakten Wissensch., Math. Reihe Lehrbücher und Monographien aus dem Gebiete der Exakten Wissenschaften (LMW). Mathematische Reihe. [Textbooks and Monographs in the Exact Sciences. Mathematical Series] Birkhäuser,

† Leitfäden Angew. Math. Mech. Leitfäden der Angewandten Mathematik und Mechanik. [Guides to Applied Mathematics and Mechanics] Teubner, Stuttgart.

Leningrad. Gos. Univ. Učen. Zap. Leningradskii Gosudarstvennyi Ordena Lenina Universitet imeni A. A. Ždanova. Učenye Zapiski. (Leningrad) (Continued as: Leningrad. Gos. Univ. Uchen. Zap..)

* Leningrad. Gos. Unio. Uchen. Zap.. Leningradskii Gosudarstvennyi Ordena Lenina Universitet imeni A. A. Zhdanova. Uchenye Zapiski. (Leningrad) (Formerly: Leningrad. Gos. Univ. Učen. Zap.)

† Leonhardi Euleri Opera Omnia, Ser. 2 Leonhardi Euleri Opera Omnia, Series Secunda: Opera Mechanica et Astronomica. Orell Füssli, Zurich

† Leonhardi Euleri Opera Omnia, Ser. 4A Leonhardi Euleri Opera Omnia, Series Quarta

A: Cor nercium Epistolicum. Orell Füssli, Zurich.

etopis' Zhurnal'nykh Stateï Letopis' Zhurnal'nykh Stateï. (Moscow) (Formerly: Letopis' Žurnal'nyh Stateï)

**Letopis' Žurnal'nyh Statei Letopis Žurnal'nyh Statei. (Moscow) (Continued as: Letopis' Zhurnal'nykh Statei)

Lett. Math. Phys. Letters in Mathematical Physics. A Journal for the Rapid Dissemination of Short Contributions in the Field of Mathematical Physics. (Dordrecht) Lett. Nuovo Cimento (2) Lettere al Nuovo Cimento. Rivista Internazionale della Società

Italiana di Fisica. Serie 2. (Bologna)

Libertas Math. Libertas Mathematica. (Berkeley, Calif.) 1- 1981-

† Library of Theoria Library of Theoria. Gleerup, Lund. Libyan J. Sci. The Libyan Journal of Science. (Tripoli)

† Lie Groups: Hist., Frontiers and Appl. Lie Groups: History, Frontiers and Applications.

Math Sci Press, Brookline, Mass. Linear Algebra Appl. Linear Algebra and its Applications. (New York)

Linear and Multilinear Algebra Linear and Multilinear Algebra. (New York)

† Linguistic Lit. Ser. Eastern Europe Linguistic & Literary Studies in Eastern Europe. Benjamins, Amsterda

ian Math. J. Lithuanian Mathematical Journal. (New York) (Translation of Litovsk. Mat. Sb.)

Litousk. Fiz. Sb. Lietuvos TSR Mokslų Akademija. Lietuvos TSR Aukštosios Mokyklos. Lietuvos Fizikos Rinkinys. Akademiya Nauk Litovskoi SSR. Vysshie Shkoly Litovskoi SSR. Litovskii Fizicheskii Sbornik. (Vilnius) (Translated as: Soviet Phys. -Collection

Litovsk. Mat. Sb. Lietuvos TSR Mokslų Akademija. Lietuvos TSR Aukštosios Mokyklos. Lietuvos Matematikos Rinkinys. Akademiya Nauk Litovskoi SSR. Vysshie Uchebnye Zavedeniya Litovskoi SSR. Litovskii Matematicheskii Sbornik. (Vilnius) (Translated as: Lithuanian Math. J.)

Lixue Xuebao See Acta Mech. Sinica (Beijing)

* Lixue Yu Shijian See Mech. Practice

Lixue Yu Shijian Lixue Yu Shijian. Mechanics and Practice. (Beijing) (Continued as: Mech. Practice) 2- 1980-

† Logik Grundlagen Math. Logik und Grundlagen der Mathematik. [Logic and Foundations of Mathematics] Vieweg, Braunschweig.

Logique et Anal. (N.S.) Logique et Analyse. Nouvelle Série. (Louvain)

London Math. Soc. Lecture Note Ser. London Mathematical Society Lecture Note Series. Cambridge Univ. Press, Cambridge.

† London Math. Soc. Monographs London Mathematical Society Monographs. Academic Press, London.

Luso J. Sci. Tech. Luso. Journal of Science and Technology. (Zomba) 1, no. 2-

† MAA Stud. Math. MAA Studies in Mathematics. Math. Assoc. America, Washington,

Machine Intelligence Workshop Machine Intelligence Workshop. Halsted, New York. Macmillan Lectures in Math. Macmillan Lectures in Mathematics. Macmillan of India, New Delhi,

Magnetohydrodynamics Magnetohydrodynamics. (A translation of Magnitnava Gidrodinamika of the Academy of Sciences of the Latvian SSR). (New York)

(Translation of Magnit. Gidrodinamika) 1965-Makedon. Akad. Nauk. Umet. Oddel. Mat.-Tehn. Nauk. Prilozi Makedonska Akademija na Naukite i Umetnostite. Oddelenie za Matematichki-Tehnichki Nauki. Prilozi= Makedonska Akademija na Naukite i Umetnostite. Oddelenie za Matematički-Tehnički

Nauki. Prilozi. (Skopje) 11- 1980-Makedon. Akad. Nauk. Umet. Oddel. Prirod.-Mat. Nauk. Prilozi Makedonska Akademija na Naukite i Umetnostite. Oddelenie za Prirodo-Matematichki Nauki.

Prilozi=Makedonska Akademija na Naukite i Umetnostite. Oddelenie za Prirodo-Matematički Nauki. Prilozi. (Skopje) Management Sci. Management Science. Journal of the Institute of Management Sci-

ence. Application and Theory Series. (Providence, R.I.) Manuscripta Math. Manuscripta Mathematica. (Berlin)

Mat. Apl. Comput. Matemática Aplicada e Computacional. (Rio de Janeiro) 1-1982-

Mat. Bilten Matematichki Bilten = Matematički Bilten. (Skopje) 27- 1977-Mat. Enseñanza Matemáticas y Enseñanza. (Mexico City)

Mat. Enseñanza Univ. Matemática Enseñanza Universitaria. (Bogotà) No. 3-1979-Mat. Fak. Univ. Kiril Metodij Skopje Godišen Zb. Matematichki Fakultet. Univerzitetot

Kiril i Metodij. Skopje. Godishen Zbornik = Matematički Fakultet. Univerzitet Kiril i Metodij, Skopje. Godišen Zbornik. (Skopje) 30– 1979– † Mat.—Fiz. Matematika—Fizika. [Mathematics—Physics] Univ. Ljubljana, Ljubljana

Mat. Fiz. Akademiya Nauk Ukrainskoi SSR. Institut Matematiki. Matematicheskaya Fizika. (Kiev)

Mat.-Fys. Medd. Danske Vid. Selsk. Matematiskfysiske Meddelelser udgivet af Det Kongelige Danske Videnskabernes Selskab. (Copenhagen)

Mat. Issled. Akademiya Nauk Moldavskoi SSR. Institut Matematiki s Vychislitel'nym Tsentrom. Matematicheskie Issledovaniya. (Kishinev)

Mat. Lapok Matematikai Lapok. Bolyai János Matematikai Társulat. (Budapest) Mat. Metody i Fiz.-Meh. Polja Akademija Nauk Ukrainskoi SSR. L'vovskii Filial

Matematičeskoi Fiziki Instituta Matematiki. Matematičeskie Metody i Fiziko-Mehaničeskie Polja. (Kiev) (Continued as: Mat. Metody i Fiz.-Mekh. Polya) * Mat. Metody i Fiz.-Mekh. Polya Matematicheskie Metody i Fiziko-Mekhanicheskie

Polya. (Kiev) (Formerly: Mat. Metody i Fiz.-Meh. Polja) Mat. Metody v Social. Nauk.—Trudy Sem. Processy Optimal. Upravlenija II Sekcija Institut Fiziki i Matematiki Litovskoi SSR. Matematičeskie Metody v Social'nyh

Naukah. Trudy Respublikanskogo Naučnogo Seminara "Processy Optimal'nogo Upravlenija". II Sekcija. (Vilnius) (Continued as: Mat. Metody v Sotsial. Nauk-Trudy Sem. Protsessy Optimal. Upravleniya II Sektsiya)

* Mat. Metody v Sotsial. Nauk—Trudy Sem. Protsessy Optimal. Upravleniya II Sektsiya Institut Fiziki i Matematiki Litovskoi SSR. Matematicheskie Metody v Sotsial'nykh Naukakh. Trudy Respublikanskogo Nauchnogo Seminara "Protsessy Optimal'nogo Upravleniya". II Sektsiya. (Vilnius) (Formerly: Mat. Metody v Social. Nauk .-Trudy Sem. Processy Optimal. Upravlenija II Sekcija)

† Mat.: Novoe Zarub. Nauke Математика: Новое в Зарубежной Науке. [Mathematics: Recent Publications in Foreign Science] Mir, Mosco

Mat. Sb. (N.S.) Matematicheskii Sbornik. Novaya Seriya. (Moscow) (Translated as: Math. USSR-Sb.)

† Mat. Sem. SNTL Matematický Seminář SNTL. [Mathematical Seminar SNTL] SNTL, Prague.

Mat. Stos. Roczniki Polskiego Towarzystwa Matematycznego. Seria III. Matematyka Stosowana. (Warsaw) 7- 1976-† Mat. USP Math. Einzelwissensch. Materialien des USP Mathematisierung der Einzel-

wissenschaften. [Materials of the USP Mathematization of the Sciences] Univ. Biele-

* Mat. v Shkole Ministerstvo Prosveshcheniya RSSR. Matematika v Shkole. (Moscow) (Formerly: Mat. v Škole)

Mat. v Škole Ministerstvo Prosveščenija RSSR. Matematika v Škole. (Moscow) (Continued as: Mat. v Shkole)

Mat. Vesnik Drushtvo Matematichara, Fizichara i Astronoma SR Srbije-Jugoslavija. Matematichki Vesnik = Društvo Matematičara, Fizičara i Astronoma SR Srbije-SFR Jugoslavija. Matematički Vesnik. (Belgrade)

Mat. Zametki Akademiya Nauk Soyuza SSR. Matematicheskie Zametki. (Moscow) (Translated as: Math. Notes)

Match Match. (Mülheim) No. 1- 1976-

Matematiche (Catania) Le Matematiche. (Catania)

Matematika (Sarajevo) Matematika. (Sarajevo)

* Math. Agoge Mathematike Agoge. (Athens) 1981, no. 1-

Math. Ann. Mathematische Annalen. (Berlin)

† Math. Anwendungen Phys. Tech. Mathematik und ihre Anwendungen in Physik und Technik. [Mathematics and its Applications in Physics and Technology] Geest & Portig, Leipzig.

† Math. Appl. Mathematics and its Applications. Gordon & Breach, New York.

† Math. Appl. Mathematics and its Applications. Reidel, Dordrecht.

† Math.—Arbeitspapiere Mathematik—Arbeitspapiere. [Mathematics—Publications] Univ. Bremen, Bremen.

Math. Balkanica Mathematica Balkanica. (Belgrade)

Math. Biosci. Mathematical Biosciences. An International Journal. (New York)

† Math. Centre Tracts Mathematical Centre Tracts. Math. Centrum, Amsterdam.

Math. Chronicle Mathematical Chronicle. (Auckland)

Math. Colloq. Univ. Cape Town Mathematics Colloquium University of Cape Town. (Cape Town) 6- 1970/71-Math. Comp. Mathematics of Computation. (Providence, R.I.)

Math. Comput. Ed. Mathematics and Computer Education. (Garden City, N.Y.) (Formerly: MATYC J.) 16- 1982-Math. Comput. Simulation Mathematics and Computers in Simulation. (Amsterdam)

† Math. Concepts Methods Sci. Engrg. Mathematical Concepts and Methods in Science and Engineering. Plenum, New York.
† Math. Dept. Rep. Mathematics Department Report. James Cook Univ. North

Queensland, Townsville. † Math. Didaktik Unterrichtspraxis Mathematik, Didaktik und Unterrichtspraxis.

[Mathematics, Teaching Methods and Practice] Oldenbourg, Munich. Math. Ed. (Siwan) The Mathematics Education. (Siwan)

† Math. Expositions Mathematical Expositions. Univ. Toronto Press, Toronto, Ont.

† Math. Forschungsber. Mathematische Forschungsberichte. [Mathematical Research Reports] Deutscher Verlag Wissensch., Berlin. * Math. Forum Mathematical Forum. (Dibrugarh) 1- 1978-

Math. Gaz. The Mathematical Gazette. (Leicester)

† Math. Ingen. Naturwiss. Ökonom. Landwirte Mathematik für Ingenieure, Naturwissenschaftler, Ökonomen und Landwirte. [Mathematics for Engineers, Natural Scientists, Economists and Agriculturalists | Teubner, Leipzig.

† Math. Ingen. Naturwiss. Ökonom. sonstige Anwendungsorient. Berufe Mathematik für Ingenieure, Naturwissenschaftler, Ökonomen und sonstige Anwendungsorientierte Berufe. [Mathematics for Engineers, Natural Scientists, Economists and other Application-Oriented Occupations] Deutsch, Thun.

Math. Intelligencer The Mathematical Intelligencer. (Berlin) 1- 1978-

Math. J. Okayama Univ. Mathematical Journal of Okayama University. (Okayama) Math. Japon. Mathematica Japonica. (Osaka)

† Math. Lecture Note Ser. Mathematics Lecture Note Series. Benjamin/Cummings, Reading, Mass. † Math. Lecture Ser. Mathematics Lecture Series. Publish or Perish, Wilmington, Del.

† Math. Lehrbücher Monogr., I. Abt.: Math. Lehrbücher Mathematische Lehrbücher und Monographien, I. Abteilung: Mathematische Lehrbücher. [Mathematical Textbooks and Monographs, Part 1: Mathematical Textbooks] Akademie-Verlag, Berlin. (Formerly: Math. Lehrbücher und Monographien)

† Math. Lehrbücher Monogr., II. Abt.: Math. Monogr.

Mathematische Lehrbücher und
Monographien, II. Abteilung: Mathematische Monographien. [Mathematical Textbooks and Monographs, Part 2: Mathematical Monographs] Akademie-Verlag,

† Math. Lehrer Mathematik für Lehrer. [Mathematics for Teachers] Deutscher Verlag Wissensch., Berlin.

Math. Mag. Mathematics Magazine. (Washington, D.C.) (Incorporated Delta (Madison) in Fall of 1976.)

Math. Medley Mathematical Medley. (Singapore) 5- 1977-

Math. Methods Appl. Sci. Mathematical Methods in the Applied Sciences. (Stuttgart) 1- 1979-

t Math. Methods Oper. Res. Mathematical Methods of Operations Research. Akad. Kiadó, Budapest.

† Math. Miniaturen Mathematische Miniaturen. [Mathematical Miniatures] Birkhäuser,

Math. Modelling Mathematical Modelling. (New York) 1- 1980-

† Math. Monograph. Mathematische Monographien. [Mathematical Monographs] Deutscher Verlag Wissensch., Berlin.

Math. Nachr. Mathematische Nachrichten. (Berlin)

† Math.-Naturwiss. Bibliothek Mathematisch-Naturwissenschaftliche Bibliothek. [Mathematical-Scientific Library] Teubner, Leipzig.

† Math. Naturwiss. Tech. Mathematik für Naturwissenschaft und Technik. [Mathematics for Science and Technology] Deutscher Verlag Wissensch., Berlin. Math. Notae Mathematicae Notae, Boletin del Instituto de Matemática. (Rosario)

† Math. Notes Mathematical Notes. Princeton Univ. Press, Princeton, N.J. Math. Notes Mathematical Notes of the Academy of Sciences of the USSR. (New

York) (Translation of Mat. Zametki) 1967-Math. Numer. Sinica Mathematica Numerica Sinica. Jisuan Shuxue. (Beijing) 2-1980-

Math. Oper. Res. Mathematics of Operations Research. (Providence, R.I.) 1-1976-

Math. Operationsforsch. Statist. Ser. Optim. Mathematische Operationsforschung und Statistik Series Optimization. (Berlin)

Math. Operationsforsch. Statist. Ser. Statist. Mathematische Operationsforschung und

Statistik Series Statistics. (Berlin)

† Math. Phys. Appl. Math. Mathematical Physics and Applied Mathematics. Reidel, Dordrecht.

† Math. Phys. Monograph Ser. Mathematical Physics Monograph Series. Addison-Wesley, Reading, Mass

† Math. Phys. Stud. Mathematical Physics Studies. Reidel, Dordrecht.

† Math. Physiker Mathematik für Physiker. [Mathematics for Physicists] Bibliographisches Inst., Mannheim,

Math. Proc. Cambridge Philos. Soc. Mathematical Proceedings of the Cambridge Philosophical Society. (Cambridge)

Math. Programming Mathematical Programming. (Amsterdam)

Math. Programming Stud. Mathematical Programming Study. (Amsterdam)

Math. Rep. Kyushu Univ. Mathematical Reports of College of General Education. Kyushu University. (Fukuoka)

Math. Rep. Toyama Univ. Toyama University. Mathematics Reports. (Toyama) 1-1978

† Math. Res. Mathematical Research. Akademie-Verlag, Berlin.

Math. Rev. Mathematical Reviews. (Providence, R.I.) (Usually abbreviated as MR in the text of Math. Rev.)

Math. Rev. Sect. Mathematical Reviews Sections. (Providence, R.I.) 1982-Math. Scand. Mathematica Scandinavica. (Copenhagen)

† Math. Schülerbücherei Mathematische Schülerbücherei. [Mathematical Library for Students] Teubner, Leipzig.

Math. Sci. The Mathematical Scientist. (Canberra) 5- 1980-

† Math. Sci. Engrg. Mathematics in Science and Engineering. Academic Press, London. Math. Sci. Humaines Centre de Mathématique Sociale. École Pratique des Hautes Études. Mathématiques et Sciences Humaines. (Paris)

Math. Sem. Notes Kobe Univ. Kobe University. Mathematics Seminar Notes. (Kobe) Math. Semesterber. Mathematische Semesterberichte. (Göttingen) 28- 1981-

† Math. Ser. Mathematics Series. Texas Tech Univ., Lubbock, Tex.

Math. Slovaca Mathematica Slovaca. (Bratislava)

Math. Social Sci. Mathematical Social Sciences. (Amsterdam) 1- 1980/81-

Math. Spectrum Mathematical Spectrum. (Sheffield) 14- 1981/82-Math. Student The Mathematics Student. (Delhi)

† Math. Surveys Mathematical Surveys. Amer. Math. Soc., Providence, R.I.

† Math. Systems in Econom. Mathematical Systems in Economics. Hain, Königstein/Ts. Math. Systems Theory Mathematical Systems Theory. (New York)

Math. USSR-Izv. Mathematics of the USSR-Izvestiya. (Providence, R.I.) (Translation of Izv. Akad. Nauk SSSR Ser. Mat.) 1967-

Math. USSR-Sb. Mathematics of the USSR-Sbornik. (Providence, R.I.) (Translation of Mat. Sb. (N.S.)) 1968-

† Math. Wirtschaftswiss. Mathematik für Wirtschaftswissenschaftler. [Mathematics for Economists | Bibliographisches Inst., Mannheim.

Math. Z. Mathematische Zeitschrift. (Berlin)

Mathematica (Cluj) Societatea de Sțiințe Matematice și Fizice din R.P.R. Filiala Cluj. Mathematica. (Cluj-Napoca)

† Mathematicians of Our Time Mathematicians of Our Time. MIT Press, Cambridge, Mass.

† Mathematik 9 Mathematik 9. [Mathematics 9] VDF, Zurich.

Mathematika Mathematika. A Journal of Pure and Applied Mathematics. (London) Matrix Tensor Quart. The Tensor Society of Great Britain. The Matrix and Tensor Quarterly. (London)

Matscience Rep. Matscience Report. Inst. Math. Sci., Madras.

MATYC J. The Mathematics Association of Two-Year Colleges. Journal. (Garden City, N.Y.) (Continued as: Math. Comput. Ed.) 15- 1981-

MC Mathematics of Computation. (Providence, R.I.) (Reviewed as: Math. Comp.)

MC Syllabus MC Syllabus. Math. Centrum, Amsterdam.

† MC Varia MC Varia. Math. Centrum, Amsterdam.

Mech. of Fracture Mechanics of Fracture. Nijhoff, The Hague.

Mech. Practice Mechanics and Practice. Lixue Yu Shijian. (Beijing) (Formerly: Lixue Yu Shijian) 4- 1982Mech. Res. Comm. Mechanics Research Communications. (Elmsford, N. Y.)

Mech. Solids Mechanics of Solids. (New York) (Translation of Izv. Akad. Nauk SSSR Mekh. Toerd. Tela) 1965-

Mech. Teoret. Stos. Polskie Towarzystwo Mechaniki Teoretycznej i Stosowanej. Mechanika Teoretyczna i Stosowana. (Warsaw)

† Med. Inform. Statist. Medizinische Informatik und Statistik. [Medical Information Science and Statistics] Springer, Berlin.

Med. Konink. Acad. Wetensch. België Mededelingen van de Koninklijke Academie voor Wetenschappen, Letteren en Schone Kunsten van België. Klasse der Wetenschappen. (Brussels) 42- 1980-

† Meh.: Noooe Zarub. Nauke Mexaника: Новое в Зарубежной Науке. [Mechanics: Recent Publications in Foreign Science] Mir, Moscow. (Continued as: Mekh.: Novoe Zarub, Nauke)

Meh. Tverd. Tela Akademija Nauk Ukrainskoi SSR. Institut Prikladnoi Matematiki i Mehaniki. Mehanika Tverdogo Tela. (Kiev) (Continued as: Mekh. Tverd. Tela)

† Mekh.: Novoe Zarub. Nauke Механика: Новое в Зарубежной Науке. [Mechanics: Recent Publications in Foreign Science] Mir, Moscow. (Formerly: Meh.: Novoe Zarub. Nauke)

* Mekh. Tverd. Tela Akademiya Nauk Ukrainskoi SSR. Institut Prikladnoi Matematiki i Mekhaniki. Mekhanika Tverdogo Tela. (Kiev) (Formerly: Meh. Tverd. Tela)

Mem. Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur. (5) Accademia delle Scienze di Torino. Memorie. Classe di Scienze Fisiche, Matematiche e Naturali. Serie V. (Turin) 1- 1977-

Mem, Amer. Math. Soc. Memoirs of the American Mathematical Society. (Providence, R.I.)

Mem. Amer. Philos. Soc. Memoirs of the American Philosophical Society. Amer. Philos. Soc., Philadelphia, Pa.

Mem. Ehime Univ. Natur. Sci. Ser. A Memoirs of the Ehime University. Natural Science. Series A. (Matsuyama)

Mem. Fac. Ed. Kumamoto Univ. Natur. Sci. Kumamoto University. Faculty of Education. Memoirs. Natural Science. (Kumamoto)

Mem. Fac. Ed. Shiga Univ. Natur. Sci. Shiga University. Faculty of Education. Mem-

oirs. Natural Science. (Otsu) Mem. Fac. Ed. Shimane Univ. Natur. Sci. Shimane University. Faculty of Education.

Memoirs. Natural Science. (Matsue) 11- 1977-Mem. Fac. Engrg. Hiroshima Univ. Memoirs of the Faculty of Engineering. Hiroshima University. (Hiroshima) No. 25- 1975-

Mem. Fac. Engrg. Kyoto Univ. Memoirs of the Faculty of Engineering. Kyoto University. (Kyoto)

Mem. Fac. Engrg. Miyazaki Univ. Memoirs of the Faculty of Engineering. Miyazaki University. (Miyazaki)

Mem. Fac. Gen. Ed. Kumamoto Univ. Natur. Sci. Kumamoto University. Faculty of General Education. Natural Sciences. Memoirs. Mathematics. (Kumamoto)

Mem. Fac. Indust. Arts Kyoto Tech. Univ. Sci. and Tech. Memoirs of the Faculty of Industrial Arts. Kyoto Technical University. Science and Technology. (Kyoto) Mem. Fac. Sci. Kôchi Univ. Ser. A Math. Kôchi University. Faculty of Science. Mem-

oirs. Series A. Mathematics. (Kôchi) 1- 1980-Mem. Fac. Sci. Kyushu Univ. Ser. A Memoirs of the Faculty of Science. Kyushu

University. Series A. Mathematics. (Fukuoka) Mem. Fac. Sci. Shimane Univ. Shimane University. Faculty of Science. Memoirs.

(Matsue) 12- 1978-

Mem. Kitami Inst. Tech. Memoirs of the Kitami Institute of Technology. (Kitami) Mem. Kyoto Tech. Univ. Sci. Tech. Memoirs of the Faculty of Industrial Arts. Kyoto Technical University. Science and Technology. (Kyoto)

† Mem. Mat. Inst. Jorge Juan Memorias de Matemática del Instituto "Jorge Juan". [Mathematical Memoirs of the Jorge Juan Institute] Inst. "Jorge Juan" Mat., Madrid. Mem. Muroran Inst. Tech. Memoirs of the Muroran Institute of Technology.

(Muroran) Mem. Nat. Defense Acad. Memoirs of the National Defense Academy. Mathematics, Physics, Chemistry and Engineering. (Yokosuka)

Mem. Numer. Math. Memoirs of Numerical Mathematics. (Kyoto)

Mem. Osaka Inst. Tech. Ser. A Memoirs of the Osaka Institute of Technology. Series A. Science & Technology. (Osaka)

Mem. Osaka Kyoiku Univ. III Natur. Sci. Appl. Sci. Memoirs of Osaka Kyoiku Univ.

versity. III. Natural Science and Applied Science. (Osaka)

Mem. Real Acad. Cienc. Artes Barcelona Memorias de la Real Academia de Ciencias y Artes de Barcelona. (Barcelona)

Mem. Real Acad. Cienc. Exact. Fis. Natur. Madrid Memorias de la Real Academia de Ciencias Exactas, Físicas y Naturales de Madrid. Serie de Ciencias Exactas. (Madrid) Mem. School Engrg. Okayama Univ. Memoirs of the School of Engineering. Okayama

University. (Okayama) Mem. School Sci. Engrg. Waseda Univ. Memoirs of the School of Science and En-

gineering. Waseda University. (Tokyo) † Mem. Ser. Calcutta Math. Soc. Memoir Series of the Calcutta Mathematical Society.

Calcutta Math. Soc., Calcutta. Mem. Soc. Astronom. Ital. (N.S.) Memorie della Società Astronomica Italiana. Nuova

Serie. (Milan) Mém. Soc. Math. France (N.S.) Mémoire de la Société Mathématique de France.

Nouvelle Série. (Paris) 1981, no. 1-

† Memoirs Memoirs. Aarhus Univ., Aarhus.

Menemui Mat. Menemui Matematik (Discovering Mathematics). (Kuala Lumpur)

† Methoden Verfahren Math. Phys. Methoden und Verfahren der Mathematischen Physik.

[Methods and Procedures in Mathematical Physics] Lang, Frankfurt.
† Méthodes Math. Inform. Méthodes Mathématiques de l'Informatique. [Mathematical Methods of Information Sciencel Dunod, Paris.

- Méthodes Sociologie Méthodes de la Sociologie. [Sociological Methods] Mouton, Paris. Methods Oper. Res. Methods of Operations Research. Hain, Königstein/Ts.
- Metody Diskret. Analiz. Metody Diskretnogo Analiza. (Novosibirsk) No. 34 1980-
- † Metody Rasčeta Oboloček Metomu Pacuera Oболочек. [Methods for Calculating Shells] "Naukova Dumka", Kiev. (Continued as: Metody Rascheta Obolochek)
 † Metody Rascheta Obolochek Metoma Pacuera Oболочек. [Methods for Calculating
- Shells] "Naukova Dumka", Kiev. (Formerly: Metody Rasčeta Oboloček)
- Metody Vychisł. Leningradskii Ordena Lenina Gosudarstvennyi Universitet imeni A. A. nova. Metody Vychislenii. (Leningrad) (Formerly: Metody Vyčisl.)
- Metody Vyčisl. Leningradskii Ordena Lenina Gosudarstvennyi Universitet im. A. A. Zdanova. Kafedra Vyčislitel'noi Matematiki i Vyčislitel'nyi Centr. Metody Vyčislenii. (Leningrad) (Continued as: Metody Vychisl.)
- Métrica. Estudos e Pesquisas em Matemática. (São Paulo) No. 1- 1979-Metrika Metrika. (Vienna)
- ica Metroeconomica. Rivista Internazionale di Economica. (Bologna) Metron Metron. (Rome)
- MIC-Modeling Identification Control Modeling, Identification and Control. A Norwegian Research Bulletin. (Oslo) 1- 1980-
- Michigan Math. J. The Michigan Mathematical Journal. (Ann Arbor, Mich.)
- Mind. A Quarterly Review of Philosophy. (Oxford)
- † MIT East Asian Sci. Ser. MIT East Asian Science Series. MIT Press, Cambridge,
- † MIT Press Ser. Comput. Sci. MIT Press Series in Computer Science. MIT Press, Cambridge, Mass. (Formerly: Series in Computer Sci.)
- † MIT Press Ser. Signal Process. Optim. Control MIT Press Series in Signal Processing, Optimization, and Control. MIT Press, Cambridge, Mass.
- † Mitt. Geodät. Inst. Tech. Univ. Graz Mitteilungen des Geodätischen Instituts der Technischen Universität Graz. [Reports of the Geodetic Institute of the Technical University of Graz] Tech. Univ. Graz, Graz.
- Mitt. Math. Ges. DDR Mitteilungen. Mathematische Gesellschaft der Deutschen De-mokratischen Republik. (Berlin) No. 1- 1980-Mitt. Math. Ges. Hamburg Mitteilungen der Mathematischen Gesellschaft in Hamburg.
- (Hamburg)
- Mitt. Math. Sem. Giessen Mitteilungen aus dem Mathematischen Seminar Giessen. (Giessen)
- Mitt. Verein. Schweiz. Versicherungsmath. Vereinigung Schweizerischer Versicherungsmathematiker. Mitteilungen. (L'Association des Actuaires Suisses. Bul-
- † Mitteilung Mitteilung [Report] Deutsche Forschungs- und Versuchsanst. Luft- und Raumfahrt Porz-Wahn
- † Moderne Lehrtexte: Wirtschaftswiss. Moderne Lehrtexte: Wirtschaftswissenschaften. [Modern Textbooks: Economics] Gabler, Wiesbaden.
- lerne Math. Elem. Darstellung Moderne Mathematik in Elementarer Darstellung. [Modern Mathematics in Elementary Presentation] Vandenhoeck & Ruprecht, Göt-
- Moho Shuxue See Fuzzy Math.
- Molecular Phys. Molecular Physics. (London)
- Monatsh. Math. Monatshefte für Mathematik. (Vienna)
- † Monograf. Dziejów Nauk. Tech. Monografie z Dziejów Nauki i Techniki. [Monographs in the History of Science and Technology] Ossolineum, Wrocław
- † Monograf. Inst. Mat. Monografias del Instituto de Matemáticas. [Monographs of the Institute of Mathematics] Univ. Nac. Autónoma Mexico, Mexico City. † Monograf. Mat. Monografias de Matemática. [Mathematical Monographs] Inst. Mat.
- Pura Apl., Rio de Janeiro.
- † Monograf. Mat. Monografie Matematyczne. [Mathematical Monographs] PWN, Warsaw
- † Monograf. Mat. Monografias de Matemática. [Mathematical Monographs] Inst. "Jorge Juan" Mat., Madrid.
- † Monograf. Mat. Pura Apl. Monografias de Matemática Pura e Aplicada. [Monographs in Pure and Applied Mathematics] Univ. Estad. Campinas, São Paulo.
- † Monograf. Psych. Monografie Psychologiczne. [Psychology Monographs] Ossolineum, Wrocław
- † Monograph. Enseign. Math. Monographies de L'Enseignement Mathématique. [Monographs of L'Enseignement Mathématique] Univ. Genève, Geneva.
- † Monograph. Linguist. Math. Monographies de Linguistique Mathématique. [Monographs in Mathematical Linguistics | Dunod, Paris.
- ograph. Math. Monographies de Mathématique. [Mathematical Monographs] Univ. Catholique Louvain, Louvain-La-Neuve.
- † Monograph. Modernen Math. Monographien zur Modernen Mathematik. [Monographs on Modern Mathematics] Studienverlag Brockmeyer, Bochum.
- † Monograph. Sci. Maison Franco-Japon. Monographies Scientifiques de la Maison Franco-Japonaise. [Scientific Monographs of the Maison Franco-Japonaise] Maison Franco-Japon., Tokyo.
- † Monograph Ser. Monograph Series. Input-Output, London.
- † Monograph. Wissenschaftstheorie Grundlagenforsch. Monographien Wissenschaftstheorie und Grundlagenforschung. [Monographs: Theory of Science and Fundamental Research] Scriptor, Königstein/Ts.
- † Monographs Population Biol. Monographs in Population Biology. Princeton Univ. Press, Princeton, N.J.
- † Monographs Stud. Math. Monographs and Studies in Mathematics. Pitman, Boston,
- † Monographs Surveys Water Res. Engrg. Monographs and Surveys in Water Resource Engineering. Pitman, Boston, Ma
- † Monographs Textbooks Mech. Solids Fluids: Mech. Anal. Monographs and Textbooks on Mechanics of Solids and Fluids: Mechanics and Analysis. Sijthoff & Noordhoff, Alphen aan den Rijn.

- † Monographs Textbooks Mech. Solids Fluids: Mech. Continua Monographs and Textbooks on Mechanics of Solids and Fluids: Mechanics of Continua. Sijthoff & Noordhoff, Alphen aan den Rijn.
- † Monographs Textbooks Mech. Solids Fluids: Mech. Dynam. Systems Monographs and Textbooks on Mechanics of Solids and Fluids: Mechanics of Dynamical Systems. Sijthoff & Noordhoff, Alphen aan den Rijn.
- † Monographs Textbooks Mech. Solids Fluids: Mech. Elastic Stability Monographs and Textbooks on Mechanics of Solids and Fluids: Mechanics of Elastic Stability. Sijthoff & Noordhoff, Alphen aan den Rijn.
- Monographs Textbooks Mech. Solids Fluids: Mech. Elastic Viscoelastic Solids Monographs and Textbooks on Mechanics of Solids and Fluids: Mechanics of Elastic and Viscoelastic Solids. Sijthoff & Noordhoff, Alphen aan den Rijn.
- † Monographs Textbooks Mech. Solids Fluids: Mech.: Genesis Method Monographs and Textbooks on Mechanics of Solids and Fluids: Mechanics: Genesis and Method. Sijthoff & Noordhoff, Alphen aan den Rijn.
- † Monographs Textbooks Mech. Solids Fluids: Mech. Plastic Solids Monographs and Textbooks on Mechanics of Solids and Fluids: Mechanics of Plastic Solids. Siithoff & Noordhoff, Alphen aan den Riin.
- † Monographs Textbooks Mech. Solids Fluids: Mech. Structural Systems Monographs and Textbooks on Mechanics of Solids and Fluids: Mechanics of Structural Systems. Sijthoff & Noordhoff, Alphen aan den Rijn.
- † Monographs Textbooks Mech. Solids Fluids: Mech. Surface Structures Monographs and Textbooks on Mechanics of Solids and Fluids: Mechanics of Surface Structures. Sijthoff & Noordhoff, Alphen aan den Rijn.
- † Monographs Textbooks Pure Appl. Math. Monographs and Textbooks in Pure and Applied Math. Dekker, New York.
- Monthly Notices Roy. Astronom. Soc. Royal Astronomical Society. Monthly Notices. (Oxford) 186- 1979-
- Moscow Univ. Math. Bull. Moscow University Mathematics Bulletin. (New York) (Translation of the mathematics section of Vestnik Moskov. Univ. Ser. I Mat. Mekh.)
- Moscow Univ. Phys. Bull. Moscow University Physics Bulletin. (New York) (Trans lation of the physics section of Vestnik Moskov. Univ. Ser. III Fiz. Astronom.) Moskov. Gos. Univ. Soobšč. Gos. Astronom. Inst. Šternberg. Moskovskii Gosudarst-vennyi Universitet im. M. V. Lomonosova. Soobščenija Gosudarstvennogo Astronomičeskogo Instituta im. P. K. Šternberga. (Moscow) (Continued as: Moskov. Gos. Univ. Soobshch. Gos. Astronom. Inst. Shternberga)
- * Moskov. Gos. Univ. Soobshch. Gos. Astronom. Inst. Shternberga Moskovskii Gosudarstvennyĭ Universitet imeni M. V. Lomonosova. Soobshcheniya Gosudarstvennogo Astronomicheskogo Instituta imeni P. K. Shternberga. (Moscow) (Formerly: Moskov. Gos. Univ. Soobšč. Gos. Astronom. Inst. Šternberg.)
- * Moskov. Gos. Univ. Trudy Gos. Astronom. Inst. Shternberga Moskovskii Gosudarstvennyi Universitet imeni M. V. Lomonosova. Trudy Gosudarstvennogo Astronomicheskogo Instituta imeni P. K. Shternberga. (Moscow) (Formerly: Moskov. Gos. Univ. Trudy Gos. Astronom. Inst. Sternberg.)
- Moskov. Gos. Univ. Trudy Gos. Astronom. Inst. Šternberg. Moskovskii Gosudarstvennyi Universitet im. M. V. Lomonosova. Trudy Gosudarstvennogo Astronomičeskogo Instituta im. P. K. Šternberga. (Moscow) (Continued as: Moskov. Gos. Univ. Trudy Gos. Astronom. Inst. Shternberga)
- Moskov. Inst. Inž. Železnodorož. Transporta Trudy Moskovskii Institut Inženerov Železnodorožnogo Transporta. Trudy. (Moscow) (Continued as: Moskov. Inst. Inzh.
- Zheleznodorozh. Transporta Trudy) Moskov. Inst. Inzh. Zheleznodorozh. Transporta Trudy Moskovskii Institut Inzhenerov Zheleznodorozhnogo Transporta. Trudy. (Moscow) (Formerly: Moskov. Inst. Inž. Železnodorož. Transporta Trudy)
- ¶MR Mathematical Reviews. (Providence, R.I.) See Math. Rev. † Nachr. Akad. Wiss. Göttingen II: Math. Phys. Kl. 1981 Nachrichten der Akademie der
- Wissenschaften in Göttingen II: Mathematisch-Physikalische Klasse 1981. [Reports of the Göttingen Academy of Sciences II: Mathematics-Physics Section 1981] Akad. Wiss. Göttingen, Göttingen. Nagoya Math. J. Nagoya Mathematical Journal. (Nagoya)
- Nanjing Daxue Xuebao Nanjing Daxue Xuebao. Ziran Kexue Ban. Nanjing University Journal. Natural Sciences. (Nanjing) 1979-
- † Nanta Iremica Nanta Iremica. Univ. Nantes. Nantes.
- Narisi İstor. Prirodoznav. î Tehn. Narisi z Îstoril Prirodoznavstva î Tehnîki. (Kiev) (Continued as: Narisi Istor. Prirodoznav. i Tekhn.)
- * Narisi Istor. Prirodoznav. i Tekhn. Narisi Istorii Prirodoznavstva i Tekhniki. (Kiev) (Formerly: Narisi Istor. Prirodoznav. i Tehn.)
- † NATO Adv. Study Inst. Ser., Ser. B: Physics NATO Advanced Study Institute Series, Ser. B: Physics. Plenum, New York.
- NATO Adv. Study Inst. Ser., Ser. C: Math. Phys. Sci. NATO Advanced Study Institute Series. Ser. C: Mathematical and Physical Sciences. Reidel, Dordrecht.
- NATO Adv. Study Inst. Ser., Ser. E: Appl. Sci. NATO Advanced Study Institute Series, Ser. E: Applied Sciences. Sijthoff & Noordhoff, Alphen aan den Rijn
- † NATO Conf. Ser. III: Human Factors NATO Conference Series III: Human Factors. Plenum, New York.
- Natur. Sci. Rep. Ochanomizu Univ. Natural Science Report of the Ochanomizu University. (Tokyo)
- Naturalia Naturalia. (São Paulo) 1- 1975-* Nauchn.-Tekhn. Informatsiya (VINITI) Ser. 2 Informatsionnye Protsessy i Sistemy Akademiya Nauk SSSR. Vsesoyuznyĭ Institut Nauchnoĭ i Tekhnicheskoĭ Informatsii. Nauchno-Tekhnicheskaya Informatsiya. Seriya 2. Informatsionnye Protsessy i Sistemy. (Moscow) (Translated as: Automat. Document. and Math. Linguistics) (Formerly: Naučn.-Tehn. Informacija (VINITI) Ser. 2 Informacionnye Processy i Sistemy)
- Naučn.-Tehn. Informacija (VINITI) Ser. 2 Informacionnye Processy i Sistemy Akademija Nauk SSSR. Vsesojuznyĭ Institut Naučnoi i Tehničeskoĭ Informacii. Naučno-

Tehničeskaja Informacija. Serija 2. Informacionnye Processy i Sistemy. (Moscow) (Translated as: Automat. Document. and Math. Linguistics) (Continued as: Nauchn.-Tekhn. Informatsiya (VINITI) Ser. 2 Informatsionnye Protsessy i Sistemy)

Naval Res. Logist. Quart. Naval Research Logistics Quarterly. (Washington, D.C.) NEC Res. Develop. NEC Research and Development (Technical Journal of Nippon Electric Co., Ltd.). (Tokyo)

Nederl. Akad. Wetensch. Indag. Math. Koninklijke Nederlandse Akademie van Wetenschappen. Indagationes Mathematicae. (Amsterdam) (Same as: Nederl. Akad. Wetensch. Proc. Ser. A)

Nederl. Akad. Wetensch. Proc. Ser. A See Nederl. Akad. Wetensch. Indag. Math. Nederl. Akad. Wetensch. Proc. Ser. B Koninklijke Nederlandse Akademie van Wetenschappen. Proceedings. Series B. Physical Sciences. (Amsterdam)

Nederl. Akad. Wetensch. Verslag Afd. Natuurk. Koninklijke Nederlandse Akademie van Wetenschappen. Verslag van de Gewone Vergadering van de Afdeling Natuur-(Amsterdam)

Nepali Math. Sci. Rep. The Nepali Mathematical Sciences Report. (Kathmandu) 3-1978-

Networks Networks. An International Journal. (New York)

New Math. Library New Mathematical Library. Math. Assoc. America, Washington, D.C.

New Zealand Math. Mag. The New Zealand Mathematics Magazine. (Auckland) New Zealand Oper. Res. New Zealand Operational Research. (Wellington) Nieuw Arch. Wisk. (3) Nieuw Archief voor Wiskunde. Derde Serie. (Amsterdam)

Nieuw Tijdschr. Wisk. Nieuw Tijdschrift voor Wiskunde. (Dordrecht) Nigerian J. Sci. University of Ibadan. Nigerian Journal of Science. (Ibadan)

† Nijhoff Internat. Philos. Ser. Nijhoff International Philosophy Series. Nijhoff, The

† NLR TR. NLR TR. Nat. Lucht- en Ruimtevaartlab., Amsterdam.

Nonlinear Anal. Nonlinear Analysis. (Oxford) 1- 1976-Nordisk Tidskr. Informationsbehandling (BIT) See BIT

Normat Normat. Nordisk Matematisk Tidskrift. (Oslo) 27- 1979-

Norske Vid.-Akad. Oslo Mat.-Natur. Kl. Skr. (N.S.) Norske Videnskaps-Akademi i Oslo. Matematisk-Naturvidenskapelig Klasse. Skrifter. (Oslo)

Norske Vid. Selsk. Forh. (Trondheim) Det Kongelige Norske Videnskabers Selskabs Forhandlinger. (Trondheim)

Norske Vid. Selsk. Skr. (Trondheim) Det Kongelige Norske Videnskabers Selskabs Skrifter. (Trondheim)

North-Holland Math. Library North-Holland Mathematical Library. North-Holland, Amsterdam. (Formerly: Math. Library)

† North-Holland Math. Stud. North-Holland Mathematics Studies. North-Holland,

Amsterdam. † North-Holland Ser. Appl. Math. Mech. North-Holland Series in Applied Mathematics

and Mechanics. North-Holland, Amsterdam. † North-Holland Ser. Gen. Systems Res. North-Holland Series in General Systems Re-

search. North-Holland, Amsterdam. † North-Holland Ser. System Sci. Engrg. North-Holland Series in System Science and

Engineering. North-Holland, Amsterdam † North-Holland Syst. Control Ser. North-Holland Systems and Control Series. North-

Holland, Amsterdam.

† Notas Algebra Anal. Notas de Álgebra y Análisis. [Notes on Algebra and Analysis] Univ. Nac. del Sur, Bahia Blanca.

† Notas Geom. Topol. Notas de Geometría y Topologia. [Notes on Geometry and Topology] Univ. Nac. del Sur, Bahía Blanca.

† Notas Inst. Mat. Estatist. Univ. São Paulo Ser. Mat. Notas do Instituto de Matemática e Estatistica da Universidade de São Paulo, Série Matemática. [Notes of the Institute of Mathematics and Statistics of the University of São Paulo, Mathematics Series] Univ. São Paulo, São Paulo,

† Notas Mat. Notas de Matemática. [Mathematical Notes] North-Holland, Amsterdam. † Notas Mat. Discreta Notas de Matematica Discreta. [Notes in Discrete Mathematics] Univ. Nac. del Sur, Bahia Blanca.

* Note Mat. Note di Matematica. (Lecce)

† Note Technique 1979 Note Technique 1979. [Technical Report 1979] Office Nat. Études Recherches Aérospatiales, Chatillon.

Notes and Records Roy. Soc. London Notes and Records of the Royal Society of London. (London)

Notes on Pure Math. Notes on Pure Mathematics. Austral. Nat. Univ., Canberra.

Notices Amer. Math. Soc. Notices of the American Mathematical Society. (Providence, R.I.) See Abstracts Amer. Math. Soc. (Beginning with the January, 1980 issue only contains the program of the meeting of the Society.)

Notre Dame J. Formal Logic Notre Dame Journal of Formal Logic. (Notre Dame, Ind.)

Noûs Noûs. (Bloomington, Ind.)

† Nouveau Cours de Math. Nouveau Cours de Mathématiques. [New Course in Mathematics] Vuibert, Paris.

Nova Acta Leopoldina (N.F.) Nova Acta Leopoldina. Abhandlungen der Deutschen Akademie der Naturforscher Leopoldina. Neue Folge. (Leipzig)

Novi Zb. Mat. Prob. Novi Zbornik Matematičkih Problema. [New Collection of Mathematical Problems | Naučna Knjiga, Belgrade. † Novoe Zhizni Nauk. Tekhn. Ser. "Mat. Kibernet." 82 | Новое в Жизни, Науке, Технике

и Серия "Математика, Киберпетика" 82.

[Recent Publications in Life, Science and Technology Series "Mathematics and Cybernetics" 82] "Znanie", Moscow. (Formerly: Novoe Žizni Nauk. Tehn. Ser. "Mat. Kibernet," 82)

† Novoe Žizni Nauk. Tehn. Ser. "Mat. Kihernet." 82 Новое в Жизии, Науке, Технике: Серня "Математика, Кибернетика" 82. [Recent Publications in Life, Science and Technology: Series "Mathematics and Cybernetics" 82] "Znanie", Moscow

(Continued as: Novoe Zhizni Nauk. Tekhn. Ser. "Mat. Kibernet." 82)

Novye Knigi SSSR Novye Knigi SSSR. (Moscow)

NTM Schr. Geschichte Natur. Tech. Medizin NTM Schriftenreihe für Geschichte der Naturwissenschaften Technik und Medizin. (Leipzig)

Nuclear Phys. A Nuclear Physics. A. (Amsterdam) Nuclear Phys. B Nuclear Physics. B. (Amsterdam)

Numer. Funct. Anal. Optim. Numerical Functional Analysis and Optimization. (New York) 1- 1979-

Numer. Math. Numerische Mathematik. (Berlin)

Numer. Math. J. Chinese Univ. Numerical Mathematics. A Journal of Chinese Universities. Gaodeng Xuexiao Jisuan Shuxue Xuebao. (Nanjing) 1- 1979-

Nuovo Cimento A (11) Il Nuovo Cimento. A. Serie 11. (Bologna) Nuovo Cimento B (11) Il Nuovo Cimento. B. Serie 11. (Bologna)

Nuovo Cimento C (1) Il Nuovo Cimento. C. Serie 1. (Bologna) 4- 1981-

O Eukleides A-Agymnasio (N.S.) O Eukleides; Ekdose Tes Ellenikes Mathemates Etairias. A. Agymnasio. Nea Seira. (Athens) 1- 1978/79-

O Eukleides B-Lykeio (N.S.) O Eukleides; Ekdose Tes Ellenikes Mathemates Etairias. B. Lykeio. Nea Seira. (Athens) 1- 1978/79-

Obs. Astronóm. Univ. Nac. La Plata Ser. Astronóm. Observatorio Astronómico de la Universidad Nacional de La Plata. Serie Astronómica. (La Plata)

Obzornik Mat. Fiz. Drushtvo Matematikov, Fizikov in Astronomov SRS. Obzornik za Matematiko in Fiziko = Društvo Matematikov, Fizikov in Astronomov SRS. Obzornik za Matematiko in Fiziko. (Ljubljana)

† Occasional Publ. in Math. Occasional Publications in Mathematics. Massey Univ., Palmerston North.

† Odjel. Teh. Nauka Odjeljenje Tehničkih Nauka. [Technical Sciences Section] Akad. Nauk. i Umjetnost. Bosne i Hercegovine, Sarajevo.

† Omega Omega. Wiedza Powszechna, Warsaw

† ONERA Publ. 1981 ONERA Publication 1981. Office Nat. Études Recherches Aérospatiales, Chatillon.

† Oper. Program. Systems Ser. Operating and Programming Systems Series. North-Holland, New York.

Oper. Res. Operations Research. The Journal of the Operations Research Society of America. (Baltimore, Md.)

* Oper. Res. Lett. Operations Research Letters. (Amsterdam) 1- 1981/82-† Operator Theory: Adv. Appl. Operator Theory: Advances and Applications. Birkhäuser, Basel.

Opsearch Opsearch. The Journal of the Operational Research Society of India. (New Delhi)

Optica Acta Optica Acta. (London)

Optimal Control Appl. Methods Optimal Control Applications & Methods. (Chichester) 1- 1980-

Optimizacija Akademija Nauk SSSR. Sibirskoe Otdelenie. Institut Matematiki. Optimizacija. (Novosibirsk) (Continued as: Optimizatsiya)

* Optimizatsiya Akademiya Nauk SSSR. Sibirskoe Otdelenie. Institut Matematiki. Optimizatsiya. (Novosibirsk) (Formerly: Optimizacija)

Opuscula Graecolatina Opuscula Graecolatina. Museum Tuscul. Press, Copenhagen. † Organiz. Vychisl. Struktur. Process. Организация Вычислительных Структур и Процессов. [Organization of Computer Structures and Processes] Leningrad. Univ.,

Leningrad. (Formerly: Organiz. Vyčisl. Struktur. Process.) † Organiz. Vyčisl. Struktur. Process. Организация Вычислительных Структур и Процессов. [Organization of Computer Structures and Processes] Leningrad. Univ., Leningrad. (Continued as: Organiz. Vychisl. Struktur. Process.)

Organon Organon, Institut d'Histoire de la Science et de la Technique auprès de l'Académie Polonaise des Sciences. (Warsaw)

† ORNL/CSD ORNL/CSD. Oak Ridge Nat. Lab., Oak Ridge, Tenn.

Osaka J. Math. Osaka Journal of Mathematics. (Osaka)

† Osnabrück. Schrift. Math. Osnabrücker Schriften zur Mathematik. [Osnabrück Publications in Mathematics] Univ. Osnabrück, Osnabrück.

Österreich. Akad. Wiss. Math.-Natur. Kl. Denkschr. Österreichische Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. Denkschriften.

Österreich. Akad. Wiss. Math.-Natur. Kl. Sitzungsber. II Österreichische Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. Sitzungsberichte. Abteilung II. Mathematik, Astronomie, Physik, Meterologie und Technik. (Vienna)

† Ostwalds Klassiker Exakt. Wiss. Ostwalds Klassiker der Exakten Wissenschaften. [Ostwald's Classics of the Exact Sciences] Geest & Portig, Leipzig.

Otbor i Peredača Informacii Otbor i Peredača Informacii. Akademija Nauk Ukrainskoi SSR. Fiziko-Mehaničeskii Institut. (Kiev) (Continued as: Othor i Peredacha Informatsii)

* Othor i Peredacha Informatsii Othor i Peredacha Informatsii. Akademiya Nauk Ukrainskoi SSR, Fiziko-Mekhanicheskii Institut. (Kiev) (Formerly: Othor i Peredača Informacii)

† Oxford Logic Guides Oxford Logic Guides. Oxford Univ. Press, New York. Pacific J. Math. Pacific Journal of Mathematics. (Carmel Valley, Calif.)

† Pahl-Rugenstein-Hochschulschrift. Gesellschafts-Naturwissenschaft. Ser. Math. Pahl-Rugenstein-Hochschulschriften Gesellschafts- und Naturwissenschaften, Serie: Mathematik. [Pahl-Rugenstein University Texts in the Social and Natural Sciences, Series: Mathematics] Pahl-Rugenstein, Cologne.

† Paideia Stud. Nature of Modern Math. Paideia Studies in the Nature of Modern Mathematics. Paideia, Norfolk, Va.

Pallas Paperbacks Pallas Paperbacks. Reidel, Dordrecht.

Papers Proc. Roy. Soc. Tasmania Papers and Proceedings of the Royal Society of Tasmania. (Hobart)

† Particles and Fields Subser. Particles and Fields Subseries. Amer. Inst. Physics, New York.

ition The Journal of the Pattern Recognition Society. (Oxford)

Performance Evaluation P (Amsterdam) 1- 1981ation Performance Evaluation. An International Journal.

† Phase Trans. Phenom. Phase Transition Phenomena. Elsevier, Amsterdam.

Philips J. Res. Philips Journal of Research. (Eindhoven)

† Philos. Abhandlungen Philosophische Abhandlungen. [Philosophical Essays] Kloster- † Prace IPI PAN Prace IPI PAN. [ICS PAS Reports] Polsk. Akad. Nauk, Warsaw. mann, Frankfurt.

† Philos. Bibliothek Philosophische Bibliothek. [Philosophical Library] Meiner, Hamburg.

Philos. Forum Quart. The Philosophical Forum. A Quarterly. (Boston, Mass.)

Philos. Math. Philosophia Mathe ematica. An International Journal for Philosophy of Modern Mathematics. (Norfolk, Va.)

Philos. Natur. Philosophia Naturalis. Archiv für Naturphilosophie und die Philosophischen Grenzgebiete der Exakten Wissenschaften und Wissenschaftsgeschichte. (Königstein/Ts.)

The Philosophical Quarterly. (St. Andrews) ilos. Quart. Philos. Sci. Philosophy of Science. (East Lansing, Mich.)

† Philos. Stud. Philosophical Studies. (Dordrecht)
† Philos. Stud. Ser. Philos. Philosophical Studies Series in Philosophy. Reidel, Dordrecht.

Philos. Trans. Roy. Soc. London Ser. A Philosophical Transactions of the Royal Society of London. Series A. Mathematical and Physical Sciences. (London)

Phys. A Physica. A. Europhysics Journal. (Amsterdam)

† Phys. Atoms and Molecules Physics of Atoms and Molecules. Plenum, New York Phys. B+C Physica B+C. Europhysics Journal. B: Low Temperature and Solid State

Physics. C: Atomic, Molecular and Plasma Physics, Optics. (Amsterdam)

Phys. D Physica D. Nonlinear Phenomena. (Amsterdam) 1- 1980-Phys. Energi. Fort. Phys. Nuclear. Physica Energiae Fortis et Physica Nuclearis. Gaoneng Wuli Yu He Wuli. (Beijing) 1- 1980-

Phys. Fluids The Physics of Fluids. (New York)

Phys. Lett. A Physics Letters. A. (Amsterdam)
Phys. Lett. B Physics Letters. B. (Amsterdam)

Phys. Rep. Physics Reports. Section C of Physics Letters. (Amsterdam)

Phys. Rep. Kumamoto Univ. Physics Reports of the Kumamoto University. (Kum

Phys. Rev. A (3) Physical Review. A. General Physics. Third Series. (New York)

Phys. Rev. B (3) Physical Review. B. Condensed Matter. Third Series. (New York) Phys. Rev. C (3) Physical Review. C. Nuclear Physics. Third Series. (New York)

Phys. Rev. D (3) Physical Review. D. Particles and Fields. Third Series. (New York)

Phys. Rev. Lett. Physical Review Letters. (New York)
† Phys. Sci. Data Physical Sciences Data. Elsevier, New York

Phys. Scripta Physica Scripta. (Stockholm)
Phys. Status Solidi (B) Physica Status Solidi. B. Basic Research. (Berlin)

Physis-Riv. Internaz. Storia Sci. Physis. Rivista Internazionale di Storia della Scienza.

Plasma Phys. Plasma Physics. (Bristol/Elmsford, N.Y.) 13- 1981-

PLISKA Stud. Math. Bulgar. PLISKA Studia Mathematica Bulgarica. (Sofia) 1-1977-

* Ploudio. Unio. Nauchn. Trud. Ploudivski Universitet. Nauchni Trudove. (Ploudiv) (Formerly: Plovdiv. Univ. Naučn. Trud.)

Ploodio. Univ. Naučn. Trud. Plovdivski Universitet. Naučni Trudove. (Plovdiv) (Continued as: Plovdiv. Univ. Nauchn. Trud.)

Podstawy Sterowania Podstawy Sterowania. Polska Akademia Nauk. Centrum Badań Naukowych w Woj. Katowickim. Zaklad Systemów Automatyki Kompleksowej. (Gliwice/Kraków/Warsaw)

Pokroky Mat. Fyz. Astronom. Jednota Československých Matematikú a Fyziku. Pokroky Matematiky, Fyziky a Astronomie. (Prague)

Polish Acad. Sci. Inst. Philos. Sociol. Bull. Sect. Logic Polish Academy of Sciences. Institute of Philosophy and Sociology. Bulletin of the Section of Logic. (Wrocław)

Polska Biblio. Analit. Mech. Polska Akademia Nauk. Instytut Podstawowych Problemów Techniki. Polska Bibliografia Analityczna. Mechanika. Polish Scientific Abstracts. Mechanics. (Warsaw)

† Poly Poly (Schriftenreihe der Eidgenössischen Technischen Hochschule, Zurich). [Poly (Series of the Federal Technical University of Zurich)] Birkhäuser, Basel

† Popul. Lekcii Mat. Популярные Лекции по Математике. [Popular Lectures on Mathematics] "Nauka", Moscow. (Continued as: Popul. Lektsii Mat.)

† Popul. Lektsii Mat. Популярные Лекции по Математике. [Popular Lectures on Mathematics] "Nauka", Moscow. (Formerly: Popul. Lekcii Mat.)

† Pored. S"vremen. Mat. Поредица Свременна Математика. [Series in Modern Mathematics] Nauka i Izkustvo, Sofia.

Portugal. Math. Portugaliae Mathematica. (Lisbon)

Portugal. Phys. Portugaliae Physica. (Lisbon)

m. Posebna Izdanja. [Special Editions] Mat. Inst., Belgrade.

Posebni Izdanie Посебии Издание. [Special Editions] Univ. "Kiril et Metodij", Skopje.

† Postdir olom. Sem. Fiz. Postdiplomski Seminar iz Fizike. [Postgraduate Seminar in Physics] Univ. Ljubljana, Ljubljana.

m. Sem. Mat. Postdiplomski Seminar iz Matematike. [Postgraduate Seminar in Mathematics] Univ. Ljubljana, Ljubljana. Postępy Cybernet. Postępy Cybernetyki. Kwartalnik Naukowy. (Wrocław) 3-

1980-

† Potsdamer Forschungen Potsdamer Forschungen (Wissenschaftliche Schriftenreihe der Pädagogischen Hochschule "Karl Liebknecht" Potsdam, Reihe B). [Potsdam Research

(Scientific Reports of the Potsdam Teachers College "Karl Liebknecht", Series B)] Pad. Hochschule, Potsdam.

† Prace Dějim. Přirod. Věd. Práce z Dějin Přirodních Věd. [Works in the History of Natural Sciences] Ústav Česk. a Svět. Dějin, Česk. Akad. Věd, Prague.

Period. Math. Hungar. Periodica Mathematica Hungarica. Journal of the János Bolyai

† Prace Inst. Fiz. Prace Instytutu Fizyki. [Proceedings of the Institute of Physics] OssoMathematical Society. (Budapest)

Prace Inst. Maszyn Przepływowych Prace Instytutu Maszyn Przepływowych. Transactions of the Institute of Fluid-Flow Machinery. (Warsaw)

Prace Nauk. Inst. Cybernet. Tech. Politech. Wrocław. Ser. Konfer. Wrocław. Politechnika. Instytut Cybernetyki Tehnicznej. Prace Naukowe Seria Konferencje. (Wrocław)

Prace Nauk. Inst. Cybernet. Tech. Politech. Wrocław. Ser. Monograf. Wrocław. Politechnika Wrocławska. Instytut Cybernetyki Technicznej. Prace Naukowe. Seria Monografie. (Wrocław)

Prace Nauk. Inst. Cybernet. Tech. Politech. Wrocław. Ser. Stud. Materiały Wrocław. Politechnika Wrocławska. Instytut Cybernetyki Technicznej. Prace Naukowe. Seria Studia i Materialy. (Wrocław) No. 8- 1974-

Prace Nauk. Inst. Mat. Politech. Wrocław. Ser. Konfer. Wrocław. Politechnika Wrocławska. Instytutu Matematyki. Prace Naukowe. Seria Konferencje. (Wrocław) No. 1- 1977-

Prace Nauk. Inst. Mat. Politech. Wrocław. Ser. Monograf. Wrocław. Politechnika Wrocławska. Instytutu Matematyki. Prace Naukowe. Seria Monografie. (Wrocław) No. 3- 1976

Prace Nauk. Inst. Mat. Politech. Wrocław. Ser. Stud. Materiały Politechniki Wrocławskiej. Instytutu Matematyki. Prace Naukowe. Seria Studia i Materiały. (Wrocław)

† Prace Nauk. Uniw. Śląsk. Katowic. Prace Naukowe Uniwersytetu Śląskiego w Katowicach. [Scientific Publications of the University of Silesia] Uniw. Ślaski, Katowice.

* Práce Štúd. Vysokej Školy Doprav. Spojov Žiline Sér. Mat.-Fyz. Práce a Štúdie Vysokej Školy Dopravy a Spojov v Žiline. Séria Matematicko-Fyzikálna. (Bratislava) (Formerly: Práce Štúd. Vysokej Školy Doprav. Žiline Sér. Mat.-Fyz.) 3- 1981-

* Práce Štúd. Vysokej Školy Doprav. Žiline Sér. Mat.-Fyz. Práce a Štúdie Vysokej Školy Dopravnej v Žiline. Séria Matematicko-Fyzikálna. (Bratislava) (Continued as: Práce Štúd. Vysokej Školy Doprav. Spojov Žiline Sér. Mat.-Fyz.)

† Prace Wrocław. Towarz. Nauk. Ser. A Prace Wrocławskiego Towarzystwa Naukowego, Series A. [Works of the Wrocław Society of Science, Series A] Ossolineum, Wrocław. Prague Bull. Math. Linguist. Prague Bulletin of Mathematical Linguistics. (Prague) No 21_ 1974_

Prakt. Akad. Athēnon Praktikà tês Akademias Athenôn. (Athens)

† Pratique Systèm. Logiques Pratique des Systèmes Logiques. [Applications of Logical Systems] Tech. et Documentation, Paris.

Praxis Math. Praxis der Mathematik. (Cologne)

† Preprint 1980 Preprint 1980. Univ. "Babeş-Bolyai", Cluj-Napoca. Preprint 1981 Preprint 1981. Univ. "Babeş-Bolyai", Cluj-Napoca.

† Preprint 79 Препринт 79. [Preprint 79] Akad. Nauk Ukrain. SSR, Inst. Kibernet., Kiev

† Preprint 80 | IDEHDWHT 80. [Preprint 80] Akad. Nauk Ukrain. SSR. Inst. Kibernet. Kiev.

† Preprint 81 Препринт 81. [Preprint 81] Akad. Nauk Ukrain. SSR, Inst. Kibernet.,

Prikl. Geom. i Inžener. Grafika Prikladnaja Geometrija i Inženernaja Grafika. (Kiev) (Continued as: Prikl. Geom. i Inzhener. Grafika) No. 30- 1980-

* Prikl. Geom. i Inzhener. Grafika Prikladnava Geometriva i Inzhenernava Grafika. (Kiev) (Formerly: Prikl. Geom. i Inžener. Grafika) No. 30- 1980-

Prikl. Mat. Meh. Akademija Nauk SSSR. Otdelenie Tehničeskih Nauk. Institut Mehaniki. Prikladnaja Matematika i Mehanika. (Moscow) (Translated as: J. Appl. Math. Mech.) (Continued as: Prikl. Mat. Mekh.)

* Prikl. Mat. Mekh. Akademiya Nauk SSSR. Otdelenie Tekhnicheskikh Nauk. Institut Mekhaniki. Prikladnava Matematika i Mekhanika. (Moscow) (Translated as: J. Appl. Math. Mech.) (Formerly: Prikl. Mat. Meh.)

Prikl. Meh. Akademija Nauk Ukrainskoi SSR. Otdelenie Matematiki, Mehaniki i Kibernetiki. Prikladnaja Mehanika. (Kiev) (Translated as: Soviet Appl. Mech.) (Continued as: Prikl. Mekh.)

* Prikl. Mekh. Akademiya Nauk Ukrainskoi SSR. Otdelenie Matematiki, Mekhaniki i Kibernetiki. Prikladnaya Mekhanika. (Kiev) (Translated as: Soviet Appl. Mech.) (Formerly: Prikl. Meh.)

Prikl. Problemy Proč. i Plast. Gor'kovskii Gosudarstvennyi Universitet imeni N. I. Lobačevskogo. Prikladnye Problemy Pročnosti i Plastičnosti. (Gorki) (Continued as: Prikl. Problemy Proch. i Plast.)

* Prikl. Problemy Proch. i Plast. Gor'kovskii Gosudarstvennyi Universitet imeni N. I. Lobachevskogo. Prikladnye Problemy Prochnosti i Plastichnosti. (Gorki) (Formerly: Prikl. Problemy Proč. i Plast.)

Primenen. Mat. Ekonom. Leningradskii Ordena Lenina Gosudarstvennyi Universitet imeni A. A. Zhdanova. Kafedra i Laboratoriya Ekonomiko-Matematicheskikh Meto-

dov. Primenenie Matematikii v Ekonomike. (Leningrad)
Primenen. Teor. Verojatnost. i Mat. Statist. Primenenie Teorii Verojatnostei i Matematičeskoj Statistiki. (Vilnius) (Continued as: Primenen, Teor. Verovatnost, i Mat. Statist.) No. 2- 1979-

Teor. Veroyatnost. Mat. Statist. Primenenie Teorii Veroyatnostei i Matematicheskoï Statistiki. (Vilnius) (Formerly: Primenen. Teor. Verojatnost. i Mat. Statist.) No. 2- 1979-

† Princeton Math. Ser. Princeton Mathematical Series. Princeton Univ. Press, Princeton, N.J.

† Princeton Stud. Math. Econom. Princeton Studies in Mathematical Economics. Princeton Univ. Press, Princeton, N.J.

Probab. Math. Statist. Probability and Mathematical Statistics. (Warsaw/Wrocław) 1- 1980-

† Probab. Math. Statist. Probability and Mathematical Statistics. Academic Press, New York.

† Probl. Mat. Anal. Проблемы Математического Анализа. [Problems of Mathematical Analysis] Leningrad. Univ., Leningrad.

† Probl. Mat. Fiz. Проблемы Математическої Физики. [Problems in Mathematical Physics] Leningrad. Univ., Leningrad.

† Problemata Problemata. Frommann-Holzboog, Stuttgart.

† Probleme de Automat. Probleme de Automatizare (Problems of Automation) Ed Acad. R.S. România, Bucharest.

Problemi Tehn. Kibernet. Problemi na Tehničeskata Kibernetika. Problems of Engineering Cybernetics. (Sofia) (Continued as: Problemi Tehn. Kibernet. Robot.)

Problemi Tehn. Kibernet. Robot. Problemi na Tehničeskata Kibernetika i Robitikata. Problems of Engineering Cybernetics and Robotics. (Sofia) (Continued as: Problemi Tekhn. Kibernet. Robot.) 12- 1981-

Problemi Tekhn. Kibernet. Robot. Problemi na Tekhnicheskata Kibernetika i Robotikata. Problems of Engineering Cybernetics and Robotics. (Sofia) (Formerly: Problemi Tehn. Kibernet. Robot.)

Problems Control Inform. Theory/Problemy Upravlen. Teor. Inform. Problems of Control and Information Theory. Problemy Upravlenija i Teorii Informacii. (Budapest) Problems Inform. Transmission Problems of Information Transmission. (New York) (Translation of Problemy Peredachi Informatsii) 1965-

† Problems of the Contemporary World Problems of the Contemporary World. "Social Sciences Today" Editorial Board, Moscow

Problemy Jadern. Fiz. i Kosm. Lučeř Problemy Jadernov Fiziki i Kosmičeskih Lučeř. (Kharkov) (Continued as: Problemy Yadern Fiz. i Kosm. Luchei)

Problemy Kibernet. Problemy Kibernetiki. (Moscow)

Problemy Mat. Bydgoszcz. Wyższa Szkoła Pedagogiczna. Zeszyty Naukowe. Problemy Matematyczne. (Bydgoszcz) No. 1- 1977-

Problemy Matematičeskogo Analiza (Problems in Mathematical Analysis) Problemy Matematičeskogo Analiza (Problems in Mathematical Analysis). (Leningrad) (Translated as: J. Soviet Math.) (Continued as: Problemy Matematicheskogo Analiza (Problems in Mathematical Analysis))

* Problemy Matematicheskogo Analiza (Problems in Mathematical Analysis) Problemy Matematicheskogo Analiza (Problems in Mathematical Analysis). (Leningrad) (Translated as: J. Soviet Math.) (Formerly: Problemy Matematičeskogo Analiza (Problems in Mathematical Analysis))

* Problemy Peredachi Informatsii Akademiya Nauk SSSR. Institut Problem Peredachi Informatsii Akademii Nauk SSSR. Problemy Peredachi Informatsii. (Moscow) (Translated as: Problems Inform. Transmission) (Formerly: Problemy Peredaci Infor-

Problemy Peredači Informacii Akademija Nauk SSSR. Institut Problem Peredači Informacii Akademii Nauk SSSR. Problemy Peredači Informacii. (Moscow) (Translated as: Problems Inform. Transmission) (Continued as: Problemy Peredachi Informatsii)

Problemy Shičain, Poiska Akademija Nauk Latvijskoj SSR, Institut Elektroniki i Vyčislitel'noĭ Tehniki. Problemy Slučaĭnogo Poiska. (Riga) (Continued as: Problemy Sluchain, Poiska)

* Problemy Shuchain. Poiska Akademiya Nauk Latviiskoi SSR. Institut Elektroniki i Vychislitel'noĭ Tekhniki. Problemy Sluchaĭnogo Poiska. (Riga) (Formerly: Problemy Slučain. Poiska)

Problemy Teor. Gravitacii i Element. Častic Problemy Teorii Gravitacii i Elementarnyh Častic. (Moscow) (Continued as: Problemy Teor. Gravitatsii i Element. Chastits)

* Problemy Teor. Gravitatsii i Element. Chastits Problemy Teorii Gravitatsii i Elementarnykh Chastits. (Moscow) (Formerly: Problemy Teor. Gravitacii i Element. Častic)

* Problemy Yadern Fiz. i Kosm. Luchei Problemy Yadernoï Fiziki i Kosmicheskikh Luchei. (Khar'kov) (Formerly: Problemy Jadern. Fiz. i Kosm. Lučei) Proc. Amer. Math. Soc. Proceedings of the American Mathematical Society. (Provi-

dence, R.I.) Proc. Edinburgh Math. Soc. (2) Proceedings of the Edinburgh Mathematical Society.

Series II. (Edinburgh) Proc. Fac. Sci. Tokai Univ. Proceedings of the Faculty of Science of Tokai University.

(Tokyo) Proc. IEE-A Institution of Electrical Engineers. Proceedings. A. Physical Sciences,

Measurement and Instrumentation. (London) 127- 1980-Proc. IEE-B Institution of Electrical Engineers. Proceedings. B. Electric Power Appli-

cations. (London) 127- 1980-Proc. IEE-C Institution of Electrical Engineers. Proceedings. C. Generation, Transmis-

sion and Distribution. (London) 127- 1980-Proc. IEE-D Institution of Electrical Engineers. Proceedings. D. Control Theory and

Applications. (London) 127- 1980-Proc. IEE-E Institution of Electrical Engineers. Proceedings. E. Computers and Digital

Techniques. (London) 127- 1980-Proc. IEE-F Institution of Electrical Engineers. Proceedings. F. Communications, Radar

and Signal Processing. (London) 127- 1980-Proc. IEE-G Institution of Electrical Engineers. Proceedings. G. Electronic Circuits and

(London) 127- 1980-Proc. IEE-H Institution of Electrical Engineers. Proceedings. H. Microwaves, Optics

and Antennas. (London) 127- 1980-Proc. IEE-I Institution of Electrical Engineers. Proceedings. I. Solid-State and Elec-

tronic Devices. (London) 127- 1980-Proc. Indian Acad. Sci. Chem. Sci. Indian Academy of Sciences. Proceedings. Chemical

Sciences. (Bangalore) 90- 1981-Proc. Indian Acad. Sci. Earth Planetary Sci. Indian Academy of Sciences. Proceedings.

Earth and Planetary Sciences. (Bangalore) 90- 1981-Proc. Indian Acad. Sci. Math. Sci. Indian Academy of Sciences. Proceedings. Mathematical Sciences. (Bangalore) 90- 1981Proc. Indian Nat. Sci. Acad. Part A Proceedings of the Indian National Science Academy. Part A. Physical Sciences. (New Delhi)

Proc. Inst. Statist. Math. The Proceedings of the Institute of Statistical Mathematics. (Tokyo)

† Proc. Internat. School of Phys. "Enrico Fermi" Proceedings of the International School of Physics "Enrico Fermi". North-Holland, Amsterdam.

Proc. Japan Acad. Ser. A Math. Sci. Japan Academy. Proceedings. Series A. Mathematical Sciences. (Tokyo)

Proc. Japan Acad. Ser. B Phys. Biol. Sci. Japan Academy. Proceedings. Series B. Physical and Biological Sciences. (Tokyo)

Proc. London Math. Soc. (3) Proceedings of the London Mathematical Society. Third Series. (London)

Proc. Math. Phys. Soc. Egypt Proceedings of the Mathematical and Physical Society. (Giza/Cairo)

Proc. Nat. Acad. Sci. India Sect. A Proceedings of the National Academy of Sciences, India. Section A. (Allahabad)

Proc. Nat. Acad. Sci. U.S.A. Proceedings of the National Academy of Sciences of the United States of America. (Washington, D.C.)

† Proc. P. N. Lebedev Phys. Inst. Proceedings of the P. N. Lebedev Physics Institute. Consultants Bureau, New York.

Proc. Roy. Irish Acad. Sect. A Proceedings of the Royal Irish Academy. Section A. (Dublin)

Proc. Roy. Soc. Canada (4) Proceedings of the Royal Society of Canada. Fourth Series. (Ottawa, Ont.)

Proc. Roy. Soc. Edinburgh Sect. A Proceedings of the Royal Society of Edinburgh. Section A. Mathematical and Physical Sciences. (Edinburgh)

Proc. Roy. Soc. London Ser. A Proceedings of the Royal Society. London. Series A. Mathematical and Physical Sciences. (London)

Proc. Steklov Inst. Math. Proceedings of the Steklov Institute of Mathematics. (Providence, R.I.) (Translation of Trudy Mat. Inst. Steklov.) 1967-

† Proc. Sympos. Appl. Math. Proceedings of Symposia in Applied Mathematics. Amer. Math. Soc., Providence, R.I.

† Proc. Sympos. Pure Math. Proceedings of Symposia in Pure Mathematics. Amer. Math. Soc., Providence, R.I.

Proc. (Trudy) P. N. Lebedev Phys. Inst. Proceedings (Trudy) of the P. N. Lebedev Physics Institute. (New York) (Translation of Trudy Fiz. Inst. Lebedev.)

Proc. West Virginia Acad. Sci. West Virginia Academy of Science. Proceedings.

(Morgantown, W. Va.)

Processy Optimal. Upravlenija Trudy Sem. I Sekcija See Differencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija (Continued as: Protsessy Optimal. Upravleniya Trudy Sem. I Sektsiya)

Processy Optimal. Upravlenija Trudy Sem. II Sekcija See Mat. Metody v Social. Nauk. Sem. Processy Optimal. Upravlenija II Sekcija (Continued as: Protsessy Optimal. Upravleniya Trudy Sem. II Sektsiya)

Processy Optimal. Upravlenija Trudy Sem. V Sekcija See Statist. Problemy Upravlenija -Trudy Sem. Processy Optimal. Upravlenija V Sekcija (Continued as: Protsessy Optimal. Upravleniya Trudy Sem. V Sektsiya)

† Profiles Profiles. Reidel, Dordrecht.

† Progr. Comput. Sci. Progress in Computer Science. Birkhäuser, Boston, Mass. † Progr. Math. Progress in Mathematics. Birkhäuser, Boston, Mass.

Progr. Math. (Allahabad) Academy for Progress of Mathematics of the University of Allahabad. Progress of Mathematics. (Allahabad)

† Progr. Particle and Nuclear Phys. Progress in Particle and Nuclear Physics. Pergamon, Elmsford, N.Y. (Formerly: Progr. Nuclear Phys.)

† Progr. Phys. Progress in Physics. Birkhäuser, Boston, Mass.

† Progr. Prob. Statist. Progress in Probability and Statistics. Birkhäuser, Boston, Mass. † Progr. Sci. Comput. Progress in Scientific Computing. Birkhäuser, Boston, Mass. Progr. Theoret. Phys. Progress of Theoretical Physics. (Kyoto)

Progr. Theoret. Phys. Suppl. Progress of Theoretical Physics. Supplement. (Kyoto) No. 66- 1979ning and Comput. Software Programming and Computer Software. (New

York) (Translation of Programmirovanie) 1975-Programmirovanie Akademiya Nauk SSSR. Programmirovanie. (Moscow) (Trans-

lated as: Programming and Comput. Software) Programmirovanie EVM Programmirovanie EVM. (Vilnius)

† Project Hist. Biobibliog. Project for Historical Biobibliography. Univ. Newcastle upon

Tyne, Newcastle. † Projeto Euclides Projeto Euclides. [Euclid Project] Inst. Mat. Pura Apl., São Paulo.

Protsessy Optimal. Upravleniya Trudy Sem. I Sektsiya See Differentsial'nye Uravneniya i Primenen.-Trudy Sem. Protsessy Optimal. Upravleniya I Sektsiya (Formerly: Processy Optimal. Upravlenija Trudy Sem. I Sekcija)

* Protsessy Optimal. Upravleniya Trudy Sem. II Sektsiya See Mat. Metody v Sotsial. Nauk-Trudy Sem. Protsessy Optimal. Upravleniya II Sektsiya (Formerly: Processy Optimal. Upravlenija Trudy Sem. II Sekcija)

* Protsessy Optimal. Upravleniya Trudy Sem. V Sektsiya See Statist. Problemy Upravleniya-Trudy Sem. Protsessy Optimal. Upravleniya V Sektsiya (Formerly: Processy Optimal. Upravlenija Trudy Sem. V Sekcija)

Przegląd Statyst. Polska Akademia Nauk. Komitet Statistyki i Ekonometrii. Przegląd Statystyczny. (Warsaw)

Psychometrika Psychometrika. A Journal Devoted to the Development of Psychology as a Quantitative Rational Science. (Los Angeles, Calif.)

"Centro Stud. Pensiero Filos. Cinq. Seicento Rel. Prob. Sci." CNR Ser. I-Stud. Pubblicazioni del "Centro di Studi del Pensiero Filosofico del Cinquecento e del Seicento in Relazione ai Problemi della Scienza" del Consiglio Nazionale delle Ricerche Serie I-Studi. [Publications of the "Study Center of Philosophical Thought of the Sixteenth and Seventeenth Centuries in Relation to the Problems of Science" of the Consiglio Nazionale delle Ricerche] Nuova Ital. Ed., Florence.

- Pubbl. Istit. Mat. Appl. Fac. Ingr. Univ. Stud. Roma Quaderno Università degli Studi di † Que sais-je? Que sais-je? [What Do I Know?] Presses Univ. France, Paris.

 Roma. Facoltà di Ingegneria. Istituto di Matematica Applicata. Pubblicazioni. † Queen's Papers in Pure and Appl. Math. Queen's Papers in Pure and Appl. Math. (Rome)
- Picone" (IAC), Rome.
- † Publ. Center Medieval Ren. Stud. UCLA Publications of the Center for Medieval and Renaissance Studies UCLA. Univ. California Press, Berkeley, Calif.
- † Publ. Centre Rech. Math. Pures Sér. 3 Publications du Centre de Recherches en Mathématiques Pures, Série 3. [Publications of the Research Center for Pure Mathematics, Series 3] Univ. Neuchâtel, Neuchâtel.
- Publ. Centre Rech. Math. Pures (1) Publications du Centre de Recherches en Mathématiques Pures. Série I. (Neuchâtel)
- † Publ. Dep. Desenho Publicações do Departamento de Desenho. [Publications of the Department of Design] Univ. Fed. Parana, Parana.
- Publ. Dép. Math. (Lyon) Publications du Département de Mathématiques. Faculté des Sciences de Lyon. (Lyon)
- es Publications Économétriques. (Paris)
- † Publ. Inst. Mat., Vol. 1 Publicaciones del Instituto de Matemática, Vol. 1. [Publications of the Mathematics Institute, Vol. 1] Univ. Republica, Montevideo.
- Publ. Inst. Math. (Beograd) (N.S.) Institut Mathématique. Publications. Nouvelle Série. (Belgrade)
- † Publ. Inst. Math. Univ. Nancago Publications de l'Institut Mathématique de l'Université de Nancago. [Publications of the Mathematical Institute of the University of Nancagol Hermann, Paris.
- † Publ. Inst. Math. Univ. Strasbourg Publications de l'Institut de Mathématiques de l'Université de Strasbourg. [Publications of the Mathématical Institute of the University of Strasbourg | Hermann, Paris.
- Publ. Inst. Statist. Univ. Paris Publications de l'Institut de Statistique de l'Université de
- † Publ. Intern. Postgrado Publicaciones Internas del Postgrado. [Internal Postgraduate Publications] Univ. Zulia, Maracaibo
- Publ. Math. Debrecen Universitatis Debreceniensis. Institutum Mathematicum. Publicationes Mathematicae. (Debrecen)
- † Publ. Math. Orsay 80 Publications Mathématiques d'Orsay 80. [Mathematical Publications of Orsay 80] Univ. Paris XI, Orsay. (Formerly: Publ. Math. Orsay 79)
- † Publ. Math. Orsay 81 Publications Mathématiques d'Orsay 81. [Mathematical Publica-
- tions of Orsay 81] Univ. Paris XI, Orsay. † Publ. Math. Orsay 82 Publications Mathématiques d'Orsay 82. [Mathematical Publications of Orsay 82] Univ. Paris XI, Orsay.
- † Publ. Math. Res. Center Univ. Wisconsin Publication of the Mathematics Research Center, University of Wisconsin. Academic Press, New York.
- † Publ. Math. Res. Inst. Istanbul Publication of the Mathematical Research Institute, Istanbul, Univ. Istanbul, Istanbul,
- † Publ. Math. Soc. Japan Publications of the Mathematical Society of Japan. Princeton Univ. Press, Princeton, N.J.
- † Publ. Math. Univ. Paris VII Publications Mathématiques de l'Université Paris VII. [Mathematical Publications of the University of Paris VII] Univ. Paris VII, Paris.
- † Publ. Math. Univ. Pierre et Marie Curie Publications Mathématiques de l'Université Pierre et Marie Curie. [Mathematical Publications of the Université Pierre et Marie Curiel Univ. Paris VI. Paris.
- Madras.
- Publ. Res. Inst. Math. Sci. Kyoto University. Research Institute for Mathematical
- Sciences. Publications. (Kyoto) Publ. Sec. Mat. Univ. Autònoma Barcelona Publicacions de la Secció de Matemàtiques Universitat Autònoma de Barcelona. (Barcelona) No. 16- 1979-
- † Publ. Secc. Mat. Fac. Ci. Publicaciones de la Seccion de Matematica de la Facultad de Ciencias. [Publications of the Mathematics Section of the Science Faculty] Univ. Madrid, Madrid
- † Publ. Sem. Mat. Garcia de Galdeano Publicaciones del Seminario Matematico Garcia de Galdeano. [Publications of the Garcia de Galdeano Mathematics Seminar] Univ.
- Zaragoza, Zaragoza. † Publ. Univ. Joensuu, Ser. BI Publications of the University of Joensuu, Series BI. Univ. Joensuu, Joensu
- † Publ. Univ. Toulouse-Le Mirail, Sér. A Publications de l'Université de Toulouse-Le Mirail, Série A. [Publications of the University of Toulouse-Le Mirail, Series A] Univ. Toulouse-Le Mirail, Toulouse
- Punjab Univ. J. Math. (Lahore) Punjab University. Journal of Mathematics. (Lahore) † Pure and Appl. Math. Pure and Applied Mathematics. Academic Press, New York.
- Pure Appl. Math. Sci. Pure and Applied Mathematika Sciences. (Saharanpur)
- Quad. Mathesis Cosenza Mathesis di Cosenza. Quaderni. (Rome) 7- 1979-Quad. "Ricerca Sci." Quaderni de "La Ricerca Scientifica". [Publications of "Scientific † Quad. "Ricerca Sci." Research" | CNR. Rome.
- † Quad. Ser. III Quaderni Serie III. [Study Series III] Ist. Appl. Calc. "Mauro Picone" (IAC), Rome
- Quaestiones Math. Quaestiones Mathematicae. (Pretoria) 1- 1976-
- † Quantitative Appl. in the Social Sciences Quantitative Applications in the Social Sciences. Sage, Beverly Hills, Calif.
- Quantitative Linguistics Quantitative Linguistics. Studienverlag Brockmeyer, Bochum.
- † Quantitative Meth. Unternehmungsplanung Quantitative Methoden der Unternehmungsplanung. [Quantitative Methods in Marketing Research] Hain, Königstein/Ts. Quart. Appl. Math. Quarterly of Applied Mathematics. (Providence, R.I.)

 Quart. J. Econom. The Quarterly Journal of Economics. (New York) 96- 1981-
- Quart. J. Math. Oxford Ser. (2) The Quarterly Journal of Mathematics. Oxford. Second Series. (London)
- Quart. J. Mech. Appl. Math. The Quarterly Journal of Mechanics and Applied Mathematics. (London)

- matics. Queen's Univ., Kingston, Ont.
- † Pubbl. Ser. III Pubblicazioni Serie III. [Publication Series III] Ist. Appl. Calc. "Mauro † Quellen Stud. Philos. Quellen und Studien zur Philosophie. [Sources and Studies in Philosophy] de Gruyter, Berlin.
 - R&E R&E. Heldermann, Berlin.
 - RAAG Res. Notes Research Notes and Memoranda of Applied Geometry for Preveni-
 - ent Natural Philosophy. Post-RAAG Reports. (Tokyo)

 Rad Jugoslav. Akad. Znan. Umjet. Rad Jugoslavenske Akademije Znanosti i Umjetnosti. (Zagreb)
 - Radio Engrg. Electron. Phys. Radio Engineering and Electronic Physics. Translation of Radiotekhnika i Elektronika, a U.S.S.R. Academy of Sciences Publication. (Silver Spring, Md.) (Translation of Radiotekhn. i Elektron.) 1961-
 - Radiophys. and Quantum Electronics Radiophysics and Quantum Electronics. A translation of the Izvestiya Vysshikh Uchebnykh Zavedenii Radiofizika of the Ministry of Higher Education of the USSR. (New York) (Translation of Izv. Vyssh. Uchebn. Zaved, Radiofiz.) 1965-
 - Radiotehn. (Har'kov) Har'kovski Ordena Trudovogo Krasnogo Znameni Gosudarstvennyĭ Universitet imeni A. M. Gor'kogo. Radiotehnika. (Kharkov) (Continued as: Radiotekhn. (Khar'kov))
 - Radiotehn, i Elektron. Akademija Nauk SSSR. Radiotehnika i Elektronika. (Moscow) (Translated as: Radio Engrg. Electron. Phys.) (Continued as: Radiotekhn. i Elektron.) Radiotekhn. i Elektron. Akademiya Nauk SSSR. Radiotekhnika i Elektronika.
 - (Moscow) (Translated as: Radio Engrg. Electron. Phys.) (Formerly: Radiotehn. i Elektron.
 - Radiotekhn. (Khar'kov) Khar'kovski Ordena Trudovogo Krasnogo Znameni Gosudarstvennyĭ Universitet imeni A. M. Gor'kogo. Radiotekhnika. (Khar'kov) (Formerly: Radiotehn. (Har'kov))
 - RAIRO Anal. Numér. RAIRO Analyse Numérique. (Paris)
 - RAIRO Automat. RAIRO Automatique. (Paris)
 - RAIRO Inform. RAIRO Informatique. (Paris)
 - RAIRO Inform. Théor. RAIRO Informatique Théorique. (Paris) RAIRO Rech. Opér. RAIRO Recherche Opérationnelle. (Paris)
 - Ranchi Univ. Math. J. Ranchi University Mathematical Journal. (Ranchi)
 - Ratio Ratio. (Oxford)
 - Raymond W. Brink Selected Math. Papers Raymond W. Brink Selected Mathematical Papers. Math. Assoc. America, Washington, D.C.
 † Razred Mat. Fiz. Teh. Vede Dela Razred za Matematične, Fizikalne in Tehnične Vede,
 - Dela. [Class of Mathematics, Physics and Technology, Works] Slovensk. Akad. Znanosti Umetnosti, Ljubljana.
 - RCA Rev. RCA Review. (Princeton, N.J.) Real Anal. Exchange Real Analysis Exchange. (Macomb, Ill.) 1- 1976-
 - Recent Progr. Natur. Sci. Japan Recent Progress of Natural Sciences in Japan. (Tokyo) 1- 1976-
 - Rech. Aérospat. La Recherche Aérospatiale. (Châtillon) (Translated as: Rech. Aérospat. (English))
 - Rech. Aérospat. (English) La Recherche Aérospatiale. English edition. (Châtillon) (Translation of Rech. Aérospat.) 1980, no. 3-
 - † Regensburger Math. Schriften Regensburger Mathematische Schriften. [Regensburg Mathematical Publications] Univ. Regensburg, Regensburg.
- † Publ. Ramanujan Inst. Publications of the Ramanujan Institute. Univ. Madras, † Regensburger Trichter Der Regensburger Trichter. [The Regensburg Funnel] Univ. Regensburg, Regensburg.
 - Reihe Informatik. [Information Science Series] Bibliographisches Inst., † Reihe Informat. Mannheim
 - Rend Accad Naz XI. (5) Accademia Nazionale dei XI., Rendiconti, Serie V. (Rome) Rend. Accad. Sci. Fis. Mat. Napoli (4) Società Nazionale di Scienze, Lettere ed Arti in Napoli. Rendiconto dell'Accademia delle Scienze Fisiche e Matematiche. Serie IV. (Naples)
 - Rend. Circ. Mat. Palermo (2) Rendiconti del Circolo Matematico di Palermo. Serie II. (Palermo)
 - Rend, Istit, Mat. Univ. Trieste Rendiconti dell'Istituto di Matematica dell'Università di Trieste. (Trieste)
 - Rend. Mat. (7) Rendiconti di Matematica. Serie VII. Università degli Studia Roma. Istituto Matematica Guido Castelnuovo. Istituto di Matematica Applicata. Istituto Nazionale di Alta Matematica. (Rome) 1- 1981-
 - Rend. Sem. Fac. Sci. Univ. Cagliari Rendiconti del Seminario della Facoltà di Scienze della Università di Cagliari. (Cagliari)
 - † Rend. Sem. Mat. Brescia Rendiconti del Seminario Matematico di Brescia. [Reports of the Mathematics Seminar of Brescia] Univ. Cattolica Sacro Cuore, Milan.
 - Rend. Sem. Mat. Fis. Milano Rendiconti del Seminario Matematico e Fisico di Milano. (Milan)
 - Rend Sem. Mat. Univ. Padova Rendiconti del Seminario Matematico dell'Università di Padova. (Padua)
 - Rend. Sem. Mat. Univ. Politec. Torino Rendiconti del Seminario Matematico (già "Conferenze di Fisica e di Matematica") Università e Politecnico di Torino. (Turin)
 - Rep. Fac. Engrg. Kanagawa Univ. Kanagawa University. Faculty of Engineering. Reports. (Yokohama) No. 14- 1976-
 - Rep. Fac. Engrg. Oita Univ. Oita University. Faculty of Engineering. Reports. (Oita) No. 2- 1976-
 - Rep. Fac. Sci. Engrg. Saga Univ. Math. Reports of the Faculty of Science and Engineering. Saga University. Mathematics. (Saga) No. 14- 1976-
 - Rep. Fac. Sci. Kagoshima Univ. Reports of the Faculty of Science of Kagoshima University. (Kagoshima) Rep. Fac. Sci. Shizuoka Univ. Reports of the Faculty of Science. Shizuoka University.
 - (Shizuoka) No. 2-1976-
 - Rep. Inst. High Speed Mech. Tõhoku Univ. Tõhoku University. Institute of High Speed Mechanics. Reports. (Sendai)

Rep. Math. Logic Reports on Mathematical Logic. (Warsaw/Kraków)

Rep. Math. Phys. Reports on Mathematical Physics. (Oxford)

† Rep. MATH 1981 Report MATH 1981. Akad. Wiss. DDR, Berlin. Rep. MATH 1982 Report MATH 1982. Akad. Wiss. DDR, Berlin.

† Rep. MECH 1981 Report MECH 1981. Akad. Wiss. DDR, Berlin.

Rep. Progr. Phys. Reports on Progress in Physics. (Bristol) No. 43- 1980 Rep. Statist. Appl. Res. Un. Japan. Sci. Engrs. Reports of Statistical Application
 Research. Union of Japanese Scientists and Engineers. (Tokyo)

Rep. Univ. Electro-Comm. Reports of the University of Electro-Com (Tokyo)

Rep. 1980 Report 1980. Akad. Wiss. DDR, Berlin. (Formerly: Rep. 1979)

Report Report. Katholieke Univ., Nijmegen.
Repúbl. Venezuela Bol. Acad. Cienc. Fis. Mat. Natur. República de Venezuela. Boletin de la Academia de Ciencias Físicas, Matemáticas y Naturales. (Caracas)

Res. Act. Fac. Sci. Engrg. Tokyo Denki Univ. Research Activities. The Faculty of Science and Engineering of Tokyo Denki University. (Tokyo) 1- 1979-Res. Bull. Fac. Ed. Oita Univ. The Research Bulletin of the Faculty of Education. Oita

University. (Oita) Res. Bull. Meisei Univ. Meisei University. Research Bulletin. (Tokyo)

Res. Bull. Panjab Univ. (N.S.) Research Bulletin of the Panjab University. New Series. (Chandigarh)

Res. Inst. Fund. Inform. Sci. Res. Rep. Kyushu University. Research Institute of Fundamental Information Science. Research Report. (Fukuoka)

† Res. Notes in Math. Research Notes in Mathematics. Pitman, Boston, Mass.

Res. Rep. Anan Tech. College Research Reports of the Anan Technical College. (Anan) Res. Rep. Fac. Engrg. Tokyo Denki Univ. Research Reports of the Faculty of Engineering. Tokyo Denki University. (Tokyo) (Formerly: Res. Rep. Tokyo Denki Univ.) No. 28- 1980-

Res. Rep. Kushiro Tech. College Research Reports. Kushiro Technical College.

Res. Rep. Miyagi Tech. College Miyagi Technical College. Research Reports. (Sendai) Res. Rep. Nagaoka Tech. College Research Reports of the Nagaoka Technical College. (Nagaoka)

Res. Rep. Nat. Sci. Council Math. Res. Center Research Reports. National Science Council. Mathematics Research Center. (Taipei) 9- 1980/81-

Res. Rep. Tokyo Denki Univ. Tokyo Denki University. Research Reports. (Tokyo) (Continued as: Res. Rep. Fac. Engrg. Tokyo Denki Univ.)

† Res. Report IMS Research Report IMS. Acad. Sinica, Chengdu Branch, Chengdu.

Resultate Math. Resultate der Mathematik. (Basel) 1- 1978-

Rev. Acad. Cienc. Zaragoza (2) Revista de la Academia de Ciencias Exactas, Físico-Químicas y Naturales de Zaragoza. Serie 2. (Zaragoza)

Rev. CETHEDEC Revue du Centre d'Études Théoriques de la Détection et des Communications. (Paris)

Rev. CETHEDEC Cahier Revue du Centre d'Études Théoriques de la Détection et des Communications. Cahier. (Paris) 1977, no. 2-

Rev. Cienc. (Lima) Revista de Ciencias. (Lima)

Rev. Colombiana Mat. Revista Colombiana de Matemáticas. (Bogotá)
Rev. Econom. Statist. The Review of Economics and Statistics. (Amsterdam)

Rev. Econom. Stud. The Review of Economic Studies. (Edinburgh) 46- 1979-

Rev. Geophys. Space Phys. Reviews of Geophysics and Space Physics. (Washington, D.C.) 19- 1981-

Rev. Histoire Sci. Appl. Revue d'Histoire des Sciences et de leurs Applications. (Paris) Rev. Internat. Philos. Revue Internationale de Philosophie. (Wetteren)

Rev. Mat. Hisp.-Amer. (4) Revista Matemática Hispano-Americana. 4. Serie. (Madrid) Rev. Mexicana Astronom. Astrofis. Revista Mexicana de Astronomía y Astrofisica. (Mexico City) 1- 1974-

Rev. Mexicana Fis. Revista Mexicana de Física. (Mexico City)

Rev. Modern Phys. Reviews of Modern Physics. (New York)
Rev. Questions Sci. Revue des Questions Scientifiques. (Namur)

Rev. Real Acad. Cienc. Exact. Fis. Natur. Madrid Real Academia de Ciencias Exactas,

Fisicas y Naturales de Madrid. Revista. (Madrid) Rev. Roumaine Math. Pures Appl. Académie de la République Populaire Roumaine. Revue Roumaine de Mathématiques Pures et Appliquées. (Bucharest)

Rev. Roumaine Phys. Revue Roumaine de Physique. (Bucharest)

Rev. Roumaine Sci. Tech. Ser. Électrotech. Énergét. Revue Roumaine des Sciences Techniques. Série Électrotechnique et Énergétique. (Bucharest)

aine Sci. Tech. Sér. Méc. Appl. Revue Roumaine des Sciences Techniques. Série de Mécanique Appliquée. (Bucharest)

Rev. Statist. Appl. Revue de Statistique Appliquée. Centre d'Enseignement et de Re-

cherche de Statistique Appliquée. (Paris) Rev. Técn. Fac. Ingr. Univ. Zulia Universidad del Zulia. Facultad de Ingenieria. Revista Técnica. (Maracaibo) 1- 1978/79-

Rev. Un. Mat. Argentina Revista de la Unión Matemática Argentina. (Buenos Aires) Rheol. Acta Rheologica Acta. An International Journal of Rheology. (Darmstadt)

18- 1979-Rice Univ. Stud. Rice University Studies. (Houston, Tex.)

Ricerca (4) (Napoli) La Ricerca. Matematiche Pure ed Applicate. Serie IV. (Naples)

Ricerche Automat. Ricerche di Automatica. (Gubbio) 10- 1979-

Ricerche Mat. Ricerche di Matematica. (Naples)

Riv. Mat. Sci. Econom. Social. Rivista di Matematica per le Scienze Economiche e Sociali. (Milan) 1- 1978-

Riv. Mat. Univ. Parma (4) Rivista di Matematica della Università di Parma. Serie IV.

Riv. Nuovo Cimento (3) La Rivista del Nuovo Cimento. Serie 3. (Bologna)

Rocky Mountain J. Math. The Rocky Mountain Journal of Mathematics. (Tempe, Ariz.)

Rostock. Math. Kollog. Rostocker Mathematisches Kolloquium. (Rostock) No. 1-1976-

† Rostocker Phys. Manuskr. Rostocker Physikalische Manuskripte. [Rostock Manuscripts in the Physical Sciences] Wilhelm-Pieck-Univ., Rostock.

Rozpravy Československé Akad. Věd Řada Mat. Přírod. Věd Rozpravy Československé Akademie Věd Řada Matematických a Přírodních Věd. (Prague)

Rozprawy Elektrotech. Polska Akademia Nauk. Instytut Technologii Elektronowej. Rozprawy Elektrotechniczne. (Warsaw)

Rozprawy Inż. Polska Akademia Nauk. Instytut Podstawowych Problemów Techniki. Rozprawy Inżynierskie. (Warsaw)
Rozprawy Politech. Poznań Politechnika Poznańska. Rozprawy. (Poznań)

RR-81. Internat. Inst. Appl. Systems Anal., Laxenburg.

† RR-82 RR-82. Internat. Inst. Appl. Systems Anal., Laxenburg.

Russian Math. Surveys Russian Mathematical Surveys. (London) (Translation of Uspekhi Mat. Nauk) 1971-

¶ RŽ Avtomat. Telemeh. i Vyčisl. Tehn. Akademija Nauk SSSR. Institut Naučnoï Informacii. Referativnyï Žurnal. Avtomatika, Telemehanika i Vyčislitel'naja Tehnika. (Moscow) (Continued as: RZh. Avtomat. Telemekh. i Vychisl. Tekhn.)

Akademija Nauk SSSR. Institut Naučnoĭ Informacii. Referativnyĭ Žurnal. Matematika. (Moscow) (Usually abbreviated as RŽMat in the text of Math. Rev.) (Continued as: RZh. Mat.)

¶RŽ Meh. Akademija Nauk SSSR. Institut Naučnoï Informacii. Referativnyi Žurnal. Mehanika. (Moscow) (Usually abbreviated as RŽMeh in the text of Math. Rev.) (Continued as: RZh. Mekh.)

¶RŽ Tehn. Kibernet. Akademija Nauk SSSR. Institut Naučnoï i Tehničeskoi. Referativnyi Žurnal. Tehničeskaja Kibernetika. (Moscow) (Usually abbreviated as RŽTehn. Kibernet. in the text of Math. Rev.) (Continued as: RZh. Tekhn. Kibernet.)

*¶ RZh. Aptomat. Telemekh. i Vychisl. Tekhn. Akademiya Nauk SSSR. Institut Nauchnoï Informatsii. Referativnyi Zhurnal. Avtomatika, Telemekhanika i Vychislitel'naya Tekhnika. (Moscow) (Formerly: RZh. Automat. Telemekh. i Vychisl. Tekhn.)

*¶ RZh. Mat. Akademiya Nauk SSSR. Institut Nauchnoĭ Informatsii. Referativnyĭ Zhurnal. Matematika. (Moscow) (Usually abbreviated as RZhMat in the text of Math. Rev.) (Formerly: RZ Mat.)

*¶ RZh. Mekh. Akademiya Nauk SSSR. Institut Nauchnoĭ Informatsii. Referativnyĭ Zhurnal. Mekhanika. (Moscow) (Usually abbreviated as RZhMekh in the text of Math. Rev.) (Formerly: RŽ Meh.)

*¶RZh. Tekhn. Kibernet. Akademiya Nauk SSSR. Institut Nauchnoĭ i Tekhnicheskoĭ Informatsii. Referativnyi Zhurnal. Tekhnicheskaya Kibernetika. (Moscow) (Usually abbreviated as RZhTekhn. Kibernet. in the text of Math. Rev.) (Formerly: RŽ Tehn. Kibernet.)

*¶ RZhMat Akademiya Nauk SSSR. Institut Nauchnoĭ Informatsii. Referativnyī Zhurnal. Matematika. (Moscow) See RZh. Mat. (Formerly: RŽMat)

*¶ RZhMekh Akademiya Nauk SSSR. Institut Nauchnoĭ Informatsii. Referativnyĭ Zhurnal. Mekhanika. (Moscow) See RZh. Mekh. (Formerly: RŽMeh)

¶RZhTekhn. Kibernet. Akademiya Nauk SSSR. Institut Nauchnoi i Tekhnicheskoi. Referativnyi Zhurnal. Tekhnicheskaya Kibernetika. (Moscow) See RZh. Tekhn. Kibernet. (Formerly: RŽTehn. Kibernet.)

¶RŽMat Akademija Nauk SSSR. Institut Naučnoi Informacii. Referativnyi Žurnal. Matematika. (Moscow) (Continued as: RZhMat)

¶RŽMeh Akademija Nauk SSSR. Institut Naučnoi Informacii. Referativnyi Žurnal. Mehanika. (Moscow) (Continued as: RZhMekh)

RŽTehn. Kibernet. Akademija Nauk SSSR. Institut Naučnoï i Tehničeskoï. Referativnyĭ Žurnal. Tehničeskaja Kibernetika. (Moscow) (Continued as: RZhTekhn. † Sammlung Göschen Sammlung Göschen. [Göschen Collection] de Gruyter, Berlin.

† Sammlung Wichmann, N.F. Sammlung Wichmann, Neue Folge. [Wichmann Collec-tion, New Series] Wichmann, Karlsruhe.

Sankhyā Ser. A Sankhyā (Statistics). The Indian Journal of Statistics. Series A. (Calcutta) Sankhyā Ser. B Sankhyā (Statistics). The Indian Journal of Statistics. Series B.

(Calcutta) Sb. Praci Ped. Fak. v Ostravě Ser. A Sborník Prací Pedagogické Fakulty v Ostravě.

Seria A. (Prague)

Sb. Praci Přirodověd. Fak. Univ. Palackého v Olomouci Chem. Sborník Praci Přírodovědecké Fakulty University Palackého v Olomouci. Obor Chemica. (Prague)

Sb. Praci Přirodověd. Fak. Univ. Palackého v Olomouci Fyz. Sborník Praci Přírodovědecké Fakulty University Palackého v Olomouci. Obor Fyzika. (Prague)

Sb. Praci Přírodověd. Fak. Univ. Palackého v Olomouci Mat. Sbornik Praci Přírodovědecké Fakulty University Palackého v Olomouci. Obor Matematika. (Prague)

Sb. Trudov Inst. Problem Upravlen. Institut Problem Upravleniya. Sbornik Trudov. (Moscow)

Sb. Vysoké. Učení Tech. v Brně Sborník Vysokého Učení Technického v Brně. (Brno) Scand. Actuar. J. Scandinavian Actuarial Journal. (Stockholm)

Scand. J. Statist. Scandinavian Journal of Statistics. Theory and Applications. (Stockholm)

† Schriften des Nikolaus von Kues Schriften des Nikolaus von Kues. [Writings of Nikolaus von Kues] Meiner, Hamburg.

† Schriften Philos. Ges. Schriften zur Philosophie und ihrer Geschichte. [Notes on Philosophy and its History] Akademie-Verlag, Berlin.

† Schriften Wirtschaftswiss. Forsch. Schriften zur Wirtschaftswissenschaftlichen Forschung. [Notes on Economic Research] Hain, Königstein/Ts.

† Schriftenreihe Schriftenreihe. [Series] Rechenzentrum, Univ. Münster, Münster.

† Schriftenreihe Didaktik Math. Schriftenreihe Didaktik der Mathematik. [Teaching of Mathematics Series] Hölder-Pichler-Tempsky, Vienna. † Schriftenreihe Lehrstuhls Meß-Regelungstech. Schriftenreihe des Lehrstuhls für Meßund Regelungstechnik. [Series of the Department of Measure and Control] Ruhr† Seminarberichte Seminarberichte. [Seminar Reports] Humboldt Univ., Berlin.

Univ., Bochum.

† Schriftenreihe Math. Schriftenreihe für Mathematik. [Mathematics Series] Trauner,

reihe Math. Inst. Univ. Münster Schriftenreihe des Mathematischen Instituts der Universität Münster. [Series of the Mathematical Institute of the University of Münster] Rechenzentrum, Univ. Münster, Münster.

† Schriftenreihe Rechenzentrum Univ. Köln Schriftenreihe des Rechenzentrums der Universität zu Köln. [Series of the Computer Center of the University of Cologne] Univ. Köln, Cologne

† Schriftenreihe Referenten Schriftenreihe für den Referenten. [Series for the Referee] Urania, Leipzig.

† Schriftenreihe Zentralinst. Math. Mech. Schriftenreihe des Zentralinstituts für Mathematik und Mechanik. [Series of the Central Institute for Mathematics and Mechanics] Akademie-Verlag, Berlin.

Sci. Bull. Fac. Ed. Nagasaki Univ. Science Bulletin of the Faculty of Education. Nagasaki University. (Nagasaki)

Sci. Comput. Programming Science of Computer Programming. (Amsterdam) 1-

Sci. Exploration Science Exploration. Kexue Tansuo. (Changsha) 1981, no. 1-

Sci. Mat. Scienze Matematiche. Vita e Pensiero, Milar

† Sci. Paperbacks Science Paperbacks. Chapman & Hall, London-New York.

Sci. Papers College Gen. Ed. Univ. Tokyo Scientific Papers of the College of General Education. University of Tokyo. (Tokyo)

Sci. Rep. College Gen. Ed. Osaka Univ. Science Reports. College of General Education. Osaka University. (Osaka)

Sci. Rep. Fac. Ed. Fukushima Univ. Fukushima University. Faculty of Education. Science Reports. (Fukushima) No. 30- 1980-

Sci. Rep. Fac. Ed. Gifu Univ. Natur. Sci. Science Reports of the Faculty of Education. Gifu University. Natural Science. (Gifu)

Sci. Rep. Hirosaki Univ. Science Reports of the Hirosaki University. (Hirosaki)

Sci. Rep. Kagoshima Univ. Science Reports of Kagoshima University. (Kagosh Sci. Rep. Kanazawa Univ. The Science Reports of the Kanazawa University. (Kanazawa)

Sci. Rep. Kyoto Prefect. Univ. Natur. Sci. Living Sci. Kyoto Prefectural University. Scientific Reports. Natural Science and Living Science. (Kyoto) No. 27- 1976-Sci. Rep. Niigata Univ. Ser. A Science Reports of Niigata University. Series A. nematics. (Niigata)

Sci. Rep. Res. Inst. Engrg. Kanagawa Univ. Kanagawa University. Research Institute for Engineering. Science Reports. (Yokohama) No. 1- 1978-

Sci. Rep. Saitama Univ. Ser. A The Science Reports of the Saitama University. Series A. Mathematics, Physics and Chemistry. (Crawa)
Sci. Rep. Tokyo Woman's Christian Univ. Tokyo Woman's Christian University. Sci.

ence Reports. (Tokyo)

Sci. Rep. Yokohama Nat. Univ. Sect. I Science Reports of the Yokohama National University. Section I. Mathematics, Physics. (Yokohama)

Sci. Sinica Scientia Sinica. Zhongguo Kexue. (Beijing) (Continued as: Sci. Sinica Ser. A and Sci. Sinica Ser. B)

* Sci. Sinica Ser. A Scientia Sinica. Series A. Mathematical, Physical, Astronomical & Technical Sciences. (Beijing) (Formerly: Sci. Sinica) 25- 1982-

* Sci. Sinica Ser. B Scientia Sinica. Series B. Chemical, Biological, Agricultural, Medical & Earth Sciences. (Beijing) (Formerly: Sci. Sinica) 25- 1982-

Sci. Sinica Suppl. Scientia Sinica Supplement. Zhonggup Kexue Zengkan. (Beijing) 1- 1978-

Science American Association for the Advancement of Science. Science. (Washington, D.C.)

† Science in History Science in History. Sijthoff & Noordhoff, Alphen aan den Rijn. Scientia (Milano) Scientia, Rivista Internazionale di Sintesi Scientifica. (Milan) Scientia (Valparaiso) Universidad Técnica Federico Santa Maria. Scientia. (Valparaiso)

Scripta Fac. Sci. Natur. UJEP Brunensis-Biol. Scripta Facultatis Scientiarum Naturalium Universita J. E. Purkyně Brunensis. Biologia. (Brno) 10- 1980-

Scripta Fac. Sci. Natur. UJEP Brunensis—Chem. Scripta Facultatis Scientiarum Naturalium Universita J. E. Purkyně Brunensis. Chemia. (Brno) 10– 1980– Scripta Fac. Sci. Natur. UJEP Brunensis—Geog. Universita J. E. Purkyně. Facultatis Scientiarum Naturalium. Scripta Geographia. (Brno) 1-2, 5– 1971/72, 1975–

Scripta Fac. Sci. Natur. UJEP Brunensis-Geol. Scripta Facultatis Scientiarum Naturalium Universita J. E. Purkyně Brunensis. Geologia. (Brno) 10- 1980-

Scripta Fac. Sci. Natur. UJEP Brunensis—Math. Scripta Facultatis Scientiarum Naturalium Universita J. E. Purkyně Brunensis. Mathematica. (Brno)

Scripta Fac. Sci. Natur. UJEP Brunensis-Phys. Scripta Facultatis Scientiarum Naturalium Universita J. E. Purkyně Brunensis. Physica. (Brno)

† SEAMS Monograph SEAMS Monograph. Southeast Asian Math. Soc., Singapore. Selecta Math. Soviet. Selecta Mathematica Sovietica. (Cambridge, Mass.) 1-† Selecta Statist, Canadiana Selecta Statistica Canadiana, Univ. Press of Canada. Toronto, Ont.

† Sém. Anal. Séminaire d'Analyse. [Seminar on Analysis] Univ. Bordeaux I, Talence. † Sém. Anal. Moderne Séminaire d'Analyse Moderne. [Seminar on Modern Analysis]

Univ. Sherbrooke, Sherbrooke, Que. matiki. Seminar. Doklady. (Tbilisi) No. 12-13- 1978-

† Sem. Math. Sci. Seminar on Mathematical Sciences. Keio Univ., Yokohama.

† Sém. Math. Sup. Séminaire de Mathématiques Supérieures. [Seminar on Higher Mathematics] Presses Univ. Montréal, Montreal, Qu

† Sem. Nota Seminaro Nota. [Seminar Notes] Ryukyu Univ., Naha. Semigroup Forum Semigroup Forum. (New York)

† Ser. Ciencia Tec. Serie Ciencia y Técnica. [Science and Technology Series] Inst. Poli-

† Sér. Conf. Union Math. Internat. Série des Consérences de l'Union Mathématique Internationale, [Lecture Series of the International Mathematics Union] Univ. Genève, Geneva

† Ser. Mat. Fis. Serie di Matematica e Fisica. [Mathematics and Physics Series] Liguori,

† Ser. Piper Serie Piper. [Piper Series] Piper, Munich. † Ser. Preprint. Nauchn. Dokl. Серца Преприитов "Научные Доклады". [Preprint Series "Scientific Reports"] Akad. Nauk SSSR Komi Filial, Syktyvkar. (Formerly: Ser. Preprint, Naučn. Dokl.)

† Ser. Preprint. Naučn. Dokl. Серия Преприитов "Научные Доклады". [Preprint Series "Scientific Reports"] Akad. Nauk SSSR Komi Filial, Syktyvkar. (Continued as: Ser. Preprint. Nauchn. Dokl.)

† Ser. Universitaria Serie Universitaria. Fundación Juan March, Madrid.

Serdica Serdica Bulgaricae Mathematicae Publicationes. (Sofia) † Shiva Math. Ser. Shiva Mathematics Series. Shiva, Nantwich.

Shuxue Niankan See Chinese Ann. Math. Shuxue Wuli Xuebao See Acta Math. Sci.

Shuxue Xuebao See Acta Math. Sinica

Shuxue Yanjiu Yu Pinglun See J. Math. Res. Exposition Shuxue Zazhi See J. Math. (Wuhan)

Shuxuede Shijian Yu Renshi See Knowledge Practice Math.

† SIAM-AMS Proc. SIAM-AMS Proceedings. Amer. Math. Soc., Providence, R.I. SIAM J. Algebraic Discrete Methods Society for Industrial and Applied Mathematics. Journal on Algebraic and Discrete Methods. (Philadelphia, Pa.) 1- 1980-

SIAM J. Appl. Math. SIAM Journal on Applied Mathematics. (Philadelphia, Pa.)

SIAM J. Comput. SIAM Journal on Computing. (Philadelphia, Pa.)

SIAM J. Control Optim. Society for Industrial and Applied Mathematics. Journal on

Control and Optimization. (Philadelphia, Pa.) SIAM J. Math. Anal. SIAM Journal on Mathematical Analysis. (Philadelphia, Pa.)

SIAM J. Numer. Anal. SIAM Journal on Numerical Analysis. (Philadelphia, Pa.) SIAM J. Sci. Statist. Comput. Society for Industrial and Applied Mathematics. Journal on Scientific and Statistical Computing. (Philadelphia, Pa.) 1- 1980-

SIAM Rev. SIAM Review. A Publication of the Society for Industrial and Applied Mathematics. (Philadelphia, Pa.) 1- 1980-

† SIAM-SIMS Conf. Ser. SIAM-SIMS Conference Series. SIAM, Philadelphia, Pa † SIAM Stud. Appl. Math. SIAM Studies in Applied Mathematics. SIAM, Philadelphia, Pa. Siberian Math. J. Siberian Mathematical Journal. (New York) (Translation of

Sibirsk. Mat. Zh.) 1966-Sibirsk. Mat. Ž. Akademija Nauk SSSR. Sibirskoe Otdelenie. Sibirskii Matematičeskii

Zurnal. (Moscow) (Translated as: Siberian Math. J.) (Continued as: Sibirsk. Mat.

* Sibirsk. Mat. Zh. Akademiya Nauk SSSR. Sibirskoe Otdelenie. Sibirskii Matematicheskii Zhurnal. (Moscow) (Translated as: Siberian Math. J.) (Formerly: Sibirsk. Mat. Ž.)

Sichuan Daxue Xuebao Sichuan Daxue Xuebao. Ziran Kexue Ban. Sichuan University Journal. Natural Sciences. (Chengdu) 1982-

Siemens Forsch. Entwickl. Siemens Forschungs-und Entwicklungsberichte. Research and Development Reports. (Berlin)

† Sigma Ser. Pure Math. Sigma Series in Pure Mathematics. Heldermann, Berlin.

Signal Process. Signal Processing. (Amsterdam) 1, no. 2—1979— Simon Stevin. Simon Stevin. Wis- en Natuurkundig Tijdschrift. (Ghent)

† Simulations Councils Proc. Simulations Councils Proceedings. AFIPS Press, Arling-

† Sistem. Model. Системное Моделирование. [Systems Modeling] Akad. Nauk SSSR Sibirsk. Otdel., Vychisl. Tsentr. Novosibirsk.

† Sitzungsber. Akad. Wiss. DDR, Math.-Naturwiss.-Tech., Jahrgang 1977 Sitzungsberichte der Akademie der Wissenschaften der DDR, Mathematik-Naturwissenschaften-Technik, Jahrgang 1977. [Proceedings of the Academy of Sciences of the DDR, Mathematics-Sciences-Technology, 1977] Akademie-Verlag, Berlin. (Formerly: Sitzungsber, Akad, Wissensch, DDR)

† Sitzungsber. Akad. Wiss. DDR, Math.-Naturwiss.-Tech., Jahrgang 1979 Sitzungsberichte der Akademie der Wissenschaften der DDR, Mathematische-Naturwissenschaften-Technik, Jahrgang 1979. [Proceedings of the Academy of Sciences of the DDR, Mathematics-Sciences-Technology, 1979] Akademie-Verlag, Berlin.

Sitzungsber. Heidelb. Akad. Wiss. Math.-Natur. Kl. Sitzungsberichte der Heidelberger Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. (Heidelberg)

† Sitzungsber. Säch. Akad. Wiss. Leipzig Math.-Natur. Kl. 115 Sitzungsberichte der Sächsischen Akademie der Wissenschaften zu Leipzig, Mathematisch-Naturwissenschaftliche Klasse 115. [Proceedings of the Saxon Academy of Sciences of Leipzig, Mathematics-Natural Sciences Section 115] Akademie-Verlag, Berlin.

† Sitzungsber, Wiss, Gesellschaft J. W. Goethe-Univ. Frankfurt, XIV Sitzungsberichte der Wissenschaftlichen Gesellschaft an der Johann Wolfgang Goethe-Universität, Frankfurt am Main, XIV. [Proceedings of the Scientific Society at the Johann Wolfgang Goethe University, Frankfurt am Main, XIV] Steiner, Wiesbaden.

Sem. Inst. Prikl. Mat. Dokl. Tbilisskii Gosudarstvennyi. Institut Prikladnoi Mate- † Skriftser. Roskilde Universitetsbibl. Skriftserie fra Roskilde Universitetsbibliotek. [Publication Series from Roskilde University Library] Roskilde Univ. Library, Roskilde. Soc. Sci. Fenn. Comment. Phys.-Math. Societas Scientiarum Fennica. Commentationes

Physico-Mathematicae. (Helsinki)

Social Networks Social Networks. An International Journal of Structural Analysis. (Lausanne) 1- 1978-

† Social Sci. Res. Council Rev. Current Res. Social Science Research Council Reviews of Current Research. Heinemann, London.

Solid Mech. Arch. Solid Mechanics Archives. (Dordrecht)

† Sonderhefte zum Allgemein. Statist. Arch. Sonderhefte zum Allgemeinen Statistischen Archiv. [Special Issue of the General Statistical Archive] Vandenhoeck & Ruprecht. Göttingen.

Soobšč. Akad. Nauk Gruzin. SSR Soobščenija Akademii Nauk Gruzinskoi SSR. (Tbilisi) (Continued as: Soobshch. Akad. Nauk Gruzin. SSR)

* Soobshch. Akad. Nauk Gruzin. SSR Soobshcheniya Akademii Nauk Gruzinskoi SSR. (Tbilisi) (Formerly: Soobšč. Akad. Nauk Gruzin. SSR)

Soochow J. Math. Soochow Journal of Mathematics. (Taipei)

† Sources & Stud. Hist. Arabic-Islamic Sci.: Hist. of Math. Ser. Sources & Studies in the
History of Arabic-Islamic Science: History of Mathematics Series. Univ. Aleppo,

† Sources Hist. Math. Phys. Sci. Sources in the History of Mathematics and Physical

Sciences. Springer, New York.

† Sources Stud. Hist. Arabic-Islamic Sci.: Hist. of Tech. Ser. Sources & Studies in the History of Arabic-Islamic Science: History of Technology Series. Univ. Aleppo, Aleppo.

Sources Stud. Hist. Arabic Math. Sources and Studies in the History of Arabic Mathematics. Univ. Aleppo, Aleppo.

South African Statist. J. South African Statistical Journal. (Pretoria)

Southeast Asian Bull. Math. Southeast Asian Bulletin of Mathematics. (Singapore) 1977-

Soviet Aeronaut. Soviet Aeronautics. (New York) (Translation of Izv. Vyssh. Uchebn. Zaved. Aviatsion. Tekhn.) 1966-

Soviet Appl. Mech. Soviet Applied Mechanics. (New York) (Translation of Prikl. Mekh.) 1966-

Soviet Astronom. Soviet Astronomy. A translation of Astronomicheskii Zhurnal, the astronomical journal of the Academy of Sciences of the USSR. (New York) (Translation of Astronom. Zh.) 1957-

Soviet Automat. Control Soviet Automatic Control. (Silver Spring, Md.) (Translation of Avtomatika) 1968-

Soviet J. Contemporary Math. Anal. Soviet Journal of Contemporary Mathematical Analysis. (New York) (Translation of Izv. Akad. Nauk Armyan. SSR Ser. Mat.) 1979-

Soviet J. Nuclear Phys. American Institute of Physics. Soviet Journal of Nuclear Physics. (New York) (Translation of Yadernaya Fiz.) 1965-

Soviet J. Particles and Nuclei Soviet Journal of Particles and Nuclei. (New York) (Translation of Fiz. Elementar. Chastits i Atom. Yadra) 1972-

Soviet Math. Dokl. Soviet Mathematics, Doklady, A translation of the mathematics section of Doklady Akademii Nauk SSSR. (Providence, R. I.) (Translation of mathematics section of Dokl. Akad. Nauk SSSR) 1960-

Soviet Math. (Iz. VUZ) Soviet Mathematics (Izvestiya Vysshikh Uchebnykh Zavedenii. Matematika). (New York) (Translation of Izv. Vyssh. Uchebn. Zaved. Mat.) 1974-

Soviet Phys. Acoust. Soviet Physics. Acoustics. A translation of Akusticheskii Zhurnal of the Academy of Sciences of the USSR. (New York) (Translation of Akust. Zh.)

Soviet Phys. Collection Soviet Physics. Collection. (New York) (Translation of Litovsk. Fiz. Sb.) 1974-

Soviet Phys. Cryst. Soviet Physics Crystallography. (New York) (Translation of Kristallografiya) 23- 1978-

Soviet Phys. Dokl. Soviet Physics. Doklady. A translation of the physics sections of Doklady Akademii Nauk SSSR. (New York) (Translation of physics sections of Dokl. Akad. Nauk SSSR) 1956-

Soviet Phys. J. Soviet Physics Journal. (New York) (Translation of Izv. Vyssh. Uchebn. Zaved. Fiz.) 1965-

Soviet Phys. JETP Soviet Physics. JETP. A translation of Zh. Eksperimental'noi i Teoreticheskoï Fiziki of the USSR. (New York) (Translation of Zh. Eksper. Teoret.

Soviet Phys. Uspekhi Soviet Physics. Uspekhi. A translation of the Uspekhi Fizicheskikh Nauk (Advances in the Physical Sciences) of the Academy of Sciences of the USSR. (New York) (Translation of Uspekhi Fiz. Nauk) 1958-

† Soviet Sci. Rev. Sect. C: Math. Phys. Rev. Soviet Scientific Reviews Section C: Mathematical Physics Reviews. Harwood Academic, Chur.

† Spomenice Spomenice. [Memoirs] Srpska Akad. Nauk. i Umetnost., Belgrade. † Springer Ser. Chem. Phys. Springer Series in Chemical Physics. Springer, Berlin.

† Springer Ser. Electrophys. Springer Series in Electrophysics. Springer, Berlin.

Springer Ser. Inform. Sci. Springer Series in Information Sciences. Springer, Berlin.

† Springer Ser. Optical Sci. Springer Series in Optical Sciences. Springer, Berlin. † Springer Ser. Solid-State Sci. Springer Series in Solid-State Sciences. Springer, Berlin. Springer Ser. Synergetics Springer Series in Synergetics. Springer, Berlin.

Springer Tracts Modern Phys. Springer Tracts in Modern Physics. Springer, Berlin. Springer Tracts Nat. Philos. Springer Tracts in Natural Philosophy. Springer, Berlin.

† SR 81 Status Report (SR) 81. Internat. Inst. Appl. Systems Anal., Laxenburg. Statist. Anal. Données Statistique et Analyse des Données. Bulletin de l'Association des

Statisticiens Universitaires. (Paris) 6- 1981-† Statist. Décisions Économ. Statistique et Décisions Économiques. [Statistics and Eco-

nomic Decisions] Masson, Paris. † Statist. Distributions Sci. Work Statistical Distributions in Scientific Work. Internat.

Co-op. Publ. House, Fairland, Md.

† Statist. Ecology Ser. Statistical Ecology Series. Internat. Co-op. Publ. House, Fairland, Md.

Statist. Hefte (N.F.) Statistische Hefte. Neue Folge. (Wiesbaden)

Statist. Neerlandica Statistica Neerlandica. Orgaan van de Vereniging voor Statistiek. (Rotterdam)

* Statist. Probab. Lett. Statistics & Probability Letters. (Amsterdam) 1- 1982/83-

Statist. Problemy Upravlenija—Trudy Sem. Processy Optimal. Upravlenija V Sekcija Akademija Nauk Litovskoi SSR. Institut Fiziki i Matematiki. Institut Fiziko-Tehničeskih Problem Energetiki. Litovskaja Territorial'naja Gruppa NKAU SSR Meždunarodnoĭ Federacii po Avtomatičeskomu Upravleniju Litovskoĭ NII NTI i TEI. Statističeskie Problemy Upravlenija. Trudy Seminara "Processy Optimal'nogo Upravlenija." V Sekcija. (Vilnius) (Continued as: Statist. Problemy Upravleniya-Trudy Sem. Protsessy Optimal. Upravleniya V Sektsiya)

* Statist. Problemy Upravleniya-Trudy Sem. Protsessy Optimal. Upravleniya V Sektsiya Akademiya Nauk Litovskoi SSR. Institut Fiziki i Matematik Institut Fiziko-Tekhnicheskikh Problem Energetiki. Litvoskaya Territorial'naya Gruppa NKAU SSR Mezhdunarodnoï Federatsii po Avtomaticheskomu Upravleniyu Litovskoĭ NII NTI i TEI. Statisticheskie Problemy Upravleniya. Trudy Seminara "Protsessy Optimal'nogo Upravleniya". V Sektsiya. (Vilnius) (Formerly: Statist. Problemy Upravlenija-Trudy Sem. Processy Optimal. Upravlenija V Sekcija)

† Statist. Teor. Svjazi Статистическая Теория Связи. [Statistical Theory of Communications] "Svyaz", Moscow. (Continued as: Statist. Teor. Svyazi)

† Statist. Teor. Svyazi Статистическая Теория Связи. [Statistical Theory of Communications] "Svyaz", Moscow. (Formerly: Statist. Teor. Svjazi)

Statist. Theory Method Abstracts Statistical Theory and Method Abstracts. (Edinburgh) (Usually abbreviated as STMA in the text of Math. Rev.)

Statistica (Bologna) Statistica. (Bologna)

† Statistics Statistics: Textbooks and Monographs. Dekker, New York.

¶STMA Statistical Theory and Method Abstracts. (London) See Statist. Theory Method Abstracts

Stochastic Process. Appl. Stochastic Processes and their Applications. (Amsterdam) Stochastica Stochastica. (Barcelona) 1- 1975-

Stochastics Stochastics. (New York)

Structural Topology Structural Topology. Topologie Structurale. (Montreal) 1979, no.

Strukturn. i Mat. Lingvistika Kievskii Gosudstvennyi Universitet. Strukturnaya i Matematicheskaya Lingvistika. (Kiev)

† Strum. una Nuova Cultur.: Guide e Manuali Strumenti per una Nuova Cultura: Guide e Manuali. [Tools for a New Culture: Guides and Manuals] Mursia, Milan.

† Stud. Algebra Anwendungen Studien zur Algebra und ihre Anwendungen. [Studies in Algebra and its Applications] Akademie-Verlag, Berlin.

† Stud. Angew. Wirtschaftsforsch. Statist. Studien zur Angewandten Wirtschaftsforschung und Statistik. [Studies in Applied Economics Research and Statistics] Vandenhoeck & Ruprecht, Göttingen.

Stud. Appl. Math. Studies in Applied Mathematics. (New York) † Stud. Appl. Mech. Studies in Applied Mechanics. Elsevier, Amsterdam.

Stud. Automat. Control Studies in Automation and Control. Elsevier, Amsterdam.

† Stud. Bayesian Econometrics Studies in Bayesian Econometrics. Elsevier, Amsterdam. Stud. Cerc. Fiz. Studii și Cercetări de Fizică. (Bucharest)

Stud. Cerc. Mat. Studii și Cercetări Matematice. (Bucharest)

Stud. Cerc. Mec. Apl. Studii și Cercetări de Mecanică Aplicată. (Bucharest)

Stud. Develop. Middle East Technical University. Studies in Development. (Ankara) Stud. Develop. Special Issue Middle East Technical University. Studies in Development. Special Issue. (Ankara) 1977-

† Stud. Gesch. Akad. Wiss. DDR Studien zur Geschichte der Akademie der Wissenschaften der DDR. [Studies in the History of the Academy of Sciences of the DDR] Akademie-Verlag, Berlin.

† Stud. Hist. Math. Phys. Sci. Studies in the History of Mathematics and Physical Sciences. Springer, New York.

† Stud. Hist. Modern Sci. Studies in the History of Modern Science. Reidel, Dordrecht. Stud. Hist. Philos. Sci. Studies in History and Philosophy of Science. (Oxford)

† Stud. Intellectual Precocity Studies of Intellectual Precocity. Johns Hopkins Univ. Press. Baltimore, Md.

* Stud. Lang. Studies in Language. International Journal. (Amsterdam) (Formerly: Found. Lang.) 1- 1977-† Stud. Logic Foundations Math. Studies in Logic and the Foundations of Mathematics.

North-Holland, Amsterdam.

† Stud. Management Sci. Studies in the Management Sciences. North-Holland, Amsterdam.

† Stud. Management Sci. Systems Studies in Management Sciences and Systems. North-Holland, Amsterdam.

† Stud. Materialien Geschichte Philos. Studien und Materialien zur Geschichte der Philosophie. [Studies and Materials on the History of Philosophy] Olms, Hildesheim.

† Stud. Math. Appl. Studies in Mathematics and its Applications. North-Holland, Amsterdam.

† Stud. Math. Managerial Econom. Studies in Mathematical and Managerial Economics. North-Holland, Amsterdam.

† Stud. Modern Thermodynamics Studies in Modern Thermodynamics. Elsevier, Amsterdam.

† Stud. Nat. Sci. Studies in the Natural Sciences. Plenum, New York.

† Stud. Naturwiss. Tech. Studienbücher Naturwissenschaft und Technik. [Textbooks for Science and Technology] Vieweg, Braunschweig.

† Stud. Philos. Studies in Philosophy. Mouton, The Hague

† Stud. Regional Sci. Urban Econom. Studies in Regional Science and Urban Economics. North-Holland, Amsterdam.

† Stud. Statist. Mech. Studies in Statistical Mechanics. Elsevier, Amsterdam.

Studia Automat. Studia z Automatiki. Poznańskie Towarzystwo Przyjacioł Nauk. Wydział Nauk Technicznyh. Prace Komisji Automatyki. (Warsaw/Poznań)

† Studia Copernicana Studia Copernicana. Ossolineum, Wrocław.

Studia Geotech. Mech. Studia Geotechnica et Mechanica. (Wrocław) 1- 1979-Studia Leibnitiana Studia Leibnitiana. Vierteljahrschrift für Philosophie und Geschichte der Wissenschaften. (Wiesbaden)

- † Studia Leibnitiana Sonderheft Studia Leibnitiana Sonderheft. [Studia Leibnitiana Special Issue] Steiner, Wiesbaden.
- † Snakia Leibnitiana Suppl. Studia Leibnitiana Supplementa. Steiner, Wiesbaden. Snakia Logica Polska Akademia Nauk. Institut Filozofii i Socijologii. Studia Logica.

- † Studia Math. Studia Mathematica. Univ. South Africa, Pretoria.

 Studia Math. Polska Akademia Nauk. Institut Matematyczny. Studia Mathematica. (Warsaw)
- † Studia Math. / Math. Lehrbücher Studia Mathematica/Mathematische Lehrbücher. [Studia Mathematica/Mathematical Textbooks] Vandenhoeck & Ruprecht, Göttin-
- † Studia Math. / Math. Lehrbücher Taschenbuch Studia Mathematica / Mathematische Lehrbücher, Taschenbuch. [Studia Mathematica / Mathematica | Textbooks, Paperback] Vandenhoeck & Ruprecht, Göttingen.
- † Studia Math.: Skript Studia Mathematica: Skript. Vandenhoeck & Ruprecht, Göt-
- Studia Sci. Math. Hungar. Consilium Instituti Mathematici Academiae Scientiarum Hungaricae. Studia Scientiarum Mathematicarum Hungarica. (Budapest)
 Studia Univ. Babeş-Bolyai Math. Universitatas Babeş-Bolyai. Studia. Mathematica.
- (Cluj)
- Studia Univ. Babes-Bolyai Ser. Phys. Studia Universitatis Babes-Bolyai. Series Physica.
- Studienskripten zur Soziol. Studienskripten zur Soziologie. [Research Papers on Sociology] Teubner, Leipzig.
- Su-hak kwa Mul-li Aademy of Science of the People's Democratic Republic of Korea.

 Research Center for Physics and Mathematics. Su-hak kwa Mul-li (Mathematics and Physics). (P'yongyang)
- † Subser. Optical Sci. Engrg. Subseries on Optical Science and Engineering. Amer. Inst. Physics, New York.
- Sudhoffs Arch. Sudhoffs Archiv für Geschichte der Medizin und der Naturwissenschaften. (Wiesbaden)
- Sûgaku Mathematical Society of Japan. Sûgaku (Mathematics). (Tokyo)
- † Sugaku no Rekishi Sugaku no Rekishi. [History of Mathematics] Kyoritsu Shuppan,
- Sûgakushi Kenkyû History of Mathematics Society of Japan. Sûgakushi Kenkyû (Jour-
- nal of History of Mathematics of Japan). (Tokyo)
 * Suid-Afrikaanse Tydskr. Natuurwetenskap Tegnol. Die Suid-Afrikaanse Tydskrif vir Natuurwetenskap en Tegnologie. (Pretoria) (Formerly: Tydskr. Natuurwetenskap.) 1- 1982-
- † Sunschrift Sunschrift. [SUN Series] Socialist. Uitgev. Nijmegen, Nijmegen. Sûrikaisekikenkyûsho Kôkyûroku Sûrikaisekikenkyûsho Kôkyûroku. (Kyoto) † Surveys Reference Works Math. Surveys and Reference Works in Mathematics. Pit-
- man, Boston, Mass.
- † Sympos. Math. Symposia Mathematica. Academic Press, New York.
- Synthese Synthese. An International Journal for Epistemology, Methodology and Philosophy of Science. (Dordrecht)
- † Synthese Historical Library Synthese Historical Library. Reidel, Dordrecht. † Synthese Library Synthese Library. Reidel, Dordrecht.
- Systems and Control Systems and Control (Shisutemu to Seigyo). (Kyoto)
- Systems-Comput.-Controls Systems-Computers-Controls. The Transactions of the Institute of Electronics and Communication Engineers of Japan. (Silver Spring, Md.) (Partial translation of Denshi Tsushin Gakkai Ronbunshi Sect. A-D) (See also Electron. Comm. Japan) 1970-
- * Systems Control Lett. Systems & Control Letters. (Amsterdam) 1- 1981/82-Systems Sci. Wrocław Technical University. Systems Science. (Wrocław)
- † Szamki Közlem. Számki Közlemények. [Communications Notes] Res. Inst. Appl. Comput. Sci., Budapest.
- SZÁMKI Tanulmányok Számítógépalkalmazási Kutató Intézet. Tanulmányok. (Budapest) No. 5- 1980-
- Szigma-Mat.-Közgazdasági Folyóirat Szigma. Matematikai-Közgazdasági Folyóirat. (Budapest)
- Tamkang J. Math. Tamkang Journal of Mathematics. (Taipei)
- † Tamsui Oxford Coll. Lecture Notes Ser. Tamsui Oxford College Lecture Notes Series. Tamsui Oxford Coll., Taipei.
- ányok-MTA Számítástech. Automat. Kutató Int. Budapest Tanulmányok. MTA Számitástechnikai és Automatizálási Kutató Intézet Budapest. (Budapest)
- * Tap Chi Toán Học Tạp Chi Toán Học. Progress of Mathematical Sciences. (Hanoi) 9. no. 2- 1981-
- Tartu Riikl. Ül. Toimetised Tartu Riikliku Ülikooli Toimetised. Uchenye Zapiski Tartuskogo Gosudarstvennogo Universiteta. Acta et Commentationes Universitatis Tartuensis. (Tartu)
- * Tashkent. Gos. Univ. Sb. Nauchn. Trudov Tashkentskii Gosudarstvennyi Universitet. Sbornik Nauchnykh Trudov. (Tashkent) (Formerly: Taškent. Gos. Univ. Sb. Naučn.
- Trudov) Taškent. Gos. Univ. Sb. Naučn. Trudov Taškentskii Gosudarstvennyi Universitet. Sbornik Naučnyh Trudov. (Tashkent) (Continued as: Tashkent. Gos. Univ. Sb.
- Nauchn. Trudov) † Tata Inst. Fund. Res. Lectures on Math. and Phys. Tata Institute of Fundamental
- Research Lectures on Mathematics and Physics. Springer, Berlin.

 † Tata Inst. Fund. Res. Studies in Math. Tata Institute of Fundamental Research Studies in Mathematics. Tata Inst. Fundamental Res., Bombay.
- † Tata Inst. Fund. Res. Studies in Math. Tata Institute of Fundamental Research Studies in Mathematics. Springer, Berlin.
- Tbiliss. Gos. Univ. Inst. Prikl. Mat. Trudy Tbilisskii Gosudarstvennyi Universitet. Institut Prikladnoï Matematiki. Trudy. (Tbilisi)
 Tech. Rep. Kansai Univ. Kansai University. Technology Reports. (Suita)

- Tech. Rep. Osaka Univ. Technology Reports of the Osaka University. (Suita) † Tech. Tworczego Myślenia Techniki Tworczego Myślenia. [Techniques of Creative Thinking] WNT, Warsaw.
- Technikgeschichte Technikgeschichte. Verein Deutscher Ingenieure. (Düsseldorf)
- † Techniques Phys.
- Techniques Phys. Techniques of Physics. Academic Press, London.

 Technometrics Technometrics. A Journal of Statistics for the Physical, Chemical and Engineering Sciences. (Washington, D.C.)
- † Tekst. IMFUFA Tekster fra IMFUFA. [Texts from IMFUFA] Roskilde Univ.,
- Tellus Svenska Geofysiska Föreningen. Tellus. A Quarterly Journal of Geophysics. (Copenhagen)
- Tensor (N.S.) The Tensor Society. Tensor. New Series. (Chigasaki)
- Teor. Funkcii Funkcional. Anal. i Priložen. Har'kovskii Ordena Trudovogo Krasnogo Znameni Gosudarstvennyi Universitet im. A. M. Gor'kogo. Teorija Funkcii, Funkcional'nyi Analiz i ih Priloženija. (Kharkov) (Continued as: Teor. Funktsii Funktsional. Anal. i Prilozhen.)
- * Teor. Funktsii Funktsional. Anal. i Prilozhen. Khar'kovskii Ordena Trudovogo Krasnogo Znameni Gosudarstvennyi Universitet imeni A. M. Gor'kogo. Teoriya Funktsii, Funktsional'nyi Analiz i ikh Prilozheniya. (Khar'kov) (Formerly: Teor. Funkcii Funkcional, Anal, i Priložen.)
- † Teor. Metod. Sistem. Anal. Теория и Методы Системного Анализа. [Theory and Methods of Systems Analysis] "Nauka", Moscow.
- Teor. Optimal. Rešenii-Trudy Sem. Processy Optimal. Upravlenija VI Sekcija Akademii Nauk Litovskoĭ SSR. Institut Fiziki i Matematiki. Teorija Optimal'nyh Rešeniĭ—Trudy Seminara "Processy Optimal" nogo Upravlenija". (Vilnius) (Continued as: Teor. Optimal.. Reshenii—Trudy Sem. Protsessy Optimal. Upravleniya VI Sektsiya)
- * Teor. Optimal.. Reshenii-Trudy Sem. Protsessy Optimal. Upravleniya VI Sektsiya Akademiya Nauk Litovskoi SSR. Institut Fiziki i Matematiki. Teoriya Optimal'nykh Reshenii-Trudy Seminara "Protsessy Optimal'nogo Upravleniya". (Vilnius) (Formerly: Teor. Optimal. Rešenii-Trudy Sem. Processy Optimal. Upravlenija VI Sekcija)
- Teor. Primen. Meh. Jugoslovensko Društvo za Mehaniku. Teorijska i Primenjena Mehanika. (Belgrade) No. 4- 1978-
- † Teor. Techn. System. Teoria i Technika Systemów. [Theory and Technology of Systems] PWN. Warsaw.
- Teor. Verojatnost. i Mat. Statist. Teorija Verojatnostei i Matematičeskaja Statistika. (Kiev) (Translated as: Theory Probab. Math. Statist.) (Continued as: Teor. Veroyatnost. i Mat. Statist.)
- Teor. Verojatnost. i Primenen. Akademija Nauk SSSR. Teorija Verojatnostei i ee Primenenija. (Moscow) (Translated as: Theory Probab. Appl.) (Continued as: Teor. Verovatnost, i Primenen.)
- * Teor. Veroyatnost. i Mat. Statist. Teoriya Veroyatnostei i Matematicheskaya Statistika. (Kiev) (Translated as: Theory Probab. Math. Statist.) (Formerly: Teor. Verojatnost. i Mat. Statist.)
- * Teor. Veroyatnost. i Primenen. Akademiya Nauk SSSR. Teoriya Veroyatnosteï i ee Primeneniya. (Moscow) (Translated as: Theory Probab. Appl.) (Formerly: Teor. Verojatnost, i Primenen.)
- Teorema Teorema (Valencia)
 Teoret. Elektrotehn. L'vovskii Gosudarstvennyi Universitet. Teoretičeskaja Elektrotehnika. (Lvov) (Continued as: Teoret. Elektrotekhn.)
- Teoret. Elektrotekhn. L'vovskii Gosudarstvennyi Universitet. Teoreticheskaya Elektrotekhnika. (L'vov) (Formerly: Teoret. Elektrotehn.)
- Teoret. i Prikl. Meh. (Kiev/Donetsk) Doneckii Gosudarstvennyi Universitet. Teoretičeskaja i Prikladnaja Mehanika. (Kiev/Donetsk) (Continued as: Teoret. i Prikl. Mekh. (Kiev/Donetsk))
- Teoret. i Prikl. Meh. (Minsk) Belorusskii Politehničeskii Institut. Teoretičeskaja i Prikladnaja Mehanika. (Minsk) (Continued as: Teoret. i Prikl. Mekh. (Minsk))
- * Teoret. i Prikl. Mekh. (Kiev/Donetsk) Donetskii Gosudarstvennyi Universitet. Teoreticheskaya i Prikladnaya Mekhanika. (Kiev/Donetsk) (Formerly: Teoret. i Prikl. Meh. (Kiev/Donetsk))
- * Teoret. i Prikl. Mekh. (Minsk) Belorusskii Politekhnicheskii Institut. Teoreticheskaya i Prikladnaya Mekhanika. (Minsk) (Formerly: Teoret. i Prikl. Meh. (Minsk))
- Teoret. Mat. Fiz. Akademiya Nauk SSSR. Teoreticheskaya i Matematicheskaya Fizika. (Moscow) (Translated as: Theoret. and Math. Phys.)
- Teoret. Prilož. Meh. B"lgarska Akademija na Naukite. Teoretična i Priložna Mehanika. (Sofia) (Continued as: Teoret. Prilozhna Mekh.)
- * Teoret. Prilozhna Mekh. B"lgarska Akademiya na Naukite. Teoretichna i Prilozhna Mekhanika. (Sofia) (Formerly: Teoret. Prilož. Meh.) 13- 1982-
- TESLA Electron. TESLA Electronics. Quarterly Review of Czechoslovak Electronics and Telecommunications. (Prague)
- † Teubner Studienskr. Teubner Studienskripten. [Teubner Study Scripts] Teubner, Leipzig.
- † Teubner-Texte zur Math. Teubner-Texte zur Mathematik. [Teubner Texts in Mathematics] Teubner, Leipzig.
- Texas J. Sci. The Texas Journal of Science. (San Angelo, Tex.) 31- 1979-
- † Text. Metod. Mat. Textos de Métodos Matemáticos. [Texts on Mathematical Methods] Inst. Mat., Univ. Fed. Rio de Janeiro, Rio de Janeiro.
- † Texte Kritisch. Psych. Texte zur Kritischen Psychologie. [Texts in Critical Psychology] Campus, Frankfurt.
- † Textes Math. Textes Mathématiques. [Mathematical Texts] CEDIC, Paris
- † Texts Monographs Phys. Texts and Monographs in Physics. Springer, New York. Theoret. and Math. Phys. Theoretical and Mathematical Physics. (New York)
- (Translation of Teoret. Mat. Fiz.) 1969-Theoret. Comput. Sci. Theoretical Computer Science. (Amsterdam)
- Theoret. Linguist. Theoretical Linguistics. (Berlin)
- Theoret. Population Biol. Theoretical Population Biology. (New York)

Theoria Theoria A Swedish Journal of Philosophy. (Stockholm/Vällingby)

Theory and Decision Theory and Decision. An International Journal for Philosophy and Methodology of the Social Sciences. (Dordrecht)

† Theory and Decision Library Theory and Decision Library. Reidel, Dordrecht. Theory Probab. Appl. Theory of Probability and its Applications. An English translation of the Soviet journal Teoriya Veroyatnosteï i ee Primeneniya. (Philadelphia, Pa.) (Translation of Teor. Veroyatnost. i Primenen.) 1956-Theory Probab. Math. Statist. Theory of Probability and Mathematical Statistics

(Providence, R.I.) (Translation of Teor. Veroyatnost. i Mat. Statist.) 1974-

† Thèse Thèse. [Thesis] Juris, Zurich. Tianmen Xuebao See Acta Astronom. Sinica

Tianti Wuli Xuebao See Acta Astrophys. Sinica

† Tilastotieteellisiä Tutkimuksia Tilastotieteellisiä Tutkimuksia. [Statistical Studies] Finnish Statist. Soc., Helsinki.

Tôhoku Math. J. (2) The Tôhoku Mathematical Journal. Second Series. (Sendai) Tokyo J. Math. Tokyo Journal of Mathematics. (Tokyo) 1- 1978-

† Topics Appl. Phys. Topics in Applied Physics. Springer, Berlin. † Topics Current Phys. Topics in Current Physics. Springer, Berlin.

Topology Topology. An International Journal of Mathematics. (Oxford)

Topology Appl. Topology and its Applications. (Amsterdam)

Topology Proc. Topology Proceedings. (Auburn, Ala.) 1- 1977
† Trab. Investigação 79 Trabalhos de Investigação 79. [Research Monographs 79] Univ. Nova Lisboa, Lisbon

† Trab. Investigação 80 Trabalhos de Investigação 80. [Research Monographs 80] Univ. Nova Lisboa, Lisbon

† Trab. Investigação 81 Trabalhos de Investigação 81. [Research Monographs 81] Univ. Nova Lisboa, Lisbon.

Trabajos Estadist. Investigación Oper. Trabajos de Estadística y de Investigación Operativa. (Madrid)

† Traité d'Électricité Traité d'Électricité. [Treatise on Electricity] Georgi, St.-Saphorin. Trans. Amer. Math. Soc. Transactions of the American Mathematical Society. (Providence, R. I.)

† Trans. Amer. Philos. Soc., Vol. 71 Transactions of the American Philosophical Society, Vol. 71. Amer. Philos. Soc., Philadelphia, Pa.

Trans. ASME Ser. E.J. Appl. Mech. American Society of Mechanical Engineers. Transactions of the ASME. Series E. Journal of Applied Mechanics. (New York)

Trans. ASME Ser. G J. Dynamic Systems Measurement Control American Society of Mechanical Engineers. Transactions of the ASME. Series G. Journal of Dynamic Systems, Measurement and Control. (New York)

Trans. Illinois State Acad. Sci. Illinois State Academy of Science. Transactions. (Springfield, Ill.) 71, no. 2- 1978-

† Trans. Math. Monographs Translations of Mathematical Monographs. Amer. Math. Soc., Providence, R.I.

Trans. Moscow Math. Soc. Transactions of the Moscow Mathematical Society. (Providence, R.I.) (Translation of Trudy Moskov. Mat. Obshch.)

† Trans. New York Acad. Sci. Ser. II Transactions of the New York Academy of Sciences, Series II. New York Acad. Sci., New York.

Trans. Roy. Soc. Canada (4) Transactions of the Royal Society of Canada. Chemical, Mathematical and Physical Sciences. Fourth Series. (Ottawa, Ont.)

Trans. Roy. Soc. South Africa Transactions of the Royal Society of South Africa.

(Cape Town)

Transport Theory Statist. Phys. Transport Theory and Statistical Physics. An International Journal for Rapid Communication. (New York)

Transportation Plann. Tech. Transportation Planning and Technology. (London)
Transportation Res. Part B Transportation Research. Part B. Methodological. (Oxford) 13- 1979-

Transportation Sci. Operations Research Society of America. Transportation Science Section. Transportation Science. (Baltimore, Md.)

† Travaux Humanisme et Renaissance Travaux de l'Humanisme et Renaissance. [Works of Humanism and the Renaissance] Droz, Geneva.

Travaux Sém. Anal. Convexe Travaux du Séminaire d'Analyse Convexe. (Montpellier) 6- 1976-

TRU Math. TRU Mathematics. (Tokyo)

Trudy Akad. Nauk Litov. SSR Ser. B Lietuvos TSR Mokslų Akademijos. Darbai. Serija B. Akademii Nauk Litovskoi SSR. Trudy. Seriya B. (Vilnius)

Trudy Fiz. Inst. Lebedev. Akademiya Nauk SSSR. Trudy Fizicheskogo Instituta imeni P. N. Lebedeva. (Moscow) (Translated as: Proc. (Trudy) P. N. Lebedev Phys. Inst.) Trudy Geom. Sem. Kazan. Univ. Kazanskii Universitet. Trudy Geometricheskogo

Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR Trudy Instituta Matematiki i Mehaniki. Ural'skiĭ Naučnyĭ Centr. Akademija Nauk SSSR. (Sverdlovsk) (Continued as: Trudy Inst. Mat. i Mekh. Ural, Nauchn, Tsentr Akad, Nauk SSSR)

Trudy Inst. Mat. i Mekh. Ural. Nauchn. Tsentr Akad. Nauk SSSR Trudy Instituta Matematiki i Mekhaniki. Ural'skii Nauchnyi Tsentr. Akademiya Nauk SSSR. (Sverdlovsk) (Formerly: Trudy Inst. Mat. i Meh. Ural. Naučn. Centr Akad. Nauk SSSR)

Trudy Inst. Sistem Upravlenija Akad. Nauk Gruzin. SSR Akademija Nauk Gruzinskoji SSR. Trudy Instituta Sistem Upravlenija. (Tbilisi) (Continued as: Trudy Inst. Sistem Upravleniya Akad. Nauk Gruzin. SSR)

Trudy Inst. Sistem Upravleniya Akad. Nauk Gruzin. SSR Akademiya Nauk Gruzinskol SSR. Trudy Instituta Sistem Upravleniya. (Tbilisi) (Formerly: Trudy Inst. Sistem

Upravlenija Akad. Nauk Gruzin. SSR)
Trudy Kirgiz. Gos. Univ. Ser. Mat. Nauk Kirgizskii Gosudarstvennyi Universitet. Trudy Kirgizskogo Gosudarstvennogo Universiteta. Seriya Matematicheskikh Nauk.

Trudy Mat. Inst. Steklov. Akademiya Nauk Soyuza Sovetskikh Sotsialisticheskikh Re-

spublik. Trudy Matematicheskogo Instituta imeni V. A. Steklova. (Moscow) (Translated as: Proc. Steklov Inst. Math.)

Trudy Moskov. Mat. Obšč. Trudy Moskovskogo Matematičeskogo Obščestva. (Moscow) (Translated as: Trans. Moscow Math. Soc.) (Continued as: Trudy Moskov. Mat. Obshch.)

Trudy Moskov. Mat. Obshch. Trudy Moskovskogo Matematicheskogo Obshchestva. (Moscow) (Translated as: Trans. Moscow Math. Soc.) (Formerly: Trudy Moskov. Mat. Obšč.)

Trudy Moskov. Orden. Lenin. Energet. Inst. Trudy Moskovskogo Ordena Lenina

Energeticheskogo Instituta. (Moscow)

Trudy Samarkand. Gos. Univ. (N.S.) Ministerstvo Vysshego i Srednego Spetsial'nogo Obrazovaniya UzSSR. Trudy Samarkandskogo Gosudarstvennogo Universiteta imeni A. Navoi. Novaya Seriya. (Samarkand)

Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. (Džambul) Džambulskii. Tehnologičeskii Institut Legkoĭ i Piščevoĭ Promyšlennosti. Seminar Kafedr Teoretičeskoĭ Mehaniki i Vysšei Matematiki. Trudy. (Dzhambul) (Continued as: Trudy Sem. Kaf. Teoret.

Mekh. i Vyssh. Mat. (Dzhambul)) * Trudy Sem. Kaf. Teoret. Mekh. i Vyssh. Mat. (Dzhambul) Dzhambulskii Tekhnologicheskii Institut Legkoi i Pishchevoi Promyshlennosti. Seminar Kafedr Teoreticheskoĭ Mekhaniki i Vyssheĭ Matematiki. Trudy. (Dzhambul) (Formerly: Trudy Sem. Kaf. Teoret. Meh. i Vysš. Mat. (Džambul))

Trudy Sem. Kraev. Zadačam Trudy Seminara po Kraevym Zadačam. (Kazan) (Continued as: Trudy Sem. Kraev. Zadacham)

* Trudy Sem. Kraev. Zadacham Trudy Seminara po Kraevym Zadacham. (Kazan) (Formerly: Trudy Sem. Kraev. Zadačam)

Trudy Sem. Petrovsk. Moskovskii Universitet. Trudy Seminara imeni I. G. Petrovskogo. (Moscow)

† Trudy Sem. S. L. Soboleva, No. 1 Труды Семвнара С. Л. Соболева, No. 1. [Proceedings of the S. L. Sobolev Seminar, No. 1] Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk. (Formerly: Proc. Sobolev Sem.)

† Trudy Sem. S. L. Soboleva, No. 2 Труды Семпнара С. Л. Соболева, No. 2. [Proceedings of the S. L. Sobolev Seminar, No. 2] Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk. (Formerly: Proc. Sobolev Sem.)

Trudy Sem. Vektor. Tenzor. Anal. Trudy Seminara po Vektornomu i Tenzornomu Analizu s ikh Prilozheniyami k Geometrii, Mekhanike i Fizike. (Moscow)

Trudy Thiliss. Mat. Inst. Razmadze Akad. Nauk Gruzin. SSR Akademiya Nauk Gruzinskoĭ SSR. Trudy Tbilisskogo Matematicheskogo Instituta im. A. M. Razmadze. (Tbilisi)

Trudy Tbiliss. Univ. Tbilisskii Universitet. Trudy. Fiziko- Matematicheskie i Estestvennye Nauki. (Tbilisi)

Trudy Tomsk. Gos. Univ. Trudy Tomskogo Gosudarstvennogo Universiteta im. V. V. Kuibysheva. (Tomsk) Trudy Unio. Družby Narod. Trudy Universiteta Družby Narodov im. Patrisa Lumumby.

(Moscow) (Continued as: Trudy Univ. Druzhby Narod.)

*Trudy Univ. Druzhby Narod. Trudy Universiteta Druzhby Narodov imeni Patrisa Lumumby. (Moscow) (Formerly: Trudy Univ. Družby Narod.)

* Trudy Vychisl. Tsentra Akad. Nauk Armyan. SSR i Erevan. Gos. Univ. Mat. Voprosy Kibernet. i Vychisl. Tekhn. Trudy Vychislitel'nogo Tsentra Akademii Nauk Armyanskoi SSR i Erevanskogo Gosudarstvennogo Universiteta. Matematicheskie Voprosy Kibernetiki i Vychislitel'noi Tekhniki. (Erevan) (Formerly: Trudy Vyčisl. Centra Akad. Nauk Armjan. SSR i Erevan. Gos. Univ. Mat. Voprosy Kibernet. i Vyčisl. Tehn.)

* Trudy Vychisl. Tsentra Akad. Nauk Gruzin. SSR Akademiya Nauk Gruzinskoi SSR. Trudy Vychislitel'nogo Tsentra. (Tbilisi) (Formerly: Trudy Vyčisl. Centra Akad. Nauk Gruzin. SSR)

* Trudy Vychisl. Tsentra Tartu. Gos. Univ. Trudy Vychislitel'nogo Tsentra. Tartuskii Gosudarstvennyi Universitet. (Tartu) (Formerly: Trudy Vyčisl. Centra Tartu. Gos. Univ.)

Trudy Vyčisl. Centra Akad. Nauk Armjan. SSR i Erevan. Gos. Univ. Mat. Voprosy Kibernet. i Vyčisl. Tehn. Trudy Vyčislitel'nogo Centra Akademii Nauk Armjai SSR i Erevanskogo Gosudarstvennogo Universiteta. Matematičeskie Voprosy Kibernetiki i Vyčislitel'noi Tehniki. (Erevan) (Continued as: Trudy Vychisl. Tsentra Akad. Nauk Armyan, SSR i Erecan, Gos. Univ. Mat. Voprosy Kibernet. i Vychisi. Tekni. Trudy Vyčisl. Centra Akad. Nauk Gruzin. SSR Akademija Nauk Gruzinskoi SSR.

Trudy Vyčislitel'nogo Centra. (Tbilisi) (Continued as: Trudy Vychisl. Tsentra Akad. Nauk Gruzin. SSR)

Trudy Vyčisl. Centra Tartu. Gos. Univ. Trudy Vyčislitel'nogo Centra. Tartuskii Gosudarstvennyi Universitet. (Tartu) (Continued as: Trudy Vychisl. Tsentra Tartu. Gos. Univ.)

Tsukuba J. Math. Tsukuba Journal of Mathematics. (Ibaraki)

TUM-INFO TUM-INFO. Tech. Univ. München, Munich.

† Tutkimuksia-Res. Rep. Tutkimuksia-Research Reports. Univ. Helsinki, Helsinki. * Two-Year College Math. J. The Two-Year College Mathematics Journal. (Washington, D.C.) 13, no. 4- 1982-

Tydskr. Natuurwetenskap. Die Suid-Afrikaanse Akademie vir Wetenskap en Kuns. Tydskrif vir Natuurwetenskappe. (Pretoria) (Continued as: Swid-Afrikaanse Tydskr. Natuurwetenskap Tegnol.)

U.S.S.R. Comput. Math. and Math. Phys. U.S.S.R. Computational Mathematics and Mathematical Physics. (Oxford) (Translation of Zh. Vychisl. Mat. i Mat. Fiz.) 1962-

Učen. Zap. CAGI Učenye Zapiski Central'nogo Aèro-Gidrodinamičeskogo Instituta

(CAGI). (Moscow) (Continued as: Uchen. Zap. TSAGI)
Uchen. Zap. TSAGI Uchenye Zapiski Tsentral'nogo Aèro-Gidrodinamicheskogo Instituta (TSAGI). (Moscow) (Formerly: Učen. Zap. CAGI) Ukrain. Fiz. Ž. Akademija Nauk Ukrainskoï SSR. Otdelenie Fiziki. Ukrainskiĭ Fiziče-

skii Žurnal. (Kiev) (Continued as: Ukrain. Fiz. Zh.)

- in. Fiz. Zh. Akademiya Nauk Ukrainskoi SSR. Otdelenie Fiziki. Ukrainskii
- Fizicheskii Zhurnal. (Kiev) (Formerly: Ukrain. Fiz. Ž.)
 Ukrain. Geom. Sb. Ukrainskii Geometricheskii Sbornik. (Kharkov)
 Ukrain. Mat. Ž. Akademija Nauk Ukrainskoi SSR. Institut Mate Akademija Nauk Ukrainskoi SSR. Institut Matematiki. Ukrainskii českii Žurnal. (Kiev) (Continued as: Ukrain. Mat. Zh.)
- Akademiya Nauk Ukrainskoi SSR. Institut Mate Matematicheskii Zhurnal. (Kiev) (Formerly: Ukrain. Mat. Ž.)
- Ukrainian Math. J. Ukrainian Mathematical Journal. (New York) (Translation of Ukrain, Mat. zh.) 1967-
- † Ullstein Buch Ullstein Buch. [Ullstein Book] Ullstein, Frankfurt.
- m Inst. Tech. Rep. Ulsan Institute of Technology. Report. (Ulsan)
- ergrad. Texts Math. Undergraduate Texts in Mathematics. Springer, New York.
- Uni-Taschenbücher Uni-Taschenbücher. [Uni Paperbacks] Steinkopff, Darmstadt. Uni-Taschenbücher. [Uni Paperbacks] Fischer, Stuttgart.
- Uni-Taschenbücher. [Uni Paperbacks] † Uni-Taschenbücher Haupt, Bern.
- Uni-Taschenbücher. [Uni Paperbacks] Hüthig, Heidelberg.
- Uni-Taschenbücher Uni-Taschenbücher. [Uni Paperbacks] Schöningh, Paderborn.
- Uni-Taschenhücher Uni-Taschenbücher. [Uni Paperbacks] Birkhäuser, Basel. Uni-Taschenbücher Uni-Taschenbücher. [Uni Paperbacks] Quelle & Meyer, Heidel-
- berg. † Univ. Arkansas Lecture Notes in Math. University of Arkansas Lecture Notes in
- Mathematics. Univ. Arkansas, Fayetteville, Ark.
 Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Elektron. Telekomun. Automat. Univerzitet u Beogradu Publikacije Elektrotehničkog Fakulteta. Serija Elektronika, Telekomunikacije, Automatika. (Belgrade)
- Unio, Beograd, Publ. Elektrotehn, Fak, Ser, Mat. Fiz. Univerzitet u Beogradu, Publikacije Elektrotehničkog Fakulteta. Serija Matematika i Fizika. (Belgrade)
- Univ. Beograd. Tehn. Fiz. Univerzitet u Beogradu. Tehnička Fizika. Journal of Engineering Physics. (Belgrade)
- † Univ. Missouri Stud. University of Missouri Studies. Univ. Missouri Press, Columbia, Mo.
- Univ. u Novom Sadu Zb. Rad. Prirod.-Mat. Fak. Univerzitet u Novom Sadu. Zbornik Radova Prirodno-Matematichkog Fakulteta=Univerzitet u Novom Sadu. Zbornik Radova Prirodno-Matematičkog Fakulteta. (Novi Sad)
- † Univ. Western Ontario Ser. Philos. Sci. University of Western Ontario Series in Philosophy of Science. Reidel, Dordrecht.
- Uniw. Ślaski w Katowicach Prace Nauk.-Prace Mat. Uniwersytet Ślaski w Katowicach. Prace Naukowe. Prace Matematyczne. (Katowice)
- † Unsolved Problems in Intuitive Math. Unsolved Problems in Intuitive Mathematics. Springer, New York.
- nemye Sistemy Upravljaemye Sistemy. Institut Matematiki, Institut Kataliza Sibirskogo Otdelenija Akademii Nauk SSSR. (Novosibirsk) (Continued as: Upravlyaemye Sistemy)
- Upravlyaemye Sistemy Upravlyaemye Sistemy. Institut Matematiki. Institut Kataliza Sibirskogo Otdeleniya Akademii Nauk SSSR. (Novosibirsk) (Formerly: Upravlnemye Sistemy)
- Ural. Gos. Univ. Mat. Zap. Ural'skii Gosudarstvennyi Universitet im. A. M. Gor'kogo. Ural'skoe Matematicheskoe Obshchestvo. Matematicheskie Zapiski. (Sverdlovsk)
- US i M-Upravljajuščie Sistemy i Mašiny US i M-Upravljajuščie Sistemy i Mašiny. (Kiev) (Continued as: US i M-Upravlyayushchie Sistemy i Mashiny) * US i M-Upravlyayushchie Sistemy i Mashiny US i M-Upravlyayushchie Sistemy i
- Mashiny. (Kiev) (Formerly: US i M-Upravljajuščie Sistemy i Mašiny)
- Uspehi Fiz. Nauk Akademija Nauk SSSR. Uspehi Fizičeskih Nauk. (Moscow) (Translated as: Soviet Phys. Uspekhi) (Continued as: Uspekhi Fiz. Nauk)
- Uspehi Mat. Nauk Akademija Nauk SSSR i Moskovskoe Matematičeskoe Obščestvo. Uspehi Matematičeskih Nauk. (Moscow) (Translated as: Russian Math. Surveys) (Continued as: Uspekhi Mat. Nauk)
- * Uspekhi Fiz. Nauk Akademiya Nauk SSSR. Uspekhi Fizicheskikh Nauk. (Moscow) (Translated as: Soviet Phys. Uspekhi) (Formerly: Uspehi Fiz. Nauk)
- * Uspekhi Mat. Nauk Akademiya Nauk SSSR i Moskovskoe Matematicheskoe Obshchestvo. Uspekhi Matematicheskikh Nauk. (Moscow) (Translated as: Russian Math. Surveys) (Formerly: Uspehi Mat. Nauk)
- Utilitas Math. Utilitas Mathematica. A Canadian Journal of Applied Mathematics, Computer Science, and Statistics. (Winnipeg, Man.)
- † Various Publ. Ser. Various Publications Series. Aarhus Univ., Aarhus. Verh. Konink. Acad. Wetensch. België Verhandlingen van de Koninklijke Academie voor Wetenschappen, Letteren en Schone Kunsten van België. Klasse der Wetenschappen. (Brussels)
- † Veröffentl. Forschungsinst. Deutsch. Museum Gesch. Naturwiss. Tech., Reihe A Veröffentlichungen des Forschungsinstituts des Deutschen Museums für die Geschichte der Naturwissenschaften und der Technik, Reihe A. [Publications of the Research Institute of the German Museum for the History of Natural Sciences and Technology, Series A] Deutsches Museum, Munich.
- † Veröffentl. Forschungsinst. Deutsch. Museum Gesch. Naturwiss. Tech., Reihe C Veröffentlichungen Forschungsinstitut Deutschen Museums Geschichte Naturwissenschaft und Technik, Reihe C. [Publications of the Research Institute of the German Museum for the History of Natural Sciences and Technology, Series C] Deutsches Museum,
- † Veröffentl. Geodät. Inst. Rheinisch-Westfäl. Techn. Hochsch. Aachen Veröffentlichung des Geodätischen Instituts der Rheinisch-Westfälischen Technischen Hochschule Aachen. [Publications of the Institute of Geodetics of the Rheinisch-Westfälischen Technischen Hochschule Aachen | Rheinisch-Westfälische Tech. Hochschule, Aachen
- † Veröffentl. Leibniz-Archivs Veröffentlichungen des Leibniz-Archivs. [Publications of the Leibniz Archive] Klostermann, Frankfurt.
- † Veröffentl. Schweizer. Gesellsch. Medizin Naturwissensch. Veröffentlichungen der Schweizerischen Gesellschaft für Geschichte der Medizin und der Naturwissenschaf-

- ten. [Publications of the Swiss Society for the History of Medicine and Sciences] Sauerländer, Aarau
- Verzekerings-Arch. Het Verzekerings-Archief. (The Hague)
- Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk Vesci Akadèmii Navuk BSSR. Seryja Fizika-Matèmatyènyh Navuk. (Minsk) (Continued as: Vestsi Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk)
- Vestnik Akad. Nauk Kazah. SSR Vestnik Akademii Nauk Kazahskoi SSR. (Alma-Ata) (Continued as: Vestnik Akad. Nauk Kazakh. SSR)
- * Vestnik Akad. Nauk Kazakh. SSR Vestnik Akademii Nauk Kazakhskoï SSR. (Alma-Ata) (Formerly: Vestnik Akad. Nauk Kazah. SSR)
- Vestnik Akad. Nauk SSSR Vestnik Akademii Nauk SSSR. (Moscow)
 Vestnik Beloruss. Gos. Univ. Ser. I Vestnik Belorusskogo Gosudarstvennogo Universiteta im. V. I. Lenina. Nauchnyĭ Zhurnal. Seriya I. Matematika, Fizika, Mekhanika.
- Vestnik Har'kov. Gos. Univ. Vestnik Har'kovskogo Gosudarstvennogo Universiteta. Serija Mehaniko-Matematičeskaja. Zapiski Mehaniko-Matematičeskogo Fakulteta i Har'kovskogo Matematičeskogo Obščestva. (Kharkov) (Continued as: Vestnik Khar'kov. Gos. Univ.)
- * Vestnik Khar'kov. Gos. Univ. Vestnik Khar'kovskogo Gosudarstvennogo Universiteta. Seriya Mekhaniko-Matematicheskaya. Zapiski Mekhaniko-Matematicheskogo. Fakul'teta i Khar'kovskogo Matematicheskogo Obshchestva. (Khar'kov) (Formerly: Vestnik Har'kov. Gos. Univ.)
- Vestnik Leningrad. Univ. Fiz. Him. Vestnik Leningradskogo Universiteta. Fizika, Himija. (Leningrad) (Continued as: Vestnik Leningrad. Univ. Fiz. Khim.)
- * Vestnik Leningrad. Univ. Fiz. Khim. Vestnik Leningradskogo Universiteta. Fizika, Khimiya. (Leningrad) (Formerly: Vestnik Leningrad. Univ. Fiz. Him.)
- Vestnik Leningrad. Univ. Mat. Meh. Astronom. Vestnik Leningradskogo Universiteta. Matematika, Mehanika, Astronomija. (Leningrad) (Mathematics section translated as: Vestnik Leningrad Univ. Math.) (Continued as: Vestnik Leningrad. Univ. Mat. Mekh. Astronom.)
- Vestnik Leningrad. Univ. Mat. Mekh. Astronom. Vestnik Leningradskogo Universiteta.
 Matematika, Mekhanika, Astronomiya. (Leningrad) (Mathematics section translated as: Vestnik Leningrad Univ. Math.) (Formerly: Vestnik Leningrad. Univ. Mat. Meh. Astronom.)
- Vestnik Leningrad Univ. Math. Vestnik Leningrad University. Mathematics. (Providence, R.I.) (Translation of the mathematics section of Vestnik Leningrad. Univ. Mat. Mekh. Astronom.) 1968-
- Vestnik L'vov. Politehn. Inst. Vestnik L'vovskogo Politehničeskogo Instituta. (L'vov) (May also appear as: Visnik L'viv. Politehn. Inst.) (Continued as: Vestnik L'vov. Politekhn, Inst.) No. 141- 1980-
- Vestnik Moskov. Univ. Ser. I Mat. Meh. Vestnik Moskovskogo Universiteta. Serija I. Matematika, Mehanika. (Moscow) (Mathematics section translated as: Moscow Univ. Math. Bull.) (Continued as: Vestnik Moskov. Univ. Ser. I Mat. Mekh.)
- * Vestnik Moskov. Univ. Ser. I Mat. Mekh. Vestnik Moskovskogo Universiteta. Seriya I. Matematika, Mekhanika. (Moscow) (Mathematics section translated as: Moscow Univ. Math. Bull.) (Formerly: Vestnik Moskov. Univ. Ser. I Mat. Meh.)
- Vestnik Moskov. Univ. Ser. III Fiz. Astronom. Vestnik Moskovskogo Universiteta. Seriya III. Fizika, Astronomiya. (Moscow) (Physics section translated as: Moscow Univ. Phys. Bull.)
- * Vestnik Moskov. Univ. Ser. XV Vychisl. Mat. Kibernet. Vestnik Moskovskogo Universiteta. Seriya XV. Vychislitel'naya Matematika i Kibernetika. (Moscow) (Formerly: Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet.)
- Vestnik Moskov. Univ. Ser. XV Vyčisl. Mat. Kibernet. Vestnik Moskovskogo Universiteta. Serija XV. Vyčislitel'naja Matematika i Kibernetika. (Moscow) (Con-
- tinued as: Vestnik Moskov. Univ. Ser. XV Vychisl. Mat. Kibernet.) * Vestsi Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk Vestsi Akadèmii Navuk BSSR. Seriya Fizika-Matèmatychnykh Navuk. (Minsk) (Formerly: Vesci Akad. Navuk BSSR Ser. Fiz.-Mat. Navuk)
 - Vidya B Vidya B. Sciences. The Journal of the Gujarat University. (Ahmedabad)
- † Vienna Circle Coll. Vienna Circle Collection. Reidel, Dordrecht
- † Vieweg Stud. Aufbaukurs Math. Vieweg Studium, Aufbaukurs Mathematik. [Vieweg Studies: Mathematics Course] Vieweg, Braunschweig.
 † Vieweg Stud. Grundkurs Math. Vieweg Studium: Grundkurs Mathematik. [Vieweg
- Studies: Basic Mathematics Course] Vieweg, Braunschweig.
- † Vieweg Tracts Pure Appl. Phys. Vieweg Tracts in Pure and Applied Physics. Vieweg, Braunschweig.
- Vignana Bharathi Vignana Bharathi. (Bangalore) Vijnana Parishad Anusandhan Patrika Vijnana Parishad Anusandhan Patrika (The Research Journal of the Hindu Science Academy). (Allahabad)
- Vikram Vikram. (Ujjain) Virginia J. Sci. Virginia Journal of Science. (Richmond, Va.)
- Vīsnik Kiïv. Univ. Ser. Mat. Meh. Visnik Kiïvs'kogo Universitetu. Serija Matematiki ta Mehaniki. (Kiev) (Continued as: Visnik Kiiv. Univ. Ser. Mat. Mekh.)
- * Visnik Kiiv. Univ. Ser. Mat. Mekh. Visnik Kiivs'kogo Universitetu. Seriya Matematiki ta Mekhanīki. (Kiev) (Formerly: Vīsnik Kiīv. Unīv. Ser. Mat. Meh.)
- Vīsnik L'vīv. Derž. Unīv. Ser. Meh.-Mat. Vīsnik L'vīvs'kogo Ordena Lenîna Deržavogo Universitetu im. Ivana Franka. Serija Mehaniko-Matematična. (Lvov) (Continued as: Vīsnik L'vīv. Derzh. Unīv. Ser. Mekh.-Mat.)
- * Vīsnik L'vīv. Derzh. Unīv. Ser. Mekh.-Mat. Vīsnik L'vīvs'kogo Ordena Lenīna Derzhavogo Universitetu imeni Ivana Franka. Seriya Mekhaniko-Matematichna. (L'vov) (Formerly: Visnik L'viv. Derž. Univ. Ser. Meh.-Mat.)
- Vīsnik L'vīv. Politehn. Înst. Vīsnik L'vīvs'kogo Politehničnogo Institutu.
- Vestnik L'vov. Politehn. Inst. (Continued as: Vīsnik L'vīv. Politehn. Inst.)

 * Vīsnik L'vīv. Politehn. Inst. Vīsnik L'vīvs'kogo Politehnichnogo Institutu. (L'vov) See Vestnik L'vov. Politekhn. Inst. (Formerly: Visnik L'viv. Politehn. Inst.) Vistas Astronom. Vistas in Astronomy. (Oxford)

- † Vital Health Statist., Ser. 2: Data Evaluation Methods Res. Vital and Health Statistics, Series 2: Data Evaluation and Methods Research. Nat. Center Health Statist., Hyat-
- † VNR New Math. Library VNR New Mathematics Library. Van Nostrand Reinhold, New York.
- Voprosy Dinamiki i Prochnosti Rizhskii Politekhnicheskii Institut. Voprosy Dinamiki i Prochnosti. (Riga) (Formerly: Voprosy Dinamiki i Pročnosti)

 Voprosy Dinamiki i Pročnosti Rižskii Politehničeskii Institut. Voprosy Dinamiki i
- Pročnosti. (Riga) (Continued as: Voprosy Dinamiki i Prochnosti)
- Voprosy Filos. Akademiya Nauk SSSR. Institut Filosofii. Voprosy Filosofii. (Moscow) Voprosy Informacion. Teorii i Praktiki Akademija Nauk SSSR. Vsesojuznyi Institut Naučnol i Tehničeskol Informacii. Voprosy Informacionnol Teorii i Praktiki. (Moscow) (Continued as: Voprosy Informatsion. Teorii i Praktiki)
- * Voprosy Informatsion. Teorii i Praktiki Akademiya Nauk SSSR. Vsesoyuznyi Institut Nauchnoĭ i Tekhnicheskoĭ Informatsii. Voprosy Informatsionnoĭ Teorii i Praktiki.
- (Moscow) (Formerly: Voprosy Informacion. Teorii i Praktiki)
 Voprosy Istor. Estestooznan. i Tehn. Akademija Nauk SSSR. Voprosy Istorii Estestvoznanija i Tehniki. (Moscow) (Continued as: Voprosy Istor. Estestvoznan. i Tekhn.)
- * Voprosy Istor. Estestvoznan. i Tekhn. Akademiya Nauk SSSR. Voprosy Istorii Estestwoznaniya i Tekhniki. (Moscow) (Formerly: Voprosy Istor. Estestvoznan. i Tehn.)
- Voprosy Kibernet. (Moscow) Akademiya Nauk SSSR. Nauchnyi Sovet po Kompleksnoi Probleme "Kibernetika". Voprosy Kibernetiki. (Moscow)
 Voprosy Kibernet. (Tashkent) Voprosy Kibernetiki. Akademiya Nauk Uzbekskoi SSR.
- (Tashkent)
- † Voprosy Meh. Process. Upravl. Вопросы Механики и Процессов Управления. [Questions of Mechanics and Control Processes] Leningrad. Univ., Leningrad. (Continued as: Voprosy Mekh. Protsess. Upravl.)
- † Voprosy Mekh. Protsess. Upravl. Вопросы Механики и Пропессов Управления. [Questions of Mechanics and Control Processes] Leningrad. Univ., Leningrad. (Formerly: Voprosy Meh. Process. Upravl.)
- Вопросы Системотехники. [Problems of Systems Technology] Leningrad. Univ., Leningrad. (Continued as: Voprosy Sistemotekh.)
- † Voprosy Sistemotekh. Вопросы Системотехники. [Problems of Systems Technology] Leningrad. Univ., Leningrad. (Formerly: Voprosy Sistemoteh.)
- Voprosy Teor. Sistem Automat. Upravlenija Leningradskii Universitet. Voprosy Teorii Sistem Avtomatičeskogo Upravlenija. (Leningrad) (Continued as: Voprosy Teor. Sistem Avtomat. Upravleniya)
- * Voprosy Teor. Sistem Automat. Upravleniya Leningradskii Universitet. Voprosy Teorii Sistem Avtomaticheskogo Upravleniya. (Leningrad) (Formerly: Voprosy Teor. Sistem Avtomat. Upravlenija)
- * Voprosy Vychisl. i Prikl. Mat. (Tashkent) Akademiya Nauk Uzbekskoĭ SSR. Trudy Ordena Trudovogo Krasnogo Znameni Instituta Kibernetiki s Vychislitel'nym Tsentrom. Voprosy Vychislitel'noĭ i Prikladnoĭ Matematiki. (Tashkent) (Formerly: Voprosy Vyčisl. i Prikl. Mat. (Tashkent))
- Voprosy Vyčisl. i Prikl. Mat. (Tashkent) Akademija Nauk Uzbekskoi SSR. Trudy Ordena Trudovogo Krasnogo Znameni Instituta Kibernetiki s Vyčislitel'nym Centrom. Voprosy Vyčislitel'noĭ i Prikladnoĭ Matematiki. (Tashkent) (Continued as: Voprosy Vychisl. i Prikl. Mat. (Tashkent))
- Vorlesungen Fachbereich Math. Univ. Essen Vorlesungen aus dem Fachbereich Mathematik der Universität Essen. [Lecture Notes in Mathematics at the University of Essenl Univ. Essen. Essen.
- † Vorlesungen Math. Inst. Giessen Vorlesungen aus dem Mathematischen Institut Giessen. [Lecture Notes of the Mathematical Institute of Giessen] Univ. Giessen, Giessen.
- Voronež. Gos. Univ. Trudy Mat. Fak. Voronežskii Gosudarstvennyi Universitet im. Leninskogo Komsomola. Trudy Matematičeskogo Fakul'teta. (Voronezh) (Continued as: Voronezh. Gos. Univ. Trudy Mat. Fak.)

 * Voronezh. Gos. Univ. Trudy Mat. Fak. Voronezhskii Gosudarstvennyi Universitet imeni
- Leninskogo Komsomola. Trudy Matematicheskogo Fakul'teta. (Voronezh) (Formerly: Voronež. Gos. Univ. Trudy Mat. Fak.)
- Vorträge Automatentheorie Vorträge zur Automatentheorie. [Lectures on Automata Theory] Tech. Univ. Dresden, Dresden.
- † Vorträge Rheinisch-Westfäl. Akad. Wiss. Vorträge der Rheinisch-Westfälische Akademie der Wissenschaften. [Lectures of the Academy of Sciences of Rhine-Westphalia] Rheinisch-Westfälische Akad. Wissensch., Düsseldorf.
- * Vychisl. Metody i Programmirovanie Moskovskii Universitet. Sbornik Rabot Vychislitel'nogo Tsentra Moskovskogo Universiteta. Vychislitel'nye Metody i Programmirovanie. (Moscow) (Formerly: Vyčisl. Metody i Programs
- Vychisl. Prikl. Mat. (Kiev) Kievskii Gosudarstvennyi Universitet. Mezhvedomstvennyi Nauchnyi Sbornik. Vychislitel'naya i Prikladnaya Matematika. (Kiev) (Formerly: Vyčisl. Prikl. Mat. (Kiev))
- * Vychisl. Sistemy Akademiya Nauk SSSR. Sibirskoe Otdelenie. Institut Matematiki. Vychislitel'nye Sistemy. Sbornik Trudov. (Novosibirsk) (Formerly: Vyčisl. Sistemy)
- * Vychisl. Tekhn. i Voprosy Kibernet. Leningradskii Gosudarstvennyi Universitet. Vychislitel'nyi Tsentr. Moskovskii Gosudarstvennyi Universitet. Vychislitel'nyi Tsentr. Vychislitel'naya Tekhnika i Voprosy Kibernetiki. (Leningrad) (Formerly: Vyčisl. Tehn. i Voprosy Kibernet.)
- Vyčisl. Metody i Programmirovanie Moskovskii Universitet. Sbornik Rabot Vyčislitel'nogo Centra Moskovskogo Universiteta. Vyčislitel'nye Metody i Program-
- mirovanie. (Moscow) (Continued as: Vychisl. Metody i Programmirovanie)
 Vyčisl. Prikl. Mat. (Kieo) Kievskii Gosudarstvennyi Universitet. Mežvedomstvennyi Naučnyi Sbornik. Vyčislitel'naja i Prikladnaja Matematika. (Kiev) (Continued as: Vychisl. Prikl. Mat. (Kiev))
- Vyčisl. Sistemy Akademija Nauk SSSR. Sibirskoe Otdelenie. Institut Matematiki. Vyčislitel'nye Sistemy. Sbornik Trudov. (Novosibirsk) (Continued as: Vychisl.
- Vyčisl. Tehn. i Voprosy Kibernet. Leningradskii Gosudarstvennyi Universitet.

- Vyčislitel'nyĭ Centr. Moskovskiĭ Gosudarstvennyĭ Universitet. Vyčislitel'nyĭ Centr. Vyčislitel'naja Tehnikai Voprosy Kibernetiki. (Leningrad) (Continued as: Vychisl. Tekhn. i Voprosy Kibernet.)
- Wave Motion Wave Motion. (Amsterdam) 1- 1979-
- † Wege der Forschung Wege der Forschung. [Paths of Research] Wissensch. Buchgesellschaft, Darmstadt,
- Weiterbildungszentrum Math. Kybernet. Rechentech. Weiterbildungszentrum für Mathematische Kybernetik und Rechentechnik. [Center for Continuing Education for Mathematical Cybernetics and Computing Technique] Tech. Univ. Dresden, Dresden
- † Weiterbildungszentrum Math. Kybernet. Rechentech. Informationsverarbeitung Weiterbildungszentrum für Mathematische Kybernetik und Rechentechnik, Informationsverarbeitung. [Center for Continuing Education for Mathematical Cybernetics, Computing Technique and Information Processing] Tech. Univ. Dresden, Dresden.
- † Wetenskap. Studiereeks Wetenskaplike Studiereeks. [Scientific Study Course] Sacum Beperk, Bloemfontein,
- Wiadom. Mat. (2) Roczniki Polskiego Towarzystwa Matematycznego. Seria II. Wiadomości Matematyczne. (Warsaw)
- Wisconsin Acad. Sci. Arts Lett. Trans. Wisconsin Academy of Sciences. Arts & Letters. Transactions. (Madison, Wis.)
- Wiss. Beitr. Martin-Luther-Unio. Halle-Wittenberg M See Beiträge Algebra Geom.
- Wiss. Z. Friedrich-Schiller-Univ. Jena Math.-Natur. Reihe Friedrich-Schiller-Universität Jena. Wissenschaftliche Zeitschrift. Mathematisch-Naturwissenschaftliche Reihe. (Jena)
- Wiss. Z. Hochsch. Verkehrswesen "Friedrich List" Dresden Wissenschaftliche Zeitsch rift der Hochschule für Verkehrswesen "Friedrich List" in Dresden. Die Anwendung Mathematischer Methoden im Transport-und Nachrichtenwesen. (Dresden)
- Wiss. Z. Humboldt-Univ. Berlin Math.-Natur. Reihe Wissenschaftliche Zeitschrift der Humboldt-Universität Berlin. Mathematisch-Naturwissenschaftliche Reihe. (Berlin)
- Wiss. Z. Karl-Marx-Univ. Leipzig Ges. Sprachwiss. Reihe Leipzig. Universitaet. Wissen schaftliche Zeitschrift der Karl-Marx-Universitaet Leipzig. Gesellschaft- und Sprach-
- wissenschaftliche Reihe. (Leipzig) 28- 1979-Wiss. Z. Karl-Marx-Univ. Leipzig Math.-Natur. Reihe Wissenschaftliche Zeitschrift der Karl-Marx-Universität Leipzig. Mathematisch-Naturwissenschaftliche Reihe. (Leip-
- Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg Math.-Natur. Reihe Wissenschaftliche Zeitschrift der Martin-Luther-Universität Halle-Wittenberg. Mathematisch-Naturwissenschaftliche Reihe. (Halle/Wittenberg)
- Wiss. Z. Pädagog. Hochsch. "Karl Friedrich Wilhelm Wander" Dresden Wissenschaftliche Zeitschrift der Pädagogischen Hochschule "Karl Friedrich Wilhelm Wander" Dresden. (Dresden) 15- 1981-
- Wiss. Z. Pādagog. Hochsch. "Karl Liebknecht" Potsdam Wissenschaftliche Zeitschrift der Pädagogischen Hochschule "Karl Liebknecht" Potsdam. (Potsdam)
- Wiss. Z. Tech. Hochsch. Ilmenau Wissenschaftliche Zeitschrift der Technischen Hochschule Ilmenau. (Ilmenau)
- Wiss. Z. Tech. Hochsch. Karl-Marx-Stadt Wissenschaftliche Zeitschrift der Technischen Hochschule Karl-Marx-Stadt. (Karl-Marx-Stadt)
- Wiss. Z. Tech. Hochsch. Leuna-Merseburg Leuna-Merseburg. Technische Hochschule Wissenschaftliche Zeitschrift. (Leuna-Merseburg)
- Wiss. Z. Tech. Hocksch. Magdeburg Wissenschaftliche Zeitschrift der Technischen Hochschule Otto von Guericke Magdeburg. (Magdeburg) 23– 1979– Wiss. Z. Tech. Univ. Dresden Wissenschaftliche Zeitschrift der Technischen Universität
- Dresden. (Dresden)
- † Wissensch. Inform. Wissenschaftliche Informationen. [Scientific Information] Tech. Hochschule Karl-Marx-Stadt, Karl-Marx-Stadt.
- † Wissensch. Sitzungen Stochastik 80 Wissenschaftliche Sitzungen zur Stochastik 80. [Scientific Meetings on Stochastics 80] Akad. Wiss. DDR, Berlin. (Formerly: Wissensch. Sitzungen zur Stochastik 79)
- † Wissensch. Sitzungen Stochastik 81 Wissenschaftliche Sitzungen zur Stochastik 81. [Sci-
- entific Meetings on Stochastics 81] Akad. Wiss. DDR, Berlin.
 † Wissensch. Sitzungen Stochastik 82 Wissenschaftliche Sitzungen zur Stochastik 82. [Scientific Meetings on Stochastics 82] Akad. Wiss. DDR, Berlin.
- † Wissensch. Taschenbücher Reihe Math./Phys. Wissenschaftliche Taschenbücher, Reihe Mathematik/Physik. [Scientific Paperbacks, Mathematics/Physics Series] Akademie-Verlag, Berlin.
- † Wissensch. Taschenbücher Reihe Texte Stud. Wissenschaftliche Taschenbücher, Reihe Texte und Studien. [Scientific Paperbacks, Texts and Studies Series] Akademie-Verlag,
- † Wissenschaft und Kultur Wissenschaft und Kultur. [Science and Culture] Birkhäuser,
- † Wissenschaftstheorie-Wissenschaft Philos. Wissenschaftstheorie-Wissenschaft und Philosophie. [Theory of Science-Science and Philosophy] Vieweg, Braunschweig.
- † Working Papers Working Papers. Inst. Math. Wirtschaftsforsch., Univ. Bielefeld, Bielefeld.
- Wuhan Daxue Xuebao Wuhan Daxue Xuebao. Ziran Kexue Ban. Wuhan University Journal. Natural Sciences. (Wuhan) 1977, no. 3-
- Wuhan Unio. J. See Wuhan Daxue Xuebao
- Wuli Xuebao See Acta Phys. Sinica
- Wyż. Szkoła Ped. Krakow. Rocznik Nauk.-Dydakt. Prace Mat. Wyższa Szkoła Pedagogiczna w Krakowie. Rocznik Naukowo-Dydaktyczny. Prace Matematyczne.
- * Yadernaya Fiz. Akademiya Nauk SSSR. Yadernaya Fizika. (Moscow) (Translated
- as: Soviet J. Nuclear Phys.) (Formerly: Jadernaja Fiz.)
 † Yale Math. Monographs Yale Mathematical Monographs. Yale Univ. Press, New Haven, Conn.
- Yingyong Shuxue He Lixue See Appl. Math. Mech.

Yingyong Shuxue Xuebao See Acta Math. Appl. Sinica

Yingyong Shuxue Yu Jisuan Shuxue Yingyong Shuxue Yu Jisuan Shuxue. Applied Mathematics and Computational Mathematics. (Chongqing) 1980, no. 1-Yokohama Math. J. Yokohama Mathematical Journal. (Yokohama)

Z. Allgemeine Wissenschaftstheorie Zeitschrift für Allgemeine Wissenschaftstheorie.

Z. Angew. Math. Mech. Zeitschrift für Angewandte Mathematik und Mechanik. In-

genieurwissenschaftliche Forschungsarbeiten. (Berlin)

Z. Angew. Math. Phys. Zeitschrift für Angewandte Mathematik und Physik. ZAMP. Journal of Applied Mathematics and Physics. Journal de Mathématiques et de Physiques Appliquées. (Basel)

Ž. Eksper. Teoret. Fiz. Akademija Nauk SSSR. Žurnal Eksperimental'noi i Teoretičeskoi Fiziki. (Moscow) (Translated as: Soviet Phys. JETP) (Continued as: Zh. Eksper.

Teoret. Fiz.)

- Z. Elektr. Inform. Energietech. Zeitschrift für Elektrische Informations-und Energietechnik. (Leipzig)
- Z. Krist. Zeitschrift für Kristallographie, Kristallgeometrie, Kristallphysik, Kristalnie. (Wiesbaden) 146- 1978
- Z. Math. Logik Grundlag. Math. Zeitschrift für Mathematische Logik und Grundlagen der Mathematik. (Berlin)
- Z. Nationalökonom. Zeitschrift für Nationalökonomie. Journal of Economics. (Vienna)
- Z. Naturforsch. A Zeitschrift für Naturforschung. A. (Tübingen)
- Z. Oper. Res. Ser. A-B Zeitschrift für Operations Research. Serie A. Serie B. (Würzburg)
- Z. Phys. A Zeitschrift für Physik. A. Atoms and Nuclei. (Berlin)
- Z. Phys. B Zeitschrift für Physik. B. Condensed Matter and Quanta. (Berlin)
- Z. Phys. C Zeitschrift für Physik. C. Particles and Fields. (Berlin) 1- 1979-
- Ž. Prikl. Meh. i Tehn. Fiz. Žurnal Prikladnoĭ Mehaniki i Tehničeskoĭ Fiziki. (Moscow) (Translated as: J. Appl. Mech. Tech. Phys.) (Continued as: Zh. Prikl. Mekh. i Tekhn. Fiz.)
- Ž. Vyčisl. Mat. i Mat. Fiz. Akademija Nauk SSSR. Žurnal Vyčislitel'noi Matematiki i Matematičeskoi Fiziki. (Moscow) (Translated as: U.S.S.R. Comput. Math. and Math. Phys.) (Continued as: Zh. Vychisl. Mat. i Mat. Fiz.)

Z. Wahrsch. Verw. Gebiete Zeitschrift für Wahrscheinlichkeitstheorie und Verwandte Gebiete. (Berlin)

* Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) Zapiski Nauchnykh Seminarov Leningradskogo Otdeleniya Matematicheskogo Instituta imeni V. A. Steklova Akademii Nauk SSSR (LOMI). (Leningrad) (Translated as: J. Soviet Math.) (Formerly: Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)) Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) Zapiski Naučnyh

Seminarov Leningradskogo Otdelenija Matematičeskogo Instituta im. V. A. Steklova

- Akademii Nauk SSSR (LOMI). (Leningrad) (Translated as: J. Soviet Math.) (Continued as: Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI))
- Zastos. Mat. Polska Akademia Nauk. Instytut Matematyczny. Zastosowania Matematyki. (Warsaw)
- Zb. Rad. Mat. Inst. Beograd. (N.S.) Beograd. Matematichki Institut. Zbornik Radova. Nova Serija = Beograd. Matematički Institut. Zbornik Radova. Nova Serija. (Belgrade) 1(9)- 1976-
- † Zbirka Izbran. Poglav. Fiz. Zbirka Izbranih Poglavij iz Fizike. [Collection of Selected Papers in Physics] Univ. Ljubljana, Ljubljana
- † Zbirka Izbran. Poglav. Mat. Zbirka Izbranih Poglavij iz Matematike. [Collection of Selected Papers in Mathematics] Univ. Ljubljana, Ljubljana.
- ¶ Zbl Zentralblatt für Mathematik und ihre Grenzgebiete. (Berlin) See Zbl. Math.
- ¶ Zbl. Math. Zentralblatt für Mathematik und ihre Grenzgebiete. (Berlin) (Usually abbreviated as Zbl in the text of Math. Rev.)
- Zeszyty Nauk. Politech. Łódz. Mat. Zeszyty Naukowe Politechniki Łódzkiej. Matematyka. (Łódź)
- Zeszyty Nauk. Politech. Śląsk. Mat.-Fiz. Zeszyty Naukowe Politechniki Śląskiej. Matematyka-Fizyka. (Gliwice)
- Zeszyty Nauk. Uniw. Jagielloń. Prace Fiz. Zeszyty Naukowe Uniwersytetu Jagiellońskiego. Prace Fizyczne. (Warsaw/Kraków)
- Zeszyty Nauk. Uniw. Jagielloń. Prace Mat. Zeszyty Naukowe Uniwersytetu Jagiellońskiego. Prace Matematyczne. (Warsaw/Kraków)
- Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Fiz. Zeszyty Naukowe Wyższej Szkoły Pedagogicznej w Opolu. Fizyka. (Opole)
- Zeszyty Nauk. Wyż. Szkoły Ped. w Opolu Mat. Zeszyty Naukowe Wyższej Szkoły Pedagogicznej w Opolu. Matematyka. (Opole)
- * Zh. Eksper. Teoret. Fiz. Akademiya Nauk SSSR. Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki. (Moscow) (Translated as: Soviet Phys. JETP) (Formerly: Ž. Eksner, Teoret, Fiz.)
- * Zh. Prikl. Mekh. i Tekhn. Fiz. Zhurnal Prikladnoï Mekhaniki i Tekhnicheskoĭ Fiziki. (Moscow) (Translated as: J. Appl. Mech. Tech. Phys.) (Formerly: Ž. Prikl. Meh. i Tehn. Fiz.)
- * Zh. Vychisl. Mat. i Mat. Fiz. Akademiya Nauk SSSR. Zhurnal Vychislitel'noï Matematiki i Matematicheskoi Fiziki. (Moscow) (Translated as: U.S.S.R. Comput. Math. and Math. Phys.) (Formerly: Ž. Vyčisl. Mat. i Mat. Fiz.)
 *Zhejiang Daxue Xuebao Zhejiang Daxue Xuebao Journal of Chekiang University.
- (Hangzhou) 1979, no. 4-

Zhongguo Kexue See Sci. Sinica

Zhongguo Kexue Shuxue Zhuanji See J. Huazhong Inst. Tech.

Zidonghua Xuebao See Acta Automat. Sinica

† ZKI-Inform. 78 ZKI-Informationen 78. [ZKI Information 78] Akad. Wiss. DDR,

JOURNALS IN TRANSLATION

Algebra and Logic Algebra and Logic. (New York) (Translation of Algebra i Logika)

Appl. Math. Mech. (English Ed.) Applied Mathematics and Mechanics. English Edition. (Hong Kong) (Translation of Appl. Math. Mech.) 1- 1980-

Astrophysics Astrophysics. A translation of Astrofizika of the Academy of Sciences of the Armenian SSR. (New York) (Translation of Astrofizika) 1965-

nt. Control Comput. Sci. Automatic Control and Computer Sciences. (New York) (Translation of Avtomat. i Vychisl. Tekhn. (Riga)) 1969-

Automat. Document. and Math. Linguistics Automatic Documentation and Mathemati-cal Linguistics. (New York) (Translation of Nauchn.-Tekhn. Informatsiya (VINITI) Ser. 2 Informatsionnye Protsessy i Sistemy) 1967-

at. Remote Control Automation and Remote Control. A translation of Avtomatika i Telemekhanika, a publication of the Academy of Sciences of the USSR. (New York) (Translation of Avtomat. i Telemekh.) 1958-

Chinese Astronom. Astrophys. Chinese Astronomy and Astrophysics. (Oxford) (Selected translation of Acta Astronom. Sinica and Acta Astrophys. Sinica) 5- 1981-* Chinese Phys. Chinese Physics. (New York) (Selected translations of Chinese physics

and astronomy journals) 1- 1981-

Cybernetics Cybernetics. (New York) (Translation of Kibernetika (Kiev)) 1965-Differential Equations Differential Equations. (New York) (Translation of Different-

sial'nye Uravneniya) 1965-

Electron, Comm. Japan Electronics and Communications in Japan. The Transactions of the Institute of Electronics and Communication Engineers of Japan. (Washington, D.C.) (Partial translation of Denshi Tsushin Gakkai Ronbunshi Sect. A-D) (See also Systems-Comput.-Controls) 1963-

Engrg. Cybernetics Engineering Cybernetics. English Edition of Tekhnicheskaya Kibernetika. (Silver Spring, Md.) (Translation of Izv. Akad. Nauk SSSR Tekhn.

Kibernet.) 1963-

Fluid Dynamics Fluid Dynamics. (New York) (Translation of Izv. Akad. Nauk SSSR Mekh. Zhidk. Gaza) 1966-

Fluid Mech.-Soviet Res. Fluid Mechanics. Soviet Research. (Silver Spring, Md.) (Selected translations of Soviet publications) 1972-

Functional Anal. Appl. Functional Analysis and its Applications. (New York) (Translation of Funktsional. Anal. i Prilozhen.) 1967-

Izv. Acad. Sci. USSR Atmospher. Ocean. Phys. Izvestiya Academy of Sciences USSR. Atmospheric and Oceanic Physics. (Washington, D.C.) (Translation of Izv. Akad.

of the Solid Earth. (Washington, D.C.) (Translation of Izv. Akad. Nauk SSSR Ser.

Fiz. Zemli) 1965-

J. Appl. Math. Mech. Journal of Applied Mathematics and Mechanics. Translation of the Soviet journal Prikladnaya Matematika i Mekhanika. (Oxford) (Translation of Prikl. Mat. Mekh.) 1958-

Appl. Mech. Tech. Phys. Journal of Applied Mechanics and Technical Physics. (New York) (Translation of Zh. Prikl. Mekh. i Tekhn. Fiz.) 1965-

J. Engrg. Phys. Journal of Engineering Physics. (New York) (Translation of Inzh.-Fiz. Zh.) 1965-

J. Huazhong Inst. Tech. (English Ed.) Journal of Huazhong Institute of Technology. English Edition. (Wuhan) (Selected translation of J. Huazhong Inst. Tech.) (Continued as: J. Huazhong Univ. Sci. Tech. (English Ed.)) 1- 1979-

*J. Huazhong Univ. Sci. Tech. (English Ed.) Journal of Huazhong (Central China) University of Science and Technology. English Edition. (Wuhan) (Selected translation of J. Huazhong Inst. Tech.) (Formerly: J. Huazhong Inst. Tech. (English Ed.))

J. Soviet Math. Journal of Soviet Mathematics. (New York) (Translation of Itogi Nauki-Seriya "Matematika" (Progress in Science-Mathematical Series), Problem Matematicheskogo Analiza (Problems in Mathematical Analysis), and Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)) 1973-

Kexue Tongbao (English) Chinese Academy of Science. Kexue Tongbao (Science Bulletin). A Monthly Journal of Science. (Beijing) (Translation of Kexue Tongbao

(Chinese)) 25-1980-Lithuanian Math. J. Lithuanian Mathematical Journal. (New York) (Translation of

Litovsk. Mat. Sb.)

Magnetohydrodynamics Magnetohydrodynamics (A translation of Magnitnava Gidrodinamika of the Academy of Sciences of the Latvian SSR). (New York) (Translation of Magnit. Gidrodinamika) 1965-Math. Notes Mathematical Notes of the Academy of Sciences of the USSR. (New

York) (Translation of Mat. Zametki) 1967-

Math. USSR-Izv. Mathematics of the USSR-Izvestiya. (Providence, R.I.) (Translation of Izo. Akad. Nauk SSSR Ser. Mat.) 1967-

Math. USSR-Sb. Mathematics of the USSR-Sbornik. (Providence, R.I.) (Translation of Mat. Sb. (N.S.)) 1968-Mech. Solids Mechanics of Solids. (New York) (Translation of Izv. Akad. Nauk

SSSR Mekh. Tverd. Tela) 1965-

Moscow Univ. Math. Bull. Moscow University Mathematics Bulletin. (New York) (Translation of the mathematics section of Vestnik Moskov. Univ. Ser. I Mat. Mekh.)

Moscow Univ. Phys. Bull. Moscow University Physics Bulletin. (New York) (Translation of the physics section of Vestnik Moskov. Univ. Ser. III Fiz. Astronom.) 1966-Problems Inform. Transmission Problems of Information Transmission. (New York) (Translation of Problemy Peredachi Informatsii) 1965Proc. Steklov Inst. Math. Proceedings of the Steklov Institute of Mathematics. (Providence, R.I.) (Translation of Trudy Mat. Inst. Steklov.) 1967-Proc. (Trudy) P. N. Lebedev Phys. Inst. Proceedings (Trudy) of the P. N. Lebedev

Physics Institute. (New York) (Translation of Trudy Fiz. Inst. Lebedev.)

ning and Comput. Software Programming and Computer Software. (New York) (Translation of Programmirovanie) 1975-

Radio Engrg. Electron. Phys. Radio Engineering and Electronic Physics. Translation of Radiotekhnika i Elektronika, a U.S.S.R. Academy of Sciences Publication. (Silver Spring, Md.) (Translation of Radiotekhn. i Elektron.) 1961-

Radiophys. and Quantum Electronics Radiophysics and Quantum Electronics. A translation of the Izvestiya Vysshikh Uchebnykh Zavedenii Radiofizika of the Ministry of Higher Education of the USSR. (New York) (Translation of Izv. Vyssh. Uchebn. Zaved. Radiofiz.) 1965-

Rech. Aérospat. (English) La Recherche Aérospatiale. English edition. (Châtillon) (Translation of Rech. Aérospat.) 1980, no. 3-

Russian Math. Surveys Russian Mathematical Surveys. (London) (Translation of Uspekhi Mat. Nauk) 1971-

*Selecta Math. Soviet. Selecta Mathematica Sovietica. (Cambridge, Mass.) 1- 1981-Siberian Math. J. Siberian Mathematical Journal. (New York) (Translation of Sibirsk. Mat. Zh.) 1966-

Soviet Aeronaut. Soviet Aeronautics. (New York) (Translation of Izv. Vyssh. Uchebn. Zaved. Aviatsion. Tekhn.) 1966-

Soviet Appl. Mech. Soviet Applied Mechanics. (New York) (Translation of Prikl. Mekh.) 1966-

Soviet Astronom. Soviet Astronomy. A translation of Astronomicheskii Zhurnal, the astronomical journal of the Academy of Sciences of the USSR. (New York) (Translation of Astronom. Zh.) 1957-

Soviet Automat. Control Soviet Automatic Control. (Silver Spring, Md.) (Translation of Avtomatika) 1968-

Soviet J. Contemporary Math. Anal. Soviet Journal of Contemporary Mathematical Analysis. (New York) (Translation of Izv. Akad. Nauk Armyan. SSR Ser. Mat.) 1979-

Soviet J. Nuclear Phys. American Institute of Physics. Soviet Journal of Nuclear Physics. (New York) (Translation of Yadernaya Fiz.) 1965-

Soviet J. Particles and Nuclei Soviet Journal of Particles and Nuclei. (New York) (Translation of Fiz. Elementar. Chastits i Atom. Yadra) 1972-

Societ Math. Dokl. Soviet Mathematics. Doklady. A translation of the mathematics section of Doklady Akademii Nauk SSSR. (Providence, R. I.) (Translation of mathematics section of Dokl. Akad. Nauk SSSR) 1960-

Soviet Math. (Iz. VUZ) Soviet Mathematics (Izvestiya Vysshikh Uchebnykh Zavedenii. Matematika). (New York) (Translation of Izv. Vyssh. Uchebn. Zaved. Mat.)

Soviet Phys. Acoust. Soviet Physics. Acoustics. A translation of Akusticheskii Zhurnal of the Academy of Sciences of the USSR. (New York) (Translation of Akust. Zh.)

Soviet Phys.-Collection Soviet Physics. Collection. (New York) (Translation of Litovsk. Fiz. Sb.) 1974-

Soviet Phys. Cryst. Soviet Physics Crystallography. (New York) (Translation of

Kristallografiya) 23- 1978-Soviet Phys. Dokl. Soviet Physics. Doklady. A translation of the physics sections of Doklady Akademii Nauk SSSR. (New York) (Translation of physics sections of Dokl. Akad. Nauk SSSR) 1956-

Soviet Phys. J. Soviet Physics Journal. (New York) (Translation of Izv. Vyssh. Uchebn. Zaved. Fiz.) 1965-

Soviet Phys. JETP Soviet Physics. JETP. A translation of Zh. Eksperimental'noï i Teoreticheskoi Fiziki of the USSR. (New York) (Translation of Zh. Eksper. Teoret.

Soviet Phys. Uspekhi Soviet Physics. Uspekhi. A translation of the Uspekhi Fizicheskikh Nauk (Advances in the Physical Sciences) of the Academy of Sciences of the USSR. (New York) (Translation of Uspekhi Fiz. Nauk) 1958-

Systems-Comput.-Controls Systems-Computers-Controls. The Transactions of the In-stitute of Electronics and Communication Engineers of Japan. (Silver Spring, Md.) (Partial translation of Denshi Tsushin Gakkai Ronbunshi Sect. A-D) (See also Electron. Comm. Japan) 1970-Theoret. and Math. Phys. Theoretical and Mathematical Physics. (New York)

(Translation of Teoret. Mat. Fiz.) 1969-

Theory Probab. Appl. Theory of Probability and its Applications. An English translation of the Soviet journal Teoriya Veroyatnosteĭ i ee Primeneniya. (Philadelphia, Pa.) (Translation of Teor. Veroyatnost. i Primenen.) 1956-

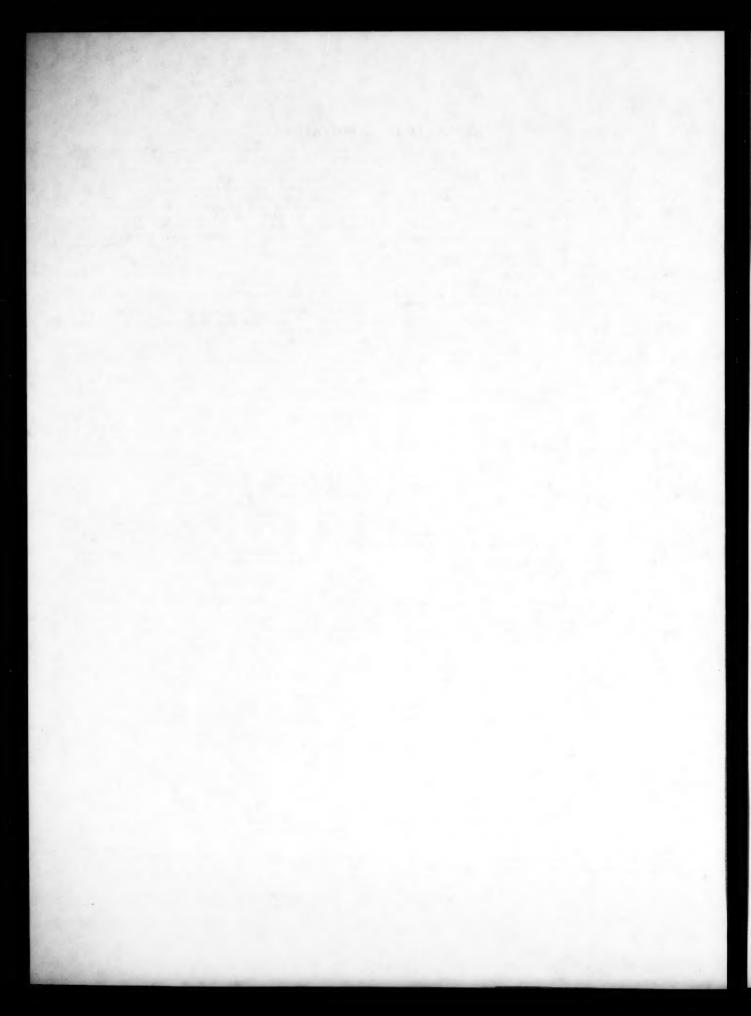
Theory Probab. Math. Statist. Theory of Probability and Mathematical Statistics. (Providence, R.I.) (Translation of Teor. Veroyatnost. i Mat. Statist.) 1974-

Trans. Moscow Math. Soc. Transactions of the Moscow Mathematical Society. (Providence, R.I.) (Translation of Trudy Moskov, Mat. Obshch.)

U.S.S.R. Comput. Math. and Math. Phys. U.S.S.R. Computational Mathematics and Mathematical Physics. (Oxford) (Translation of Zh. Vychisl. Mat. i Mat. Flz.) 1962-

Ukrainian Math. J. Ukrainian Mathematical Journal. (New York) (Translation of Ukrain, Mat. Zh.) 1967-

Vestnik Leningrad Univ. Math. Vestnik Leningrad University. Mathematics. (Providence, R.I.) (Translation of the mathematics section of Vestnik Leningrad. Univ. Mat. Mekh. Astronom.) 1968-



TRANSLITERATION OF CYRILLIC

Starting with volume 14 № 23 (November 12, 1982) of Current Mathematical Publications (CMP) and with issue 83a (January 1983) of Mathematical Reviews (MR), these publications and the American Mathematical Society will use the new system for transliteration (romanization) of Cyrillic given below.

Any transliteration scheme used in the work of MR must be one-to-one: the Cyrillic characters should be treated in a uniform way, independent of the language in which they occur, and it has to be possible to reconstruct the original Cyrillic from the transliterated version. The transliteration system used in MR before the change is (almost) one-to-one (and could easily be made one-to-one); it is optimal for the needs of Slavic languages that use Cyrillic alphabets, independent of any other language, and hence eminently suited for use in an international journal like MR. The new system below is largely in agreement with other transliteration systems in use in the U.S.A., such as those of the American National Standards Institute (ANSI), the U.S. Library of Congress (LC), and the Institute for Scientific Information (ISI). The principal feature of these systems is that they are intended to be as phonetic as possible for speakers of English. (It turns out that the transliteration of consonants is quite phonetic, except for the Cyrillic x which is rendered kh. Truly phonetic (English-oriented) transliteration of vowels is more or less impossible.)

To all those readers who have come to love the present "Slavic style" transliteration, the editors of MR apologize for the inconvenience. In particular, Associate Editors S. Ivanov and S. Zdravkovska are not in favor of the change.

The table below lists all Cyrillic letters occurring in Slavic languages, and the transliteration schemes used by:

Mathematical Reviews (= MR) (new), Zentralblatt für Mathematik (= Zbl), (new)

MR and Zbl (old),

American National Standards Institute (= ANSI),

U. S. Library of Congress (= LC),

Institute for Scientific Information (= ISI).

The transliteration of the British Standards Institute (= BSI) agrees with that of ISI, except for the letters \ddot{e} and $\ddot{n} \mapsto \ddot{1}$.

In the schemes of some of these enterprises, a few Cyrillic letters receive more than one transliteration, depending on the language in which the letter occurs. Non-Russian Cyrillic letters and transliterations different from the one for Russian are identified by superscript numbers:

1	Ukrainian	2	Belorussian	
3	Serbian	4	Macedonian	
-	D 1 .			

5 Bulgarian.

In order to achieve complete reversibility of the transliteration scheme, centered dots will be used as a separating or bracketing device, in the following cases:

TC \mapsto t·s, TIII \mapsto t·sh, III \mapsto sh·ch, ыу \mapsto y·u, ыа \mapsto y·a, дј \mapsto d·j, дј \mapsto l·j, нј \mapsto n·j, for separation, and $u\mapsto$ dzh· for bracketing.

Alphabetization (in indexes, etc.) will take place following the "stripped" version (i.e., without diacritical marks) of the transliteration; the symbol " (double prime) representing b, will be kept in the stripped version and placed at the head of the alphabet (the single prime representing b will be ignored). The capital version of the Bulgarian " is distinguished by an underbar: ".

Cvril	lie	MR	old	ation of Cyr Zbl	ANSI	LC	ISI
Cyrillic		(new)	(MR, Zbl)	(new)	AINOI	DC	101
A	a	8	8	8	a	a	a
Б	6	b	b	b	b	b	b
В	В	v	v	v	v	v	v
Г	r	g	g	g	g	g, h ¹	g
Д	д	d	d	d	ď	d d	d
ъ	ħ ³	dj	Ðd	dj	đ	đ	-
ŕ	ŕ4	ģ	Du	40	ģ	ģ	
E	e	e		e	e	e	е
Ë	ë	ë	ë	e	ë	ë	e
€	$\epsilon^{1,2}$	ē	ē	je		îe	
ж		zh	ž	zh	ye zh, ž ^{3,4}	zh, zh ¹ , ž ^{3,4}	zh
	ж						
З И	3	z i	i	z i	ž	i, y ¹	z
	и i ^{1,2}	1	ī		ī	i, y	1
I Ï	ï¹	ĭ	ï	yi 	ï	ï	
	j ^{3,4}			yi			
J		j	j	j	j	j	j
Й	й	Y	ĭ	j	Y	Y	i
K	к	k	k	k	k	k	k
Л	Л	1	1	1	1	1	1
љ	љ ^{3,4}	lj	lj	lj	lj	lj	
M	M	m	m	m	m	m	m
Н	H	n	n	n	n	n	n
њ	њ ^{3,4}	nj	nj	nj	nj	nj	
0	0	0	0	o	0	0	0
П	П	p	p	p	p	p	p
P	p	r	r	r	r	r	r
C	c	8	8	8	8	8	8
T	T	t	t	t	t	t	t
Ъ	\hbar^3	ć	ć	cj	ć	ć	
Ŕ	Ŕ ⁴	k			k	k	
У	у	u	u	u	u	u	u
Ÿ	ÿ ²	ŭ			ŭ	ŭ	
Φ	ф	f	f	f	f	f	f
X	x	kh	h	kh	kh, h ^{3,4}	kh, h ^{3,4}	kh
Ц	ц	ts	c	ts	ts, c ^{3,4}	ts, ts1 ,c3,4	ts
Ч	ч	ch	č	ch	ch, č ^{3,4}	ch, č ^{3,4}	ch
Ų	$u^{3,4}$	dzh-	dž	dzh	dž	dž	
Ш	ш	sh	š	sh	sh, š	sh, š ^{3,4}	sh
Щ	щ	shch	šč	shch, sht ⁵	shch	shch, sht ⁵	shch
$[\mathbf{b}^5]$	ъ	["] "	"	", y ⁵	", ă ⁵	″, ŭ ⁵	"
Ы	ы	у	у		1	у	у
	ь	,	,	y ,	y ,	y ,	,
Э	э	è	è	eh	ė	ė	é
Ю	ю	yu	ju	yu	yu	îu	yu
Я	я	ya	ja	ya	ya	ía.	ya

Author Institution Codes and Addresses

Starting in 1983, some items in Current Mathematical Publications and then in MR will include an author institution address code. It is not feasible to code all institutions, and the code will be assigned only for articles which have an author address coinciding with one of the institutions we have coded. A revised list is planned for the 1983 annual index.

1-ABCC

Department of Mathematics Abilene Christian College Abilene, TX 79699

1-ABRN

Department of Mathematics Auburn University Auburn, AL 36830

1-ABRN-A

Department of Aerospace Engineering Auburn University Auburn, AL 36830

1-ADEL

Department of Mathematics Adelphi University Garden City, NY 11530

1-AK

Department of Mathematics University of Alaska Fairbanks, AK 99701

1-AL

Department of Mathematics University of Alabama University, AL 35486

1-AL-C

Department of Computer Science University of Alabama University, AL 35486

1-AL-S

Department of Statistics University of Alabama University, AL 35486

1-AL2

Department of Mathematics University of Alabama Birmingham, AL 35294

1-ALGN

Allegheny College Meadville, PA 16335

1.ALE

Department of Mathematics University of Alabama Huntsville, AL 35807

1-ALH-P

Department of Physics University of Alabama Huntsville, AL 35807

1-ALS

Department of Mathematics Alabama State University Montgomery, AL 36195

1-ALS-R

Mathematics Research Group Alabama State University Montgomery, AL 36195

1-AMER

Department of Mathematics, Statistics and Computer Science American University Washington, DC 20016

1-AMH

Department of Mathematics Amherst College Amherst, MA 01002

1-AMS

American Mathematical Society P.O. Box 6248 Providence, RI 02940

1-ANL

Argonne National Laboratory Argonne, IL 60439

1-APLS

Department of Mathematical Sciences Appalachian State University Boone, NC 28607

1-AF

Department of Mathematics University of Arkansas Fayetteville, AR 72701

1-ARS

Department of Mathematics Arkansas State University State University, AR 72467

1-ARSP

The Aerospace Corporation P.O. Box 92957 Los Angeles, CA 90009

. ..

Department of Mathematics University of Arisona Tucson, AZ 85721

1-AZ-B

College of Business and Public Administration University of Arizona Tucson, AZ 85721

1 47 6

Department of Computer Science University of Arizona Tucson, AZ 85721

. . .

Systems of Industrial Engineering University of Arisona Tucson, AZ 85721

1-A7-

Department of Philosophy University of Arisona Tucson, AZ 85721

1-A7

Department of Mathematics Arisona State University Tempe, AZ 85281

1-BCNI

Department of Mathematics Bucknell University Lewisburg, PA 17837

1-BELL

Bell Labs Murray Hill, NJ 07974

1-BELL2

Bell Labs Holmdel, NJ 07733

1-BELLS

Bell Labs Piscataway, NJ 08854

1-BELL4

Bell Labs Whippany, NJ 07981

1.BELLS

Bell Labs Naperville, IL 60566

1-BLBS

Department of Mathematics Bloomsburg State College Bloomsburg, PA 17815

1-BLGS

Department of Mathematics and Statistics Bowling Green State University Bowling Green, OH 43403

1-BLS

Department of Mathematical Sciences Ball State University Muncie, IN 47306

I-RNL

Brookhaven National Lab Upton, NY 11973

1-BOST

Department of Mathematics Boston University Boston, MA 02146

1-BOWD

Department of Mathematics Bowdoin College Brunswick, ME 04011

1-BRN

Department of Mathematics Brown University Providence, RI 02912

1-BRN-A

Division of Applied Mathematics Brown University Providence, RI 02912

1-BRN-D

Department of Economics Brown University Providence, RI 02912

1-BRN-E

Division of Engineering Brown University Providence, RI 02912

1-BRN-Q

Department of Philosophy Brown University Providence, RI 02912

1-BRND

Department of Mathematics Brandeis University Waltham, MA 02154

1-BRND-P

Department of Physics Brandeis University Waltham, MA 02254

1-BSTC

1-BSTC
Department of Mathematics
Boston College
Chestnut Hill, MA 02167

1-BYRN

Department of Mathematics Bryn Mawr College Bryn Mawr, PA 19010

1-RYU

Department of Mathematics Brigham Young University Provo, UT 84602

1-CA

Department of Mathematics University of California Berkeley, CA 94720

1-CA-C

Department of Electrical Engineering and Computer Sciences University of California Berkeley, CA 94720

1.CA.P

Department of Mechanical Engineering University of California Berkeley, CA 94720

1-CA-F

School of Public Health University of California Berkeley, CA 94720

1-CA-I

Department of Industrial Engineering and Operations Research University of California Berkeley, CA 94720

1-CA-R

Mathematic Sciences Research Institute University of California Berkeley, CA 94720

1-CA-8

Department of Statistics University of California Berkeley, CA 94720

1-CAS

Department of Mathematics University of California Irvine, CA 92664

1-CA3-E

School of Engineering University of California Irvine, CA 92664

1-CA3-I

Department of Physics University of California Irvine, CA 92664

1-CAD

Department of Mathematics University of California Davis, CA 95616

1-CAD-A

Graduate School of Administration University of California Davis, CA 95616

1-CAIT

Department of Mathematics California Institute of Technology Pasadena, CA 91125

1-CAIT-A

Department of Chemical Engineering California Institute of Technology Pasadena, CA 91125

1-CAPS

Department of Mathematics California Polytechnic State University San Luis Obispo, CA 93407

1-CAE

Department of Mathematics University of California Riverside, CA 92502

1-CAR-S

Department of Statistics University of California Riverside, CA 92502

1-CAS

Department of Mathematics California State University Fresno, CA 93740

1-CAS3

Department of Mathematics California State University Fullerton, CA 92634

1-CAS3-C

Department of Computer Science California State University Fullerton, CA 92634

1-CASCH

Department of Mathematics California State University Chico, CA 95929

1-CASDH

Department of Mathematics California State College Domingues Hills, CA 90747

1-CASH

Department of Mathematics California State University Hayward, CA 94542

1-CASLA

Department of Mathematics California State University Los Angeles, CA 90032

1-CASLB

Department of Mathematics California State University Long Beach, CA 90840

1-CASN

Department of Mathematics California State University Northridge, CA 91324

1-CASP

Department of Mathematics California State Polytechnic University Pomona, CA 91768

1-CASSB

Department of Mathematics California State College San Bernardino, CA 92407

1-CATH

Department of Mathematics Catholic University of America Washington, DC 20064

1-CATH-P

Department of Physics Catholic University of America Washington, DC 20064

1-CCNY

Department of Mathematics City College, CUNY New York, NY 10031

1-CCNY-C

Department of Computer Science City College CUNY New York, NY 10031

1-CH

Department of Mathematics University of Chicago Chicago, IL 60637

1-CHI-A

Graduate School of Business University of Chicago Chicago, IL 60637

1-СНІ-В

Department of Biophysics and Theoretical Biology University of Chicago Chicago, IL 60637

1-СНІ-Е

Department of Economics University of Chicago Chicago, IL 60637

1-CHRL

Department of Mathematics College of Charleston Charleston, SC 29401

1-CINC

Department of Mathematics University of Cincinnati Cincinnati, OH 45221

1-CINC-A

Department of Aerospace Engineering University of Cincinnati Cincinnati, OH 45221

1-CINC-E

Department of Economics University of Cincinnati Cincinnati, OH 45221

1-CINC-P

Department of Physics University of Cincinnati Cincinnati, OH 45221

1-CLEM

Department of Mathematical Sciences Clemson University Clemson, SC 29631

1-CLMB

Department of Mathematics Columbia University New York, NY 10027

1-CLMB-D

Department of Middle Eastern Languages Columbia University New York, NY 10027

1-CLMB-E

Department of Economics Columbia University New York, NY 10027

1-CLMB-Q

Department of Philosophy Columbia University New York, NY 10027

1-CLMB-S

Department of Mathematical Statistics Columbia University New York, NY 10027

1-CLRK

Department of Mathematics Clark University Worcester, MA 01610

1-CLRK-P

Department of Physics Clark University Worcester, MA 01610

1-CMI

Department of Mathematics Central Michigan University Mount Pleasant, MI 48859

1-CMU

Department of Mathematics Carnegie-Mellon University Pittsburgh, PA 15213

1-CMU-C

Department of Computer Science Carnegie-Mellon University Pittsburgh, PA 15213

1-CMU-E

Department of Electrical Engineering Carnegie-Mellon University Pittsburgh, PA 15213

1-CMU-I

Graduate School of Industrial Administration Carnegie-Mellon University Pittsburgh, PA 15213 1-CMU-Q

Department of History and Philosophy Carnegie-Mellon University Pittsburgh, PA 15213

1-CMU-S

Department of Statistics Carnegie-Mellon University Pittsburgh, PA 15213

1-CO

Department of Mathematics University of Colorado Boulder, CO 80302

1-CO-P

Department of Physics University of Colorado Boulder, CO 80302

1-CO2

Department of Mathematics University of Colorado Colorado Springs, CO 80907

1-COD

Department of Mathematics University of Colorado Denver, CO 80202

1-COLG

Department of Mathematics Colgate University Hamilton, NY 13346

1-COLG-P

Department of Physics and Astronomy Colgate University Hamilton, NY 13346

1-COMSAT

COMSAT Laboratories Clarksburg, MD 20871

1-COS

Department of Mathematics Colorado State University Fort Collins, CO 80523

1-COS-C

Department of Computer Science Colorado State University Fort Collins, CO 80523

1-COS-S

Department of Statistics Colorado State University Fort Collins, CO 80523

1-CRNL

Department of Mathematics Cornell University Ithaca, NY 14853

1-CRNL-A

Sibley School of Mechanics and Aerospace Engineering Cornell University Ithaca, NY 14853 1-CRNL-B

Department of Theoretical and Applied Mechanics Cornell University Ithaca, NY 14853

1-CRNL-C

Department of Computer Science Cornell University Ithaca, NY 14853

1-CRNL-E

School of Electrical Engineering Cornell University Ithaca, NY 14850

1-CRNL-G

Biometrics Unit Cornell University Ithaca, NY 14853

1-CRNL-O

Department of Operations Research Cornell University Ithaca, NY 14853

1-CSCT

Department of Mathematics and Computer Science Clarkson College of Technology Potsdam, NY 13676

1-CSCT-P

Department of Physics Clarkson College Potsdam, NY 13676

1-C7

Department of Mathematics University of Connecticut Storrs, CT 06268

1-CT-Q

Department of Philosophy University of Connecticut Storrs, CT 06268

1-CT-8

Department of Statistics University of Connecticut Storrs, CT 06268

1-CUNY2

Department of Mathematics Bernard M. Baruch College CUNY New York, NY 10010

1-CUNY2-S

Department of Statistics Bernard M. Baruch College CUNY New York, NY 10010

1-CUNY7

Department of Mathematics Herbert H. Lehman College CUNY Bronx, NY 10468

1-CUNY7-H

Department of History Herbert H. Lehman College CUNY Bronx, NY 10468 1-CUNYB

Department of Mathematics Brooklyn College CUNY Brooklyn, NY 11210

1-CUNYH

Department of Mathematics Hunter College, CUNY New York, NY 10021

1-CUNYJ

Department of Mathematics John Jay College of Criminal Justice, CUNY New York, NY 10019

1-CUNYQ

Department of Mathematics Queens College CUNY Flushing, NY 11366

1-CUNYQ-C

Department of Computer Science Queens College CUNY Flushing, NY 11367

1-CUNYS

Department of Mathematics College of Staten Island, CUNY Staten Island, NY 10301

1-CVLS

Department of Mathematics Cleveland State University Cleveland, OH 44115

1-CWR

Department of Mathematics and Statistics Case Western Reserve University Cleveland, OH 44106

1-DC

Department of Mathematics University of the District of Columbia Washington, DC 20001

1-DCKN

Department of Mathematics Dickinson College Carlisle, PA 17013

1-DE

Department of Mathematics University of Delaware Newark, DE 19711

1-DE-E

Department of Mechanical Engineering University of Delaware Newark, DE 19711

1-DE-P

Department of Physics University of Delaware Newark, DE 19711

1-DNV

Department of Mathematics University of Denver Denver, CO 80210 1-DPL

Department of Mathematics DePaul University Chicago, IL 60614

1-DREX

Department of Mathematics Drexel University Philadelphia, PA 19104

1-DTM

Department of Mathematics Dartmouth College Hanover, NH 03755

1-DTM-Q

Department of Philosophy Dartmouth College Hanover, NH 03755

1-DUKE

Department of Mathematics Duke University Durham, NC 27706

1-DUKE-B

The Fuqua School of Business Social Science Building Duke University Durham, NC 27706

1-DUKE-D

Department of Electrical Engineering Duke University Durham, NC 27706

1-DUKE-E

Department of Mechanical Engineering Duke University Durham, NC 27706

1-DYTN

Department of Mathematics University of Dayton Dayton, OH 45469

1-EMI

Department of Mathematics Eastern Michigan University Ypsilanti, MI 48197

1-EMRY

Department of Mathematics Emory University Atlanta, GA 30322

L-ENC

Department of Mathematics East Carolina University Greenville, NC 27834

1-ET

Educational Testing Service Princeton, NJ 08540

1-EWA

Department of Mathematics Eastern Washington University Cheney, WA 99004

1-FL

Department of Mathematics University of Florida Gainesville, FL 32611

1-FL-C

Department of Computer Science University of Florida Gainsville, FL 32611

1-FL-D

Department of Electrical Engineering University of Florida Gainesville, FL 32611

1-FL-E

Department of Engineering Sciences University of Florida Gainesville, FL 32611

1-FL-8

Department of Statistics University of Florida Gainesville, FL 32611

1-FLAT

Department of Mathematics Florida Atlantic University Boca Raton, FL 33432

Department of Mathematics Florida State University Tallahassee, FL 32306

Department of Computer Science Florida State University Tallahassee, FL 32306

1-FLS-Q Department of Philosophy Florida State University Tallahassee, FL 32306

1-FLS-S

Department of Statistics Florida State University Tallahassee, FL 32306

Department of Mathematics Framingham State College Framingham, MA 01701

1-FMHS-C

Department of Mathematics and Computer Science Framingham State College Framingham, MA 01701

1-FRDH

Department of Mathematics Fordham University Bronx, NY 10458

1-FRDH2

Division of Science and Mathematics Fordham University at Lincoln Center New York, NY 10023

1-FRF

Department of Mathematics Fairfield University Fairfield, CT 06430

1-FRMC

Department of Mathematics Franklin and Marshall College Lancaster, PA 17604

1-GA

Department of Mathematics University of Georgia Athens, GA 30602

1-GA-A

Center for Applied Mathematics University of Georgia Athens, GA 30602

1-GA-8

Department of Statistics and Computer Science The University of Georgia Athens, GA 30602

1-GAIT

Department of Mathematics Georgia Institute of Technology Atlanta, GA 30332

1-GAIT-C

School of Information and Computer Science Georgia Institute of Technology Atlanta, GA 30332

1-GAIT-E

School of Electrical Engineering Georgia Institute of Technology Atlanta, GA 30332

1-GAIT-P

School of Physics Georgia Institute of Technology Atlanta, GA 30332

1-GAS

Department of Mathematics Georgia State University Atlanta, GA 30303

1-GAS-E

Department of Economics Georgia State University Atlanta, GA 30303

1-GGT

Department of Mathematics Georgetown University Washington, DC 20007

1-GGT-Q

Department of Philosophy Georgetown University Washington, DC 20057

1-GMRL

Department of Mathematics General Motors Research Labs Warren, MI 48090

1-GMSN

Department of Mathematics George Mason University Fairfax, VA 22030

1-GWU

Department of Mathematics George Washington University Washington, DC 20052

1-CWILC

Department of Electrical Engineering and Computer Science George Washington University Washington, DC 20052

1-HAMC

Department of Mathematics Hamilton College Clinton, NY 13323

1-HI

Department of Mathematics University of Hawaii Honolulu, HI 96822

1-HI-C

Department of Information and Computer Science University of Hawaii Honolulu, HI 96822

1-HIH

Department of Mathematics University of Hawaii Hilo, HI 96720

Department of Mathematics College of the Holy Cross Worcester, MA 01610

1-HMUD

Department of Mathematics Harvey Mudd College Claremont, CA 91711

Department of Mathematics Hofstra University Hempstead, NY 11550

1-HRV

Department of Mathematics Harvard University Cambridge, MA 02138

1-HRV-A

Division of Applied Sciences Harvard University Cambridge, MA 02138

1-HRV-B

Graduate School of Business Administration Harvard University Boston, MA 02163

1-HRV-D

Department of Psychology and Social Relations Harvard University Cambridge, MA 02138

1-HRV-E

Division of Engineering and Applied Physics Harvard University Cambridge, MA, 02138

1-HRV-P

Department of Physics Harvard University Cambridge, MA 02138

1-HRV-8

Department of Statistics Harvard University Cambridge, MA 02138

1-HST

Department of Mathematics University of Houston Houston, TX 77004

1-HST-P

Department of Physics University of Houston Houston, TX 77004

1-HUMB

Department of Mathematics **Humboldt State University** Arcata, CA 95521

1-HWRD

Department of Mathematics Howard University Washington, DC 20059

1-HWRD-E

Department of Mechanical Engineering Howard University Washington, DC 20059

1-IA

Department of Mathematics University of Iowa Iowa City, IA 52242

1-TA-C

Department of Computer Science University of Iowa Iowa City, IA, 52242

Department of Electrical Engineering University of Iowa Iowa City, IA 52242

1-IA-I

Division of Information Engineering University of Iowa Iowa City, IA 52242

1-IA-P

Department of Physics and Astronomy University of Iowa Iowa City, IA 52242

1-IA-8

Department of Statistics and Actuarial Science University of Iowa Iowa City, IA 52242

1-IASP

School of Mathematics Institute for Advanced Study Princeton, NJ 08540

1-IASP-B

School of Natural Science Princeton Institute for Advanced Study Princeton, NJ 08540

1-IASU

Department of Mathematics Iowa State University Ames, IA 50011

1-IASU-C

Department of Computer Science Iowa State University Ames, IA 50011

1-IASU-D

Department of Engineering Science and Mechanics Iowa State University Ames, IA 50011

1-LASU-E

Department of Economics Iowa State University Ames, IA 50011

1-LASU-F

Department of Electrical Engineering Iowa State University Ames, IA 50011

1-IASU-L

Statistical Laboratory Iowa State University Ames, IA 50011

1-IASU-P

Department of Physics Iowa State University Ames, IA 50011

1-IASU-S

Department of Statistics Iowa State University Ames, IA 50011

1-IBM

IBM Research Center P.O. Box 218 Yorktown Heights, NY 10598

1-IBM2

IBM Research Laboratory San Jose, CA 95193

1-ID

Department of Mathematics University of Idaho Moscow, ID 83843

1-IDA

Institute for Defense Analyses Thanet Road Princeton, NJ 08540

1-IL

Department of Mathematics University of Illinois Urbana, IL 61801

1-IL-B

Department of Business Administration University of Illinois Urbana, IL 61801

1-IL-C

Department of Computer Science University of Illinois Urbans, IL 61801 1-IL-D

Department of Electrical Engineering University of Illinois Urbana, IL 61801

1-IL-E

Department of Economics University of Illinois Urbana, IL 61801

1-IL-F

Computer-Based Education Research Laboratory University of Illinois Urbana, IL 61801

1-ILCC

Department of Mathematics University of Illinois Chicago, IL 60680

1-ILCC-B

Department of Quantitative Methods University of Illinois Chicago, IL 60680

1-ILCC-C

Computing Center University of Illinois Chicago, IL 60680

1-ILCC-I

Department of Information Engineering University of Illinois Chicago, IL 60680

1-ILCC-P

Department of Physics University of Illinois Chicago, IL 60680

1-ILIT

Department of Mathematics Illinois Institute of Technology Chicago, IL 60616

1-ILIT-A

Department of Mechanics Illinois Institute of Technology Chicago, IL 60616

1-ILIT-P

Department of Physics Illinois Institute of Technology Chicago, IL 60616

1-ILS

Department of Mathematics Illinois State University Normal, IL 61761

1-IN

Department of Mathematics Indiana University Bloomington, IN 47401

I-IN-R

Graduate School of Business Indiana University Bloomington, IN 47401 I-IN-E

Department of Economics Indiana University Bloomington, IN 47401

1-IN-H

Department of History and Philosophy of Science Indiana University Bloomington, IN 47401

1-IN-P

Department of Physics Indiana University Bloomington, IN 47401

1-IN-Q

Department of Philosophy Indiana University Bloomington, IN 47401

1-INPFW

Department of Mathematical Sciences Indiana-Purdue University Fort Wayne, IN 46805

1-INPI

Department of Mathematical Sciences Indiana-Purdue University Indianapolis, IN 46205

1-INS

Department of Mathematics Indiana State University Terre Haute, IN 47809

1-INSB

Department of Mathematics Indiana University South Bend, IN 46615

1-IONA

Iona College New Rochelle, NY 10801

1-IONA-B

Hagan School of Business Iona College New Rochelle, NY 10801

1-ITHC

Department of Mathematics Ithaca College Ithaca, NY 14850

1-ЈНОР-А

Applied Physics Laboratory Johns Hopkins University Laurel, MD 20810

1-ЈНОР-В

Department of Earth and Planetary Science Johns Hopkins University Laurel, MD 20810

1-JHOP-D

Department of Electrical Engineering Johns Hopkins University Laurel, MD 20810 1-JHOP-E

Department of Political Economy Johns Hopkins University Laurel, MD 20810

1-JMAD

Department of Mathematics James Madison University Harrisonburg, VA 22801

1-KNGC

Department of Mathematics King's College Wilkes-Barre, PA 18711

1-KNTS

Department of Mathematics Kent State University Kent, OH 44242

1-KNTS2

Kent State University Trumbull Campus Warren, OH 44483

1-K8

Department of Mathematics University of Kansas Lawrence, KS 66045

1-KS-B

School of Business University of Kansas Lawrence, KS 66045

1-KS-C

Department of Computer Science University of Kansas Lawrence, KS 66045

1-K8-E

Department of Economics University of Kansas Lawrence, KS 66045

1-KSS

Department of Mathematics Kansas State University Manhattan, KS 66506

1-KY

Department of Mathematics University of Kentucky Lexington, KY 40501

1-KY-A

Wenner Gren Research Laboratory University of Kentucky Lexington, KY 40501

1-KY-C

Department of Computer Science University of Kentucky Lexington, KY 40506

1-KY-D

Department of Electrical Engineering University of Kentucky Lexington, KY 40501

1-KY-P

Department of Physics University of Kentucky Lexington, KY 40501

1-KY-8

Department of Statistics University of Kentucky Lexington, KY 40501

1-LAS

Department of Mathematics Louisiana State University Baton Rouge, LA 70803

1-I.AS-C

Department of Computer Science Louisiana State University Baton Rouge, LA 70803

1-LAS-D

Department of Chemistry Louisiana State University Baton Rouge, LA 70803

1-LAS-E

Department of Electrical Engineering Louisiana State University Baton Rouge, LA 70803

1-LAS-P

Department of Physics and Astronomy Louisiana State University Baton Rouge, LA 70803

1-LEHI

Department of Mathematics Lehigh University Bethlehem, PA 18015

1-LEHI-A

Center for the Application of Mathematics Lehigh University Bethlehem, PA 18015

1-LEHI-E

Department of Mechanical Engineering Lehigh University Bethlehem, PA 18015

1-LFYC

Department of Mathematics Lafayette College Easton, PA 18042

1-I.I.I.

Lawrence Livermore Laboratory Livermore, CA 94550

1-LMNC

Department of Mathematics Le Moyne College Syracuse, NY 13214

1-LMNC-C

Department of Computer Science Le Moyne College Syracuse, NY 13214

1-I.MR

Department of Mathematics Lamar University Beaumont, TX

1-LMS

Lockheed Missiles and Space Company, Inc. Sunnyvale, CA 94086

Department of Mathematics University of Louisville Louisville, KY 40208

Department of Mathematics University of Lowell Lowell, MA 01854

1-LYLCH

Department of Mathematical Sciences Loyola University Chicago, IL 60626

1-LYLNO

Department of Mathematics Loyola University New Orleans, LA 70118

1-LYLNO-P

Department of Physics Loyola University New Orleans, LA 70118

Department of Mathematics and Statistics University of Massachusetts Amherst, MA 01003

Department of Electrical and Computer Engineering University of Massachusetts Amherst, MA 01002

1-MA-Q

Department of Philosophy University of Massachusetts Amherst, MA 01003

Department of Mathematics University of Massachusetts Boston, MA 02125

1-MD

Department of Mathematics University of Maryland College Park, MD 20742

1-MD-C

Department of Computer Science University of Maryland College Park, MD 20742

1-MD-E

Department of Electrical Engineering University of Maryland College Park, MD 20742

Institute for Fluid Dynamics and Applied Mathematics University of Maryland College Park, MD 20742

1-MD-P

Institute for Physical Sciences and Technology University of Maryland College Park, MD 20742

1-MD-8

Department of Management and Statistics University of Maryland College Park, MD 20742

1-MDBC

Division of Mathematics and **Physics** University of Maryland, **Baltimore County** Baltimore, MD 21228

1-MDDR

McDonnell Douglas Research Lab. P.O. Box 516 St. Louis, MO 63166

Department of Mathematics University of Maine Orono, ME 04473

1-ME-E

Department of Electrical Engineering University of Maine Orono, ME 04469

1-MEMP

Department of Mathematical Sciences Memphis State University Memphis, TN 38152

Department of Mathematics University of Michigan Ann Arbor, MI 48109

Department of Economics University of Michigan Ann Arbor, MI 48109

Department of Biostatistics School of Public Health University of Michigan Ann Arbor, MI 48109

1-MI-C

Department of Computer and Communication Science University of Michigan Ann Arbor, MI 48109

1-MI-E

Computer Information and Control Engineering University of Michigan Ann Arbor, MI 48109

1-MI-F

Department of Electronics and Computer Engineering University of Michigan Ann Arbor, MI 48109

1-MI-H

Center for Human Growth & Development University of Michigan Ann Arbor, MI 48109

1-MI-I

Department of Industrial Engineering University of Michigan Ann Arbor, MI 48109

1-MI-P

Department of Physics University of Michigan Ann Arbor, MI 48109

1-MI-Q

Department of Philosophy University of Michigan Ann Arbor, MI 48109

1-MLS

Department of Statistics University of Michigan Ann Arbor, MI 48109

1-MT2

Department of Mathematics University of Michigan Dearborn, MI 48128

1-M13

Department of Mathematics University of Michigan Flint, MI 48503

1-MIAM

Department of Mathematics University of Miami Coral Gables, FL 33124

1-MIAM-A

Institute for Molecular and Cellular Evolution University of Miami Coral Gables, FL 33124

Department of Mathematics Michigan State University E. Lansing, MI 48823

Department of Metal. Mechanics and Materials Science Michigan State University E. Lansing, MI 48823

1-MIS-D

Department of Economics Michigan State University E. Lansing, MI 48823

Department of Electrical Engineering and Systems Michigan State University E. Lansing, MI 48824

1-MIS-S

Department of Statistics and Probability Michigan State University E. Lansing, MI 48823

1-MIT

Department of Mathematics MIT Cambridge, MA 02139

1-MITR

The Mitre Corporation Bedford, MA 01730

1.MITT

Keweenaw Research Center Michigan Technological University Houghton, MI 49931

1-ММОН

Department of Mathematics and Statistics Miami University Oxford, OH 45056

1-MMOH2

Department of Mathematics Miami University Middletown, OH 45042

1-MN

Department of Mathematics University of Minnesota Minneapolis, MN 55455

1-MN-P

Department of Physics University of Minnesota Minneapolis, MN 55455

1-MN-8

Department of Statistics University of Minnesota Minneapolis, MN 55455

1-MO

Department of Mathematics University of Missouri Columbia, MO 65201

1-MO-C

Department of Computer Science University of Missouri Columbia, MO 65201

1-MO-I

Department of Industrial Engineering University of Missouri Columbia, MO 65201

1-MO-P

Department of Physics University of Missouri Columbia, MO 65201

1-MO-8

Department of Statistics University of Missouri Columbia, MO 65201

1-MOKC

Department of Mathematics University of Missouri Kansas City, MO 64110

1-MOR

Department of Mathematics University of Missouri Rolla, MO 65401

1-MOSL

Department of Mathematics University of Missouri St. Louis, MO 63121

1-MR

Mathematical Reviews P.O. Box 8604 Ann Arbor, MI 48107

1-MRHS

Department of Mathematics Moorhead State University Moorhead, MN 56560

1-MRQT-S

Department of Mathematics and Statistics Marquette University Milwaukee, WI 53233

LMRRS

Department of Mathematics Murray State University Murray, KY 42071

1-M

Department of Mathematics University of Mississippi University, MS 38677

1-M85

Department of Mathematics Mississippi State University Mississippi State, MS 39762

1-M7

Department of Mathematics University of Montana Missoula, MT 59801

1-MTCS

Department of Mathematics Montclair State College Upper Montclair, NJ 07043

1-MTS

Department of Mathematics Montana State University Bozeman, MT 59715

1-N

Department of Mathematics University of North Carolina Chapel Hill, NC 27514

1-NC-H

School of Public Health University of North Carolina Chapel Hill, NC 27514

1-NC-P

Department of Physics and Astronomy University of North Carolina Chapel Hill, NC 27514

1-NC-S

Department of Statistics University of North Carolina Chapel Hill, NC 27514

1-NC

Department of Mathematics University of North Carolina Charlotte, NC 28213

1-NCA

National Center for Atmospheric Research P.O. Box 1470 Boulder, CO 80302

1-NCG

Department of Mathematics University of North Carolina Greensboro, NC 27412

1-NCS

Department of Mathematics North Carolina State University Raleigh, NC

1-NCS-C

Department of Mathematics and Computer Science North Carolina State University Raleigh, NC 27650

1-NCS-I

Department of Industrial Engineering North Carolina State University Raleigh, NC

1-NCS-8

Department of Statistics North Carolina State University Raleigh, NC 27650

1-NCW

Department of Mathematical Sciences University of North Carolina Wilmington, NC 28406

1-NDM

Department of Mathematics University of Notre Dame Notre Dame, IN 46556

1-NDM-A

Department of Chemistry University of Notre Dame Notre Dame, IN 46556

1-NDM-F

Department of Electrical Engineering University of Notre Dame Notre Dame, IN 46556

1-NE

Department of Mathematics and Statistics University of Nebraska Lincoln, NE 68588

1-NENG

Department of Mathematics New England College Henniker, NH 03242

1-NEO

Department of Mathematics University of Nebraska Omaha, NE 68182

1-NH

Department of Mathematics University of New Hampshire Durham, NH 03824

1-NIL

Department of Mathematical Sciences Northern Illinois University DeKalb, IL 60115

1-NJIT

Department of Mathematics New Jersey Institute of Technology Newark, NJ 07102

1.NM

Department of Mathematics University of New Mexico Albuquerque, NM 87131

1-NM-C

Department of Computer Science University of New Mexico Albuquerque, NM 87131

1-NM-P

Department of Physics and Astronomy University of New Mexico Albuquerque, NM 87131

1-NM-8

Department of Mathematics and Statistics University of New Mexico Albuquerque, NM 87114

1-NMS

Department of Mathematical Sciences New Mexico State University Las Cruces, NM

1-NMS-P

Department of Physics New Mexico State University Las Cruces, NM 88003

1-NORE

Department of Mathematics Northeastern University Boston, MA 02115

1-NORL

Department of Mathematics University of New Orleans New Orleans, LA 70148

1-NORL-C

Computer Science Department University of New Orleans New Orleans, LA

1-NORL-P

Department of Physics University of New Orleans New Orleans, LA

1-NPS

Department of Mathematics Naval Postgraduate School Monterey, CA 93940

1-NPS-A

Operations Analysis Department Naval Postgraduate School Monterey, CA 93940

1-NRL

Naval Research Laboratory Washington, DC 20378

1-NSF

National Science Foundation Washington, DC 20550

1-NTXS

Department of Mathematics North Texas State University Denton, TX 76203

1-NV

Department of Mathematics University of Nevada Reno, NV 89557

1-NVLV

Department of Mathematical Sciences University of Nevada Las Vegas, NV 89154

1-NW

Department of Mathematics Northwestern University Evanston, IL 60201

1-NW-D

Graduate School of Management Northwestern University Evanston, IL 60201

1-NW-E

Department of Electrical Engineering and Computer Science Northwestern University

Evanston, IL 60201

1-NW-F

Department of Engineering Science and Applied Mathematics Northwestern University Evanston, IL 60201

1-NW-G

Department of Managerial Economics Northwestern University Evanston, IL 60201

1-NW-I

Department of Industrial Engineering and Management Science Northwestern University Evanston, II. 60201

1-NY-E

Department of Economics New York University New York, NY 10003

1-NY-N

Department of Near Eastern Languages and Literatures New York University New York, NY 10003

1-NY-R

Department of Politics New York University New York, NY 10003

1-NY-X

Courant Institute New York University New York, NY 10012

1-OAKL

Department of Mathematical Sciences Oakland University Rochester, MI 48063

1-OAKL-P

Department of Physics Oakland University Rochester, MI 48063

1-OBLC

Department of Mathematics Oberlin College Oberlin, OH 44074

1-OCD

Department of Mathematics Occidental College Los Angeles, CA 90041

1-ODN

Department of Mathematics and Computer Science Old Dominion University Norfolk, VA 23508

1-OB

Department of Mathematics Ohio University Athens, OH 45701

1-OHS

Department of Mathematics Ohio State University Columbus, OH 43210

1-OHS-C

Department of Computer and Information Science Ohio State University Columbus, OH 43210

LOHS.D

Department of Civil Engineering Ohio State University Columbus, OH 43210

1-OHS-E

Department of Engineering Mechanics Ohio State University Columbus, OH 43210

1-OHS-Q

Department of Philosophy Ohio State University Columbus, OH 43210

1-OHS-S

Department of Statistics Ohio State University Columbus, OH 43210

1-OHSL

Department of Mathematics Ohio State University Lima, OH 45804

1-OHSN

Department of Mathematics Ohio State University Newark, OH 48055

1.OK

Department of Mathematics University of Oklahoma Norman, OK 73019

1-OK-C

School of Electrical Engineering and Computer Science University of Oklahoma Norman, OK 73019

1-OKS

Department of Mathematics Oklahoma State University Stillwater, OK 74074

1-OKS-F

Center for Financial Institute Oklahoma State University Stillwater, OK 74074

1-OKS-S

Department of Statistics Oklahoma State University Stillwater, OK 74074

1-OLAF

Department of Mathematics St. Olaf College Northfield, MN 55057

1-OR

Department of Mathematics University of Oregon Eugene, OR 97403

1-OR-C

Department of Computer and Information Science University of Oregon Eugene, OR 97403

1-ORNL

Oak Ridge National Lab P.O. Box X Oak Ridge, TN 37830

1-OR

Department of Mathematics Oregon State University Corvallis, OR 97331

1-ORS-C

Department of Computer Science Oregon State University Corvallis, OR 97331

1-OR8-8

Department of Statistics Oregon State University Corvallis, OR 97331

1-PA

Department of Mathematics University of Pennsylvania Philadelphia, PA 19104

1-PA-E

Department of Economics University of Pennsylvania Philadelphia, PA 19104

1-PA-F

Department of Finance University of Pennsylvania Philadelphia, PA 19104

1-PA-8

Department of Statistics University of Pennsylvania Philadelphia, PA 19104

1-PAM

Department of Mathematics Pan American University Edinburg, TX 78539

1-PAS

Department of Mathematics Pennsylvania State University University Park, PA 16802

1-PAS-C

Department of Computer Science Pennsylvania State University University Park, PA 16802

1-PAS-D

Division of Management Science Pennsylvania State University University Park, PA 16802

1-PAS-S

Department of Statistics Pennsylvania State University University Park, PA 16802

1-PASE

Department of Mathematics Pennsylvania State University Erie, PA 16563

1-PASF-P

Department of Physics Pennsylvania State University Fogelsville, PA 18051

1-PASK

Department of Mathematics Pennsylvania State University McKeesport, PA 15132

1-PASM

Department of Mathematics Pennsylvania State University Monaca, PA 15061

1-PASMA

Department of Mathematics Pennsylvania State University Mont Alto, PA 17237

1-PASR

Department of Mathematics Pennsylvania State University Reading, PA 19608

1-PINY

Department of Mathematics Polytechnic Institute of New York Brooklyn, NY 11201

1-PITT

1-PTTT
Department of Mathematics and
Statistics
University of Pittsburgh
Pittsburgh, PA 15260

1-PITT-A

Department of Electrical Engineering University of Pittsburgh Pittsburgh, PA

1-PITT-B

Graduate School of Business University of Pittsburgh Pittsburgh, PA 15260

1-PITT-C

Department of Computer Science University of Pittsburgh Pittsburgh, PA 15260

1-PITT-D

Graduate School of Public Health University of Pittsburgh Pittsburgh, PA

1-PITT-I

Department of Industrial Engineering University of Pittsburgh Pittsburgh, PA

1-PRIN

Department of Mathematics Princeton University Princeton, NJ 08540

1-PRIN-D

Department of Electrical Engineering Princeton University Princeton, NJ 08540

1-PRIN-E

Department of Economics Princeton University Princeton, NJ 08540

1-PRIN-P

Department of Physics Princeton University Princeton, NJ

1-PRIN-Q

Department of Philosophy Princeton University Princeton, NJ 08540

1-PRLS

Department of Mathematics Portland State University Portland, OR 97201

1-PRM

Department of Mathematics University of Puerto Rico Mayaguez, PR 00708

1-PRRP

Department of Mathematics University of Puerto Rico Rio Piedras, PR 00931

1-PTB

Department of Mathematics Pittsburg State University Pittsburg, KS 66762

1-PURD

Department of Mathematics Purdue University W. Lafayette, IN 47907

1-PURD-A

Krannert Graduate School of Management Purdue University W. Lafayette, IN 47907

1-PURD-B

Department of Psychological Science Purdue University W. Lafayette, IN 47907

1-PURD-C

Department of Computer Science Purdue University West Lafayette, IN 47907

1-PURD-E

School of Electrical Engineering Purdue University W. Lafayette, IN 47907

1-PURD-S

Department of Statistics Purdue University W. Lafayette, IN 47907

1-PURD2

Department of Mathematical Sciences Purdue University, Calumet Hammond, IN 46323

1-PURD2-P

Department of Chemistry and Physics Purdue University, Calumet Hammond, IN 46323

1-RCF

Department of Mathematics Rockefeller University New York, NY 10021

1-RCT

Department of Mathematics University of Rochester Rochester, NY 14627

1-RCT-C

Department of Computer Science University of Rochester Rochester, NY 14627

1-RCT-I

Graduate School of Management University of Rochester Rochester, NY 14627

1-RCT-E

Department of Electrical Engineering University of Rochester Rochester, NY 14627

1-RCT-S

Department of Statistics University of Rochester Rochester, NY 14627

1-RDF

Department of Mathematics Radford College Radford, VA 24142

1.REED

Department of Mathematics Reed College Portland, OR 97202

1-REED-Q

Department of Philosophy Reed College Portland, OR 97202

1-R

Department of Mathematics University of Rhode Island Kingston, RI 02881

1-RICE

Department of Mathematical Sciences Rice University Houston, TX 77001

1-RSF

Department of Mathematical Sciences Rensselaer Polytechnic Institute Troy, NY 12181

1-RSP-A

Department of Mechanics Rensselaer Polytechnic Institute Troy, NY 12181

1-RSP-E

Department of Electrical and Systems Engineering Rensselaer Polytechnic Institute Troy, NY 12181

1-RTG

Department of Mathematics Rutgers University New Brunswick, NJ 08903

1-RTG-C

Department of Computer Science Rutgers University New Brunswick, NJ 08903

1-RTG-S

Statistics Center Rutgers University New Brunswick, NJ 08903

1-RTG2

Department of Mathematics Rutgers University Newark, NJ 07102

1-RTG

Department of Mathematics Rutgers University Camden, NJ 08102

1-SAI

Department of Mathematics and Statistics University of South Alabama Mobile, AL 36608

1-SAND

Sandia Laboratories Albuquerque, NM 87185

1-SBDR

Schlumberger-Doll Research Ridgefield, CT 06877

1-8C

Department of Mathematics and Statistics University of South Carolina Columbia, SC 29208

1-8C-D

College of Education University of South Carolina Columbia, SC 29208

1-SC2

Department of Mathematics University of South Carolina Aiken, SC 29801

1-8CA

Department of Mathematics University of Southern California Los Angeles, CA 90007

1-SCA-A

Department of Aerospace Engineering University of Southern California Los Angeles, CA 90007

1-8CA-B

Graduate School of Business University of Southern California Los Angeles, CA 90007

1-SCA-C

Department of Computer Science University of Southern California Los Angeles, CA 90007

1-SCA-E

Department of Civil Engineering University of Southern California Los Angeles, CA 90007

1-SCA-G

Graduate Department of Aerospace Studies University of Southern California Los Angeles, CA 90007

1-SDS

Department of Mathematics San Diego State University San Diego, CA 92182

1-SFI

Department of Mathematics University of South Florida Tampa, FL 33620

1-SFLNC

Department of Mathematics New College of the University of South Florida Sarasota, FL 33580

1-SIL

Department of Mathematics Southern Illinois University Carbondale, IL 62901

1-SIL-C

Department of Computer Science Southern Illinois University Carbondale IL

1-811.2

Department of Mathematics Southern Illinois University Edwardsville, IL 62025

1-838

Department of Mathematics San Jose State University San Jose, CA 95192

1-8J8-Q

Department of Philosophy San Jose State University San Jose, CA 95192

1-SKTS

Department of Mathematics Stockton State College Pomona, NJ 08240

1.SMS

Department of Mathematics University of Southern Mississippi Hattiesburg, MS 39401

1-SMTH

Department of Mathematics Smith College Northampton, MA 01063

1-SMU

Department of Mathematics Southern Methodist University Dallas, TX 75275

1-SMU-C

Department of Computer Science Southern Methodist University Dallas, TX 75275

1-SMU-E

Department of Electrical Engineering Southern Methodist University Dallas, TX 75275

1-8MU-I

Department of Industrial Engineering and Operations Research Southern Methodist University Dallas, TX 75275

1-SMU-S

Department of Statistics Southern Methodist University Dallas, TX 75275

1-SRC

Department of Mathematics Syracuse University Syracuse, NY 13210

1-SRCS-E

Department of Electrical and Computer Engineering Syracuse University Syracuse, NY 13210

1-SRI-C

Computer Science Laboratory SRI International Menlo Park, CA 94025

1-STCL

Department of Mathematics University of Santa Clara Santa Clara, CA 95053

1-STCL-A

Department of Quantitative Methods University of Santa Clara Santa Clara, CA 95053

1.STE

Department of Mathematics Stanford University Stanford, CA 94305

1-STF-B

Department of Biological Science Stanford University Stanford, CA 94305

1-STF-C

Department of Computer Science Stanford University Stanford, CA 94305

1-STF-D

Digital Systems Laboratory Stanford University Stanford, CA 94305

1-STF-E

Department of Electrical Engineering Stanford University Stanford, CA 94305

1-STF-G

Department of Genetics Stanford University Stanford, CA 94305

1-STF-H

Department of Economics Stanford University Stanford, CA 94305

1-STF-O

Department of Operations Research Stanford University Stanford, CA 94305

1-STF-Q

Department of Philosophy Stanford University Stanford, CA 94305

1-STF-S

Department of Statistics Stanford University Stanford, CA 94305

1-STHL

Department of Mathematics Seton Hall University S. Orange, NJ 07079

1-STTT

Department of Mathematics Stevens Institute of Technology Hoboken, NJ 07030

1-STJ

Department of Mathematics and Computer Science St. John's University Jamaica, NY 11439

1-STL

Department of Mathematics St. Louis University St. Louis, MO 63103

1-SUNY2

Department of Mathematical Sciences SUNY Binghamton, NY 13901

1-SUNY2-A

Department of Systems Science SUNY Binghamton, NY 13901

1-SUNY2-C

Department of Computer Science SUNY Binghamton, NY 13901

1-SUNY2-P

Department of Physics SUNY Binghamton, NY 13901

1-SUNYA

Department of Mathematics and Statistics SUNY Albany, NY 12222

1-SUNYA-B

School of Business SUNY Albany, NY 12222

1-SUNYA-C

Department of Computer Science SUNY Albany, NY 12222

1-SUNYB

Department of Mathematics SUNY (Buffalo) Amherst, NY 14226

1-SUNYB-C

Department of Computer Science SUNY (Buffalo) Amherst, NY 14226

1-SUNYB-E

Department of Electrical Engineering SUNY (Buffalo) Amherst, NY 14226

1-SUNYB-F

School of Management SUNY (Buffalo) Buffalo, NY 14226

1-SUNYB-P

Department of Physics SUNY (Buffalo) Buffalo, NY 14226

1-SUNYB-Q

Department of Philosophy SUNY (Buffalo) Buffalo, NY 14226

1-SUNYB-S

Department of Statistics SUNY (Buffalo) Amherst, NY 14226

1-SUNYF

Department of Mathematics College of Fredonia, SUNY Fredonia, NY 14063

1-SUNYF-Q

Department of Philosophy College at Fredonia SUNY Fredonia, NY 14063

1-SUNYP

Department of Mathematics College at New Palts, SUNY New Palts, NY 12561

1-SUNYS

Department of Mathematics SUNY Stony Brook, NY 11790

1-SUNYS-A

Department of Applied Analysis SUNY Stony Brook, NY 11790

1-SUNYS-E

Department of Mechanical Engineering SUNY Stony Brook, NY 11790

1-SUNYS-P

Department of Physics SUNY Stony Brook, NY 11794

1-SUNYS-S

Department of Applied
Mathematics and Statistics
SUNY
Stony Brook, NY 11790

1-SUNYW

Department of Mathematics College at Old Westbury, SUNY Old Westbury, NY 11568

1-SWLA

Department of Mathematics University of Southwestern Louisiana Lafayette, LA 70504

1-TLD

Department of Mathematics University of Toledo Toledo, OH 43606

1-TMPL

Department of Mathematics Temple University Philadelphia, PA 19122

1-TMPL-B

School of Business Administration Temple University Philadelphia, PA 19122

1-TMPL-C

Department of Computer and Information Science Temple University Philadelphia, PA 19122

1-TMPL-D

Department of Chemistry Temple University Philadelphia, PA 19122

1-TMPL-P

Deptartment of Physics Temple University Philadelphia, PA 19122

1-TMPL-8

Department of Statistics Temple University Philadelphia, PA 19122

1-TN

Department of Mathematics University of Tennessee Knoxville, TN

1-TN-A

Department of Psychology University of Tennessee Knoxville, TN 37916

1-TN-C

Department of Computer Science University of Tennessee Knoxville, TN 37916

1-TN2

Department of Mathematics University of Tennessee Chattanooga, TN 37401

1-TN3

Department of Mathematics University of Tennessee Martin, TN 38238

1-TUFT

Department of Mathematics Tufts University Medford, MA 02155

1-TULN

Department of Mathematics Tulane University New Orleans, LA 70118

1-TULN-C

Department of Computer Science Tulane University New Orleans, LA 70118

1-TX

Department of Mathematics University of Texas Austin, TX 78712

1-TX-A

Department of Aerospace Engineering University of Texas Austin, TX 78712

1.TY.C

Department of Computer Science University of Texas Austin, TX

1-TX-D

Department of Astronomy University of Texas Austin, TX 78712

1-TX-E

Department of Engineering Mechanics University of Texas Austin, TX 78712

1-TX-F

Department of Finance University of Texas Austin, TX 78712

1-TX-G

Department of General Business University of Texas Austin, TX 78712

1-TX-N

Center for Numerical Analysis University of Texas Austin, TX 78712

1-TX-Q

Department of Philosophy University of Texas Austin, TX 78712

1-TXA

Department of Mathematics University of Texas Arlington, TX 76019

1-TXAM

Department of Mathematics Texas A & M University College Station, TX 77843

1-TXAM-B

Department of Business Analysis and Research College of Business Administration Texas A & M University College Station, TX 77843

1-TXAM2

Department of General Academics Texas A & M University Galveston, TX 77553

1. TY

Department of Mathematics Texas Christian University Fort Worth, TX 76129

1-TXC-A

M. J. Neeley School of Business Texas Christian University Fort Worth, TX 76129

1-TXD-A

School of Management and Administration University of Texas at Dallas Richardson, TX 75080

1-TXEP

Department of Mathematics University of Texas El Paso, TX 79968

1-TXH-H

School of Public Health University of Texas Houston, TX 77025

1-TXSA

Division of Mathematics and Computer Science University of Texas San Antonio, TX 78229

1.TYT

Department of Mathematics Texas Tech University Lubbock, TX 79409

1-TXT-E

Department of Electrical Engineering Texas Tech University Lubbock, TX 79409

1-UCLA

Department of Mathematics UCLA Los Angeles, CA 90024

1-UCLA-B

Department of Biomathematics UCLA Los Angeles, CA 90024

1-UCLA-C

Engineering/Computer Science UCLA Los Angeles, CA 90024

1-UCLA-F

Department of System Science UCLA Los Angeles, CA 90024

1-UCLA-G

Graduate School of Management UCLA Los Angeles, CA 90024

1-UCSE

Department of Mathematics University of California Santa Barbara, CA 93106

1-UCSC

Department of Mathematics University of California Santa Crus, CA 95064

1-UCSD

Department of Mathematics University of California, San Diego La Jolla, CA 92093

1-UCSD-A

Department of Aerospace and Mechanical Engineering Sciences University of California, San Diego La Jolla, CA 92093

1-UCSD-C

Department of Applied Physics and Information Science University of California, San Diego La Jolla, CA 92093

1-UCSD-G

Institute of Geophysics and Planetary Physics University of California, San Diego La Jolla, CA 92093

1-UCSD-P

Department of Physics University of California, San Diego La Jolla, CA 92093

1-USNA

Department of Mathematics U.S. Naval Academy Annapolis, MD 21402

1-UT

Department of Mathematics University of Utah Salt Lake City, UT 84112

1-UT-P

Department of Physics University of Utah Salt Lake City, UT 84112

1-UTS

Department of Mathematics Utah State University Logan, UT 85322

1-VA

Department of Mathematics University of Virginia Charlottesville, VA 22903

1-VA-B

Department of Electrical Engineering University of Virginia Charlottesville, VA

1-VA-

Department of Applied
Mathematics and Computer
Science
University of Virginia
Charlottesville, VA

1-VA-E

Department of Engineering Science and Systems University of Virginia Charlottesville, VA.

1-VACW

Department of Mathematical Sciences Virginia Commonwealth University Richmond, VA 23284

1-VAPI

Department of Mathematics Virginia Polytechnic Institute and State University Blacksburg, VA 24061

1-VAPI-B

Department of Biology Virginia Polytechnic Institute and State University Blacksburg, VA

1-VAPI-C

Department of Computer Science Virginia Polytechnic Institute and State University Blacksburg, VA 24061

1-VAPI-D

Public Choice Center Virginia Polytechnic Institute and State University Blacksburg, VA 24061

1-VAPI-P

Department of Physics Virginia Polytechnic Institute and State University Blacksburg, VA 24061

1-VAPI-S

Department of Statistics Virginia Polytechnic Institute and State University Blacksburg, VA 24061

1-VDB

Department of Mathematics Vanderbilt University Nashville, TN 37235

1-VLNV

Department of Mathematics Villanova University Villanova, PA 19085

1-VLNV-P

Department of Physics Villanova University Villanova, PA 19085

1-V88R

Department of Mathematics Vassar College Poughkeepsie, NY 12601

1-VSSR-Q

Department of Philosophy Vassar College Poughkeepsie, NY 12601

1-WA

Department of Mathematics University of Washington Seattle, WA 98195

1-WA-B

Department of Chemistry University of Washington Seattle, WA 98195

1-WA-C

Department of Computer Science University of Washington Seattle, WA 98195

1-WA-D

Department of Chemical Engineering University of Washington Seattle, WA 98195

1-WA-E

Department of Electrical Engineering University of Washington Seattle, WA 98195

1-WA-O

Department of Oceanography University of Washington Seattle, WA 98195

1-WAS

Department of Mathematics Washington State University Pullman, WA 99164

1-WAS-C

Department of Computer Science Washington State University Pullman, WA 99164

1-WASN

Department of Mathematics Washington University St. Louis, MO 63130

1-WASN-B

Systems Science and Mathematics Washington University St. Louis, MO 63130

1-WASN-D

Department of Economics Washington University St. Louis, MO 63130

1-WASN-E

Department of Electrical Engineering Washington University St. Louis, MO 63130

1-WCHS

Department of Mathematics Wichita State University Wichita, KS 67208

1-WCHS-P

Department of Physics Wichita State University Wichita, KS 67208

1-WESL

Department of Mathematics Wesleyan University Middletown, CT 06457

1-WFL

Department of Mathematics University of West Florida Pensacola, FL 32504

1-W

Department of Mathematics University of Wisconsin Madison, WI 53706

1-WI-B

Graduate School of Business University of Wisconsin Madison, WI 53706

1-WI-

Department of Computer Science University of Wisconsin Madison, WI 53706

1-WI-I

Department of Industrial Engineering University of Wisconsin Madison, WI 53706

1-WI-Q

Department of Philosophy University of Wisconsin Madison, WI 53706

1-WI-R

Mathematics Research Center University of Wisconsin Madison, WI 53706

1-WI-8

Department of Statistics University of Wisconsin Madison, WI 53706

1-WII

Department of Mathematics Western Illinois University Macomb, IL 61455

1-WIL-C

Computer Science Division Western Illinois University Macomb, IL 61455

1-WIM

Department of Mathematics University of Wisconsin Milwaukee, WI 53201

1-WIM-B

School of Business Administration University of Wisconsin Milwaukee, WI 53201

1-WIM-E

Department of Electrical Engineering and Computer Science University of Wisconsin Milwaukee, WI 53201

1-WIP

Department of Mathematics University of Wisconsin-Parkside Kenosha, WI 53141

1-WIP-P

Division of Science University of Wisconsin-Parkside Kenosha, WI 53141

1-WIST

Department of Mathematics University of Wisconsin-Stout Menomonie, WI 54751

1-WKFR

Department of Mathematics Wake Forest University Winston-Salem, NC 27109

1-WLEE

Department of Mathematics Washington and Lee University Lexington, VA 24450

1-WLL

Department of Mathematics Wellesley College Wellesley, MA 02181

1-WLMS

Department of Mathematics Williams College Williamstown, MA 01267

1-WLMS-B

Department of Biology Williams College Williamstown, MA 01267

1-WM

Department of Mathematics Western Michigan University Kalamazoo, MI 49008

1-WMI-C

Department of Computer Science Western Michigan University Kalamazoo, MI 49008

1-WNC

Department of Mathematics Western Carolina University Cullowhee, NC 28723

1-WPI

Department of Mathematics Worcester Polytechnic Institute Worcester, MA 01609

1-WPTC

Department of Mathematics William Paterson College Wayne, NJ 07470

1-WRTS

Department of Mathematics Wright State University Dayton, OH 45435

1-WSF

Department of Mathematics Westfield State College Westfield, MA 01085

1-WSMR

White Sands Missile Range NM 88002

1-WV

Department of Mathematics West Virginia University Morgantown, WV 26506

1-WV-C

Department of Statistics and Computer Science West Virginia University Morgantown, WV 26506

1-WY

Department of Mathematics University of Wyoming Laramie, WY 82071

1-WY-C

Department of Computer Science University of Wyoming Laramie, WY 82071

1-WY-T

Science and Mathematics **Teaching Center** University of Wyoming Laramie, WY 82071

1-WYNS

Department of Mathematics Wayne State University Detroit, MI 48202

1-WYN8-C

Department of Computer Science Wayne State University Detroit, MI 48202

1-WYNS-I

Department of Industrial Engineering Wayne State University Detroit, MI 48202

Department of Mathematics Yale University New Haven, CT 06520

1-YALE-B

Department of Chemistry Yale University New Haven, CT 06520

1-YALE-E

Department of Economics Yale University New Haven, CT 06520

1-YALE-O

Organization and Management Yale University New Haven, CT 06520

1-YALE-S

Department of Statistics Yale University New Haven, CT 06520

1-YGTS

Department of Mathematics Youngstown State University Youngstown, OH 44555

1-Y8V

Department of Mathematics Yeshiva University Belfer Graduate School New York, NY 10033

2-AOS-A

Institute of Problems of Mechanics Academy of Sciences of the USSR 117526 Moscow USSR

2-AO8-B

Institute of Central Economic Mathematics Academy of Sciences of the USSR 117333 Moscow USSR

2-AOS-D

V. A. Seklov Mathematic Institute Academy of Sciences of the USSR 11733 Moscow USSR

2-AOSAR

Institute of Mathematics Academy of Sciences Armenian SSR 375019 Erevan HISSE

2-AOSAR-C

Computing Center Academy of Sciences Armenian SSR 375019 Erevan USSR

2-AOSAZ-A

Institute of Mathematics and Mechanics Academy of Sciences Azerbaijan SSR 370000 Baku USSR

2-AOSBY

Institute of Mathematics Academy of Sciences Byelorussian SSR 220000 Minsk

2-AOSES-A

Institute of Cybernetics Academy of Sciences Estonian SSR 200026 Tallinn USSR

2-AOSGO-A

Institute of Cybernetics Academy of Sciences Georgian 380086 Tbilisi TISSE

2-AOSKZ-A

Institute of Mathematics and Mechanics Academy of Sciences Kasakh SSR 480100 Alma-Ata

2-AOSLI-A

Institute of Mathematics and Cybernetics Academy of Sciences Lithuanian SSR 232600 Vilnius USSR

2-AOSLI-B

Institute of Physics and Mathematics Academy of Sciences Lithuanian SSR 232600 Vilnius USSR

2-AOSMO

Institute of Mathematics Academy of Sciences Moldavian SSR 270000 Kishinev

2-A088I

Institute of Mathematics Siberian Branch Academy of Sciences of the USSR 630090 Novosibirsk USSR

2-AOSSI-C

Computing Center Siberian Branch Academy Sciences of the USSR 630090 Novosibirsk USSR

2-AOSUK

Institute of Mathematics Academy of Sciences Ukrainian SSR 252601 Kiev HISSR

2-AOSUK-A

Physical Engineering Institute of Low Temperatures Academy of Sciences Ukrainian SSR 310086 Kharkov USSR

2-AOSUK-B

Institute of Cybernetics Academy of Sciences Ukrainian SSR 252207 Kiev USSR

2-AOSUK-D

Institute of Applied Problems of Mechanics and Mathematics Academy of Sciences Ukrainian SSR 290047 L'vov USSR

2-AOSUR-A

Institute of Mathematic and Mehanics Ural Science Center Academy of Sciences of the USSR 620066 Sverdlovsk HISSR

2-AOSUZ

V. I. Romanovskii Institute of Mathematics Academy of Sciences Usbek SSR 700143 Tashkent TIRRE

2-BYEL

Faculty of Mechanics and Mathematics Byelorussian State University 220080 Minsk USSR

2-CHER

Chernigov Pedagogical Institute 250000 Chernigov USSR

2-DONE

Donetsk State University 340055 Donetak USSR

2-GOME

Faculty of Mathematics and Mechanics Gomel State University Gomel USSR

2-IRKU

Department of Mathematics Irkutsk State University 664003 Irkutak USSR

2-KAZA

Kasan State University 420000 Kasan

2-KEME

Department of Mathematics Kemerovo State University 650043 Kemerovo USSR

2-KEME-A

Department of Algebra and Geometry Kemerovo State University 650043 Kemerovo USSR

2-KHAR

Department of Mathematics Kharkov State University 310000 Kharkov USSR

2-KIEV

Department of Mathematics Kiev State University 252017 Kiev USSR

2-KIEV-A

Department of Cybernetics Kiev State University 252017 Kiev 17 USSR

2-KRAS

Krasnoyarsk State University 660025 Krasnoyarsk USSR

2-KUBN

Faculty of Mathematics Kuban State University 350751 Krasnodar USSR

2-LATV

Department of Mathematics Latvian State University 226098 Riga USSR

2-LATV-C

Computing Center Latvian State University 226098 Riga USSR

2-LENI

Faculty of Mathematics and Mechanics Leningrad State University 198904 Leningrad USSR

2-LENIP

Leningrad Polytechnic Institute 195251 Leningrad USSR

2-LOMI

Mathematics Institute
Leningrad Branch of the Steklov
Institute
191511 Leningrad
USSR

2-MOSC

Department of Mathematics Moscow State University 117234 Moscow USSR

2-NOVO

Department of Mathematics Novosibirsk State University 630090 Novosibirsk USSR

2-OMSK

Department of Mathematics Omsk State University 644077 Omsk USSR

2-SYKT

Faculty of Physics and Mathematics Syktyvkar State University 167001 Syktyvkar USSR

2-TAJI

Department of Mathematics Tajik State University 730000 Dushanbe USSR

2-TART

Department of Mathematics Tartu State University 202400 Tartu USSR

2-TASH

Faculty of Mathematics Tashkent State University 700095 Tashkent USSR

2-TBIL-A

Institute of Applied Mathematics Tbilisi State University 380043 Tbilisi IISSR

2-TIRAT

Department of Mathematics Ural State University 620083 Sverdlovsk USSR

2-VILN

Department of Mathematics Vilnius State University 232600 Vilnius USSR

2-VORO

Voronesh State University 394693 Voronesh USSR

3-AB

Department of Mathematics University of Alberta Edmonton, AB T6G 2G1 CANADA

3-AB-0

Department of Computing Science University of Alberta Edmonton, AB T6G 2E1 CANADA

3-AB-D

Department of Economics University of Alberta Edmonton, AB T6G 2E1 CANADA

3-AB-E

Department of Electrical Engineering University of Alberta Edmonton, AB T6G 2G7 CANADA

3-AB-F

Department of Finance and Management Science University of Alberta Edmonton, AB T6G 2G1 CANADA

3-AB-P

Department of Physics University of Alberta Edmonton, AB T6G 2E1 CANADA

2-ACAD

Department of Mathematics Acadia University Wolfville, NS B0P 1Z0 CANADA

3-RC

Department of Mathematics University of British Columbia Vancouver, BC V6T 1W5 CANADA

3-BC-0

Department of Computer Science University of British Columbia Vancouver, BC V6T 1W5 CANADA

3-BRCK

Department of Mathematics Brock University St. Catharines, ON L2S 3A1 CANADA

3-CALG

Department of Mathematics and Statistics University of Calgary Calgary, AB T2N 1N4 CANADA

3-CALG-E

Department of Mechanical Engineering University of Calgary Calgary, AB T2N 1N4 CANADA

3-CALG-Q

Department of Philosophy University of Calgary Calgary, AB T2N 1N4 CANADA

3-CARL

Department of Mathematics Carleton University Ottawa, ON K1S 5B6 CANADA

3-CARL-A

Department of Systems and Computer Engineering Carleton University Ottawa, ON K1S 5B6 CANADA

3-CARL-B

Department of Psychology Carleton University Ottawa, ON K1S 5B6 CANADA

3-CONC

Department of Mathematics Concordia University Montreal, PQ H3G 1M8 CANADA

3-CONC-A

Department of Quantitative Methods Concordia University Montreal, PQ H3G 1M8 CANADA

3-CONC-C

Department of Computer Science Concordia University Montreal, PQ H3G 1M8 CANADA

3-CONC-P

Department of Physics Concordia University Montreal, PQ H3G 1M8 CANADA

3-DLHS

Department of Mathematics Dalhousie University Halifax, NS B3H 4H8 CANADA

3-GLPB

Department of Mathematics and Statistics University of Guelph Guelph, ON N1G 2W1 CANADA

3-LETH

Department of Mathematical Science University of Lethbridge Lethbridge, AB T1K 3M4 CANADA

3-LETH-Q

Department of Philosophy University of Lethbridge Lethbridge, AB T1K 3M4 CANADA

3-LKHD

Department of Mathematical Science Lakehead University Thunder Bay, ON P7B 5E1 CANADA

3-LVL

Department of Mathematics Université Laval Quebec 10, PQ G1K 7P4 CANADA

3-MB

Department of Mathematics University of Manitoba Winnipeg, MB R3T 2N2 CANADA

3-MB-A

Department of Applied Mathematics University of Manitoba Winnipeg, MB R3T 2N2 CANADA

3-МВ-В

Department of Actuarial and Business Mathematics University of Manitoba Winnipeg, MB R3T 2N2 CANADA

3-MB-C

Department of Computer Science University of Manitoba Winnipeg, MB R3T 2N2 CANADA

3-MB-S

Department of Statistics University of Manitoba Winnipeg, MB R3T 2N2 CANADA

3-MGL

Department of Mathematics McGill University Montreal, PQ H3A 2K6 CANADA

3-MGL-A

Department of Electrical Engineering McGill University Montreal, PQ H3A 2A7 CANADA

3-MGL-C

School of Computer Science McGill University Montreal, PQ H3A 2K6 CANADA

3-MGL-P

Department of Physics McGill University Montreal, PQ H3A 2T8 CANADA

3-MGL-Q

History and Philosophy of Science Program McGill University Montreal, PQ H3A lG5 CANADA

3-MMAS

Department of Mathematics McMaster University Hamilton, ON L85 4K1 CANADA

3-MMAS-A

Department of Applied Mathematics McMaster University Hamilton, ON L8S 4K1 CANADA

3-MMAS-B

Faculty of Business McMaster University Hamilton, ON L8S 4M4 CANADA

3-MMAS-E

Department of Electrical Engineering McMaster University Hamilton, ON L8S 4L7 CANADA

3-MSV

Department of Mathematics Mount Saint Vincent University Halifax, NS B3M 2J6 CANADA

3-MTRL

Department of Mathematics and Statistics Université de Montréal Montreal, PQ H3C 3J7 CANADA

3-MTRL-I

Department of Information Science and Operational Research Université de Montréal Montreal, PQ H3C 3J7 CANADA

3-MTRL-R

Center of Research Mathematics Université de Montréal Montreal, PQ H3C 3JT CANADA

3-MTRLP-A

Department of Applied Mathematics Polytechnic School Université de Montréal Montreal, PQ H3C 3A7 CANADA

3-NB

Department of Mathematics University of New Brunswick Fredericton, NB E3B 5A3 CANADA

3-NB-B

School of Business University of New Brunswick Fredericton, NB E3B 5A3 CANADA

3-NI

Department of Mathematics Memorial University of Newfoundland St. John'a, NF A1C 587 CANADA

3-NF-C

Department of Computer Science Memorial University of Newfoundland St. John's, NF A1C 5S7 CANADA

3-NRC

National Research Council of Canada Ottawa, ON K1A 0R8 CANADA

3-OTTW

Department of Mathematics University of Ottawa Ottawa, ON K1N 6N5 CANADA

3-OTTW-C

Department of Computer Science University of Ottawa Ottawa, ON K1N 9B4 CANADA

3-OTTW-E

Department of Electrical Engineering University of Ottawa Ottawa, ON K1N 6N5 CANADA

3-PO

Department of Mathematics Université du Québec Montreal, PQ H3C 3P8 CANADA

3-PQ-A

Department of Pure Science Université du Québec Chicoutimi,PQ G7H 2B1 CANADA

3-PQTR-Q

Department of Philosophy Université du Québec Trois-Rivières, PQ G9A 5H7 CANADA

3-QEN

Department of Mathematics and Statistics Queen's University Kingston, ON K7L 3N6 CANADA

3-QEN-B

School of Business Queen's University Kingston, ON K7L 3N6 CANADA

3-QEN-C

Department of Computing and Information Science Queen's University Kingston, ON K7L 3N6 CANADA

3-RGN

Department of Mathematics University of Regina Regina, SK S4S 0A2 CANADA

3-RGN-C

Department of Computer Science University of Regina Regina, SK S4S OA2 CANADA

3-RMC

Department of Mathematics Royal Military College Kingston, ON K7L 2W3 CANADA

3-SFR

Department of Mathematics Simon Fraser University Burnaby, BC V5A 186 CANADA

3-SFR-C

Department of Computing Science Simon Fraser University Burnaby, BC V5A 1S6 CANADA

3-SFR-E

Department of Economics and Commerce Simon Fraser University Burnaby, BC V5A 186 CANADA

3-SFR-P

Department of Physics Simon Fraser University Burnaby, BC V5A 186 CANADA

3-SHRB

Department of Mathematics Université de Sherbrooke Sherbrooke, PQ J1K 2R1 CANADA

3-SK

Department of Mathematics University of Saskatchewan Saskatoon, SK S7N 0W0 CANADA

3-SKR

Department of Mathematics University of Saskatchewan Regina,SK S4S 042 CANADA

3-SKR-C

Department of Computer Science University of Saskatchewan Regina, SK S4S O42 CANADA

3-STMR

Department of Mathematics St. Mary's University Halifax NS B3H 3C3 CANADA

3-TRNT

Department of Mathematics University of Toronto Toronto, ON M5S 1A1 CANADA

3-TRNT-A

Department of Applied Science and Engineering University of Toronto Toronto, ON M5S 1A4 CANADA

3-TRNT-C

Department of Computer Science University of Toronto Toronto, ON M5S 1A1 CANADA

3-TRNT-D

Department of Electrical Engineering University of Toronto Toronto, ON M5S 1A1 CANADA

3-TRNT-I

Department of Industrial Engineering University of Toronto Toronto, ON M5S 1A4 CANADA

3-TRNT-P

Department of Physics University of Toronto Toronto, ON M5S 1A7 CANADA

3-TRNT-Q

Department of Philosophy University of Toronto Toronto, ON M5S 1A1 CANADA

3-TRNT-S

Department of Statistics University of Toronto Toronto, ON M5S 1A1 CANADA

3-TRNT2

Department of Mathematics Scarborough College University of Toronto West Hill, ON M1C 1A4 CANADA

3-TRNT2-A

Division of Social Science Scarborough College University of Toronto West Hill, ON M1C 1A4 CANADA

3-VCTR

Department of Mathematics University of Victoria Victoria, BC V8W 2Y2 CANADA

3-VCTR-C

Department of Computer Science University of Victoria Victoria, BC V8W 2Y2 CANADA

3-WIND

Department of Mathematics University of Windsor Windsor, ON N9B 3P4 CANADA

3-WIND-C

School of Computer Science University of Windsor Windsor, ON N9B 3P4 CANADA

3-WIND-E

Department of Electrical Engineering University of Windsor Windsor, ON N9B 3P4 CANADA

3-WLR

Department of Mathematics Wilfrid Laurier University Waterloo, ON N2L 3C5 CANADA

3-WLR-E

Department of Economics Wilfrid Laurier University Waterloo ON N2L 3C5 CANADA

3-WNPG-Q

Department of Philosophy University of Winnipeg Winnipeg, MB R3B 2E9 CANADA

3-WON

Department of Mathematics University of Western Ontario London, ON N6A 3K7 CANADA

3-WON-A

Department of Applied Mathematics University of Western Ontario London, ON N6A 3K7 CANADA

3-WON-C

Department of Computer Science University of Western Ontario London, ON N6A 5B9 CANADA

3-WON-Q

Department of Philosophy University of Western Ontario London, ON N6A 3K7 CANADA

3-WON-S

Department of Statistical and Actuarial Science University of Western Ontario London, ON N6A 5B9 CANADA

3-WTRL

Faculty of Mathematics University of Waterloo Waterloo, ON N2L 3G1 CANADA

3-WTRL-A

Department of Applied Mathematics University of Waterloo Waterloo, ON N2L 3G1 CANADA

3-WTRL-B

Department of Combinatorics and Optimisation University of Waterloo Waterloo, ON N2L 3G1 CANADA

3-WTRL-C

Department of Computer Science University of Waterloo Waterloo, ON N2L 3G1 CANADA

3-WTRL-D

Department of Electrical Engineering University of Waterloo Waterloo, ON N2L 3G1 CANADA

3-WTRL-F

Department of Management Sciences University of Waterloo Waterloo, ON N2L 3G1 CANADA

3-WTRL-H

Department of Civil Engineering University of Waterloo Waterloo, ON N2L 3G1 CANADA

3-WTRL-P

Department of Physics University of Waterloo Waterloo, ON N2L 3G1

3-WTRL-S

Department of Statistics University of Waterloo Waterloo, ON N2L 3G1 CANADA

3-YORK

Department of Mathematics York University Downsview, ON M3J 1P3 CANADA

4-ABER

Department of Mathematics University of Aberdeen Aberdeen AB9 2TY SCOTLAND

4-ABER-Q

Department of History and Philosophy of Science University of Aberdeen Aberdeen AB9 2UB SCOTLAND

4-ABER-S

Department of Statistics University of Aberdeen Aberdeen AB9 2UB SCOTLAND

4-ASTN

Department of Mathematics University of Aston Birmingham B4 7ET ENGLAND

4-BIRM

Department of Pure Mathematics University of Birmingham Birmingham B15 2TT ENGLAND

4-BIRM-C

Computer Centre University of Birmingham Birmingham B15 2TT ENGLAND

4-BIRM-E

Department of Economics University of Birmingham Birmingham B15 2TT ENGLAND

4-BRDF

Department of Mathematics Bradford University Bradford BD7 1DP ENGLAND

4-BRNL

Department of Mathematics Brunel University Uxbridge UB8 3PH ENGLAND

4-BRST

School of Mathematics University of Bristol Bristol BS8 1TH ENGLAND

4-CAMB

Department of Pure Mathematics and Mathematical Statistics University of Cambridge Cambridge CB2 1SB ENGLAND

4-CAMB-A

Department of Applied Mathematics and Theoretical Physics University of Cambridge Cambridge CB3 9EW ENGLAND

4-CAMB-D

University Engineering Department Whittle Laboratory Cambridge CB3 0EL ENGLAND

4-CAMB-F

Department of Experimental Psychology University of Cambridge Cambridge CB2 3EB ENGLAND

4-CAMB-G

Department of Applied Economics University of Cambridge Cambridge ENGLAND

4-CAMB-S

Statistical Laboratory University of Cambridge Cambridge CB2 1SB ENGLAND

4-CAMB2

Pembroke College Cambridge ENGLAND

4-CAMBE

Emmanuel College Cambridge ENGLAND

4-CAMBM

Magdalene College Cambridge ENGLAND

4-CAMBP

Peterhouse College Cambridge ENGLAND

4-CAMBSJ

St. John's College Cambridge ENGLAND

4-CAMBX

Christ's College Cambridge ENGLAND

4-CRDF

Department of Pure Mathematics University College Cardiff CF1 1XL WALES

4-CRNF

Department of Mathematics Cranfield Institute of Technology Bedford MK43 0AL ENGLAND

4-CRNF-A

College of Aeronautics Cranfield Institute of Technology Bedford MK43 0AL ENGLAND

4-DRHM

Department of Mathematics University of Durham Durham DH1 3LE ENGLAND

4-DUND

Department of Mathematics University of Dundee Dundee DD1 4HN SCOTLAND

4-EANG

School of Mathematics and Physics University of East Anglia Norwich NR4 77H ENGLAND

4-EDIN

Department of Mathematics University of Edinburgh Edinburgh EH9 3JZ SCOTLAND

4-EDIN-A

Department of Artificial Intelligence University of Edinburgh Edinburgh EH8 9NW SCOTLAND

4-EDIN-S

Department of Statistics University of Edinburgh Edinburgh EH9 3JZ SCOTLAND

4-ESSX

Department of Mathematics University of Essex Colchester C04 3SQ ENGLAND

4-EXTR

Department of Mathematics University of Exeter Exeter EX4 4QE ENGLAND

4-GLAS

Department of Mathematics University of Glasgow Glasgow G12 8QW SCOTLAND

4-GLAS-C

Computing Laboratory University of Glasgow Glasgow G12 8QW SCOTLAND

4-HULL

Department of Pure Mathematics University of Hull Hull HU6 7RX ENGLAND

4-HULL-A

Department of Applied Mathematics University of Hull Hull HU6 7RX ENGLAND

4-HULL-C

Department of Computer Studies University of Hull Hull HU6 7RX ENGLAND

4-HWAT

Department of Mathematics Heriot-Watt University Edinburgh EH1 1HX SCOTLAND

4-HWAT-A

Department of Actuarial
Mathematics and Statistics
Heriot-Watt University
Edinburgh EH14 4AS
SCOTLAND

4-KEEL

Department of Mathematics University of Keele Keele ST5 5BG ENGLAND

4-KENT

Mathematical Institute University of Kent Canterbury CT2 7NZ ENGLAND

4-KENT-C

Computing Laboratory University of Kent Canterbury CT2 7NZ ENGLAND

4-LANC

Department of Mathematics University of Lancaster Lancaster LA1 4YW ENGLAND

4-LBRO

Department of Mathematics Loughborough University of Technology Loughborough LE11 3TU ENGLAND

4-LEED

School of Mathematics University of Leeds Leeds LS2 9JT ENGLAND

4-LEED-C

Department of Computer Studies University of Leeds Leeds LS2 9JT ENGLAND

4-LEED-S

Department of Statistics University of Leeds Leeds LS2 9JT ENGLAND

4-LNDBF

Department of Mathematics Bedford College University of London London NW1 4NS ENGLAND

4-LNDBK

Department of Mathematics Birkbeck College University of London London WC1E 7HX ENGLAND

4-LNDBK-8

Department of Statistics Birkbeck College University of London London WC1E 7HX ENGLAND

4-LNDCH

Department of Mathematics Chelsea College University of London London SW3 6LX ENGLAND

4-LNDCP

Polytechnic of Central London London W1R 8AL ENGLAND

4-LNDG

Department of Mathematics Goldsmiths' College University of London London SE14 6NW ENGLAND

4-LNDIC

Department of Mathematics Imperial College of Science and Technology University of London London SW7 2RH ENGLAND

4-LNDIC-B

Department of Management Science Imperial College of Science and Technology University of London London SW7 2BX ENGLAND

4-LNDIC-C

Department of Computing
Imperial College of Science and
Technology
University of London
London SW7 2AZ
ENGLAND

4-LNDIC-E

Department of Electrical Engineering Imperial College of Science and Technology University of London London SW7 2RH ENGLAND

4-LNDKC

Department of Mathematics King's College University of London London WC2R 2LS ENGLAND

4-LNDNP

Department of Mathematics Polytechnic of North London London N7 8DB ENGLAND

4-LNDQE

Department of Mathematics Queen Elisabeth College University of London London W8 7AH ENGLAND

4-LNDQM

Department of Mathematics Queen Mary College University of London London E1 4NS ENGLAND

4-LNDRH

Department of Mathematics Royal Holloway College University of London Egham TW20 0EX ENGLAND

4-LNDRH-8

Department of Statistics and Computer Science Royal Holloway College University of London Egham TW20 0EX ENGLAND

4-LNDUC

Department of Mathematics University College University of London London WC1E 6BT ENGLAND

4-LNDW

Department of Mathematics Westfield College University of London London NW3 7ST ENGLAND

4LSE

Department of Mathematics London School of Economics University of London London WC2A 2AE ENGLAND

4-LSE-S

Department of Statistics
London School of Economics
University of London
London WC2A 2AE
ENGLAND

4-LSTR

Department of Mathematics University of Leicester Leicester LE1 7RH ENGLAND

4-LSTR-A

Department of Astronomy University of Leicester Leicester LE1 7RH ENGLAND

4.I.VRP

Department of Pure Mathematics University of Liverpool Liverpool L69 3BX ENGLAND

4-LVRP-A

Department of Applied Mathematics and Theoretical Physics University of Liverpool Liverpool L69 3BX ENGLAND

4-LVRP-C

Department of Computer and Statistics Science University of Liverpool Liverpool L69 3BX ENGLAND

4-LVRP-E

Department of Electrical Engineering University of Liverpool Liverpool L69 3BX ENGLAND

4-MANC

Department of Mathematics University of Manchester Manchester M13 9PL ENGLAND

4-MANC-D

Department of Decision Theory University of Manchester Manchester M13 9PL ENGLAND

4-MANC-E

Department of Economics and Social Statistics University of Manchester Manchester M13 9PL ENGLAND

4-MANC-Q

Department of Philosophy University of Manchester Manchester M13 9PL ENGLAND

4NOTT

Department of Mathematics University of Nottingham Nottingham NG7 2RD ENGLAND

4-NOTT-T

Department of Theoretical Mechanics University of Nottingham Nottingham NG7 2RD ENGLAND

4-NPL

Mathematics Division National Physical Laboratory Teddington TW11 0LW ENGLAND

4-NPL-C

Division of Numerical Analysis and Computer National Physical Laboratory Teddington TW11 0LW ENGLAND

4-NWAL

School of Mathematics and Computer Science University College of North Wales Bangor LL57 2UW WALES

4-NWCT

School of Mathematics
University of Newcastle upon
Tyne
Newcastle upon Tyne NE1 7RU
ENGLAND

4-NWCT-C

Computing Laboratory
University of Newcastle upon
Tyne
Newcastle upon Tyne NE1 7RU
ENGLAND

4-NWCT-E

Department of Engineering Mathematics University of Newcastle upon Tyne Newcastle upon Tyne NE1 7RU ENGLAND

4-OPEN

Faculty of Mathematics Open University Milton Keynes MK7 6AA ENGLAND

4-OX

Mathematical Institute University of Oxford Oxford OX1 3LB ENGLAND

4-OX-C

Computing Laboratory University of Oxford Oxford OX1 3PL ENGLAND

4-OX-E

Department of Engineering Science University of Oxford Oxford OX1 3PJ ENGLAND

4-OXB

Balliol College Oxford ENGLAND

4-OXM

Magdalen College Oxford ENGLAND

4-OXQ

The Queen's College Oxford ENGLAND

4-OXSA

St. Anne's College Oxford ENGLAND

4-OXSE

St. Edmund Hall Oxford ENGLAND

4-OXUC

University College Oxford OX1 4BH ENGLAND

4-OXW

Wolfson College Oxford ENGLAND

4-PRSP

Division of Mathematics Preston Polytechnic Preston PR1 2TQ ENGLAND

4-QUEEN

Department of Pure Mathematics Queen's University Belfast BT7 1NN NORTHERN IRELAND

4-QUEEN-A

Department of Applied
Mathematics and Theoretical
Physics
Queen's University
Belfast BT7 1NN
NORTHERN IRELAND

4-RDNG

Department of Mathematics University of Reading Reading RG6 2AH ENGLAND

4-SHEF

Department of Pure Mathematics University of Sheffield Sheffield S3 7RH ENGLAND

4-SHEF-A

Department of Applied
Mathematics and Computer
Science
University of Sheffield
Sheffield S10 2TN
ENGLAND

4-SHEF-C

University Computing Services University of Sheffield Sheffield S10 2TN ENGLAND

4-SHEF-S

Department of Probability and Statistics University of Sheffield Sheffield S10 2TN ENGLAND

4-SHFP

Department of Mathematics and Statistics Sheffield City Polytechnic Sheffield S1 1WB ENGLAND

4-SHMT

Department of Mathematics University of Southampton Southampton SO9 5NH ENGLAND

4-SLF

Department of Mathematics University of Salford Salford M5 4WT ENGLAND

4-SLF-A

Department of Aeronautical and Mechanical Engineering University of Salford Salford M5 4WT ENGLAND

4-STAN

Mathematical Institute University of St. Andrews St. Andrews KY16 9SS SCOTLAND

4-STAN-P

Department of Theoretical Physics University of St. Andrews St. Andrews KY16 9SS SCOTLAND

ASTAN-S

Department of Statistics University of St. Andrews St. Andrews KY16 988 SCOTLAND

4-STIR

Department of Mathematics University of Stirling Stirling FK9 4LA SCOTLAND

4-STRA

Department of Mathematics University of Strathclyde Glasgow G1 1XW SCOTLAND

4-STRA-A

Department of Applied Physics University of Strathclyde Glasgow G1 1XW SCOTLAND

4-STRA-E

Department of Electronic Science University of Strathclyde Glasgow G1 1XH SCOTLAND

4-SUR

Department of Mathematics University of Surrey Guildford GU2 5XH ENGLAND

4-SUR-P

Department of Physics University of Surrey Guildford GU2 5XH ENGLAND

4-SUSX

Department of Mathematics University of Sussex Falmer, Brighton BN1 9QH ENGLAND

4-SWNS

Department of Pure Mathematics University College Swansea SA2 8PP WALES

4-UMIST

Department of Mathematics UMIST Manchester M60 1QD ENGLAND

4-UMIST-A

Control Systems Center UMIST Manchester M60 1QD ENGLAND

4-UWIST-P

Department of Physics, Electronics and Electrical Engineering UWIST Cardiff CF1 3NU WALES

4-WALA

Department of Pure Mathematics University College of Wales Aberystwyth SY23 3DB WALES

4-WARW

Mathematics Institute University of Warwick Coventry CV4 4AL ENGLAND

4-WARW-B

Control Theory Centre University of Warwick Coventry CV4 7AL ENGLAND

4-WARW-E

Department of Science Education University of Warwick Coventry CV4 7AL ENGLAND

4-WARW-Q

Department of Philosophy University of Warwick Coventry CV4 7AL ENGLAND

4-WARW-S

Department of Statistics University of Warwick Coventry CV4 7AL ENGLAND

4-YORK

Department of Mathematics University of York York YO1 5DD ENGLAND

5-ADLD

Department of Pure Mathematics University of Adelaide Adelaide, SA 5001 AUSTRALIA

5-ADLD-A

Department of Applied Mathematics Adelaide University Adelaide, SA 5001 AUSTRALIA

5-ADLD-D

Department of Mathematical Physics University of Adelaide Adelaide, SA 5001 AUSTRALIA

5-ADLD-E

Department of Economics University of Adelaide Adelaide, SA 5001 AUSTRALIA

5-ADLD-S

Department of Statistics University of Adelaide Adelaide, SA 5001 AUSTRALIA

5-ANU

Department of Mathematics Institute of Advanced Studies Australian National University Canberra, ACT 2600 AUSTRALIA

5-ANU-C

Computer Science Group Australian National University Canberra, ACT 2600 AUSTRALIA

5-ANU-P

Department of Theoretical Physics Institute of Advanced Studies Australian National University Canberra, ACT 2600 AUSTRALIA

5-ANU-Q

Department of Philosophy Research School of Social Sciences Australian National University Canberra, ACT 2600 AUSTRALIA

5-ANU-8

Department of Statistics Institute of Advanced Studies Australian National University Canberra, ACT 2600 AUSTRALIA

5-ANU6-P

Department of Theoretical Physics Research School of Physical Sciences Australian National University Canberra, ACT 2600 AUSTRALIA

5-ANU9-A

Department of Applied Mathematics Faculty of Science Australian National University Canberra, ACT 2600 AUSTRALIA

5-ANU9-P

Department of Theoretical Physics Faculty of Science Australian National University Canberra, ACT 2600 AUSTRALIA

5-CSIRO

Division of Mathematics and Statistics CSIRO Canberra, ACT 2601 AUSTRALIA

5-CSIRO2

Division of Mathematics and Statistics CSIRO Lindfield, NSW 2070 AUSTRALIA

5-CSIRO3

Division of Mathematics and Statistics CSIRO South Melbourne, VIC 3205 AUSTRALIA

5-CSIROS

Division of Mathematics and Statistics CSIRO Adelaide, SA 5064 AUSTRALIA

5-CSIRO6

Division of Mathematics and Statistics CSIRO Wembley, WA 6014 AUSTRALIA

5-FLDR

Department of Mathematics Flinders University Bedford Park, SA 5042 AUSTRALIA

5-FLDR-P

School of Physical Sciences Flinders University Bedford Park, SA 5042 AUSTRALIA

5-GRIF-A

School of Australian Environmental Studies Griffith University Nathan, Brisbane, QLD 4111 AUSTRALIA

5-LTRB

Department of Pure Mathematics La Trobe University Bundoora, VIC 3083 AUSTRALIA

5-LTRB-A

Department of Applied Mathematics La Trobe University Bundoora, VIC 3083 AUSTRALIA

5-LTRB-C

Department of Computer Science La Trobe University Bundoora, VIC 3083 AUSTRALIA

5-LTRB-8

Department of Mathematics and Statistics La Trobe University Bundoora, VIC 3083 AUSTRALIA

5-MCQR

School of Mathematics and Physics Macquarie University North Ryde, NSW 2113 AUSTRALIA

5-MCQR-F

School of Economic and Financial Studies Macquarie University North Ryde, NSW 2113 AUSTRALIA

5-MELB

Department of Mathematics University of Melbourne Parkville, VIC 3052 AUSTRALIA

5-MELB-H

Department of History and Philosophy of Science University of Melbourne Parkville, VIC 3052 AUSTRALIA

5-MELB-8

Department of Statistics University of Melbourne Parkville, VIC 3052 AUSTRALIA

5-MNSH

Department of Mathematics Monash University Clayton, VIC 3168 AUSTRALIA

S-MNSH-R

Department of Electrical Engineering Monash University Clayton, VIC 3168 AUSTRALIA

5-MNSH-E

Faculty of Economics and Politics Monash University Clayton, VIC 3168 AUSTRALIA

S-MURD

School of Mathematical and Physical Sciences Murdoch University Murdoch, WA 6150 AUSTRALIA

5-NENG

Department of Mathematics University of New England Armidale, NSW 2351 AUSTRALIA

5-NEWC

Department of Mathematics University of Newcastle Newcastle, NSW 2308 AUSTRALIA

5-NEWC-E

Department of Electrical Engineering University of Newcastle Newcastle, NSW 2308 AUSTRALIA

5-NSW

Department of Mathematics University of New South Wales Kensington, NSW 2033 AUSTRALIA

5-N8W-C

Department of Computer Science University of New South Wales Kensington, NSW 2033 AUSTRALIA

5-NSW-E

School of Electrical Engineering University of New South Wales Kensington, NSW 2033 AUSTRALIA

5-NSWIT

School of Mathematical Sciences The NSW Institute of Technology Broadway, NSW 2007 AUSTRALIA

5-NSWIT-C

School of Computer Science The NSW Institute of Technology Broadway, NSW 2007 AUSTRALIA

5-QLD-C

Department of Computer Science University of Queensland St. Lucia, QLD 4067 AUSTRALIA

5-RMC

Department of Mathematics Royal Military College Duntroon, ACT 2600 AUSTRALIA

5-RMIT

Department of Mathematics Royal Melbourne Institute of Technology Melbourne, VIC 3001 AUSTRALIA

5-8YD

Department of Mathematics University of Sydney Sydney, NSW 2006 AUSTRALIA

5-SYD-S

Department of Mathematical Statistics University of Sydney Sydney, NSW 2006 AUSTRALIA

5-TAS

Department of Mathematics University of Tasmania Hobart, TAS 7001 AUSTRALIA

5-TAS-P

Department of Physics University of Tasmania Hobart, TAS 7001 AUSTRALIA

5-WA

Department of Mathematics University of Western Australia Nedlands, WA 6009 AUSTRALIA

5-WLG

Department of Mathematics University of Wollongong Wollongong, NSW 2500 AUSTRALIA

6-ALIG

Department of Mathematics Aligarh Muslim University Aligarh 202 001 INDIA

6-ALIG-E

Faculty of Engineering Mathematics Section Aligarh Muslim University Aligarh 202 001 INDIA

6-ALIG-S

Department of Statistics Aligarh Muslim University Aligarh 202 001 INDIA

6-ANDH

Department of Applied Mathematics Andhra University Waltair 530 003 INDIA

6-BANA

Department of Mathematics Faculty of Science Banaras Hindu University Varanasi 221 005 INDIA

6-BARO

Department of Mathematics Faculty of Sciences Maharaja Sayajirao University of Baroda Baroda 390 002 INDIA

6-BARO-8

Department of Statistics Faculty of Science Maharaja Sayajirao University of Baroda Baroda 390 002 INDIA

6-BITS

Department of Mathematics Birla Institute of Technology and Science Pilani Rajasthan 333 031 INDIA

6-BOMB

Department of Mathematics University of Bombay Bombay 400 032 INDIA

6-BURD

Department of Mathematics Burdwan University Burdwan 713 104 INDIA

6-CALC

Department of Pure Mathematics University of Calcutta Calcutta 700 019 INDIA

6-CALC-A

Department of Applied Mathematics University of Calcutta Calcutta 700 019 INDIA

6-CALC-E

Department of Applied Physics University of Calcutta Calcutta 700 009 INDIA

6-CALC-P

Department of Physics University of Calcutta Calcutta 700 009 INDIA

6-CALC-8

Department of Statistics Calcutta University Calcutta 700 019 INDIA

6-CALCP-P

Department of Physics Presidency College Calcutta 700 073 INDIA

6-CALCP-8

Department of Statistics Presidency College Calcutta 700 073 INDIA

6-DELHI

Department of Mathematics University of Delhi Delhi 110 007

6-DELHI-E

Delhi School of Economics University of Delhi Delhi 110 007 INDIA

6-DELHI-P

Department of Physics and Astrophysics University of Delhi Delhi 110 007 INDIA

6-GORA

Department of Mathematics University of Gorakhpur Gorakhpur 273 001 INDIA

6-GUJA

Department of Mathematics Gujarat University Ahmedabad 380 009 INDIA

6-GUJA-S

Department of Statistics Gujarat University Ahmedabad 380 009 INDIA

6-HYDR

Department of Mathematics University of Hyderabad Hyderabad 500 001 INDIA

6-IIM

Indian Institute of Management Calcutta 700 027 INDIA

6-IIS-A

Department of Applied Mathematics Indian Institute of Science Bangalore 560 012 INDIA

6-IIS-B

Centre for Theoretical Studies Indian Institute of Science Bangalore 560 012 INDIA

6-IIS-D

Department of Aerospace Engineering Indian Institute of Science 560 012 Bangalore INDIA

6-IIS-F

School of Automation Indian Institute of Science Bangalore 560 006 INDIA

6-IIT

Department of Mathematics Indian Institute of Technology Bombay 400 076 INDIA

6-IIT-C

Computer Centre Indian Institute of Technology Bombay 400 076 INDIA

6-IITK

Department of Mathematics Indian Institute of Technology Kanpur 208 016 INDIA

6-IITM

Department of Mathematics Indian Institute of Technology Madras 600 036 INDIA

6-IITM-A

Department of Aeronautical Engineering Indian Institute of Technology Madras 600 036 INDIA

6-IITND

Department of Mathematics Indian Institute of Technology New Delhi 110 016 INDIA

6-IITND-E

Department of Electrical Engineering Indian Institute of Technology New Delhi 110 016 INDIA

6-INDOR-S

Department of Statistics University of Indore Indore 452 001 INDIA

6-ISI

Indian Statistical Institute Calcutta 700 035 INDIA

6-ISIND

Indian Statistical Institute New Delhi 110 029 INDIA

6-JAMM

Department of Mathematics University of Jammu Jammu 180 001 INDIA

6-KALY

Department of Mathematics University of Kalyani West Bengal 741 235 INDIA

6-KALY-P

Department of Physics University of Kalyani West Bengal 741 235 INDIA

6-KARN

Department of Mathematics Karnatak University Dharwad 580 003 INDIA

6-KURUK

Department of Mathematics Kurukshetra University Kurukshetra 132 119 INDIA

6-LUCK

Department of Mathematics and Astronomy Lucknow University Lucknow 226 007 INDIA

6-LUCK-S

Department of Statistics Lucknow University Lucknow 226 007 INDIA

6-MADR

The Ramanujan Institute University of Madras Madras 600 005 INDIA

6-MADR-P

Department of Theoretical Physics University of Madras Madras 600 025 INDIA

6-MARA

Department of Mathematics and Statistics Marathwada University Aurangabad 431 004 INDIA

6-MDRCC

Madras Christian College Tambaram Madras 600 059 INDIA

6-MDRIT

Faculty of Science Madras Institute of Technology Madras 600 044 INDIA

6-MEER-P

Division of Physical Sciences Institute of Advanced Studies Meerut University Meerut 250 005 INDIA

6-MEER-S

Department of Statistics Institute of Advanced Studies Meerut University Meerut 250 005 INDIA

6-MYSO-S

Department of Statistics University of Mysore Mysore 570 006 INDIA

6-PUNJ

Department of Mathematics Punjab University Chandigarh 160 014 INDIA

6-PUNJ-S

Department of Statistics Punjab University Chandigarh 160 014 INDIA

6-RAJA

Department of Mathematics University of Rajasthan Jaipur 302 004 INDIA

6-RAJA-S

Department of Statistics University of Rajasthan Jaipur 302 004 INDIA

6-ROOR

Department of Mathematics University of Roorkee Roorkee 247 672 INDIA

6-SHIV

Department of Mathematics Shivaji University Kolhapur 416 004 INDIA

6-TIFR

Tata Institute of Fundamental Research Bombay 400 005 INDIA

6-UTKAL

Department of Mathematics Utkal University Bhubaneswar 751 004 INDIA

6-UTKAL-8

Department of Statistics Utkal University Bhubaneswar 751 004 INDIA

6-VIKR

Vikram Sarabhai Space Centre Trivandrum 695 022 INDIA

A-GRAZ-1

Mathematisches Institut I Universität Graz 8010 Graz AUSTRIA

A-INSB

Mathematisches Institut Universität Innsbruck 6020 Innsbruck AUSTRIA

A-KLAG

Mathematisches Institut Universität für Bildungswissenschaften 9010 Klagenfurt AUSTRIA

A-LINZ

Mathematisches Institut Universität Lins 4040 Lins AUSTRIA

A-MNT

Institut für Mathematik und Angewandte Geometrie Montanuniversität 8700 Leoben AUSTRIA

A-MNT-A

Institut für Angewandte Mathematik Montanuniversität 8700 Leoben AUSTRIA

A-OAW

Mathematisches Institut Österreichische Akademie der Wissenschaften 1010 Vienna AUSTRIA

A-OAW-I

Institut für
Informationsverarbeitung
Österreichische Akademie der
Wissenschaften
1010 Vienna
AUSTRIA

A-SALZ

Mathematisches Institut Universität Salzburg 5020 Salzburg AUSTRIA

A-TGRZ

Mathematisches Institut TU Gras 8010 Gras AUSTRIA

A-TUWN-1

Mathematisches Institut I TU Wien 1040 Vienna AUSTRIA

A-TUWN-B

Institut für Algebra und Diskrete Mathematik TU Wien 1040 Vienna AUSTRIA

A-TUWN-D

Institut für Mathematische Analysis TU Wien 1040 Vienna AUSTRIA

A-TUWN-G

Institut für Geometrie TU Wien 1040 Vienna AUSTRIA

A-TUWN-H

Institut für Algebra und Mathematische Strukturtheorie TU Wien 1040 Vienna AUSTRIA

A-TUWN-N

Institut für Numerische Mathematik TU Wien 1040 Vienna AUSTRIA

A-TUWN-O

Institut für Ökonometrie TU Wien 1040 Vienna AUSTRIA

A-TUWN-S

Institut für Statistik TU Wien 1040 Vienna AUSTRIA

A-TUWN-T

Institut für Technische Mathematik TU Wien 1040 Vienna AUSTRIA

A-TUWN-U

Institut für Unternehmensforschung TU Wien 1040 Vienna AUSTRIA

A-UBWN

Mathematisches Institut Universität für Bodenkultur 1180 Vienna AUSTRIA

A-WIEN

Mathematisches Institut Universität Wien 1090 Vienna AUSTRIA

A-WIEN-L

Institut für Logistik Universität Wien 1010 Vienna AUSTRIA

A-WIEN-P

Institut für Theoretische Physik Universität Wien 1010 Vienna AUSTRIA

B-ANTW

Department of Mathematics Universitaire Instelling Antwerpen 2610 Wilrijk BELGIUM

B-GHNT

Department of Mathematics Rijksuniversiteit te Gent 9000 Ghent BELGIUM

B-GHNT-A

Seminar of Higher Analysis Rijksuniversiteit te Gent 9000 Ghent BELGIUM

B-GHNT-C

Department of Computer Science Rijksuniversiteit te Gent 9000 Ghent BELGIUM

B-GHNT-E

Seminar of Experimental Psychology and Social Pedagogy Rijksuniversiteit te Gent 9000 Ghent BELGIUM

B-GHNT-G

Seminar of Geometry and Combinatorics Rijksuniversiteit te Gent 9000 Ghent BELGUIM

B-GHNT-T

Institute for Theoretical Mechanics Rijksuniversiteit te Gent 9000 Ghent BELGIUM

B-KUL

Institute of Mathematics Katholieke Universiteit Leuven 3030 Heverlee BELGIUM

B-LIEG

Institut de Mathématiques Université de Liège 4000 Liège BELGIUM

B-LIEG-P

Institut de Physique Université de Liège 4000 Liège BELGIUM

B-LMBG

Department of Mathematics Limburgs Universitair Centrum 3610 Diepenbeek BELGIUM

B-MBLE

MBLE Research Laboratory 2 avenue Van Becelaere 1170 Brussels BELGIUM

B-MONS

Université de l'État à Mons 7000 Mons BELGIUM

B-NDP

Department of Mathematics Facultés Universitaires Notre Dame de la Paix 5000 Namur BELGIUM

B-NDP-C

Institut d'Informatique Facultés Universitaires Notre Dame de la Paix 5000 Namur BELGIUM

B-UCL

Institut de Mathematiques Université Catholique de Louvain 1348 Louvain-la-Neuve BELGIUM

B-UCL-A

Institut d'Astronomie et de Géophysique Université Catholique de Louvain 1348 Louvain-la-Neuve BELGIUM

B-UCL-P

Institut de Physique Theorique Université Catholique de Louvain 1348 Louvain-la-Neuve BELGIUM

B-ULB

Department of Mathematics Université Libre de Bruxelles 1050 Brussels BELGIUM

B-ULB-I

Laboratoire d'Information Theorique Université Libre de Bruxelles 1050 Brussels BELGIUM

B-ULB-S

Institut de Statistiques Université Libre de Bruxelles 1050 Brussels BELGIUM

B-VUB

Department of Mathematics Vrije Universiteit Brussel 1050 Brussels BELGIUM

BG-AOS

Institute of Mathematics Bulgarian Academy of Sciences 1090 Sofia BULGARIA

BG-AOS-A

Institute of Mathematics with Computer Center Bulgarian Academy of Sciences 1090 Sofia BULGARIA

BG-AOS-B

Center of Mathematics and Mechanics Bulgarian Academy of Sciences 1090 Sofia BULGARIA

BG-HICE

Department of Mathematics Higher Institute of Civil Engineering 1423 Sofia BULGARIA

BG-PLOV

Department of Mathematics University of Plovdiv 4000 Plovdiv BULGARIA

BG-SOFI

Department of Mathematics University of Sofia 1090 Sofia BULGARIA

BR-BRSL

Department of Mathematics Universidade de Brasília 70.000 Brasília - DF BRAZIL

BR-ECP

Department of Mathematics Universidade Estadual de Campinas 13.100 Campinas, São Paulo BRAZIL

BR-ECP-E

Faculty of Engineering Universidade Estadual de Campinas 13.100 Campinas, São Paulo BRAZIL

BR-ECP-P

Institute of Physics
Universidade Estadual de
Campinas
13.100 Campinas, São Paulo
BRAZII.

BR-FCR

Department of Mathematics Universidade Federal do Ceará 60.000 Fortaleza-Ceará BRAZIL

BR-FGS

Istitute of Mathematics and Physics Universidade Federal de Goiás 74.000 Goiânia, Goiás BRAZII.

BR-FMG

Department of Mathematics Universidade Federal de Minas Gerais 30.000 Belo Horizonte, Minas Gerais BRAZII.

BR-FPN-E

Department of Electronics and Systems Engineering Universidade Federal de Pernambuco 50.000 Recife, Pernambuco BRAZIL

BR-FRJ

Department of Mathematics Universidade Federal de Rio de Janeiro 20.000 Rio de Janeiro BRAZIL

BR-FSC

Department of Mathematics Universidade Federal de Santa Catarina 88.000 Florianópolis, S.C. BRAZII.

BR-FSC-E

Department of Electrical
Engineering
Universidade Federal de Santa
Catarina
88.000 Florianópolis, S.C.
BRAZII.

BR-PCRJ

Department of Mathematics
Pontificia Universidade Católica
do Rio de Janeiro
22.453 Rio de Janeiro
BRAZIL

BR-PCRJ-C

Department of Computer Science Pontificia Universidade Católica do Rio de Janeiro 22.453 Rio de Janeiro BRAZII.

BR-SPI

Institute of Mathematics and Statistics Universidade de São Paulo 01.451 São Paulo BRAZIL

BR-SPL-B

Polytechnic School Universidade de São Paulo 01.000 São Paulo BRAZIL

BR-SPL-P

Institute of Physics Universidade de São Paulo 01.000 São Paulo BRAZIL

BR-SPL

Department of Mathematics
Faculty of Philosophy Sciences
and Letters
Universidade de São Paulo
14.100 Ribeirão Prêto
BRAZII.

BR-SPLSC

Institute of Mathematical Sciences Universidade de São Paulo 13.560 São Carlos BRAZIL

CH-BASL

Mathematisches Institut Universität Basel 4051 Basel SWITZERLAND

CH-BERN

Mathematisches Institut Universität of Bern 3012 Bern SWITZERLAND

CH-BERN-P

Institut für Theoretische Physik Universität Bern 2012 Bern SWITZERLAND

CH-CERN

CERN 1211 Geneva SWITZERLAND

CH-ETHZ

Mathematisches Institut Eidgenössische TH Zürich 8092 Zurich SWITZERLAND

CH-FRIB

Institut de Mathématiques Université de Fribourg 1700 Fribourg SWITZERLAND

CH-FRIB-P

Institut de Physique Université de Fribourg 1700 Fribourg SWITZERLAND

CH-GENV

Institut de Mathématiques Université de Genève 1211 Geneva SWITZERLAND

CH-LAUS

Institut de Mathématiques Faculté de Sciences Université de Lausanne 1015 Lausanne SWITZERLAND

CH-LSNP

Département de Mathématiques École Polytechnique Fédéral de Lausanne 1007 Lausanne SWITZERLAND

CH-ZRCH

Mathematisches Institut Universität Zurich 8032 Zurich SWITZERLAND

CM-YND

Department of Mathematics Faculty of Science University of Yaounde Yaounde CAMEROON

CS-CHRL

Faculty of Mathematics and Physics Charles University (KU) 186 00 Prague CZECHOSLOVAKIA

CS-CMNS

Department of Mathematics Comenius University 842 15 Bratislava CZECHOSLOVAKIA

C8-C8AV

Mathematics Institute
Czechoslovak Academy of
Sciences (ČSAV)
115 67 Prague
CZECHOSLOVAKIA

CS-CSAV-B

Center of Biomathematics Csechoslovak Academy of Sciences (ČSAV) 142 20 Prague CZECHOSLOVAKIA

CS-CSAV-P Physics Institute

Physics Institute
Csechoslovak Academy of
Sciences (ČSAV)
180 40 Prague
CZECHOSLOVAKIA

CS-CVUT

Technical University of Prague (CVUT) 166 27 Prague CZECHOSLOVAKIA

C8-KTU

Department of Mathematics Kosice Technical University (VŠT) 040 01 Kosice CZECHOSLOVAKIA

CS-OSTR

Department of Mathematics State College of Mining and Metallurgy (VŠB) 708 33 Ostrava CZECHOSLOVAKIA

CS-PLCK

Department of Mathematics Palacký University 771 46 Olomouc CZECHOSLOVAKIA

CS-PLZN

College of Mechanical and Electrical Engineering (VSSE) 306 14 Plseň CZECHOSLOVAKIA

CS-PRKN

Department of Mathematics Purkyne University 662 95 Brno CZECHOSLOVAKIA

CO SAV

Mathematics Institute Slovak Academy of Sciences (SAV) 814 73 Bratislava CZECHOSLOVAKIA

CS-SAV-A

ÚSTAV Technical Cybernetics Institute Slovak Academy of Sciences (SAV) 809 31 Bratislava CZECHOSLAVAKIA

C8-8AV2

Mathematics Institute Slovak Academy of Sciences (SAV) 040 01 Kotice CZECHOSLOVAKIA

CS-SFRK

Department of Mathematics Šfárik University 041 54 Kolice CZECHOSLOVAKIA

CS-STU

Slovak Technical University (SVŠT) 812 19 Bratislava CZECHOSLOVAKIA

CS-TUR

Department of Mathematics Technical University of Brno (VŠT) 662 09 Brno CZECHOSLOVAKIA

CS-VSE

School of Economics (VŠE) 130 67 Prague CZECHOSLOVAKIA

CS-ZLLN

University of Transport and Telecommunications (VŠD) 010 88 Žillina CZECHOSLOVAKIA

D-AACH

Institut für Reine und Angewandte Mathematik **RWTH Aachen** 5100 Aachen FEDERAL REPUBLIC OF GERMANY

D-AACH-G

Institut für Geometrie und Praktische Mathematik RWTH Aachen 5100 Aachen FEDERAL REPUBLIC OF GERMANY

D-AACH-I

Institut für Informatik RWTH Aachen 5100 Aachen FEDERAL REPUBLIC OF GERMANY

D-AACH-P

Institut für Theoretische Physik RWTH Aachen 5100 Aachen FEDERAL REPUBLIC OF GERMANY

D-BAYR

Mathematisches Institut Universität Bayreuth 8580 Bayreuth FEDERAL REBUBLIC OF GERMANY

D-BAYR-A

FB Mathematik/Physik Universität Bayreuth 8580 Bayreuth FEDERAL REPUBLIC OF GERMANY

D-BCHM

Institut für Mathematik Ruhr-Universität Bochum 4630 Rochum FEDERAL REPUBLIC OF GERMANY

D-BCHM-R

Ruhr-Universität Bochum 4630 Bochum FEDERAL REPUBLIC OF GERMANY

D-BCHM-U

Institut für Unternehmungsführung und Unternehmensforschung Ruhr-Universität Bochum 4630 Bochum FEDERAL REPUBLIC OF GERMANY

D-BLF

Fakultät für Mathematik Universität Bielefeld 4800 Bielefeld FEDERAL REPUBLIC OF GERMANY

D-RI.F.P

Fakultät für Physik Universität Bielefeld 4800 Bielefeld 1 FEDERAL REPUBLIC OF GERMANY

D-RONN

Mathematisches Institut Universität Bonn 5300 Bonn FEDERAL REPUBLIC OF GERMANY

D-BONN-A

Institut für Angewandte Mathematik und Informatik Universität Bonn 5300 Bonn 1 FEDERAL REPUBLIC OF GERMANY

D-BONN-E

Sonderforschungsbereich, "Theoretische Mathematik" Universität Bonn 5300 Bonn 1 FEDERAL REPUBLIC OF GERMANY

D.BONN.O

Institut für Ökonometrie und Operations-Research Universität of Bonn 5300 Bonn FEDERAL REPUBLIC OF **GERMANY**

D-BRMN

FB Mathematik Universität Bremen 2800 Bremen 33 FEDERAL REPUBLIC OF GERMANY

D-BRNS

Mathematisches Institut TU Braunschweig 3300 Braunschweig FEDERAL REPUBLIC OF GERMANY

D-CLTU

Institut für Mathematik TU Clausthal 3392 Clausthal-Zellerfeld FEDERAL REPUBLIC OF GERMANY

D-DARM

FB Mathematik TH Darmstadt 6100 Darmstadt FEDERAL REPUBLIC OF GERMANY

D-DARM-B

FB Mechanik TH Darmstadt. 6100 Darmstadt FEDERAL REPUBLIC OF GERMANY

D-DARM-I

Institut für Theoretische Informatik TH Darmstadt 6100 Darmstadt FEDERAL REPUBLIC OF GERMANY

D-DMSM

Institut für Geschichte der Naturwissenschaften Deutsches Museum 8000 Munich FEDERAL REPUBLIC OF GERMANY

D-DORT

Institut für Mathematik Universität Dortmund 4600 Dortmund 50 FEDERAL REPUBLIC OF GERMANY

D-DORT-D

Universität Dortmund Institut für Didaktik der Mathematik 4600 Dortmund 50 FEDERAL REPUBLIC OF GERMANY

D-DORT-I

Institut für Informatik Universität Dortmund 4600 Dortmund 50 FEDERAL REPUBLIC OF GERMANY

D-DSLD

Mathematisches Institut Universität Düsseldorf 4000 Diisseldorf FEDERAL REPUBLIC OF GERMANY

D-DSLD-S

Institut für Statistik und Dokumentation 4000 Diisseldorf FEDERAL REPUBLIC OF **GERMANY**

D-DUIS

FB Mathematik **GHS** Duisburg 4100 Duisburg 1 FEDERAL REPUBLIC OF GERMANY

D-DUSS

Mathematisches Institut Universität Düsseldorf 4000 Düsseldorf 1 FEDERAL REPUBLIC OF GERMANY

D-EICH

Mathematisch-Geographische Fakultät Kirchliche GHS Eichstätt 8078 Eichstätt FEDERAL REPUBLIC OF **GERMANY**

D-ERL

Mathematisches Institut Universität Erlangen-Nürnberg 8520 Erlangen FEDERAL REPUBLIC OF GERMANY

D-ERL-A

Institut für Angewandte Mathematik Universität Erlangen-Nürnberg 8520 Erlangen FEDERAL REPUBLIC OF **GERMANY**

D-ERL-D

Institut für Mathematische Maschinen und Datenverarbeitung I Universität Erlangen-Nürnberg 8520 Erlangen FEDERAL REPUBLIC OF **GERMANY**

D-ESSN

FB Mathematik GHS Essen 4300 Essen 1 FEDERAL REPUBLIC OF GERMANY

D-FRBG

Mathematisches Institut Universität Freiburg 7800 Freiburg im Breisgau FEDERAL REPUBLIC OF GERMANY

D-FRBG-A

Institut für Angewandte Mathematik Universität Freiburg 7800 Freiburg im Breisgau FEDERAL REPUBLIC OF GERMANY

D-FRBG-S

Institut für Mathematische Stochastik Universität Freiburg 7800 Freiburg im Breisgau FEDERAL REPUBLIC OF GERMANY

D-FRNK

FB Mathematik Universität Frankfurt 6000 Frankfurt a. M. FEDERAL REPUBLIC OF GERMANY

D-FRNK-P

Institut für Theoretische Physik Universität Frankfurt 6000 Frankfurt a. M. FEDERAL REPUBLIC OF GERMANY

D-FUB-1

Mathematisches Institut I Freie Universität Berlin 1000 Berlin 33 FEDERAL REPUBLIC OF GERMANY

D-FUB-2

Mathematisches Institut II Freie Universität Berlin 1000 Berlin 33 FEDERAL REPUBLIC OF GERMANY

D-FUB-3

Mathematisches Institut III Freie Universität Berlin 1000 Berlin 33 FEDERAL REPUBLIC OF GERMANY

D-FUB-P

Institut für Mathematische Physik Freie Universität Berlin 1000 Berlin 33 FEDERAL REPUBLIC OF GERMANY

D-GSSN

Mathematisches Institut Universität Giessen 6300 Giessen FEDERAL REPUBLIC OF GERMANY

D-GTN-N

Institut für Numerische und Angewandte Mathematik Universität Göttingen 3400 Göttingen FEDERAL REPUBLIC OF GERMANY

D-GTN-P

Institut für Theoretische Physik Universität Göttingen 3400 Göttingen FEDERAL REPUBLIC OF GERMANY

D-GTN-S

Institut für Mathematik und Statistik Universität Göttingen 3400 Göttingen FEDERAL REPUBLIC OF GERMANY D-HAMB

Mathematisches Seminar Universität Hamburg 2000 Hamburg 13 FEDERAL REPUBLIC OF GERMANY

D-HAMB-A

Institut für Angewandte Mathematik Universität Hamburg 2000 Hamburg 13 FEDERAL REPUBLIC OF GERMANY

D-HAMB-H

Institut für Geschichte der Naturwissenschaften 2000 Hamburg 13 FEDERAL REPUBLIC OF GERMANY

D-HAMB-I

Institut für Informatik Universität Hamburg 2000 Hamburg 13 FEDERAL REPUBLIC OF GERMANY

D-HAMB-P

Institut für Theoretische Physik II Universität Hamburg 2000 Hamburg 50 FEDERAL REPUBLIC OF GERMANY

D-HAMB-S

Institut für Mathematische Stochastik Universität Hamburg 2000 Hamburg 13 FEDERAL REPUBLIC OF GERMANY

D-HANN

Institut für Mathematik Universität Hannover 3000 Hannover FEDERAL REPUBLIC OF GERMANY

D-HANN-S

Mathematische Stochastik Universität Hannover 3000 Hannover FEDERAL REPUBLIC OF GERMANY

D-HDBG

Mathematisches Institut Universität Heidelberg 6900 Heidelberg FEDERAL REPUBLIC OF GERMANY

D-HDBG-A

Institut für Angewandte Mathematik Universität Heidelberg 6900 Heidelberg FEDERAL REPUBLIC OF GERMANY D-HDBG-P

Physikalisches Institut Universität Heidelberg 6900 Heidelberg 1 FEDERAL REPUBLIC OF GERMANY

D-HGN

D-HGN
FB Mathematik
Fernuniversität
5800 Hagen 1
FEDERAL REPUBLIC OF
GERMANY

D-HGN-O

Operations Research Fernuniversität 5800 Hagen 1 FEDERAL REPUBLIC OF GERMANY

D-KFZK

Kernforschungssentrum Karlsruhe GmbH 7500 Karlsruhe 1 FEDERAL REPUBLIC OF GERMANY

D-KIEL

Mathematisches Seminar Universität Kiel 2300 Kiel 1 FEDERAL REPUBLIC OF GERMANY

D-KIEL-I

Institut für Informatik und Praktische Mathematik Universität Kiel 2300 Kiel FEDERAL REPUBLIC OF GERMANY

D-KIEL-Q

Philosophisches Seminar Universität Kiel 2300 Kiel FEDERAL REPUBLIC OF GERMANY

D-KLRH-1

Mathematisches Institut I TH Karlsruhe 7500 Karlsruhe 1 FEDERAL REPUBLIC OF GERMANY

D-KLRH-2

Mathematisches Institut II TH Karlsruhe 7500 Karlsruhe 1 FEDERAL REPUBLIC OF GERMANY

D-KLRH-A

Institut für Angewandte Mathematik TH Karlsruhe 7500 Karlsruhe 1 FEDERAL REPUBLIC OF GERMANY D-KLRH-D

Institut für Theoretische Mechanik TH Karlsruhe 7500 Karlsruhe 1 FEDERAL REPUBLIC OF GERMANY

D-KLRH-G

Institut für Praktische
Mathematik
TH Karlsruhe
7500 Karlsruhe
FEDERAL REPUBLIC OF
GERMANY

D-KLRH-I

Institut für Informatik TH Karlsruhe 7500 Karlsruhe 1 FEDERAL REPUBLIC OF GERMANY

D-KLRH-S

Institut für Mathematische Statistik TH Karlsruhe 7500 Karlsruhe 1 FEDERAL REPUBLIC OF GERMANY

D-KLRH-W

Institut für Statistik und Mathematische Wirtschaftwissenschaft TH Karlsruhe 7500 Karlsruhe 1 FEDERAL REPUBLIC OF GERMANY

D-KNST

FB Mathematik Universität Konstans 7750 Konstans FEDERAL REPUBLIC OF GERMANY

D-KNST-P

Fakultät für Physik Universität Konstans 7750 Konstans FEDERAL REPUBLIC OF GERMANY

D-KNST-W

Fäkultat für Wirtschaftswissenschaften und Statistik Universität Konstanz 7750 Konstans FEDERAL REPUBLIC OF GERMANY

D-KOLN

Mathematisches Institut Universität Köln 5000 Cologne 41 FEDERAL REPUBLIC OF GERMANY

D-KOLN-P

Institut für Theoretische Physik Universität Köln 5000 Cologne 41 FEDERAL REPUBLIC OF GERMANY

D-KSRL

FB Mathematik Universität Kaiserslautern 6750 Kaiserslautern FEDERAL REPUBLIC OF GERMANY

D-KSRL-P

FB Physik Universität Kaiserslautern 6750 Kaiserslautern FEDERAL REPUBLIC OF GERMANY

D-KSSL

FB Mathematik
GHS Kassel
3500 Kassel
FEDERAL REPUBLIC OF
GERMANY

D-MNCH-S

Seminar für Ökonometrie und Statistik Universität München 8000 Munich 40 FEDERAL REPUBLIC OF GERMANY

D-MNHM

Mathematisches Institut Universität Mannheim 6800 Mannheim FEDERAL REPUBLIC OF GERMANY

D-MNZ

Mathematisches Institut Universität Mains 6500 Mains FEDERAL REPUBLIC OF GERMANY

D-MPI

Max-Plank-Institut für Mathematik 5300 Bonn 3 FEDERAL REPUBLIC OF GERMANY

D-MPIG-A

Max-Planck-Institut für Physik und Astrophysik 8046 Munich (Garching) FEDERAL REPUBLIC OF GERMANY

D-MPIG-L

Max-Planck-Institut für Plasmaphysik 8046 Munich (Garching) FEDERAL REPUBLIC OF GERMANY

D-MRBG

FB Mathematik Universität Marburg 3550 Marburg FEDERAL REPUBLIC OF GERMANY

D-MUNS

Mathematisches Institut Universität Münster 4400 Münster FEDERAL REPUBLIC OF GERMANY

D-MUNS-N

Institut für Numerische Mathematik Universität Münster 4400 Münster FEDERAL REPUBLIC OF GERMANY

D-MUNS-S

Institut für Mathematik und Statistik Universität Münster 4400 Münster FEDERAL REPUBLIC OF GERMANY

D-MUTU

Mathematisches Institut TU München 8000 Munich 2 FEDERAL REPUBLIC OF GERMANY

D-MUTU-D

Institut für Informatik TU München 8000 Munich 2 FEDERAL REPUBLIC OF GERMANY

D-MUTU-E

Institut für Geometrie TU München 8000 Munich 2 FEDERAL REPUBLIC OF GERMANY

D-MUTU-Q

Institut für Philosophie TU München 8000 Munich 2 FEDERAL REPUBLIC OF GERMANY

D-OSNAV

FB Mathematik Universität Osnabrück -Abteilung Vechta-2848 Vechta FEDERAL REPUBLIC OF GERMANY

D-OSNB

FB Mathematik Universität Osnabrück 4500 Osnabrück FEDERAL REPUBLIC OF GERMANY

D-PDRB

FB Mathematik-Informatik GHS Paderborn 4790 Paderborn FEDERAL REPUBLIC OF GERMANY

D-PDRB-P

FB Theoretische Physik GHS Paderborn 4790 Paderborn FEDERAL REPUBLIC OF GERMANY

D-RGBG

FB Mathematik Universität Regensburg 8400 Regensburg 2 FEDERAL REPUBLIC OF GERMANY

D-SAAR

FB Mathematik Universität des Saarlandes 6600 Saarbrücken FEDERAL REPUBLIC OF GERMANY

D-SGN

FB Mathematik GHS Siegen 5900 Siegen 21 FEDERAL REPUBLIC OF GERMANY

D-STGT-A

Mathematisches Institut A Universität Stuttgart 7000 Stuttgart 80 FEDERAL REPUBLIC OF GERMANY

D-STGT-B

Mathematisches Institut B Universität Stuttgart 7000 Stuttgart 80 FEDERAL REPUBLIC OF GERMANY

D-STGT-G

Institut für Geodäsie Universität Stuttgart 7000 Stuttgart 1 FEDERAL REPUBLIC OF GERMANY

D-STGT-I

Institut für Informatik Universität Stuttgart 7000 Stuttgart 1 FEDERAL REPUBLIC OF GERMANY

D-TBNG

Mathematisches Institut Universität Tübingen 7400 Tübingen FEDERAL REPUBLIC OF GERMANY

D-TBNG-B

Institut für Medizinische Biologie Universität Tübingen 7400 Tübingen FEDERAL REPUBLIC OF GERMANY

D-TBNG-I

Institut für Informatik Universität Tübingen 7400 Tübingen FEDERAL REPUBLIC OF GERMANY

D-TUB

FB Mathematik
TU Berlin
1000 Berlin 12
FEDERAL REPUBLIC OF
GERMANY

DILLIM

Abteilung für Mathematik Universität Ulm 7900 Ulm FEDERAL REPUBLIC OF GERMANY

D-ULM-2

Abteilung für Mathematik II Universität Ulm 7900 Ulm FEDERAL REPUBLIC OF GERMANY

D-ULM-4

Abteilung für Mathematik IV Universität Ulm 7900 Ulm FEDERAL REPUBLIC OF GERMANY

D-ULM-5

Abteilung für Mathematik V Universität Ulm 7900 Ulm FEDERAL REPUBLIC OF GERMANY

D-ULM-7

Abteilung für Mathematik VII Universität Ulm 7900 Ulm FEDERAL REPUBLIC OF GERMANY

D-ULM-B

Abteilung für Theoretische Chemie Universität Ulm 7900 Ulm FEDERAL REPUBLIC OF GERMANY

D-ULM-P

Abteilung für Theoretische Physik Universität Ulm 7900 Ulm FEDERAL REPUBLIC OF GERMANY

D-WRZB

Mathematisches Institut Universität Würzburg 8700 Würzburg FEDERAL REPUBLIC OF GERMANY

D-WRZB-A

Institut für Angewandte Mathematik und Statistik Universität Würsburg 8700 Würsburg FEDERAL REPUBLIC OF GERMANY

D-WUPP

FB Mathematik GHS Wuppertal 5600 Wuppertal 1 FEDERAL REPUBLIC OF GERMANY

DDR-ADW

Forschungsbereich Mathematik/ Kybernetik Akademie der Wissenschaften der DDR 1199 Berlin GERMAN DEMOCRATIC REPUBLIC

DDR-ADW-B

Zentralinstitut für Mathematik und Mechanik Akademie der Wissenschaften der DDR 1080 Berlin GERMAN DEMOCRATIC REPUBLIC

DDR-ADW-I

Zentralinstitut für Kybernetik und Informationsprozesse Akademie der Wissenschaften der DDR 1080 Berlin GERMAN DEMOCRATIC REPUBLIC

DDR-BRGF

Sektion der Mathematik Bergakademie Freiberg 9200 Freiberg GERMAN DEMOCRATIC REPUBLIC

DDR-BRGF-P

Sektion der Physik Bergakademie Freiberg 9200 Freiberg (Sax) GERMAN DEMOCRATIC REPUBLIC

DDR-EMAU

Sektion der Mathematik Ernst-Moritz-Arndt-Universität 2200 Greifswald GERMAN DEMOCRATIC REPUBLIC

DDR-FSU

Sektion der Mathematik Friedrich-Schiller-Universität 6900 Jena GERMAN DEMOCRATIC REPUBLIC

DDR-HUMB

Sektion Mathematik Humboldt-Universität 1086 Berlin GERMAN DEMOCRATIC REPUBLIC

DDR-ILTU

Sektion der Mathematik TU Ilmenau 6300 Ilmenau GERMAN DEMOCRATIC REPUBLIC

DDR-KMU

Sektion der Mathematik Karl-Marx-Universität 7001 Leipzig GERMAN DEMOCRATIC REPUBLIC

DDR-KMU-P

Sektion der Physik Karl-Marx-Universität 7010 Leipzig GERMAN DEMOCRATIC REPUBLIC

DDR-MLU

Sektion der Mathematik Martin-Luther-Universität Halle a.d. Saale 401 GERMAN DEMOCRATIC REPUBLIC

DDR-THKM

Sektion der Mathematik TH Karl-Marx-Stadt 9000 Karl-Marx-Stadt GERMAN DEMOCRATIC REPUBLIC

DDR-THKM-A

Sektion der Automatisierungstechnik TH Karl-Marx-Stadt 9000 Karl-Marx-Stadt GERMAN DEMOCRATIC REPUBLIC

DDR-THKM-I

Sektion der Informationstechnik TH Karl-Marx-Stadt 9010 Karl-Marx-Stadt GERMAN DEMOCRATIC REPUBLIC

DDR-TUD

Sektion der Mathematik TU Dresden 8027 Dresden GERMAN DEMOCRATIC REPUBLIC

DDR-TUD-A

Institut für Angewandte Mathematik II TU Dresden 8027 Dresden GERMAN DEMOCRATIC REPUBLIC

DDR-WPU

Sektion der Mathematik Wilhelm-Pieck-Universität 2500 Rostock GERMAN DEMOCRATIC REPUBLIC

DK-ARHS

Mathematics Institute University of Aarhus 8000 Aarhus C DENMARK

DK-ARHS-H

Department of History Science University of Aarhus 8000 Aarhus C DENMARK

DK-CPNH

Mathematics Institute University of Copenhagen 2100 Copenhagen O Denmark

DK-CPNH-A

Institute for Chemistry University of Copenhagen 2200 Copenhagen N DENMARK

DK-CPNH-E

Institute of Economics University of Copenhagen 1455 Copenhagen DENMARK

DK-CPNH-S

Institute of Statistics University of Copenhagen 1455 Copenhagen K DENMARK

DK-CPNH-T

Institute of Mathematical Statistics Copenhagen University 2100 Copenhagen O DENMARK

DK-ODNS

Department of Mathematics Odense University 5230 Odense M DENMARK

DK-RVAU

Institute of Mathematics and Statistics Royal Veterinary and Agricultural University 1871 Copenhagen DENMARK

DK-TUD

Mathematical Institute Technical University of Denmark 2800 Lyngby DENMARK

DZ-ORAN

Département de Mathématiques Université d'Oran Es Senia (Oran) ALGERIA

E-BARA

Department of Mathematics Faculty of Science Universidad Autónoma de Barcelona Bellaterra, Barcelona SPAIN

E-BARCU-P

Department of Theoretical Physics Faculty of Science Universidad Central de Barcelona Barcelona 14 SPAIN

E-GRAN-G

Department Geometry and Topology Faculty of Science Universidad de Granada Granada SPAIN

E-GRAN-P

Department of Nuclear Physics Faculty of Science Universidad de Granada Granada SPAIN

E-MADA

Department of Mathematics Universidad Autónoma de Madrid 34 Madrid SPAIN

E-MADC

Faculty of Mathematics Universidad Complutense de Madrid Madrid 3 SPAIN

E-MADC-P

Faculty of Physics Universidad Compulutense de Madrid Madrid 3 SPAIN

E-SACO

Faculty of Mathematics University de Santiago de Compostela Santiago de Compostela SPAIN

E-SALA

Faculty of Science (Mathematics) Universidad de Salamanca Salamanca SPAIN

E-SALA-P

Faculty of Science (Mathematical Physics) Universidad de Salamanca Salamanca SPAIN

E-SANT-P

Faculty of Physics Universidad de Santander Santander SPAIN

E-SEVL

Faculty of Mathematics Universidad of Sevilla Seville SPAIN

E-VALD

Faculty of Science Universidad de Valladolid Valladolid SPAIN

E-VLNC

Faculty of Mathematical Sciences Universidad de Valencia Valencia SPAIN

R-VLNC-P

Faculty of Physical Sciences Universidad de Valencia SPAIN

E-ZRGZ

Faculty of Science University de Zaragosa Zaragosa SPAIN

ET-ALEX-E

Department of Electrical Engineering Alexandria University Alexandria ECYPT

ET-ASH-C

Computer and Control Section Ain Shams University Cairo EGYPT

ET-CAIR

Department of Mathematics University of Cairo Cairo EGYPT

ET-SUEZ

Department of Mathematics University of Sues Canal Ismailia EGYPT

F-ANGR

Département de Mathématiques Université d'Angers 49045 Angers Cedex FRANCE

Département de Mathématiques Faculté des Sciences Centre Universitaire d'Avignon 84000 Avignon FRANCE

F-BORD

UER de Mathématiques et d'Informatique Université de Bordeaux I 33405 Talence FRANCE

F-BRET

Département de Mathématiques Université de Bretagne Occidentale 29283 Brest FRANCE

F-BRET-A

Laboratoire de Chemie Inorganique Université de Bretagne Occidentale 29283 Brest FRANCE

F-CAEN

Département de Mathématiques et de Mécanique Université de Caen 14032 Caen Cedex FRANCE

F-CAEN-E

Départment de Sciences Économiques Université de Caen 14032 Caen Cedex FRANCE

F-CDF

Département de Mathématiques Collège de France 75231 Paris Cedex 05 FRANCE

F-CENS

S.P.T., CEN Saclay BP no. 2 91190 Gif-sur-Yvette FRANCE

F-CLEF2

Département de Mathématiques Université de Clermont-Ferrand П 63170 Aubière FRANCE

F-CNRS-A

Laboratoire de Mécanique et d'Acoustique CNRS 13277 Marseille Cedex 9

FRANCE

F-COMP Université de Technologie de Compiègne 60206 Compiègne Cedex FRANCE

F-DJON

Département de Mathématiques Université de Dijon 21000 Dijon FRANCE

F-DJON-P

Laboratoire de Physique Mathématique Université de Dijon 21000 Dijon FRANCE

F-ECL.

Laboratoire de Mathématiques et Informatique École Centrale de Lyon 69130 Ecully FRANCE

F-ECL-B

Laboratoire de Mécanique des Solides École Centrale de Lyon 69130 Ecully FRANCE

F-ENSTA

École Nationale Supérieure de Techniques Advancées 75015 Paris FRANCE

F-FRAN

Faculté des Sciences et des Techniques Université de Franche-Comté 25030 Besançon Cedex FRANCE

F-GREN

Institut de Mathématiques Pures Université de Grenoble I 38402 Saint Martin D'Hères FRANCE

F-GREN-B

Institut de Mécanique Université de Grenoble I 38041 Grenoble Cedex FRANCE

F-GREN-F

Institut Fourier Université de Grenoble I 38402 St. Martin d'Hères FRANCE

F-GREN-G

IMAG Université de Grenoble I 38410 Grenoble Cedex FRANCE

F-GREN-R

IRMA Université de Grenoble I 38041 Grenoble Cedex FRANCE

F-THES

Institut des Hautes Études Scientifiques 91440 Bures-sur-Yvette FRANCE

F-INSAR

Institut National des Sciences Appliquées de Rennes 35510 Cesson-Sevigne FRANCE

F-LILL

UER de Mathématiques Pures Université de Lille I 59655 Villeneuve d'Ascq Cedex FRANCE

F.I.IMO

UER des Sciences Université de Limoges 87060 Limoges Cedex FRANCE

F-LYON

Département de Mathématiques Université de Lyon 1 69622 Villeurbanne Cedex FRANCE

F-METZ

Département de Mathématiques Université de Metz 57000 Mets FRANCE

F-MONT2

Mathématiques Université Montpellier II 34060 Montpellier Cedex FRANCE

F-NANC

UER Sciences Mathématiques Université de Nancy I 54037 Nancy Cedex FRANCE

F-NANT

Institut de Mathématiques Université de Nantes 44072 Nantes Cedex FRANCE

F-NICE

IMSP Université de Nice 06034 Nice FRANCE

F-ORLN

Département de Mathématiques Université d'Orléans 45045 Orléans FRANCE

F-ORLN-P

Département de Physique Université d'Orléans 45046 Orléans FRANCE

F-PARISE

Département de Mathématiques Université de Paris VI 75230 Paris FRANCE

F-PARIS6-C

Institut de Programmation Université de Paris VI 75005 Paris FRANCE

F-PARIS6-N

Analyse Numérique Université de Paris VI 75230 Paris Cedex 05 FRANCE

F-PARIS6-S

Laboratoire de Calcul des Probabilités Université de Paris VI 75230 Paris Cedex 05 FRANCE

F-PARIST

Mathématiques Université de Paris VII 75221 Paris Cedex 05 FRANCE

F-PARIS11

Département de Mathématiques Université de Paris XI 91405 Orsay FRANCE

F-PARIS11-P

Laboratoire de Physique Théorique et Hautes Énérgies Université de Paris XI 91405 Orsay FRANCE

F-PARIS13

Département de Mathématiques Université Paris XIII 93430 Villetaneuse FRANCE

F-PAU

Département de Mathématiques Université de Pau 64016 Pau FRANCE

F-PCRD

UER Mathématiques Université de Picardie 80039 Amiens FRANCE

F-POIT

Département de Mathématiques Université de Poitiers 86022 Poitiers FRANCE

F-POLY

Centre de Mathématiques École Polytechnique 91128 Palaiseau Cedex FRANCE

F-RENN

UER de Mathématiques et Informatique Université de Rennes I 35031 Rennes Cedex FRANCE

F-RENN-B

IRISA Université de Rennes I 35031 Rennes Cedex FRANCE

F-RENN-8

Laboratoire de Probabilité Université de Rennes I 35042 Rennes Cedex FRANCE

F-ROUEN

Département de Mathématiques Université de Rouen 76130 Mont-Saint-Aignan FRANCE

F-SAVO

UER des Sciences Université de Savoie 73011 Chambéry FRANCE

F-SETN

Département de Mathématiques Université de Saint Étienne 42023 Saint Étienne FRANCE

F-STRAS

Département de Mathématiques Université de Strasbourg I 67084 Strasbourg FRANCE

F-TOUL3

UER Mathématiques Université de Toulouse III 31077 Toulouse FRANCE

F-TOUL3-8

Laboratoire de Statistique et Probabilité Université de Toulouse III 31077 Toulouse FRANCE

F-VALN

Département de Mathématiques Université de Valenciennes 59326 Valenciennes FRANCE

F-XMAR1

UER de Mathématiques Université d'Aix-Marseille I 13331 Marseille Cedex 3 FRANCE

F-XMAR2-B

Service Universitaire de Biomathématiques et Informatique Université d'Aix-Marseille II 13385 Marseille Cedex 5 FRANCE

GR-ATHN

Institute of Mathematics National Technical University Athens GREECE

GR-ATHN-E

Basic Electrical Engineering National Technical University Athens GREECE

GR-IOAN

Department of Mathematics University of Ioannina Ioannina GREECE

GR-PATR

Department of Mathematics University of Patras Patras GREECE

GR-PATR-E

Faculty of Engineering University of Patras Patras GREECE

GR-THESS

Department of Mathematics Faculty of Science University of Thessaloniki Thessaloniki GREECE

GR-THESS-A

Department of Astronomy Faculty of Science University of Thessaloniki Thessaloniki GREECE

GR-THESS-T

Department of Theoretical Mechanics Faculty of Science University of Thessaloniki Thessaloniki GREECE

GR-THRC

Department of Mathematics Faculty of Engineering University of Thrace Xanthi GREECE

GR-THST

Department of Mathematics Faculty of Technology University of Thessaloniki Thessaloniki GREECE

H-AOS

Mathematical Institute Hungarian Academy of Sciences 1053 Budapest HUNGARY

H-AOS-C

Computer and Automation Institute Hungarian Academy of Sciences 1014 Budapest HUNGARY

H-AOS-P

Central Research Institute for Physics Hungarian Academy of Sciences 1521 Budapest HUNGARY

H-BUDT-A

Department of Automation Technical University of Budapest 1111 Budapest HUNGARY

H-BUDT-E

Department of Mathematics Faculty of Electrical Engineering Technical University of Budapest 1111 Budapest HUNGARY

H-EOTVO-2

Department of Mathematical Analysis II Eötvös Loránd University 1088 Budapest HUNGARY

H-EOTVO-S

Department of Probability
Theory and Statistics
Eötvös Loránd University
1088 Budapest
HUNGARY

H-KMU

Department of Mathematics
Karl Marx University of
Economic Sciences
1093 Budapest
HUNGARY

H-LAJO

Department of Mathematics Lajos Kossuth University 4010 Debrecen HUNGARY

H-SZEC

Bolyai Institute University of Szeged (JATE) 6720 Szeged HUNGARY

HK-CUHK

Department of Mathematics
The Chinese University of Hong
Kong
Sha Tin NT
HONG KONG

HK-HNKG

Department of Mathematics University of Hong Kong Hong Kong HONG KONG

HK-HNKGP

Department of Mathematical Studies Hong Kong Polytechnic Hong Kong HONG KONG

I-BARI-A

Istituto di Analisi Matematica Università di Bari 70100 Bari ITALY

I-BARI-G

Istituto di Geometria Università di Bari 70100 Bari ITALY

I-BOLO

Istituto di Matematica "S. Pincherle" Università di Bologna 40127 Bologna ITALY

I-BOLO-A

Istituto di Matematica Applicata Università di Bologna 40136 Bologna ITALY

LROLO-E

Istituto di Automatica Università di Bologna 40136 Bologna ITALY

I-BOLO-G

Istituto di Geometria Università di Bologna 40127 Bologna ITALY

I-BOLO-P

Istituto di Fisica Università di Bologna 40136 Bologna ITALY

I-BOLO-8

Istituto di Statistica Università di Bologna 40136 Bologna ITALY

I-CAGL

Istituto Matematico Università di Cagliari 09100 Cagliari ITALY

I-CATN

Seminario Matematico Università di Catania 95125 Catania ITALY

I-CATN-E

Facolta di Ingegneria Università di Catania 95125 Catania ITALY

I-CATN-P

Istituto de Fisica Università di Catania 95129 Catania ITALY

I-CLBR

Dipartimento di Matematica Università della Calabria 87100 Cosenza ITALY

I-CNR-K

Laboratorio di Kibernetica Consiglio Nazionale delle Ricerche 80072 Arco Felice

I-CNR-N

Istituto de Analisi Numerica Consiglio Nazionale delle Ricerche 27100 Pavia ITALY

I-FERR

Istituto Matematico Università di Ferrara 44100 Ferrara ITALY

I-FRNZ

Istituto Matematico " U. Dini" Università di Firense 50134 Florence ITALY

I-GENO

Istituto Matematico Università di Genova 16132 Genoa ITALY

I-GENO-P

Istituto di Fisica Università di Genova 16132 Genoa ITALY

I-ICTP

International Centre for Theoretical Physics 34100 Trieste ITALY

I-LECCE

Instituto di Matematica Università di Lecce 73100 Lecce ITALY

I-LECCE-P

Istituto di Fisica Università di Lecce 73100 Lecce ITALY

I-MILAN

Istituto di Matematica "F. Enriques" Università di Milano 20133 Milan ITALY

I-MILANP

Istituto di Matematica Politecnico di Milano 20133 Milan ITALY

LMODN

Istituto Matematico "Vitali" Università di Modena 41100 Modena ITALY

I-NAPL

Istituto di Matematica "R. Caccioppoli" Università di Napoli 80100 Naples ITALY

I-NAPL-E

Facolta d'Ingegneria Università di Napoli 80100 Naples ITALY

I-NAPL-P

Istituto Fisica Teorica Università di Napoli 80125 Naples ITALY

I-PADV

Seminario Matematico Università di Padova 35100 Padua ITALY

I-PADV-A

Istituto di Matematica Applicata Università di Padova 35100 Padua ITALY

LPADV-G

Instituto di Algebra e Geometria Università di Padova 35100 Padua ITALY

I-PADV-P

Istituto di Fisica Università di Padova 35100 Padua ITALY

I-PADV-S

Istituto di Statistica Università di Padova 35100 Padua ITALY

I-PARM

Istituto di Matematica Università di Parma 43100 Parma ITALY

I-PAVI-B

Istituto Informatica Sistemistica Università di Pavia 27100 Pavia ITALY

I-PAVI-G

Istituto di Geometria Università di Pavia 27100 Pavia ITALY

I-PAVI-P

Istituto Fisica Teorica Università di Pavia 27100 Pavia ITALY

I-PERG

Istituto di Matematica Università di Perugia 06100 Perugia ITALY

I-PISA

Istituto di Matematica
"L. Tonelli"
Università di Pisa
56100 Pisa
ITALY

I-PISA-E

Facolta Di Ingegneria Università di Pisa 56100 Pisa ITALY

I-PISA-I

Istituto di Scienze dell'Informazione Università di Pisa 56100 Pisa ITALY

LPLRM

Istituto Matematico Università di Palermo 90123 Palermo ITALY

I-ROME

Istituto Matematico "G. Castelnuovo" Università di Roma 00185 Rome ITALY

I-ROME-A

Istituto di Automatica Università di Roma 00184 Rome ITALY

I-ROME-B

Istituto per le Applicazioni di Calcolo "M. Picone" 00161 Rome ITALY

I-ROME-P

Istituto di Fisica "G. Marconi" Università di Roma 00185 Rome ITALY

I-ROME-S

Facoltà di Statistica Università di Roma 00100 Rome ITALY

I-SLRN-P

Istituto di Fisica Università di Salerno 84100 Salerno ITALY

I-SNS

Scuola Normale Superiore 56100 Pisa ITALY

I-TRIN

Istituto Matematico Università di Torino 10123 Turin ITALY

I-TRIN-G

Istituto di Geometria Università di Torino 10123 Turin ITALY

I-TRIN-I

Istituto Scienze dell'Informazione Università di Torino 10125 Turin ITALY

I-TRIN-N

Istituto di Calcoli Numerici Università di Torino 10123 Turin ITALY

I-TRIN-P

Istituto di Fisica Matematica Università di Torino 10123 Turin ITALY

I-TRNP

Istituto Matematico Politecnico di Torino 10129 Turin ITALY

I-TRNP-B

Institut Meccanica Razionale Politecnico di Torino 10129 Turin ITALY

I-TRNT

Dipartimento di Matematica Libera Università degli Studi 38050 Povo Trento ITALY

I-TRNT-P

Dipartimento di Fisica Libera Università degli Studi 38050 Povo Trento ITALY

I-TRST

Istituto Matematico Università di Trieste 34127 Trieste ITALY

I-TRST-A

Istituto di Matematica Applicata Università di Trieste 34100 Trieste ITALY

I-TRST-E

Istituto di Elettrotecnica e Elettronica Università di Trieste 34100 Trieste ITALY

IL-BGUN

Department of Mathematics Ben Gurion University of the Negev Beersheva 84105 ISRAEL

IL-BGUN-P

Department of Physics
Ben Gurion University of the
Negev
Beersheva 84105
ISRAEL

IL-BILN

Department of Mathematics Bar-Ilan University Ramat Gan ISRAEL

IL-BILN-E

Department of Economics Bar-Ilan University Ramat Gan ISRAEL

IL-BILN-Q

Department of Philosophy Bar-Ilan University Ramat Gan ISRAEL

IL-HAIF

Department of Mathematics Haifa University Haifa 31999 ISRAEL

IL-HEBR

Department of Mathematics Hebrew University Jerusalem ISRAEL

IL-HEBR-A

Applied Science and Technology School Hebrew University Jerusalem ISRAEL

IL-HEBR-C

Department of Computer Science Hebrew University Jerusalem ISRAEL

IL-HEBR-E

Einstein Institute of Mathematics Hebrew University Jerusalem ISRAEL

IL-HEBR-S

Department of Statistics Hebrew University Jerusalem ISRAEL

IL-TECH

Faculty of Mathematics Technion-Israel Institute of Technology Haifa 32000 ISRAEL

IL-TECH-A

Department Aeronautical Engineering Technion-Israel Institute of Technology Haifa 32000 ISRAEL

IL-TECH-C

Department of Computer Science Technion-Israel Institute of Technology Haifa 32000 ISRAEL

IL-TECH-E

Department of Electrical Engineering Technion-Israel Institute of Technology Haifa 32000 ISRAEI.

IL-TECH-I

Faculty of Industrial and Management Engineering Technion-Israel Institute of Technology Haifa 32000 ISRAEL

IL-TECH-P

Faculty of Physics
Technion-Israel Institute of
Technology
Haifa 32000
ISRAEL

IL-TLAV

Department of Mathematics Tel Aviv University Ramat Aviv ISRAEL

IL-TLAV-A

Department of Environmental Science Tel Aviv University Ramat Aviv ISRAEL

IL-TLAV-G

Department of Geophysics Tel Aviv University Ramat Aviv 69978 ISRAEL

IL-TLAV-P

Department of Physics and Astronomy Tel Aviv University Ramat Aviv ISRAEL

IL-WEIZ

Faculty of Mathematical Sciences Weismann Institute of Science Rehovot 76100 ISRAEL

IR-ISFA

Department of Mathematics University of Isfahan Isfahan IRAN

IR-SHAR

Department of Mathematics and Computer Science Sharif University of Technology Tehran IRAN

IR-SHIR

Department of Mathematics Shiras University Shiras IRAN

IRL-CORK

Department of Mathematics University College Cork REPUBLIC OF IRELAND

IRL-CORK-S

Department of Statistics University College Cork REPUBLIC OF IRELAND

IRL-DBLN

Department of Mathematical Science University College Belfield, Dublin 4 REPUBLIC OF IRELAND

IRL-DBLN-P

Department of Mathematical Physics University College Belfield, Dublin 4 REPUBLIC OF IRELAND

IRL-DIAS

Dublin Institute of Advanced Studies Dublin 4 REPUBLIC OF IRELAND

IRL-GLWY

Department of Mathematics University College Galway REPUBLIC OF IRELAND

IRL-TCD

Department of Mathematics Trinity College Dublin 2 REPUBLIC OF IRELAND

IRL-TCD-8

Department of Statistics University of Dublin Trinity College Dublin 2 REPUBLIC OF IRELAND

IRQ-BASR

Department of Mathematics University of Basrah Basrah IRAQ

J-CHIBE-E

Department of Electronic Engineering Chiba University Chiba-shi JAPAN 260

J-CHIBS

Department of Mathematics Faculty of Science Chiba University Chiba-shi JAPAN 260

J-CHUOE-A

Department of Civil Engineering Faculty of Engineering Chuo University Bunkyö-ku Tokyo JAPAN 112

J-CHUO8

Department of Mathematics Faculty of Science and Engineering Chuo University Bunkyō-ku Tokyo JAPAN 112

LEHIMS

Department of Mathematics Faculty of Science Ehime University Bunkyo-cho 3 Matsuyama-shi JAPAN 790

J-GARUS

Department of Mathematics Faculty of Science Gakushuin University Toyoshima-ku Tokyo JAPAN 171

J-HIROS

Department of Mathematics Faculty of Science Hirosaki University Aomori-ken JAPAN 036

J-HITOE

Institute of Economic Research Hitotsubashi University Kunitachi-shi Tokyo JAPAN 186

J-HOKKR

Research Institute of Applied Electricity Hokkaido University Kita-ku Sapporo-shi JAPAN 060

LHOKKS

Department of Mathematics Faculty of Science Hokkaido University Kita-ku Sapporo-shi JAPAN 060

L-HROSE-A

Department of Applied Mathematics Faculty of Engineering Hiroshima University Naka-ku Hiroshima JAPAN 730

J-HROSE-B

Department of Circuits and Systems Faculty of Engineering Hiroshima University Naka-ku Hiroshima JAPAN 730

J-HROSI

Department of Mathematics
Faculty of Integrated Arts and
Sciences
Hiroshima University
Naka-ku
Hiroshima
JAPAN 730

J-HROSI-I

Department of Information and Behavior Science Faculty of Integrated Arts and Science Hiroshima University Naka-ku Hiroshima JAPAN 730

J-HROSU

Department of Mathematics School of Education Hiroshima University Minami-ku Hiroshima JAPAN 734

J-IBARE

Faculty of Engineering Ibaraki University Hitachi-shi Ibaraki-ken JAPAN 316

J-IBARU

Faculty of Education Ibaraki University Mito-shi Ibaraki-ken JAPAN 310

J-KAGAC

Faculty of Economics Kagawa University Takamatsu-shi JAPAN 760

J-KAGAU

Department of Mathematics Faculty of Education Kagawa University Takamatsu-shi JAPAN 760

J-KAGOL

Department of Mathematics College of Liberal Arts Kagoshima University Kagoshima-shi JAPAN 890

J-KANAS

Department of Mathematics Faculty of Science Kanasawa University Kanasawa-shi JAPAN 920

I-KEIOC

Department of Economics Keio University Tokyo JAPAN 108

PREIOE

Department of Mathematics Faculty of Engineering Keio University Minatokita-ku Yokohama-shi JAPAN 233

J-KOBEC-E

Department of Economics Kobe University Kobe JAPAN 657

J-KOBEE-E

Department of Systems Engineering Kobe University Kobe JAPAN 657

J-KOBEE-I

Department of Instrumentation Engineering Kobe University Kobe JAPAN 657

J-KOBEL

Department of Mathematics College of Liberal Arts Kobe University Kobe JAPAN 657

J-KUMAE

Faculty of Engineering Kumamoto University Kumamoto JAPAN 860

J-KUMAG

Department of Mathematics Faculty of General Education Kumamoto University Kumamoto JAPAN 860

J-KUMAS

Department of Mathematics Faculty of Science Kumamoto University Kumamoto JAPAN 860

J-KWANS

Faculty of Science Kwansei Gakuin University Nishinomiya-shi Hyogo-ken JAPAN 662

J-KYOTC

Institute of Economic Research Kyoto University Sakyō-ku Kyoto JAPAN 606

J-KYOTE-A

Department of Applied Mathematics and Physics Faculty of Engineering Kyoto University Sakyō-ku Kyoto JAPAN 606

J-KYOTE-B

Department of Electrical Engineering Kyoto University Sakyō-ku Kyoto JAPAN 606

J-KYOTG

College of General Education Kyoto University Kyoto JAPAN 606

J-KYOTS-B

Department of Biophysics Faculty of Science Kyoto University Sakyō-ku Kyoto JAPAN 606

J-KYOTS-P

Department of Physics Faculty of Science University of Kyoto Sakyō-ku Kyoto JAPAN 606

J-KYUSE-E

Department of Economic Engineering Faculty of Economics Kyushu University 27 Fukuoka JAPAN 812

J-KYUSG

Department of Mathematics College of General Education Kyushu University Chuo-ku Fukuoka JAPAN 810

J-KYUSN-A

Department of Applied Science Faculty of Engineering Kyushu University Hakozaki, Higashi-ku Fukuoka JAPAN 812

J-KYUSS

Department of Mathematics Faculty of Science Kyushu University Hakosaki, Higashi-ku Fukuoka JAPAN 812

J-NAGOE-I

Department of Information
Science
School of Electrical Engineering
Nagoya University
Chikusa-ku
Nagoya
JAPAN 464

J-NAGOG

Department of Mathematics College of General Education Nagoya University Chikusa-ku Nagoya JAPAN 464

J-NAGOS

Department of Mathematics School of Science Nagoya University Chikusa-ku Nagoya JAPAN 464

J-NDA

Department of Mathematics Faculty of Science National Defense Academy Yokosuka-shi JAPAN 239

J-NIGAE

Faculty of Engineering Niigata University Niigata-shi JAPAN 950

J-NIGAG

Department of Mathematics Faculty of General Education Niigata University Niigata-shi JAPAN 950-21

J-NIGAS

Department of Mathematics Faculty of Science Niigata University Niigata-shi JAPAN 950-21

J-NIHOH

Department of Mathematics College of Humanities and Science Nihon University Setagaya-ku Tokyo JAPAN 156

J-OKAY8

Department of Mathematics Faculty of Science Okayama University Okayama-shi JAPAN 700

J-OSAKCE-E

Department of Electrical Engineering Faculty of Engineering Osaka City University Sumiyoshi-ku Osaka JAPAN 558

J-OSAKE-A

Department of Applied Physics Faculty of Engineering Osaka University Suita-shi Osaka-fu JAPAN 565

J-OSAKE-I

Department of Information and Computer Science Faculty of Engineering Science Osaka University Toyonaka-shi Osaka-fu JAPAN 560

J-OSAKPE

Department of Mathematical Science College of Engineering University of Osaka Prefecture Sakai-shi JAPAN 591

J-SAGAS

Department of Mathematics Faculty of Science and Engineering Saga University Saga-shi JAPAN 840

LSAGAT

Department of Mathematics Faculty of Education Saga University Saga-shi JAPAN 840

J-SHIME

Department of Mathematics Faculty of Education Shimane University Matsue-shi Shimane-ken JAPAN 690

J-SHINE

Faculty of Engineering Shinshu University Nagano-shi JAPAN 380

J-SHINS

Department of Mathematics Faculty of Science Shinshu University Matsumoto-shi JAPAN 390

J-SOPHE-A

Department of Mechanical Engineering Sophia University Chiyoda-ku Tokyo JAPAN 102

J-TOHOD

Institute of High Speed Mechanics Tôhoku University Sendai-shi JAPAN 980

J-TOHOE-E

Department of Electrical Engineering Faculty of Engineering Tôhoku University Sendai-shi JAPAN 980

J-TOROE-F

Department of Electrical Communication Faculty of Engineering Tôhoku University Sendai JAPAN 980

J-TOHOG

Department of Mathematics College of General Education Tôhoku University Sendai-shi JAPAN 980

J-TOKSG

Department of Mathematics College of General Education Tokushima University Tokushima-shi JAPAN 770

J-TOKSU

Department of Mathematics Faculty of Education Tokushima University Tokushima-shi JAPAN 770

J-TOKYM

Department of Mathematics Faculty of Science Tokyo Metropolitan University Setagaya-ku Tokyo JAPAN 158

J-TOKYOC

Faculty of Economics University of Tokyo Tokyo JAPAN 160

J-TOKYOG

Department of Mathematics College of General Education University of Tokyo Meguro-ku Tokyo JAPAN 153

J-TOKYOG-P

Institute of Physics College of General Education University of Tokyo Meguro-ku Tokyo JAPAN 153

J-TOKYO8

Department of Mathematics Faculty of Science University of Tokyo Bunkyō-ku Tokyo JAPAN 160

J-TOKYOW

Department of Mathematics Tokyo Woman's Christian University Sugurami-ku Tokyo JAPAN 167

J-TOKYTE

Faculty of Engineering Tokyo Institute of Technology Meguro-ku Tokyo JAPAN 152

J-TOKYTE-A

Department of Control Engineering Tokyo Institute of Technology Meguro-ku Tokyo JAPAN 152

J-TOKYTS

Department of Mathematics Faculty of Science Tokyo Institute of Technology Meguro-ku Tokyo JAPAN 152

J-TOKYTS-I

Department of Information Science Tokyo Institute of Technology Tokyo JAPAN 152

J-TOYAU

Department of Mathematics Faculty of Education Toyama University Toyama-shi JAPAN 930

J-TSUKS

Institute of Socio-Economic Planning University of Tsukuba Sakura-mura Ibaraki-ken JAPAN 305

J-WASES

Department of Mathematics School of Science and Engineering Waseda University Shinjiku-ku Tokyo JAPAN 160

J-YAMAE-A

Department of Electronics Faculty of Engineering Yamaguchi University Ube JAPAN 755

J-YAMAS

Department of Mathematics Faculty of Science Yamaguchi University Yamaguchi-shi JAPAN 753

J-YAMATS

Department of Mathematics Faculty of Science Yamagata University Yamagata-shi JAPAN 990

J-YOKOE

Department of Mathematics Faculty of Education Yokohama National University Hödögaya-ku Yokohama-shi JAPAN 240

J-YOKOT

Department of Mathematics Faculty of Technology Yokohama National University Hödögaya-ku Yokohama-shi JAPAN 240

JA-UWI

Department of Mathematics University of the West Indies, Mona Kingston 7 JAMAICA (WEST INDIES)

KWT-KUWA

Department of Mathematics Kuwait University Kuwait KUWAIT

LAR-ALFA

Department of Mathematics Al-Fatch University Tripoli LIBYA

LAR-ALFA-S

Department of Statistics Al-Fateh University Tripoli LIBYA

MAL-MALA

Department of Mathematics University of Malaya Kuala Lumpur MALAYSIA

MAL-USM

School of Mathematical Science University of Science Malaysia Penang MALAYSIA

MEX-IPN

Department of Mathematics Instituto Politécnico Nacional CIEA Mexico City 14DF MEXICO

MEX-NAM-A

Institute of Applied Mathematics and Systems Research (IIMAS) Universidad Nacional Autónoma de Mexico Mexico City 20DF MEXICO

MEX-NAM-B

Astronomical Institute
Universidad Nacional Autóonoma
de Mexico
Mexico City 20DF
MEXICO

MEX-NAM-N

Center of Nuclear Studies Universidad Nacional Autóonoma de Mexico Mexico City 20DF MEXICO

N-BERG

Department of Mathematics University of Bergen 5014 Bergen NORWAY

N-NLHT

Mathematics Institute University of Trondheim (NLHT) 7055 Dragvoll, Trondheim NORWAY

N-NTH

Mathematics Institute University of Trondheim (NTH) 7034 Trondheim NORWAY

N-NTH-N

Numerical Mathematics Institute University of Trondheim (NTH) 7034 Trondheim NORWAY

N-OSLO

Mathematics Institute University of Oslo Blindern, Oslo 3 NORWAY

N-OSLO-A

Institute of Economics University of Oslo Blindern, Oslo 3 NORWAY

N-TRMS

Mathematical and Physical Sciences Institute University of Tromsø 9001 Tromsø NORWAY

NL-AMST

Mathematics Institute Universiteit van Amsterdam 1004 Amsterdam NETHERLANDS

NL-AMST-E

Department of Economic Statistics Universiteit van Amsterdam 1011 NH Amsterdam NETHERLANDS

NL-DELF

Department of Mathematics and Computer Science Technische Hogeschool te Delft 2600 AJ Delft NETHERLANDS

NL-DELF-E

Department of Electrical Engineering Technische Hogeschool te Delft 2600 AJ Delft NETHERLANDS

NL-EIND

Department of Mathematics Technische Hogeschool Eindhoven NETHERLANDS

NL-GRON-E

Econometric Institute Rijksuniversiteit te Groningen 9700 AV Groningen NETHERLANDS

NL-GRON-P

Institute for Theoretical Physics Rijkuniversiteit te Groningen 9700 AV Groningen NETHERLANDS

NL-LEID

Mathematics Institute Rijksuniversiteit te Leiden 2300 RA Leiden NETHERLANDS

NL-MATH

Mathematisch Centrum 1091 AL Amsterdam NETHERLANDS

NI_NIJM

Mathematics Institute
Katholieke Universiteit Nijmegen
6525 Nijmegen
NETHERLANDS

NL-NIJM-P

Institute of Theoretical Physics Katholieke Universiteit Nijmegen Nijmegen NETHERLANDS

NL-ROTT

Department of Mathematics Erasmus Universiteit Rotherdam 3000 DR Rotterdam NETHERLANDS

NL-TWEN-A

Department of Applied Mathematics Technische Hogeschool Twente Enschede NETHERLANDS

NL-UTRE

Mathematics Institute Rijksuniversiteit te Utrecht 3508 TA Utrecht NETHERLANDS

NL-UTRE-P

Institute for Theoretical Physics Rijksuniversiteit te Utrecht 3508 TA Utrecht NETHERLANDS

NL-VUAM

Department of Mathematics Vrije Universiteit 1007 MC Amsterdam NETHERLANDS

NL-VUAM-A

Interfaculty of Actuarial Science and Economics Vrije Universiteit 1007 MC Amsterdam NETHERLANDS

NZ-AUCK

Department of Mathematics University of Auckland Auckland NEW ZEALAND

NZ-AUCK-C

Department of Computer Science University of Auckland Auckland NEW ZEALAND

NZ-CANT

Department of Mathematics University of Canterbury Christchurch NEW ZEALAND

NZ-CANT-B

Department of Economics University of Canterbury Christchurch NEW ZEALAND

NZ-CANT-C

Department of Computer Science University of Canterbury Christchurch NEW ZEALAND

NZ-CANT-E

Department of Electrical Engineering University of Canterbury Christchurch NEW ZEALAND

NZ-CANT-P

Department of Physics University of Canterbury Christchurch NEW ZEALAND

NZ-MASS

Department of Mathematics and Statistics Massey University Palmerston North NEW ZEALAND

NZ-VCTR

Department of Mathematics University of Victoria Wellington NEW ZEALAND

NZ-WAIK

Department of Mathematics University of Waikato Hamilton NEW ZEALAND

P-CMBR

Institute of Mathematics University of Coimbra 3000 Coimbra PORTUGAL PAK-QAZAM

Department of Mathematics Quaid-I-Asam University Islamabad PAKISTAN

PL-GDAN

Institute of Mathematics University of Gdańsk 80-952 Gdańsk POLAND

PL-GDAN-P

Institute of Physics University of Gdańsk 80-952 Gdańsk POLAND

PL-INR

Computing Center Institute of Nuclear Research 05-400 Otwock-Swierk POLAND

PL-IPPT

Institute of Fundamental Technological Research 00-049 Warsaw POLAND

PL-JAGL

Mathematics Institute Jagiellonian University 31-007 Cracow POLAND

PL-JAGL-A

Department of Logic Jagiellonian University 31-044 Cracow POLAND

PL-JAGL-P

Physics Institute Jagiellonian University 30-059 Cracow POLAND

PL-LODZ

Institute of Mathematics University of Łodź 90-238 Łodź POLAND

PL-MCSU

Mathematics Institute Marie-Curie-Skłdowska University 20-031 Lublin POLAND

PL-PAN

Institute of Mathematics Polish Academy of Sciences Sopot POLAND

PL-PAN-C

Institute of Computer Science Polish Academy of Sciences 00-901 Warsaw POLAND PL-POZN

Institute of Mathematics Adam Mickiewicz University 61-712 Poznań POLAND

PL-POZNT-A

Institute of Automation Technical University of Poznań 60-965 Poznań POLAND

PL-POZNT-E

Institute of Control Engineering Technical University of Poznań 60-965 Poznań POLAND

PL-SILS

Department of Mathematics Silesian University 40-007 Katowice POLAND

PL-SILS-P

Institute of Physics Silesian University 40-007 Katowice POLAND

PL-TORN

Institute of Mathematics Nicholas Copernicus University 87-100 Toruń POLAND

PL-WASW

Institute of Mathematics University of Warsaw 00-901 Warsaw POLAND

PL-WASW-B

Faculty of Mathematical Methods in Physics University of Warsaw 00-682 Warsaw POLAND

PL-WASW-D

Institute of Mechanics University of Warsaw 00-901 Warsaw POLAND

PL-WASW-P

Institute of Theoretical Physics University of Warsaw 00-681 Warsaw POLAND

PL-WASWT-A

Institute of Automatic Control Technical University of Warsaw 00-665 Warsaw POLAND

PL-WROC

Institute of Mathematics University of Wrocław 50-384 Wrocław POLAND PL-WROC-C

Institute of Computer Science University of Wrocław 51-151 Wrocław POLAND

PL-WROC-I

Institute of Informatics University of Wrocław 50-384 Wrocław POLAND

PL-WROC-P

Institute of Theoretical Physics University of Wrocław 50-205 Wrocław POLAND

PL-WROCT

Institute of Mathematics Politechnika Wrocławska 50-370 Wrocław POLAND

PL-WROCT-A

Institute of Technical
Cybernetics
Technical University of Wrocław
50-370 Wrocław
POLAND

PRC-ASBJ

Institute of Mathematics Academia Sinica Beijing PEOPLE'S REPUBLIC OF CHINA

PRC-ASNK

Purple Mountain Observatory Academia Sinica Nanking PEOPLE'S REPUBLIC OF CHINA

PRC-SICH

Department of Mathematics Sichuan University Chengdu PEOPLE'S REPUBLIC OF CHINA

PRC-WHG

Wenhuagong School Chengdu PEOPLE'S REPUBLIC OF CHINA

R-AES

Department of Mathematics Academy of Economic Studies Bucharest ROMANIA

R-AES-A

Laboratories of Economic Cybernetics Department Academic of Economic Studies 71131 Bucharest ROMANIA

R-AES-B

Department of Cybernetics Academy of Economic Studies Bucharest ROMANIA R-ASRR

Institute of Mathematics Academy of the Socialist Republic of Romania Bucharest ROMANIA

R-BRAS

Faculty of Mathematics University Bragov 2200 Bragov ROMANIA

R-BUCH

Faculty of Mathematics University of Bucharest Bucharest ROMANIA

R-BUCH-C

Computing Center University of Bucharest Bucharest ROMANIA

R-BUCHP

Department of Mathematics Polytechnic Institute of Bucharest Bucharest ROMANIA

R-BUCHP-R

Department of Radiocommunications Polytechnic Institute of Bucharest Bucharest BROMANIA

R-CLUJ

Faculty of Mathematics "Babes-Bolyai" University 3400 Cluj-Napoca ROMANIA

R-CLUJ-P

Faculty of Physics
"Babes-Bdyai" University
3400 Cluj-Napoca
ROMANIA

R-CRAI

Department of Mathematics University of Craiova Craiova 1100 ROMANIA

R-CRAI-E

Faculty of Economics University of Craiova Craiova 1100 ROMANIA

R-IAS

Faculty of Mathematics University of Iaşi Iaşi ROMANIA

R-IASIP

Department of Mathematics Politechnic Institute of Iagi Iagi ROMANIA

R-NISTC

Department of Mathematics The National Institute for Scientific and Technical Creation 79622 Bucharest ROMANIA

R-TIMI

Department of Mathematics University of Timişoara 1900 Timişoara ROMANIA

R-TIMI-A

Faculty of Mechanics University of Timisoara 2400 Sibiu, R. S. ROMANIA

R-TIMIP

Faculty of Electronics
Polytechnic Institute of
Timisoara
Timisoara
ROMANIA

RA-CRDB

Institute of Mathematics, Astronomy and Physics National University of Córdoba 5000 Córdoba ARGENTINA

RA-UBA

Department of Mathematics Faculty of Exact Sciences University of Buenos Aires Buenos Aires ARGENTINA

RC-AST

Institute of Mathematics Academia Sinica Taipei Taiwan 115 REPUBLIC OF CHINA

RC-NATC

Department of Mathematics National Central University Taiwan 320 REPUBLIC OF CHINA

RC-NTAI

Department of Mathematics National Taiwan University Taipei Taiwan 107 REPUBLIC OF CHINA

RC-NTHU

Department of Mathematics National Tsing Hua University Hainchu Taiwan 300 REPUBLIC OF CHINA

RCH-UCC

Institute of Mathematics Universidad Católica de Chile Casilla 114-D Santiago CHILE

RL-AUB

Department of Mathematics American University of Beirut Beirut LEBANON

RL-LEBA

Department of Mathematics Faculty of Science Lebanese University Hadeth-Beirut LEBANON

S-CHAL

School of Mathematics Chalmers University of Technology 412 20 Göteborg SWEDEN

S-LINK

Department of Mathematics Linköping University 581 83 Linköping SWEDEN

S-LINK-E

Department of Electrical Engineering Linköping University 581 83 Linköping SWEDEN

S-LUL-A

Department of Applied Mathematics University of Luleå 951 87 Luleå SWEDEN

S-LUND-T

Faculty of Technology University of Lund 220 07 Lund SWEDEN

S-RIT-E

School of Electrical Engineering Royal Institute of Technology 100 44 Stockholm SWEDEN

S-RIT-P

School of Physics Royal Institute of Technology 100 44 Stockholm SWEDEN

S-STOC

Faculty of Natural Sciences (Mathematics-Physics) University of Stockholm 113 85 Stockholm SWEDEN

S-UMEA

Faculty of Mathematics and Natural Sciences University of Umeå 901 87 Umeå SWEDEN

S-UPPS

Faculty of Science (Mathematics-Physics) University of Uppsala 751 05 Uppsala SWEDEN

SAR-RYAD

Department of Mathematics Faculty of Science University of Riyadh Riyadh SAUDI ARABIA

SAR-RYAD-S

Department of Statistics University of Riyadh Riyadh SAUDI ARABIA

SAR-UPAM

Department of Mathematical Sciences University of Petroleum and Minerals Dhahran SAUDI ARABIA

SAR-UPAM-E

Department of Electrical Engineering University of Petroleum and Minerals Dhahran SAUDI ARABIA

SF-HELS

Department of Mathematics University of Helsinki 00100 Helsinki 10 FINLAND

SF-HELS-C

Department of Computer Science University of Helsinki 00250 Helsinki 25 FINLAND

SF-HELS-P

Department of Theoretical Physics University of Helsinki 00170 Helsinki 17 FINLAND

SF-HUT

Institute of Mathematics Helsinki University of Technology 02150 Espoo 15 FINLAND

SF-HUT-P

Department of Technical Physics Helsinki University of Technology 02150 Espoo 15 FINLAND

SP. INS

Department of Mathematics University of Joensuu 80101 Joensuu 10 FINLAND

SF-JVSK

Department of Mathematics University of Jyväskylä 40100 Jyväskylä 10 FINLAND

SF-OULUS

Department of Mathematics Faculty of Science University of Oulu 90570 Oulu FINLAND

SF-OULUT

Department of Mathematics Faculty of Technology University of Oulu 90570 Oulu 57 FINLAND

SF-OULUT-A

Department of Applied Mathematics and Statistics University of Oulu 90570 Oulu 57 FINLAND

SF-TURK

Department of Mathematics University of Turku 20500 Turku 50 FINLAND

SF-TURK-C

Department of Computer Science University of Turku 20500 Turku 50 FINLAND

SF-TUT

Department of Mathematics Tampere University of Technology 33101 Tampere FINLAND

SGP-SING

Department of Mathematics National University of Singapore Singapore 0511 SINGAPORE

SGP-SING-C

Department of Computer Science National University of Singapore Singapore 1025 SINGAPORE

SGP-SING-E

Department of Economics and Statistics National University of Singapore Singapore 1025 SINGAPORE

TN-TUNIS

Department of Mathematics Faculty of Sciences University of Tunis Tunis TUNISIA

TR-ISTNT-A

Division of Theoretical and Applied Mechanics Faculty of Science Technical University of Istanbul Istanbul TURKEY

TR-ISTNT-E

Faculty of Electrical Engineering Technical University of Istanbul Istanbul TURKEY

TR-MET

Department of Mathematics
Middle East Technical University
Ankara
TURKEY

TR-MET-P

Department of Physics Middle East Technical University Ankara TURKEY

TR-MRI

Marmara Research Institute Istanbul TURKEY

TT-UWI

Department of Mathematics University of the West Indies TRINIDAD (WEST INDIES)

WAN-IBAD

Department of Mathematics University of Ibadan Ibadan NIGERIA

WAN-IFE

Department of Mathematics University of Ife Ile-Ife NIGERIA

WAN-JOS

Department of Mathematics University of Jos Jos NIGERIA

WAN-LAGO

Department of Mathematics University of Lagos Lagos NIGERIA

WAN-NIGR

Department of Mathematics University of Nigeria Nsukka NIGERIA

WAN-NIGR-E

Department of Electrical Engineering University of Nigeria Nsukka NIGERIA

WAN-NIGR-8

Department of Statistics University of Nigeria Nsukka NIGERIA

WAN-RVRS

Department of Mathematics Rivers State University of Science and Technology Port Harcourt NIGERIA

YU-BELG

Institute of Mathematics Faculty of Science University of Belgrade 11000 Belgrade YUGOSLAVIA

YU-BELG-B

Faculty of Electrical Engineering University of Belgrade 11000 Belgrade YUGOSLAVIA

YU-BELG-E

Faculty of Economics University of Belgrade 11000 Belgrade YUGOSLAVIA

YU-IRBO

Institute "Rudjer Bošković" P.O. Box 1016 41001 Zagreb YUGOSLAVIA

YU-LJUB

Department of Mathematics University of Ljubljana 61111 Ljubljana YUGOSLAVIA

YU-NOVI

Department of Mathematics Faculty of Technical Science University of Novi Sad 21000 Novi Sad YUGOSLAVIA

YU-ZAGR

Faculty of Natural Sciences and Mathematics University of Zagreb 41001 Zagreb YUGOSLAVIA

YU-ZAGR-E

Faculty of Electrical Engineering University of Zagreb 41000 Zagreb YUGOSLAVIA

YV-IVIC

Departamento de Matematicas Institute Venezolano of Investigaciones Caracas VENEZUELA

YV-LAND

Department of Mathematics Faculty of Science University of Los Andes Mérida Edo. Mérida VENEZUELA

YV-SBOL

Departamento de Matematicas Universidad Simon Bolivar Caracas VENEZUELA

YV-UCOB

Department of Mathematics Escuela de Ciencias Universidad Centro Occidental Barquisimeto VENEZUELA

YV-UCV

Universidad Central de Venesuela Caracas VENEZUELA

Z-ZAMB

Department of Mathematics University of Zambia Lusaka ZAMBIA

ZA-CAPE

Department of Mathematics University of Cape Town Rondebosch 7700 SOUTH AFRICA

ZA-CSIR

National Research Institute for Mathematical Sciences CSIR Pretoria 0001 SOUTH AFRICA

ZA-POTCH

Department of Mathematics Potchefstroom University Potchefstroom 2520 SOUTH AFRICA

ZA-POTCH-S

Department of Statistics Potchefstroom University Potchefstroom 2520 SOUTH AFRICA

ZA-SAFR

Department of Mathematics University of South Africa Pretoria 0001 SOUTH AFRICA

ZA-STEL

Department of Mathematics University of Stellenbosch Stellenbosch 7600 SOUTH AFRICA

ZA-WITW

Department of Mathematics University of the Witwatersrand Johannesburg 2001 SOUTH AFRICA

ZA-WITW-A

Department of Applied Mathematics University of the Witwatersrand Johannesburg 2001 SOUTH AFRICA

ZW-ZIMB

Department of Mathematics University of Zimbabwe Harare ZIMBABWE

